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There’s a good reason why video games are so obsessed with body horror

quelching flesh. Protruding bones. The realm of body horror – filled with aberrant depictions of human flesh that make us fear our own physical forms – has always been somewhat over-represented in gaming. Think of every series that, in some respect, deals with plagues and mutations. It’s an exhaustive list: *Fallout*, *BioShock*, *Bloodborne*, *Amnesia: The Dark Descent*, *Morrowind*, *Dark Souls*, *Borderlands*, *The Evil Within*, *Half-Life*, *Outlast*. While playing *Elden Ring*, you may well come face to face with Godrick the Grafted, a pulpy tapestry of soldiers’ limbs, with a mighty dragon’s head emerging from his left side. In *Resident Evil 7: Biohazard*, you control Ethan Winters as he’s plunged into a full carnival of dismemberment while held captive by the cannibalistic Baker family in their Louisiana home. And gaining a power-up in *The Binding of Isaac* comes at the cost of your character’s own humanity, as he starts to grow sentient tumours, spider fangs, and mushroom caps.

There’s an obvious practical necessity here. In a medium that demands a steady supply of meat bags for players to pummel their weapons into, the mutant offers an easy route out. They’re humanoid enough in their movements that it doesn’t present an overwhelming challenge for animators, but not so obviously sentient that players risk any pang of guilt after they’ve mowed them down.

But even decisions made for logistical reasons can still, even unintentionally, reveal a little about our collective state of mind. It’s hard to look at the upcoming schedule of horror games and their body horror, and not wonder how these stories will be processed by a world still under the grip of a pandemic. One, especially, that comes with a muted but steadily growing fear of what long Covid, and other lingering side effects, may be doing to the bodies of the previously infected. So much of this sub-genre is fuelled by the terror of losing control. Even if these games have been in development for years, isn’t it odd how perfectly they capture the mood of the moment?

Many of the body horror classics are returning to the scene in remastered, revitalised forms. Next year’s *Dead Space* redo (see page 26) will bring back the Necromorphs – reanimated corpses that now only exist to corrupt more flesh and spread the terrible disease that controls them. The remake of *The Last of Us Part I*, which presumably serves as a companion piece to the upcoming HBO series, will only help solidify the Cordyceps brain infection as one of the definitive pop culture takes on the zombie. And it’s significantly more grotesque than what we’re used to, revolving not around reanimation but fungal decay. Capcom will also continue its streak of *Resident Evil* remakes with a new take on its fourth entry, originally released in 2005.

Of the new kids in town, mutations and transformations are equally common motifs. *The Callisto Protocol*, a spiritual successor to *Dead Space*, deals with human genetic experiments let loose on one of Jupiter’s moons. *ILL*, inspired by John Carpenter’s *The Thing*, promises to blur the line between man and crab. Its clattering, crawling creatures look truly repulsive, and come with the ability to reorganise their bushels of flesh into new shapes mid-battle, leaving the player without a plan or a shred of hope. Most intriguing of them all is *Scorn*, in the works since 2014, which blends the biomechanical nightmares of HR Giger with the fleshy weapons of David Cronenberg’s virtual reality-based horror, *eXistenZ* (1999).

Yes, fleshy weapons: the mechanic here is that the player’s trusty pistol and a shotgun are living organisms. They’re fed not bullets but teeth – into hungry, gaping mouths. Each shot is accompanied by an oozing crunch. This is the apex of body horror, writ large as bloody and monstrous as it can be: a fear of the self, of transforming so much that we lose our own sense of humanity. And as dark as that notion may sound, there’s an odd kind of safety in even the most perturbing of fantasies. A game like *Scorn* offers a safe space to work out very present anxieties, by smashing keys and unleashing mayhem. The grotesque, on occasion, can really be a balm.

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WELCOME

What was the first scary game you ever played? For me, it was arguably Quake. Its predecessor, DOOM, had its fair share of jolting shocks – mostly when, say, a Cacodemon popped out from around a corner – but Quake was something entirely different. The full-blooded shooting action was matched with long stretches of quiet anticipation. You’d frequently hear the distant hiss of a Scrag before its pallid body floated into view. A zombie attack in a murky sewer would be preceded by spine-jangling groans and tortured sighs. Played through headphones, it could be a truly intense experience.

Quake’s sheer, suspenseful brilliance is all the more remarkable given its tortuous development. Early on, the project was conceived as a very different sort of action game, with RPG elements and third-person melee combat. The stress of production was such that id Software was never the same afterwards, with several team members moving elsewhere – the most famous departure being designer John Romero. Had Quake remained true to its original design, though, the FPS genre would never have had one of its defining games. And a world without Quake? Now that’s a scary thought.

Enjoy the new issue!
Ryan Lambie
Editor
THE DEVIL’S IN THE DETAIL

Director Tom Heaton talks exclusively to Wireframe about THE DEVIL IN ME, the final episode in The Dark Pictures Anthology’s first season.
If you want a sign of just how popular Supermassive’s Dark Pictures Anthology has become, look no further than publisher Bandai Namco’s stand at August’s Gamescom expo in Cologne. Each day, hundreds of gamers lined up outside the firm’s gigantic stand, all waiting to get their hands on the latest instalment, The Devil In Me. Having worked our way inside the inky-black play area, Wireframe finally got to see what all the excitement was about for ourselves.

For The Devil In Me, Supermassive has gone for a rather different approach from the previous three entries in the series: where the previous game, House of Ashes, was essentially a mix of monster flick and war film, this one’s more in the mould of a Saw movie, with its mysterious villain having lured a quintet of filmmakers to his hotel, where he intends to kill each of them with a variety of tailor-made, grisly traps. Said villain was inspired by late 19th-century murderer H.H. Holmes who, according to tabloid newspapers, created his own trap-laden hotel in which he killed dozens of victims (for more on that, see box on page 9).

Such is the backdrop for another cinematic horror game that feels surprisingly like a mid-2000s Resident Evil entry; while there’s no shortage of cutscenes and branching paths, you’re also free to roam around the hotel, picking a path around obstacles and seeking out clues. In another break from earlier Dark Pictures games, there’s an inventory system, thus moving the series into more typical third-person adventure territory.

Taking on the role of filmmaker Jamie Tiergan, we find ourselves picking around a particularly run-down part of the hotel, full of crumbling floors and dank alcoves. Whoever owns the place also has an unnerving penchant for leaving naked storefront dummies in the most unexpected places. We’re capable of jumping, climbing ladders, and sidling across narrow ledges, but there’s seldom the sense that we’re freely exploring, exactly: rather, The Devil In Me resembles a grimy, ghastly maze with various sundry items and clues (we discovered a variety of old coins and an ID card tucked away in the clothes of a long-dead corpse) serving as breadcrumbs.

Again, like earlier Resident Evil entries, the pace is slow and deliberate; all the better to build up an air of impending...
dread as you and your sidekick Mark edge ever closer to the next atrocity. And in the 15-minute demo we played, we witnessed two: one a teasing, sharp-edged taster of nastier things to come; the latter forcing the player into making a split-second choice that no right-minded person would want to even think about for too long.

Not long after we set the controller down, we caught up with a gleeful Tom Heaton, director of The Devil In Me and earlier Dark Pictures entry, Man of Medan. His eyes twinkle with mischief as he talks about dreaming up the ultimate in grisly murder, generating suspense, and the more obscure recesses of the Halloween movie franchise. Here’s what he and studio director Dan McDonald had to say.

What was the genesis of this chapter? Was there a particular idea that led to it?

Tom Heaton: Whenever we do a new Dark Pictures instalment, we’re always looking to shake it up a bit, make it different from the ones that have gone before. We wanted to do one I was very passionate about doing, about a serial killer, because I’m quite fond of serial killer horror. A slasher movie, something like that. We always look for something in the real world – some sort of myth or legend or fact that we can get into. We fairly quickly landed on H.H. Holmes – the first American serial killer. It helps that there’s some historical distance, to be honest – 100 years is quite a long time.

Our game’s set in the present day, and it’s [about] a killer inspired by Holmes, who builds his own version of this hotel. He hoodwinks a documentary film crew that are making a film about Holmes to come and visit it, and then he traps them in and observes them. His aim is to kill – that’s his brand. As a player, you’re playing each of these characters – can you make it out alive? That’s always the question.

Dan McDonald: We had this amazing pitch that we talked about in the studio, and I remember every time it was told to me, the hairs would stand up on my arms. We can’t talk about it because there’s spoilers, but we knew we were onto something cool. It’s a great place to build from.

There’s a lot of grisly deaths in this one, clearly. So what’s your process amongst the team for coming up with those? Is it like a grim brainstorming session?

TH: There are grim brainstorming sessions [laughs]. They’re a lot of fun, actually. Whether they shouldn’t be or they should, they are. And it’s quite difficult because you have to have a sort of logic about how this is going on as well. In most films, people are shot or stabbed or something like that. You have to find a way of making that different. It might be something that’s unusual, it might be an unusual murder weapon or the particular use of it. There’s usually a fair dose of body horror. I’m the one that has to come and say, ‘No, that’s not gruesome enough. Make it more gruesome’ until we get something where everyone goes, ‘Yep, that’s pretty bad’.

You have a proprietary piece of software that you use to craft the story branches and track everything – the logic, the continuity. How important is that to your process?

TH: It’s important because we have to understand how the whole branching structure works before we get actors involved, screenwriters, all those cinematic people. Because once they come and do their stuff, it’s very difficult to change things after that... We spend ages in this piece of software, working out how everything fits together – it’s complicated. And in the software, we can play it – we have the whole game in storyboard form. We can play the exploration sections, the drama, when the characters are talking to each other, the action sequences, and we can get members of the public in to...
get them to play it and watch them, talk to them about it, to really understand what we're making and have a high degree of confidence that it's good before we actually commit to the script. And before we actually commit to the performances.

In terms of storytelling, is there an optimum number of branches? Can you have too many?

TH: It's a good question. Certainly, something we've done on [The Devil In Me] is to look at the value of the branching. One of the things we've learned is that there are two types of story branches. Sometimes, we say, 'Let's put a big decision here; the story could go this way, or the story could go that way'. That's desired branching, and that's very high value to the player. Sometimes we have to put branching in because we're forced to by the game. Like, if someone's been killed, but we've got a later scene where they could have been there – well, we just have to take account of that. And that is branching that is less interesting to the player. In fact, ideally, they don't even notice that it's happened, but the cost is kind of the same. So what we want to have is as much of that high-value, high-impact branching as possible. And again, we're refining this process. So one thing we find is, if we're gonna make it different, we may as well make it really different. Because it's the same to us, and it has more value. So it's about getting the best bang for the buck from branching.

A film script tends to be around 90 to 120 pages. I wondered, what would The Devil In Me script look like if it were a film script?

TH: It's about five times the size of a normal film script. So a film script is that big [indicates something about 20 mm thick]. One of our scripts is about that big [indicates a Tolkien novel]. And you can't read them as scripts. It doesn't work like that. We used to print them, but we rarely do that now. We usually have some sort of read-through with the actors where we go through one core version of the story and say, 'This isn't the story – it's just this one version of the story'. And that's kind of film script-sized. But when we record it – using the flow tool software that we talked about earlier – they're working off that on a big screen. And again, we try and give them continuity so that they understand it, but sometimes we have to go, 'OK, now whizz right back to here. Imagine that you did this instead. And now we have to do this'.

Speaking of actors, getting Jessie Buckley is quite a coup...

TH: Jessie Buckley is a massive coup. She's a terrific actress. Oscar nominee, BAFTA nominee, Olivier Award winner.
the era of something like Command & Conquer: Red Alert, which had quite cheesy cutscenes.

TH: I think they understand what games are about much more than they used to. They realise the size of the games industry, which is pretty significant. I've had lots of conversations with actors about this. They know there's a big audience there. And they know that culturally, games are close to par with films and TV.

DM: We always iterate our process in everything we do. We iterate the gameplay as well as the process we go through with the actors. We've shot this in the UK, and we've used a fantastic casting director, Jessica Ronane, who works at The Old Vic. She's part of that theatre world. And we've got a fantastic performance director that worked alongside Tom, and again, she's part of that theatre world; she's directed a whole bunch of stuff. There are names that people can gravitate towards. They've seen us working with Shawn [Ashmore] and Ashley [Tisdale], Will Poulter, and they want to be part of that. So I think it is getting easier each time to attract those fantastic people.

Do you think video games have as much in common with theatre as cinema?

TH: Funnily enough, there is some truth in that. So the presentation is cinematic. It's about using the right camera and using the right lens and getting the cuts just right. So the back end of the game is very cinematic. But the actual performance capture process, and the acting, is a bit like

I was very keen to get Jessie, and that she agreed to do it was fantastic. The role of Kate is quite a complex character. She's got things in her past – secrets that she's not quite dealt with. She can be prickly. She's very clever and able, and she's also very passionate about doing the right thing. So there's a lot there to unpack. And Jessie got that straight away. I thought she played her with great sensitivity. One of Jessie's strengths is that a lot of her roles are prickly; they're quite difficult characters. But she gets you to like those characters because of the way she plays them.

Do you find it's getting easier to get a certain generation of actors to perform in a video game? We're no longer in the era of something like Command & Conquer: Red Alert, which had quite cheesy cutscenes.

TH: I think they understand what games are about much more than they used to. They realise the size of the games industry, which is pretty significant. I've had lots of conversations with actors about this. They know there's a big audience there. And they know that culturally, games are close to par with films and TV.
a theatre workshop, actually. There’s just the minimum amount of set. And we ask people to imagine it. And it’s done very, very fast. Because usually, TV and film is quite a slow process. Sets have to be built, there’s make-up, and the cameras take ages. We dispense with all of that; we just say, ‘Do the performance, and we’ll do all that later’. And at first, it’s a bit strange for them, but eventually, they find they get into a flow. We say it’s like a theatre workshop – it’s quite fast-moving, it’s fun, and you can try things out.

What would you say is the key to generating suspense in video games like this?

TH: It’s a thing we think about a lot. Suspense in itself is a narrative thing. So we’ve looked at films and how they do suspense and how they structure things, but on a moment-to-moment basis, there are a couple of things that are needed. One thing is that the player has to understand the context, and particularly, they have to understand what it is that is threatening them. What’s the immediate threat? And they have to understand the proximity of that threat. There’s also a ton of stuff that they don’t understand. They don’t know exactly where that threat is. Is it around the next corner? Or are they on their own? That plays crazy tricks on the mind, and we try and maintain that state for as long as we can.

DM: We also know that we need to drop [suspense] off, because if you keep it going for too long, you lose it. You need to have a moment of laughter and sometimes black humour. Gallows humour, just to break it up. Then you ramp it up again.

You can’t possibly make a game like this and not love horror. What sort of horror movies, maybe even horror short stories or novels, influenced you?

TH: I’m a movie guy, mostly. I love all the classic stuff. I like the cheesiest of slasher movies, they’re my absolute favourite things. I recently sat down and watched all the Halloween movies back to back. I can eat that stuff up all day long. It’s cheesy. It’s not sophisticated, but I love it. Horror is such a rich thing. There’s quite intellectual stuff; there’s stuff that’s dealing with very serious issues. It’s a great medium for that.

DM: We’ve been talking about The Shining and the malevolence of the hotel – we’ve got some of that feeling in this game. Even though it’s not a [supernatural] place, we can still create those same feelings.

TH: Yeah. And again, we’re looking at the techniques of it. The camera lenses, the way the camera is kept low, the repeating patterns – there’s a lot of that in The Devil In Me.

I wonder what sub-genres you’d like to explore in future episodes of The Devil In Me… You mentioned body horror earlier, so might we see a David Cronenberg-esque one, perhaps?

TH: I’m not going to get drawn on any details. But the thing about our formula is that it’s very flexible. And it’s about, ‘Can we take the audience with us? So yeah, we could do that. We could really explore anything. It’s a formula that allows you to tell any sort of story you want. It’s just working out what we want to do. What do we think would be good for the audience?

DM: What’s our twist on it? It’s like vampires. What’s our take on those? There’s always that element of how can we twist expectations.

The Dark Pictures Anthology: The Devil In Me releases on 18 November 2022.
Mutant and proud

Inside Ripout, a co-op FPS with plenty of genetically engineered horrors for you (and your pet gun) to sink teeth into

Without the use of pet upgrades, you'll struggle to defeat larger enemies with your gun alone, even in the early hours.

Pet Project Games has designed Ripout to be entirely playable in solo or online co-op, but it always pays to have backup.

Instead of preventing disaster in the near-future universe of Ripout is not an option. Because it's already arrived. Instead, the main objective – as made evident in our short hands-on demo – is to simply get in and get out while trying to survive. That way, you stand a chance of ridding whatever mutant menace plagues the space freighter you're currently docked with, all while gaining enough loot and resources to do a better job the next time around. It's clear that for its debut release, Pet Project Games aims to craft a different style of online co-op horror FPS, intended to balance action and scares in equal measure, where playing stealthily can offer just as much benefit as going loud.

It's this interesting blend that first caught the eye of 3D Realms, a legendary FPS powerhouse in its own right, who personally sought Pet Project out with an offer to publish the game after witnessing Ripout's debut trailer. Much time has passed since August 2021, however, and now the ten-person Serbian-based team is prepping for an imminent launch that it hopes players on PC and current-gen will jive with.

Set entirely in a grimy universe where humanity has been forced to flee in search of safety, Ripout is structured in such a way that provides plenty of reasons to keep on fighting. "It has elements of a looter-shooter," explains creative director Goran Rajšić. "You will enter the spaceship and get loot. Get your guns, get new attachments, as well as [finding] secrets about what happened."

Missions are procedurally generated and specifically designed to be quick, containing simple and straightforward objectives that won't give your squad time to dwell. Creeping around each ship's environment means accruing vital weapon upgrades. "You've got schematics and you've got components that you can pick up during [missions on] the ships," says Rajšić. "And then later on, you can build them."

In between these bite-sized missions, you'll return to your main hub, pooling the resources you've just gathered into creating better armour pieces. Some perks carry over between each run, and some don't. Whatever your preferred playstyle, one thing's for certain: those expecting a fair fight against the nightmarish creatures lurking on each vessel should think again.
Last Hope

While Ripout follows a long legacy of co-op shooters that drop you straight into the action, Pet Project Games has also crafted a deep lore for those who want to pay attention. The genetically altered mutants, for instance, were created after organic matter merged with machines back home. “But then they started creating life forms of their own,” highlights Rajšić.

“So Earth was destroyed, and a giant human fleet is heading towards a secret, safe location.” Meanwhile, you’re constantly being pursued, and so go through ships searching for answers while trying to cleanse them.

This isn’t Left 4 Dead where you can just spray and pray. Ripout is often about approaching missions tactically, especially since the layout of freighters and the upgrades available in them changes each time.

Fortunately, aiding players with this more stealth-centric approach is a handy tool made of the same stuff as the mutants – it also serves as Ripout’s namesake. “The main pitch of the game is you have a pet gun,” Rajšić reveals. “It’s a biotech weapon and it can jump on enemies and rip out their parts.” As well as using this living weapon against bigger enemies to target their weak parts, you can send it out to consume other smaller creatures you’ll see roaming the ship. It’ll then transform into a random temporary buff like a shield, or provide the ability to shoot heat-seeking missiles. “Stack all these, and it makes it easier for you to survive the ship,” says Rajšić. “But the idea is to give you a different approach every time; they give you different abilities for the pet.”

The pet gun is at the heart of everything in Ripout, to the extent that not using it (and treating the game like just another conventional first-person shooter) won’t see you progress very far. Pet Project has allowed you to tweak the difficulty somewhat by grading selectable missions on a scale between five and nine, but startling enemies always means potentially letting them take advantage of small creatures just like you and your own pet gun would. “The enemy behaviour changes,” says Rajšić. “If you spook them, they go into high alert. The enemies attach to [small creatures instead] and get different powers. They can also get shields, they can get teleports, they can get more melee attacks. So they will use these combinations if you don’t destroy them.”

Rajšić is hesitant to disclose the exact number of enemy and weapon types that will be available at launch, but the uniqueness the pet gun brings, coupled with short but intense random levels, already gives Ripout a moreish quality FPS veterans may struggle to put down. “The smaller ships last about 15 minutes,” he says. “Let’s say the bigger ones about half an hour, but we don’t want to go beyond that.”

More so than length, though, priority one for Pet Project is keeping the experience fresh. “We want every session to be different at least a bit, so there’s a lot of replayability. You do have a story that you progress [through], but if you die, you never play that exact mission again.”

You and your squad will visit freighters and ships via a drop pod accessible from your main hub area.
Horrors beyond your comprehension

From the producer of The Witcher 3 comes a new strategy city-building hybrid. We get a guided tour of Gord

“squishy” is a word that game director and Covenant.dev boss Stan Just uses a lot when describing Gord, his fledgling studio’s upcoming survival-strategy opus. But then again, squishy is perfectly apt for a dark fantasy world positively heaving with slimy, hideous creatures: there’s Ardavan, a bloated, pustule-covered Horror that is one of nine major threats in the game. “He has mosquitoes inside those [pustules],” Just says, grinning mischievously. “He vomits those mosquitoes at your tribe. It’s kind of disgusting.”

Then there are smaller critters, such as slug-like enemies capable of burrowing underground and emerging in the most inconvenient places, or bulbous, froggy lifeforms called Foulspawn that lay poisonous eggs and ooze blood once vanquished.

It’s your job to create a safe haven from all this hideousness by building a gord – a Slavic term for a fortified settlement – in which your small population can grow its resources and gradually expand its reach across the shadowy landscape. Success in Gord requires a tricky mix of resource gathering and management, construction, and going out on quests, the latter often involving intense battles with dozens of those creatures mentioned above.

In the hands-off demo Covenant.dev showed Wireframe, the mission was to destroy a clutch of Foulspawn eggs that have been poisoning nearby swamp land. What unfolds is an atmospherically elemental bout of exploration and real-time tactical combat; as your party roams the benighted, misty landscape, you’ll have to use a variety of ranged and melee attacks, as well as spells to damage foes and buff your allies. There are further tactics you can deploy, too, if you’re feeling cunning: one wood-type creature is more powerful if it’s standing on dry land, and we’re shown that luring it out onto swamp land makes the beast more vulnerable to attack.

Alongside the ten main missions, you’ll find dozens of smaller side quests. Not all involve combat; this one has you gathering food within a strict time limit.
The air is grungy and harsh on this mission, with rain lashing down and the way ahead lit coldly by your scout’s lantern. If the style and insistent nods to Slavic mythology faintly recalls another major series from Poland, that’s no coincidence: Stan Just also produced the much-loved *The Witcher 3: Wild Hunt* back in his days at CD Projekt Red. “From *The Witcher*, we took this approach of ‘Design first, then work out how to do it afterwards,’” Just tells us. “So if you take enemies like Blood Worms, which have their young attached and can go underground, they’re a nightmare to code. We have a Spider Queen with all these spiders on her back, and the programmer went, ‘I don’t know how to do it.’ This approach that we had on *The Witcher* was, just figure out something that’s cool, then we’ll figure out a way to do it. It’s an approach we’re using in *Gord*, and I think it’s working out really nicely.”

**MEAD**

Safely back at your growing community, meanwhile, there’s the whole subject of base-building to explore. Your returning warriors can drink away their sorrows in a Mead Hall (the equivalent of your local pub) or rest up in a Bathhouse. There are also Temples (necessary for acquiring spells), forges, and military buildings among the 31 structures you can build and upgrade.

Then there’s Sanity to think about. If your people are subjected to the horrors of the outside world for too long, their mental health will suffer, which will cause all sorts of problems: subjects might begin to attack or steal from each other. Other incidents can also affect your subjects’ mental state – if they see a child or loved one killed, say, or they’re asked to repeatedly go out and do grim things like looting dead bodies, then their Sanity levels will decline. In extreme cases, your subjects will simply flee the gord altogether – one of several ways you can lose the campaign.

The Sanity meter also explains some of *Gord’s* gorier and grotesque elements – far from mere window dressing, the horror forms the game’s...
Portraits of your subjects appear here.

The action panel, where you’ll be constructing buildings, grouping units, and throwing incantations.

Your mini-map.

A small panel for quests and notifications.

Details and data about resources and parameters. Gord has three main parameters: Faith, Growth, and Sanity. Growth is about the advancement of your settlement. Faith is the equivalent of Mana, or the resource you use to cast spells. Sanity is your subjects’ mental health, which is something you need to keep a close eye on throughout the campaign.

EXPLORING THE INTERFACE

1. Portraits of your subjects appear here.
2. The action panel, where you’ll be constructing buildings, grouping units, and throwing incantations.
3. Your mini-map.
4. A small panel for quests and notifications.
5. Details and data about resources and parameters. Gord has three main parameters: Faith, Growth, and Sanity. Growth is about the advancement of your settlement. Faith is the equivalent of Mana, or the resource you use to cast spells. Sanity is your subjects’ mental health, which is something you need to keep a close eye on throughout the campaign.

— There are 31 structures you can build in Gord, each of which can be upgraded twice. Your temple level, for example, affects what level of spells you can cast.

backbone: “Many games use fear and disgust just for flashiness or to provoke emotions, but we also wanted it to have this gameplay aspect,” Just explains. “Some enemies can use fear to decrease your unit’s Sanity. So you can have a unit that has all this HP and buffs and pieces of equipment, but an enemy can still use fear to make them run away. So all that equipment was for nothing. You need to take care of the Sanity of your units as well.”

Gord is a deliberately harsh game, then, both in its tone and level of challenge, though Just stresses that there’ll also be things like tooltips and an in-game encyclopedia to help newcomers to the genre. Obsessives can dig into the menus and explore a quite overwhelming array of stats and data about each of their units, but novices can ignore all this and concentrate more on growing their society and drinking in the grimdark campaign – a narrative that will take in ten central missions and last for around 15 hours in total.

HYBRID
Overwhelmingly, Gord feels like the product of a team who are truly passionate about making the best strategy city-building hybrid they can.
How else do you explain why a new studio would choose such a big, complex project as its debut title? “It was smaller at the start!” Just chuckles. “I’d say Gord was three times smaller at the beginning. At some point, we had a bunch of ideas – even cheaper ones – but our investors said, ‘This is the one to go with’. They saw a huge target audience for this type of game. Most games in this genre are more ‘cute’ in their art style, and less dark, so there might be a niche for this as well, to combine the audiences that like strategy and dark fantasy. I proposed a lot of different ideas, and this is the one they chose.”

Development first began in 2019, not long before the studio itself was founded in Warsaw, Poland, the following year, just before the pandemic set in. “We started out with a very small team – we were selling shares to raise the budget before [publisher] Team17 came along,” says Just. “Thankfully we’re past that, and now we’re trying to push all that content. There are over 20 enemies – Horrors, humanoids – plus cinematics and motion capture. There’s a lot of story and lore to it as well. It’s all very heavy in regard to the number of assets we need to create. Currently we have over 20 staff, but we’ve also outsourced to over 50 people outside. There are about a dozen outsourcing companies to manage.”

While the bulk of Gord’s design and asset creation has been completed, the “biggest challenge lies ahead,” according to Just: balancing what amounts to a huge array of interlocking systems and variables. “The game’s in pre-beta, but in the next year, we’ll have time to have all this data analysed and balanced. It’s something we’ll focus on before release.”

Gord still has a hazard-filled quest of its own to complete before it’s ready, then. But having gotten our first look at Covenant.dev’s debut up and running, we’re looking forward to combatting some of those squishy horrors for ourselves – and trying not to lose our Sanity in the process. ©

The Spider Queen carries smaller, aggressive arachnids around on its back. Our Sanity levels would take a battering if we were confronted by this, to be honest.
That was the month that was

01. Tears of joy
Mid-September’s surprise Nintendo Direct was chock full of interesting announcements: Fire Emblem Engage being shown officially, the return of Radiant Silvergun, and yet another Kirby game reveal. Almost all of those titles were overshadowed, however, by the sequel to Breath of the Wild finally getting a title: Tears of the Kingdom.

The accompanying trailer offered plenty of teasers for what it could mean for Link’s next adventure, too. It was also impossible to ignore the Skyward Sword vibes as Link leaped off a floating city and down to the kingdom below. No signs of any Loftwings so far, though.

02. Free to Sim
In between countless expansion packs that have whisked players off everywhere from high school, the jungle, and even Star Wars’ planet Batuu, The Sims 4 is the gift that keeps on giving. Well, it looks like EA’s eight-year-old life sim is entering an all-new form from 18 October onwards, as that’s when the base game becomes free to play. EA said in a statement it will “continue to develop and release packs, kits, and Sims Delivery Express drops into the foreseeable future”. But regardless of whether you buy those, at least there’s now no excuse not to get started.

03. Sprung a leak
They say that a game is never finished, just abandoned. But in the case of the recent Twitter leaks a pre-release build of Grand Theft Auto VI was subject to, neither is true. More than 90 videos surfaced online showcasing Rockstar’s unfinished title, with footage showcasing everything from open-world layout, character animations, and even car customisation. The hack is easily one of the biggest ever faced by a developer, performed by GTAForums user teapotuberhacker who allegedly breached the studio via Slack feed. For what it’s worth, we thought the early gameplay looked extremely promising. Please don’t sue us, Rockstar.

Phil Spencer “hasn’t given up” on bringing Final Fantasy 14 to Xbox

Former cel-shaded Xbox exclusive, Sable, is primed for a PS5 version later this year
04. Yakuza no more

The Yakuza franchise’s sudden breakout popularity in the west has been one of the biggest success stories for Sega in recent years. In a move that might sound strange to some, then, in that “if it ain’t broke, don’t fix it” sort of way, the series will no longer be going by its longstanding, crime-laden moniker. Beginning with the western remake of the Ishin! spin-off, going forward, everything Yakuza-related will be named Like a Dragon. A more literal English translation of its Ryū ga Gotoku title in Japan, we’ll still assume Like a Gangster was taken.

05. Halo, goodbye

Xbox Game Studios corporate VP and head of 343 Industries, Bonnie Ross, has left Microsoft after a career at the company spanning nearly three decades. The news came via Twitter, where she cited “a family medical issue” as the reason for her exit. Losing such a senior creative arguably couldn’t have come at a worse time for Halo Infinite; however, as its player base continues to dwindle, seasonal updates keep being pushed back, and most recently, the addition of local split-screen – a hallmark of the series – was cancelled. Alas, someone else will have to help 343 Industries finish the fight.

06. Strike a cord

Following a rigorous insider testing period this summer, Discord integration has come to Xbox One and Xbox Series S/X. This removes the need to rely on third-party apps to get your voice chat needs, even if the setup process has been deemed a tad cumbersome by some. Users on PlayStation, meanwhile, are still waiting for full Discord integration on PS5. That’s despite CEO Jim Ryan explicitly announcing a partnership in May of last year, which analysts predict might not come to fruition until March 2023’s 7.00 software update. Discord? Discourse, more like. Pull your finger out, Jim.

Cyberpunk 2077 has a mass resurgence of Steam players thanks to its 1.6 patch

Modern Warfare II Open Beta confirms Call of Duty’s first third-person mode
07. Fall(en) Down

Less than a year after it launched, Square Enix and PlatinumGames’ ill-fated multiplayer slice-'em-up, Babylon’s Fall, is set to switch off its servers. Platinum is said to be cancelling any more large-scale updates it had planned, but maintains that the game’s second season will continue until 29 November, before rolling out The Final Season until termination on 27 February 2023. “Despite all your support, we are truly sad and sorry to say that we will be unable to continue with the game’s service,” a Platinum statement read. “We hope you continue to enjoy playing Babylon’s Fall until the service ends.”

08. Odd job

Following endless leaks and speculation aplenty, the much-rumoured hi-res Xbox port of GoldenEye 007 will soon be making its way to Game Pass. Rare confirmed the news shortly after Nintendo’s September Direct where, oddly enough, it was announced that the original version – with online multiplayer support added – will shortly be coming to Nintendo Switch Online for those signed up to the Expansion Pack tier. The Xbox version, however, sports 4K visuals and a higher frame rate, but will only support local multiplayer. Both platforms seem to be using their shared history with Rare to play nice, just not too nice.

09. Phantom Menace

Current-gen players should prepare for a less buggy return trip to Night City early next year, as CD Projekt RED has unveiled Cyberpunk 2077’s one and only piece of story DLC. The game’s Phantom Liberty expansion sees V and virtual friend Johnny Silverhand (again voiced by the breathtaking Keanu Reeves) navigate a new city district under the control of the authoritarian New United States of America. “We’re having a lot of fun,” game director Gabriel Amatangelo told IGN. “It’s a new style of plot, a new cast of characters, [and will expand] on a district in Night City where it primarily takes place.”
10. The price is right

The mood at this year’s Gamescom (see page 56) was somewhat soured after Sony dropped the bombshell about upping the price of PS5 consoles worldwide due to rising inflation. Naturally, this had many wondering whether Nintendo and Xbox would follow suit, but Microsoft Gaming CEO Phil Spencer had good news on the latter. “We have no plans today to raise the price of our consoles,” he said. “In a time when our customers are more economically challenged and uncertain than ever, we don’t think it’s the right move for us at this point to be raising prices on our console.”

11. Assassin’s Creed

Players still obsessed with roaming exotic cities, sometimes while wearing a hood and sometimes not, received excellent news at the latest Ubisoft Forward event as Assassin’s Creed Mirage was officially unveiled. The game is set 20 years before Valhalla, casts players as fan-favourite Basim, and is intended as a throwback to the franchise’s earlier style of a 15–20-hour stealth-focused experience. This was music to our ears, but less so was learning of two more giant open-world RPGs coming soon after in Codename Hexe and Red. Assassin’s Creed fatigue may soon be a real thing.

12. Remake reversal

The original Resident Evil 4 has a notorious reputation for being ported to almost everything, and that’s despite creative director Shinji Mikami at one time saying he would “cut his own head off” if it ever ditched GameCube exclusivity. It’s rather fitting, then, that even though next year’s Resident Evil 4 remake was originally announced to be current-gen only, Capcom has since stated that its reimagining of the survival horror classic will be coming to PS4 too. That console’s 116 million-plus install base will no doubt be pleased. Though, oddly, Xbox One owners won’t get to share in the scares.
The first game to pay a nod to the horror genre was *Haunted House* on the Magnavox Odyssey. Via a rather attractive overlay placed on your TV screen, one player controlled a ‘detective’ (represented by a dot – a ‘dotective’, perhaps) as they wandered through the titular home searching for clues. A second player adopted the role of the resident ghost, and before the game began would hide in one of the clue boxes while the detective player kept their real-life eyes closed.

Atari also released a game called *Haunted House* on the VCS, which, despite the title, had little to do with its forebear, barring a similar setting. Unlike the weird board game mash-up of the Magnavox game, Atari’s title had a lot more in common with what became the survival horror genre. It still had all the typical quirks of an early video game; however, the player’s character was nothing more than a pair of wandering eyes, and had to search the haunted mansion for fragments of its former owner’s urn. The objects in the house could only be seen when the player ‘lit a match’ by pressing the fire button, which gave the game its tension (much like the flickering torches in the horror games of the modern era). The sudden appearance of a ghost, spider, or bat would snuff out the match.

Its influence could be felt directly on Ultimate Play The Game’s later *Atic Atac*, although *Haunted House*’s game map scrolled – something of a rarity for the time – rather than being a series of static screens.

**IT BEGINS**

Horror as a genre began in written form, so it’s no great surprise that its first early gaming success might’ve been Sierra On-Line’s *Mystery House*,

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

—I was so nauseous playing *Resident Evil VII* in VR that I focused on trying not to barf—

Games have been trying to scare us for over 40 years. Mr Biffo explores how
Many of you will appreciate that what developer Malcolm Evans managed to eke out of such basic hardware remains one of the most impressive feats of programming in gaming history. I would argue that the more complex and visually interesting games became, the more they seemed to focus on impressing with aesthetics rather than tension. For much of the eighties, horror games concentrated on action (Castlevania) or comedy (Maniac Mansion) over true scares. For my money, it wasn’t really until 1992’s Alone in the Dark that games rediscovered the balance between the two, and the modern era of gaming horror began.

Though crude by today’s standards, Alone in the Dark remains an influence on the survival horror genre. The debt owed to it by Resident Evil is undeniable, from the carefully chosen camera angles, to the creaking floorboards, to the sudden appearance of monsters. Alone in the Dark understood that there’s nothing scarier than being, well, alone… and waiting. And waiting… It was a steady drip of fear, with enough jumps to ensure the space between the scares was barely tolerable.

And there we have it: yes, Alone in the Dark made me jump. I remember it now, walking into a bedroom having been lulled by a long period of not-very-much happening, and a thing appearing suddenly. I swore. I panicked. I fumbled with the controls. And I logged it out of there while I gathered myself, and laughed at myself for being such an idiot.

arguably the first graphic adventure. The legendary Roberta Williams wrote the story initially, with programming from her husband Ken, as a hobby project. Its success took the Williamses by surprise when it sold to 80,000 Apple II owners in 1980 (and was doubtless ‘shared’ to countless more). In fact, its cultural impact was such that Tom Hanks could be seen playing it in the movie Big. Its horror credentials become even more grisly when you consider the 1982 remake by Japanese company StarCraft, which featured realistic blood.

What set Mystery House apart from previous horror games was that it featured murder rather than a supernatural threat. It fully embraced the tropes of the serial killer genre, with a bunch of characters splitting up at the start to search for a treasure, before being picked off one by one. It was clunky, and not particularly pretty, but Mystery House was a masterpiece in creeping tension.

In fact, its stripped-back interface and visuals almost worked in its favour. One of the key elements of any successful horror is the steady build of anxiety, a less-is-more approach. A more modern game might go all out to impress with flashy graphical effects. In Mystery House, the simple graphics and basic phrasing serve as shadows in which anything could be lurking.

**VINTAGE**

For those of us of a certain vintage, 1981’s 3D Monster Maze achieved a similar feat on the ZX81. Players explored a randomly generated maze while being stalked by a T-rex. Stress levels were exacerbated by on-screen prompts along the lines of “Rex has seen you” and “Run, he is behind you”. As with Mystery House, the crude visuals seemed to work in favour of its atmosphere. Many of you will appreciate that what developer Malcolm Evans managed to eke out of such basic hardware remains one of the most impressive feats of programming in gaming history.

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On a graphical level, Capcom’s 1989 Famicom game Sweet Home (based on a movie of the same name) has little in common with Resident Evil, but a direct line can be drawn between the structure of the two games – puzzle-solving, backtracking to unlock previously inaccessible areas, and a desolate atmosphere punctuated by sudden quick time events. Indeed, Resident Evil was conceived initially as a remake of Sweet Home, but Capcom’s licence had expired.
The Time I Have Left

Set in a futuristic, underground city, The Time I Have Left casts you as the luckless heroine Aline, on the run from a deadly phenomenon called The Miasma. The game’s described as a “time-driven escape adventure”, and it looks as though bouts of exploration and 3D platforming will be joined by turn-based combat and other RPG elements. Then there’s the whole look of the thing: illuminated with contrasting shades of grey and red, The Time I Have Left looks captivatingly different from the usual neon-hued cyberpunk outings we’ve seen in recent years. In development at Barcelona studio GROUND Game Atelier, it’s due for release in late 2023.

ODDADA

This compact little offering may look like a puzzle game, but it’s actually more of a musical sandbox: placing various objects on an isometric landscape will cause different notes and melodies to play. Think of it as a kind of whimsical synthesiser where you make new songs by placing tiny houses on blocky hillsides. It’s not challenging, necessarily, but it sure sounds relaxing to us.

The Past Within

Point-and-click adventures have enjoyed something of a renaissance of late, but how’s this for a creative twist on a familiar genre: The Past Within has to be played cooperatively on two screens. Each player will have a different viewpoint, so plenty of communication will be required to solve the game’s puzzles. Ingenious.

Puzzle Bobble Everybubble!

The Puzzle Bobble (or Bust-A-Move) series has been going since the nineties, but somehow Taito has come up with a new twist on the bubble-bursting formula: up to four players can team up to match and clear like-coloured spheres. Puzzle Bobble Everybubble! is due out in 2023, exclusively for Nintendo Switch.
Vikings on Trampolines

Designed to be a couch co-op party game just about anyone can play, Vikings on Trampolines is an action platformer with a gleeful sense of the absurd. Using the left stick, you can bounce left and right on trampolines, hold up to hover for a few seconds, or pull down to perform a body slam. The mechanics may be simple, but the sheer wealth of stuff to do is pretty incredible. Like, say, Kirby Super Star, there's an array of minigames, including a four-on-four battle royale and football, as well as some engagingly chaotic boss fights. One of our favourites took place on a ship that's in the process of being devoured by a gigantic sea creature. Vikings on Trampolines is the work of D-Pad Studio, the Norwegian team that brought us the gorgeous Owlboy. It's fair to say that designer Simon Stafsnes Andersen has excelled himself here, with some of the most beautiful, detailed pixel art you'll see this side of Metal Slug. More on this one in a future edition of Wireframe.

Paper Cut Mansion

One of the more eccentric titles we caught up with at Gamescom, Paper Cut Mansion is a third-person rogue-lite with a Tim Burton-esque horror comedy edge. You roam the haunted floors of a remote country pile, solving puzzles, shooting enemies, and acquiring new powers as you go. Naturally, the mansion changes each time you visit. What separates Space Lizard Studio's title from other games of its ilk, though, is its papercraft aesthetic, where every element – so we're told – has been lovingly made from cardboard.

Jasper and the City of Lights

A third-person adventure with a lightly fantastical air, this casts you in the role of a young boy searching for his missing sister. The quest will take you through a variety of leafy, fairytale locations, with the style and tone recalling Level 9’s Ni no Kuni, albeit without the RPG elements. The emphasis is firmly on exploration and story here, with the game split up into four ‘books’ which will be released episodically. Book one is due to slide onto Steam’s virtual shelf before the end of 2022.
A WORLD OF HORROR

THE HISTORY OF DEAD SPACE

WRITTEN BY GRAEME MASON
How the Dead Space series has constantly thrilled – and chilled – players for the past 15 years

From the first moment that a pair of disembodied eyes explored the spooky rooms of Atari’s Haunted House, game designers have sought to frighten, intimidate, and downright terrify gamers. That most primal of emotions, fear, has been a frequently tapped well throughout gaming history, and its origins, as with all horror, are the campfire ghost tales that people tell each other to while away the cool nights. The basis of all these tales is usually an oft-used core idea or concept: a dilapidated haunted house, a mutilated hitchhiker, a 1000-year-old bloodsucking vampire.

“The key IPs for all of us were Alien and Event Horizon”

The Dead Space series, forged within the walls of EA Redwood Shores in the mid-Noughties, starts the same way.

“Unquestionably, Glen [Schofield] was the whole raison d’etre for Dead Space,” begins producer Chuck Beaver. “If it wasn’t for Glen, it wouldn’t have happened, for sure.” Schofield’s idea, forged by a lifetime of scary movies, games, and television, was for an intense horror game set, unusually for the genre, in space. “Most of the team were big horror fans,” continues Beaver. “The key IPs for all of us were Alien and Event Horizon. He loved the nature of the horror in Event Horizon.”

In the 1997 movie, a rescue mission goes horribly wrong, the crew of the eponymous craft sent insane due to its proximity to a hellish alternate dimension. “[Event Horizon] had a good mix of hellscape and gore,” recalls Ben Wanat, Dead Space’s production designer. “It was definitely the most contemporary influence at the time closest to our vision.”

It wasn’t just movies that influenced Dead Space’s concept; games played a part too, and one notable one in particular. “To help us stand up from nothing, we were initially designing ‘Resident Evil 4 in space’,” says Beaver. “And then, after we got there, we found our own identity.”

Armed with the concept, Schofield pitched to Electronic Arts, proposing a brand new IP. Surprisingly, the suits were receptive, giving him the budget for an 18-person team and six months to develop a workable demonstration. That demo, or vertical slice, proved critical.

“That’s almost completely the reason we got greenlit,” smiles Beaver. “Because we did a very thick and detailed vertical slice.” The crucial part of Dead Space would be its evocative story, yet in early development, this was very different from the final game, as Beaver recalls. “The setting in Glen’s head was about captured criminals on a moon who became evil spirits.”
were an influence for some of the more unusual transformations in Resident Evil 4, too."

As in Carpenter's classic 1982 movie, Dead Space's Necromorphs are terrifying because of their similarity to the human form. Tentacles form from intestines, and broken bones jut outwards at unnatural angles. Yet the origin of these poor, tormented souls is clear. "It was about imagining different ways, uncomfortable ways of getting broken – and what would be strange to see running at you down the hallway," wrote Wanat in Martin Robinson's excellent book, The Art of Dead Space. Wanat was responsible for the concept of the initial 3D sculpts for the majority of Dead Space's hideous enemies. "It was necessary to establish what the Necromorphs looked like, how their ecology worked, and how to realise those ideas into working 3D pre-vis models. I would rig these, animate, and render them to show people how I wanted them to feel."

Informing each creature's design was its silhouette, and using this aspect to scare the player even more. "We had such an incredibly strong focus of what the game was going to be from the very beginning – to make one of the scariest games ever," says Beaver. "And one of the things we discussed was how to get past the jump scares. And what would be strange to see running at you down the hallway," wrote Wanat in Martin Robinson's excellent book, The Art of Dead Space. Wanat was responsible for the concept of the initial 3D sculpts for the majority of Dead Space's hideous enemies. "It was necessary to establish what the Necromorphs looked like, how their ecology worked, and how to realise those ideas into working 3D pre-vis models. I would rig these, animate, and render them to show people how I wanted them to feel."

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These two concepts materialise in two forms. First, the location of Dead Space, while obviously sci-fi and futuristic, is pared down: the Ishimura is somehow. Then, along comes an innocent ship and uncorks it."

The catchy title for this idea was Rancid Moon, and while the concept enthused Schofield, the story slowly shifted to the game we know today, incorporating features from Rancid Moon. Dead Space begins in the year 2508, with the shuttle USG Kellion en route to the USG Ishimura, a mining ship and the pride of its owner, CEC. The planet-cracker class vessel has gone dark; on board the Kellion are Zach Hammond, Kendra Daniels, a brace of doomed corporals and an engineer, Isaac Clarke. Isaac's profession would become a fundamental part of the Dead Space story. "From the beginning, he was what we called an everyman," notes Beaver. "He was never going to be a super-soldier. We wanted Isaac to be on the back side of the power scale."

Shortly after docking with the Ishimura, things take a turn for the horrific. With just Zach, Kendra, and Isaac surviving the initial onslaught, Dead Space is a fraught, claustrophobic, and terrifying journey where survival is the only aim. The enemies? The deformed and gruesome former crew of the Ishimura, transformed by the power of a mysterious object known as the Marker. As with many of Dead Space's notable elements, much of the credit for the hideous Necromorphs goes to designer and horror fan, Ben Wanat. "They're influenced mostly by John Carpenter's The Thing," he says. "But I'm guessing that they were an influence for some of the more unusual transformations in Resident Evil 4, too."

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The source of all the trouble in Dead Space and its sequels: the Marker.
a working ship, akin to the Nostromo from *Alien*, featuring angular corridors, dangerous-looking machinery, and loud, clanking equipment. “The emotional impact can get neutered if everything’s fantastical,” notes Beaver. “So you have this giant through-line of relatability and emotional targets to go with the world-building.” Much of the design of the Ishimura, which echoes the rib scripture on Isaac’s suit, or the dark, jutted corners that throw disturbing shadows, reflects this. The Necromorph’s use of air ducts emphasises more the connection to *Alien* and the latent fear of nasty things jumping out of the wall and grabbing you. The weapons Isaac discovers reinforce this believability: the plasma cutter, line gun, contact beam. It’s all mining equipment repurposed as lethal ordnance.

Second is *Dead Space’s* immersion, which begins with the holographic display that serves as Isaac’s inventory and interface with the world. “When it came to the UI, our art director [Ian Milham] put together a mock-up of the UI screen of a typical horror game,” remembers Beaver. “There was all this stuff on screen, and he cleared it off and said, ‘What if it looked cinematic?’ Glen already had some ideas; he was toying with the suit’s spine as a health indicator. So we thought we should consider going diegetic with our UI.” Already knee-deep in designing the shambling Necromorphs, Ben Wanat went home one Friday with a plan in his head. “I had started peppering holograms around demo spaces, and I wanted them to be interactive,” he explains. “And that eventually led to the interactive versions for doors and the inventory.” Isaac’s glowing inventory display hovers in front of him, moving around the environment as the player moves the engineer. In true devotion to the immersion belief, browsing through your items doesn’t pause the game – Isaac is constantly exposed to attack. “It wouldn’t pause the game because that’s where you can make some fourth-wall-breaking inventory decisions.”

“One of the things we discussed was how to get past the jump scares”

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**DEAD SPACE: DOWNFALL 2008**

This animated movie again provides more backstory to the discovery of the Marker on Aegis VII.

**DEAD SPACE NOVELS 2008–2010**

*Dead Space* (2008) tells a similar story to the Image Comic, while *Martyr* (2010) is set in 2214 as humanity discovers the Markers for the first time.
voiceless protagonists are unquestionably the only way to go."

The theory's understandable: how can a player relate to an on-screen avatar if a voice constantly reminds them that this is a character and not them? As a writer, Beaver found the idea particularly difficult. "It was like, 'Hey, we need you to make a property, but your protagonist is inexplicably mute'. And I said, 'Is there a story why he's mute?' Nope. He just is." Throughout the first Dead Space, Isaac stomps around the Ishimura, collecting items and performing tasks at the behest of the other survivors, Kendra Daniels and Zach Hammond. "He could never say 'I should go fix the engines'," muses Beaver. "It was always 'Isaac, do the following things'. If he could talk, we could have swapped all that agency around instantly." The team, says Beaver, was split equally on the concept. The final decision fell to Dead Space's creative director, Glen Schofield. Isaac would be mysteriously silent.

While the team at Redwood Shores knew they had a great concept, the success of Dead Space still caught many by surprise. "We put our heart and soul into that game, and it was as good as we'd hoped," recalls Beaver. When EA greenlit a sequel shortly after release, it triggered a tumultuous time for the developer, by now called Visceral. With more or less the same team in place, the sequel's development proceeded for
able to talk and even joke with his colleagues and enemies. Behind the scenes, fresh team members mixed with existing personnel, such as Wanat, fully embracing his production designer role. In addition to working with the game’s art designers, he was now directly involved with the story. “We needed to decide where it should take place, what had become of Isaac, and so on. And that stretched from the beginning, through the employee exodus and project restart, all the way to ship and DLC.”

And what a story. It’s three years after the traumatic events of Dead Space. Isaac Clarke is on The Sprawl, a vast space station lurking on the remains of the Saturn moon, Titan. In the game’s stressful opening, an investigator interrogates Isaac, desperate to learn what he knows about the outbreak on Aegis VII and the mysterious alien artefact from the first game, the Marker. Haunted by the suicide of his girlfriend, Nicole, and anxiously fending off the insidious mental grip of the alien object, Isaac first has to escape a straitjacket before battling another Marker-inspired Necromorph outbreak. Storyboarding was helpful, as Wanat explains. “It started with us knowing that we needed a certain number of big moments. We doled them out, [according to] chapters, and explored what they could be based on [considering] where that chapter took place and the story at the time.”

The skeleton of each moment was assigned a pod of devs who submitted weekly revisions almost a year. “Then, Glen [Schofield] left to form Sledgehammer and took half the team with it,” remembers Beaver. “Those guys were family – still are.”

With EA and Visceral feeling the aftershocks of the upheaval, development continued, and the result – Dead Space 2 – is widely considered one of the greatest sequels of its generation. Ben Wanat recalls how he coped and even turned the change into a positive. “It was tough to see so many people leaving at once. But I’ve always been so focused on making the game that I couldn’t really let it slow me down. And sometimes I think we get used to working with the same people – I’ve learned it’s a great idea to shake things up, make room for other voices, and you often uncover new ideas you wouldn’t have come up with otherwise.” The mix of new and old blood engendered new ideas. “We were able to make decisions quicker and make the game faster,” recalls Beaver. “The first half of Dead Space 2 was probably the worst professional experience of my life; the second half, the best.”

Beaver and Wanat found themselves in control of Dead Space’s lore and story, and tweaked the gameplay in several new directions. Gone were the hard cuts between levels where Isaac travels to his next destination on the tram system, resulting in the game becoming one single shot from start to finish. In addition, Isaac’s stasis and telekinesis abilities are nimbler, his suit has gained rocket boots, making zero-G movement more fluid, and the engineer finally has a voice,

Among fans, Dead Space 2’s tenth level quickly became iconic – despite its design being a by-product of cost-saving. “It was actually borne out of necessity because you can’t spend the same amount of resources on all the levels – you need some cheap levels,” says art director Ian Milham. “So it felt like if we returned to the original ship [from Dead Space], we’d get a lot of reuse and have a rich fertile ground for playing with expectations. Rather than trying to hide the fact we were reusing something, we embraced it. We knew everyone would think, ‘Man, that’s where this whole thing started, that’s gonna be an absolute gauntlet’. So what if it wasn’t? What if we could just hold that off for as long as possible? And the idea was to spend the first half of the game hyping it up – early in the game, you can see the Ishimura parked up, and while we’re not hanging a lantern on it, it’s frequent enough, so the player thinks, ‘Oh man, are they gonna make me go back there?’”

Dead Space 2 introduces bigger and tougher opponents.

DEAD SPACE: SALVAGE 2010
Another graphic novel, this time detailing mining operations conflicting with the arrival of the Ishimura and the discovery of the Marker.

DEAD SPACE MOBILE 2011
This iOS/Android game features a newly converted Unitology inductee who unwittingly unleashes the Necromorphs onto The Sprawl.
and progress to the production team. The most notorious of these moments occurs towards the end of the game, as Isaac enters a machine that will unblock the Marker-infected parts of his tormented mind. “We’d been torturing Isaac a thousand ways at this point,” laughs Beaver. “And we were like, ‘What else can we do?’” The scene derived from one simple precept: the universal fear of eye trauma. “The whole thing rose from the idea of poking your eye out. Everyone is squeamish about that, so we added a needle, heartbeat, and his rapidly moving eye. It was brilliant, and the team loved it.”

Sales of Dead Space 2 were solid rather than spectacular, despite a firmer promotional push from EA. “I think we all knew we had something we were proud of,” recalls Wanat. “But also, my dev brain saw many things that could have been polished better with more time. And it was hard to tell how fans would take the control revisions and action-movement focus. But yeah, it was definitely our Aliens follow-up to Alien.” Despite critical acclaim, the pressure was on to elevate the sales of the Dead Space games to a higher tier, as Beaver explains. “The intent was that the franchise would become much larger in terms of sales, and that trend was not evident in Dead Space 2. So when it came to Dead Space 3, we had to make this change evident and sell more.”

In Dead Space 3, Isaac tracks his ex-girlfriend Ellie to the ice planet Tau Volantis, the source of a new Marker signal, followed by the Inner Circle, a fanatical subdivision of the Church Of Unitology. Once there, he discovers evidence of an ancient alien species and its attempt to prevent a Marker convergence event by freezing the previously ocean world of Tau Volantis. The battle between the Inner Circle and Isaac’s team culminates with the nearby Necromorph moon plummeting into the planet, destroying itself and the Markers. Back in our world, EA decided that the game should focus on action rather than horror. “They concluded that the main reason people played Dead Space was because it’s a horror game,” explains Beaver. “And that the main reason people didn’t play Dead Space was because... it’s a horror game.”
There was unlikely to be a major change. Furthermore, when a rumour surfaced like its shambling villains, had been irrevocably altered. Dead Space 3’s sales were comparable to its predecessor, but the rumours were indeed true: there would be no Dead Space 4. “The whole business model of a single-player narrative game was under extreme stress,” notes Beaver. “And it finally caught up with us in Dead Space 3.”

The history of Dead Space games, the mobile spin-off, developed in 2011 by Iron Monkey Studios, enjoyed award-winning success of its own. “I jumped at the chance to work on what was one of my favourite games at the time,” recalls designer Jarrad Trudgen of that portable shooter, simply known as Dead Space. “As best as I remember, from the very first communications with Visceral, the idea was that our game would set up the events of Dead Space 2. They were great to work with – they gave us a clear target, reference assets, sound libraries, and largely left us to it. We knew it was ambitious, maybe even foolhardy, to try and bring a console experience to third-generation smartphones. But dark environments mean you can benefit from a short draw distance and effective horror enemies tend to benefit from fairly simple AI. I’m sure there’s plenty we could have done better with the benefit of experience, although perhaps that foolhardy enthusiasm would have been tempered with age. But it remains one of my proudest moments in a 20-year career.”

The idea of a broader audience brought in more fresh elements. Weapon crafting, cover mechanics, dodge, and co-op play were all included, the latter partway into development. “But all of that stuff was in service of trying to make better sales without using the equity that we had in IP,” notes Beaver. Moreover, Visceral had already bowed to pressure by including a PvP mode in Dead Space 2; no one was keen to repeat that experience for the third game. “We had experimented with co-op play on the first game,” reveals Wanat, “but found it incompatible with the tech realities of how the game content was authored.” Intriguingly, an early draft of co-op had Isaac’s shadow as a companion, accentuating his fragile mental state. Ultimately, the second character became a beefy soldier named Carver, ostensibly catering to shooter fans.

None of these new elements were bad ideas. But in combination with the tonal shift and human enemies, it created something too different from what people loved about the series. “We trundled down that path, and when we got focus-tested, people were like, ‘This is real fun, but where’s my Dead Space?’,” remembers Beaver. The team added more horror to some of Dead Space 3’s encounters, but the damage had been done. Along with the controversial addition of micro-transactions, the DNA of Dead Space, like its shambling villains, had been irrevocably changed. Furthermore, when a rumour surfaced that there was unlikely to be a Dead Space 4, the storyline had to be hastily adapted to bring the series to an abrupt conclusion. “It meant our story was just too big and complex for the game,” recalls Wanat. “The more exposition you do that doesn’t involve the player’s input, the more you risk losing the player’s interest.”

As we wait for the arrival of EA’s Dead Space remake and Glen Schofield’s spiritual sequel, The Callisto Protocol, it’s clear that the love for the original series remains strong today. “I’m always a bit tickled and surprised when a fan reaches out to proclaim their love of the franchise,” says Wanat. Blessed with constructing a new IP and a cohesive and talented team, Visceral had the vision and prowess to deliver a fantastic adventure,” remembers Beaver. “There was also this idea that Isaac would become a herald of the Marker, reanimated and sent back to Earth.” At the end of the third game’s development, Visceral did some nominal work on its sequel, but Dead Space 4 was never more than a rough story outline.

“Ben [Wanat] wanted Dead Space 4 to be Ellie’s adventure,” remembers Beaver. “There was also this idea that Isaac would become a herald of the Marker, reanimated and sent back to Earth.”

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DEAD SPACE: LIBERATION

This graphic novel precedes Dead Space 3. John Carver, Ellie Langford, and Robert Norton explore the mystery of the Markers.

DEAD SPACE 3: AWAKENED

Isaac and John Carver escape Tau Volantis after Dead Space 3’s events, encountering more fanatical Unitologists on the journey back to Earth.
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The world’s finest games magazine is available to purchase in print or as a free download online on the first Thursday of every month.
With a pastel colour palette and serene sound effects, it's hard not to be charmed by A Little to the Left's purposeful attempt to make puzzles relaxing. The two-person Max Inferno team recognise that, while the sight of messy objects is nightmarish, straightening them up is equal parts gratifying.

“Tidying up is satisfying because it’s the other half of making a good mess,” says Annie Macmillan, the studio co-founder handling art and animation. “We started by gathering a list of objects that we would like to work with, and then thought about their unique qualities and started to imagine an organising principal using those inherent characteristics.”

A Little to the Left features well over 75 logic puzzles to stack, organise, and sort through, which should make it an ideal way for Marie Kondo obsessives to relax. Another huge part of achieving this, however, was the absence of narrative to purely place emphasis on each puzzle scenario. “It’s tempting to add a narrative to hook players to continue forward, or to communicate a strong message, but that’s not what we are doing with this game,” says Macmillan. “You’re left to make your own judgment and reasoning. I think a narrative would be an unnecessary distraction from the player experiencing the interactions directly, and it would close off interpretations.”
GAME
A Little to the Left
DEVELOPER
Max Inferno
PUBLISHER
Secret Mode
RELEASE
8 November 2022
WEBSITE
maxinferno.com
CREEPING DOWN THE CORRIDOR

How Hideo Kojima’s notorious P.T. demo has shaped a new age of minimalist psychological horror

WRITTEN BY AARON POTTER
Not before or since has there been a video game demo more analysed, dissected, and pored over than Hideo Kojima’s *P.T.* Short for “Playable Teaser”, the seemingly infinite corridor players must repeatedly navigate more than delivered on this eponymous promise, using an endless loop structure (alongside a plethora of other effective shock tactics) to give players a taste of something more expansive, intended to come later. Of course, Kojima’s unceremonious break away from Konami meant it never did. Seven years on, and *Silent Hills* is still nowhere to be found, merely leaving us to wonder what potentially could have been.

And yet it’s precisely because of *P.T.*’s standalone nature that it’s garnered such a legendary status among horror fans. The demo’s pared-back, defenceless, and downright unsettling approach to scares and abstract storytelling continues to inspire players and developers alike. To the extent that what Kojima Productions (operating under the guise of 7780s Studio) achieved using limited resources has almost certainly endured for much longer than initially intended, it’s a shame, then, that *P.T.* is no longer accessible, forever locked away since it was pulled from the PSN storefront in April 2015 – less than a year after release.

Only those forward-thinking enough to keep it stored on their PS4 hard drive can ever revisit *P.T.* again in its original form. For everyone else, meanwhile, there are plenty of other claustrophobic horror experiences where *P.T.*’s influence runs rampant.

**DARK ART**

“*P.T.* revolutionised the psychological horror game genre, becoming a legacy that exceeds its short runtime.” So says Tomasz Gawlikowski, CMO of Bloober Team, a studio that knows a thing or two about crafting intense first-person frights, primarily through its work on the *Layers of Fear* games. “It has certainly influenced all of us in some way, and made us feel that there is still room for subtle stories with a mysterious atmosphere. There are players who love to play games that focus on the setting, rather than monsters or ghosts popping out of nowhere.”

The original *Layers of Fear* launched in early 2016 as one of the first prominent horror titles to deliberately channel the essence of *P.T.* and stretch it out into a full-scale game. The core narrative is far removed from the familicide themes at the centre of Kojima’s twisting tunnel, true, but similar design principles such as an ever-shifting domestic environment shrouded in mystery, the complete absence of combat, and near photorealistic visuals all combine to create an undeniably chilling horror story about a a tortured painter trying to complete their unfinished masterpiece.

“The house plays with you and messes with your head a lot, moving in and out of reality,” explains Gawlikowski. “The visuals are used to manipulate the player. It’s designed in a way to make you feel like you’re trapped in a maze which exists outside of any logic or dimension.” Taking a mundane environment and making it unpredictable was very much *P.T.*’s bread and butter too, so it’s

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*Most of your time in *P.T.* will be spent avoiding the ghost of Lisa, a wife supposedly shot in the eye and stomach by her husband.*

*It’s probably a coincidence, but *Resident Evil 7: Biohazard* made the switch to first-person soon after *P.T.* arrived. It even had its own “Kitchen” demo.*
uneasy," he says. "I feel it brings the player into that scenario the same way I hope to have achieved." Clarke's game similarly lets players get familiar with one intimate environment rather than shooting for a large scale, since he believes it to be much more effective and a cornerstone of this particular horror sub-genre. "I feel there's a lot of power in a smaller environment used to its full potential as opposed to one long linear progression with changing locations."

Grounding you within a singular place – typically infested by a dark presence – is a textbook hallmark of games made in the P.T. mould. That said, equally as important is a deep amount of lore to dig into. After all, what begins as a simple turn of the corridor in Kojima's demo slowly reveals a dark backstory about a father murdering his family. The events that follow are mostly open to interpretation, sure, but they provide plenty for the player to chew on, and benefit from the same internet sleuthing that allows you to piece together the game's mysteries and get to the ending.

Spiritual successors like Layers of Fear and The Mortuary Assistant never go quite this abstract, but there's always much more to the story than simply what's presented on the surface. Plus, it opens up many doors to experiment with the way the narrative unfolds. "Lore-wise, the demon is trying to basically prime [protagonist] Rebecca for possession, and one of the ways of doing that is digging into her past," explains Clarke. "So I leaned into that by having fragments of her life come in and out of her experience in the mortuary. This vignette approach to her and other stories gives a lot of freedom to have it leak in and out of her experience in the mortuary. This interface approach to her and other stories gives a lot of freedom to have it leak in and out of her experience in the mortuary."

Layers of Fear comprises not one but several corridors, as Bloober Team uses every opportunity to reinforce its artist theme. It's not a traditional storytelling method, which makes it a bit of a gamble*

**GOING UNDERGROUND**

Hugely influential, P.T. has not only inspired existing horror developers but also up-and-coming ones, too. For proof, you only need to look at Shadows of Them, a short psychological horror experience set amongst the London Underground, developed by a group of game designers studying at the National Film and Television School (NFTS). The game was released for free on itch.io, being short-listed in Develop:Brighton's Indie Showcase category.
One thing is for certain, though: P.T. is an individual oddity that still leaves developers and horror fans curious about Silent Hills' untapped potential. "The fact that P.T. never became a full title contributed to its cult status," says Gawlikowski. "Fuelled by fans' imagination of what it could have been, it's often mentioned as one of the best titles never made. Would it really be that if it had [become] a full game? We can only speculate, and I think this is why we still can't forget about it."

Porta concurs. "The success of P.T. was born out of its in-game atmosphere," he explains. "Any group of developers capable of creating such a strong feeling of presence – using its visuals, sound design, and level design – is a group of developers whose games I want to play. Konami's Silent Hills would've been all those things and perhaps more."

Silent Hills' unexpected cancellation adds further to the mystique. "Part of what keeps it as such a well-made piece is that everyone has taken the same fantastic base and developed thoughts of what it could have been," says Clarke, "which means it's always perfect to everyone that's a fan of it." That doesn't mean he, too, is any less curious. "Obviously, I'd love to have seen it. However, I think it would have ultimately not lived up to some expectations while surpassing others, and that breaks its legacy."

Kojima's "Playable Teaser" continues to be examined by the dedicated. And while there's no guarantee that the eventual Silent Hills would have reached similar heights, you'd struggle to find a demo anywhere near as influential on so many creators. "P.T. remaining this unrefined gem has allowed so many to be inspired by it and begin to explore some great horror concepts," sums up Clarke. "Maybe that's a good thing."

"It's fair to say that P.T. was our key inspiration," says Shadows of Them's co-narrative designer, Harvey Hayman. "I'm pretty sure the early pitch line was 'P.T. but on a tube train'. [We] even drew out a map of every single corridor loop in P.T. to really inspect how it builds and maintains tension but also how each of the puzzle elements are designed. Our main takeaway from this was that P.T. is great from a horror environment perspective, but its puzzle design is obtuse – Kojima wanted players to take their time to try and solve it. In designing Shadows of Them, we wanted the puzzles to be both integral to the storytelling but fairly simple in their design and solution."

Centred on a mother's metaphorical grief after losing her family, Shadows of Them directly lifts the looping structure of P.T. but makes progression more linear. Players must still traverse an unquantifiable sense of place amidst a grim subject matter, but story pieces don't need to be stitched together. The NFTS students wanted horror fans to walk away totally satisfied. "When I finished P.T., I wasn't sad nor happy," says lighting artist Thomas Porta. "It didn't make me feel anything except, 'Wow, that's a well-made game'. In contrast, with Shadows of Them we [focused] on the player's emotional experience."

FOREVER SILENT

As is evident, just because the games discussed cite Kojima's unfinished potential masterwork as an influence, it doesn't mean that – much like the iconic corridor itself – there aren't infinite avenues in which to take this new brand of psychological horror. Whether that takes the form of giving players a slightly more complex environment to explore, a less obtuse approach to storytelling, or a means to affect the final outcome, P.T.'s legacy now stretches much further beyond whatever Silent Hills would have been. Many have speculated whether the final product could have lived up to that initial demo at all.

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THE BEST OFFENCE

Whereas a lot of horror games give players a means to fight back, P.T. was one of the earliest titles that dared to explore the kind of scares that can be achieved when defenceless. Bloober Team believes that being combat-free opens up more effective types of fear to an all-new audience, too. "With combat-oriented horror games, there's usually a point where you start to feel too powerful, too confident in your ability to repel monsters," says Gawlikowski. "In that sense, defenceless horror titles, if done correctly, can maintain the tension and dread for longer."
It’s always nice to buy into the illusion that no one would actually set out to make and sell a bad game – that every project starts with the best intentions. Of course, these days, we could easily point to the sewer of effluent that seeps out onto Steam and flies in the face of that – the achievement farmers, the crypto-miners, the titles that aren’t just bad but potentially even malicious. Faced with all of this, my mind tends to drift back to something from nearly 40 years ago, to a compilation that doesn’t represent the intention to sell a good game, but stood out in those days as a unique set of software to put on the shelves.

Don’t Buy This, a 1985 release from Firebird Software for the ZX Spectrum might just be the best way of dealing with… well, games that aren’t exactly of the highest quality. Being that Firebird was a large label with the backing of British Telecom, it naturally advertised for and received a great deal of submissions from budding coders, particularly in its earlier days. While most companies would ordinarily just throw out the poor-quality programs, someone at Firebird had the idea of picking five of the “worst” ones and releasing them.

Don’t Buy This hit the shelves with the promise that the games included were five of the worst ever made, and that they represented the end of games as we knew them. That wasn’t the end of it – the inlay said that Firebird had relinquished all copyright to the games, encouraged users to copy the tape, and that unhappy buyers could send in their most creative yet clean complaints to the label and receive an “I DIDN’T BUY THIS” sticker in return. It goes without saying that not many other software houses had taken this approach to their lousy submissions before, and not many would do so afterwards.

That last part is surprising, as Don’t Buy This actually did review and sell well, all things considered. The price point of £2.50 for five games was considered low enough for people to be curious about just what was on the tape, and the programs themselves weren’t even that terrible in the grand scheme of things. The most amusingly awful games are the pair of titles that star a badly drawn dog named Fido, and the other three are just rather basic and simple. You’d find far worse games on Cassette 50, Cascade’s tape that was sold for a tenner in the pages of literally every computer magazine for a couple of years. Occasionally, the odd modern bundle might also test people’s curiosity with some infamous PC releases that aren’t going to infect your computer, but few have ever been quite as bare-faced as this dusty old mid-eighties cassette. Perhaps the horror at what the success of Don’t Buy This represented made other companies shy away from doing something similar, yet it’s still an amusing story to revisit today.

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

In another world, Fido could have been a Spectrum hero on the same level of Dizzy and Miner Willy, amusing millions as he murders moles with his tail. Sadly, this did not happen.
Toolbox

The art, theory, and production of video games

44. **Design Principles**
Howard Scott Warshaw on the birth of a new medium

46. **Narrative Design**
More storytelling advice from our resident tale-spinner

48. **DIY Horror**
Make your own nightmare in Unreal Engine 5

54. **Source Code**
Recreate Elite’s 3D rotating space ship in Python

What was it like to work on the first movie tie-in game, *Raiders of the Lost Ark*? Howard shares his memories on page 44.

Make a first-person survival horror game worthy of *P.T.* See page 48.
The principles of game design

What’s it like to work in a medium that’s only just been born? Howard remembers it well...

The field of streaming video is starting to coalesce and narrow after an intense and crazy scramble, with virtually everyone joining the fray. This is a familiar sequence with any hot technology innovation. It starts as a trickle, soon becomes a flood, and eventually evolves into a new irrigation system. This is the cavalcade of consequences. The flood part of this transition is very exciting. That’s the feeding frenzy!

I remember sitting in a hot desert in the middle of a sandstorm years ago. I was witnessing an immense effort to launch a new major diner at the feeding frenzy phase of streaming video. Something about this felt familiar to me.

Participating in the birth of a new medium is a wonderful thing. It’s like a fresh start. I’ve been a producer, teacher, programmer, designer, manager, photographer, writer, filmmaker, public speaker, and now I’m a psychotherapist. Few things in life thrill me quite as much as fresh starts.

The thrill is all about having a fresh field of untrodden snow glistening before me and the opportunity to make the first footprints any way I choose. Perhaps in a fabulously new way nobody’s ever seen before. And this is also where the familiarity comes in...

Because I realise this isn’t my first new medium – video games were my first. And what comes with a new medium? New experiences. New opportunities. New perceptions and conceptions and entertainment breakthroughs. The chance to show people something they’ve never been able to experience before. I was there at the feeding frenzy phase of video games. That is exciting to me. That is the big rush.

But what’s the rush? It takes time for new experiences to come around. Interestingly, what usually happens is the new medium starts off redoing everything done before in other media. Why? Two reasons, primarily.

First, it’s safe. Existing content is established, well-known, and it’s already there suggesting itself. Second, it’s new.

The exciting aspect of a new medium is also the problem with a new medium: all the wild and revolutionary things no one ever thought to do in previous media are still unthought and undone.

But the development of the new medium want to recoup their investment right away, creating pressure to produce saleable products in the new medium immediately.

This pressure is anathema to creators and inventors who want to spend all their time brainstorming something that will make people see the incredible potential and possibilities of

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**AUTHOR**

**HOWARD SCOTT WARSHAW**

Howard is a video game pioneer who authored several of Atari’s most famous and infamous titles. His book, *Once Upon Atari: How I Made History by Killing an Industry*, is out now. [onceuponatari.com](http://onceuponatari.com)
the new medium. And yet, the problem of having to produce something saleable immediately can generate one big benefit. And that benefit (and here is something you almost never hear engineers say) is marketing!

Sometimes. Marketing is what CEOs turn to when they need to get revenue and they have no idea how.

On the one hand, there are lame marketing people who have no ideas. They will come to you and say, “Here’s what I can sell. Make this.” Naturally, this is impossible to create with the technology. And when you show them what you can make with the technology, they freak out. They say, “Oh no! I can’t possibly sell that.” To paraphrase Nolan Bushnell, “What drives engineers crazy is idiotic marketing people asking them to violate the laws of physics, which they do on a regular basis.”

On the other hand... There are marketing people who aren’t lame and who do have ideas. They don’t understand the technology any better, but they do understand how to separate the selling from the product. And this creates wonderful opportunities because it takes pressure off the developer to make something too specific and gives them a chance to experiment, to try something new and innovative.

Take Atari in 1981, for example. The typical marketing input for product direction was little more than a two-word title like “Rock Fight” or “Speed Chase”. But there was one marketing innovation that did emerge: the licensed property. Initially, it was the obvious coin-op title, but then came the major motion picture licence. That totally changed the game. (Pun intended.)

The upside is that you now have a sales hook that leaves more wiggle room for the product. Yes, players have expectations, but not like in a coin-op conversion. The benefit is the licence lends credence to any original concept you can shoehorn into the game.

The first non-game-related licence was Raiders of the Lost Ark. In Raiders, I was able to expand the threshold of game entry and make it a little tougher because I knew the licence would increase people’s commitment to the game. They were less likely to give up and walk away from Raiders than they were from an average game, and I used that to make Raiders a pretty intense VCS game.

The downside to a movie licence is the introduction of a far more rigid release deadline. If you plan to use a popularity window to goose your sales, you better hit that window! The first game where that really became an issue? E.T.

There have been some inevitable losers in the streaming video gold rush. One of the big ones, Quibi, launched in 2018 – it survived less than two years.
when we talk about a trope, what we mean is a common element which may recur from story to story. These elements can be of any conceptual ‘size’, ranging from the expansive ‘chosen one’ archetype, which may dominate an entire story, all the way down to some tiny sub-scene moment, like how a villain might face their chair away from a hero at first, then at the right moment swivel dramatically to emphasise their menace. The point is that these tropes are recognisably a pattern in storytelling, occurring more than once.

BUILDING BLOCKS
In many ways, tropes are the language of storytelling. Once an element becomes a pattern, it always comes with connotations inherited from the popular example of that element. Imagine, for instance, the shoulder-parrot: a parrot, perched on a shoulder, which belongs to a one-eyed or peg-legged man who likes saying “Oo-arr”. This is a small trope usually played for comedy, which likely originated with the adventure story Treasure Island, and was later imitated by others who were either intentionally referencing that work or naively accepted pirate-parrots as true to life (there’s no record of this ever being the case). Nevertheless, a shouldered parrot now immediately summons a horde of connotations, such as themes of piracy, the feeling of adventure, or specific lines such as “Polly wants a cracker”. It could just have easily emerged that parrots on the shoulder connoted sainthood, or foreshadowed the perch’s death, or that the person had a mystical connection to nature. But those possibilities simply haven’t come to pass. Accepting that, we can begin to use the trope.

Tropes like the villain chair-turn and the shoulder-parrot are building blocks which act as storytelling shortcuts. If I want audiences to know that a level’s boss (another trope) is a villainous pirate, all I must do is have them dramatically turn their chair to face the hero, revealing a pet parrot perched a-shoulder. Even if you take something relatively sophisticated, like the recent film Everything Everywhere All At Once, it’s still built more or less entirely out of repeated patterns from elsewhere in storydom: a magical artefact that destroys the minds of those who gaze upon it, a small prop used as a ‘third eye’ to symbolise enlightenment, and the trope that all Asians know, martial arts. All stories, intentionally or not, are built...
Tropes vs fiction in video games

with this vocabulary of elements. But like words in a real vocabulary, intentionally or not, some elements are harmful. Take the ‘all Asians know martial arts’ example, which in Everything Everywhere is gently lampooned. But when unquestioned it can also lead to negative outcomes, such as being fodder for playground bullying of Asian kids who “should know how to fight”, or East Asian actors needing martial arts training to work in the film industry despite this not being expected of their white counterparts.

TROPE FEAR
But again, tropes are just the building blocks of stories. In modern popular culture, many people hear ‘trope’ and understandably think ‘bad’. There are various factors why this has emerged, not least because of poor curricula in schools and the amount of CinemaSins-style content masquerading as coverage or criticism of popular media. Even among people thinking deeply about storytelling, who may have appreciated things like Tropes vs. Women in Video Games and other attempts to increase the sophistication of games criticism, a large number have taken a reactive stance to many tropes, rejecting them outright.

Take, for instance, the trope of the magical Black man. He usually lives on the outskirts of town, is poor and downtrodden, and speaks real folksy-like, but possesses some ancient, spiritual, possibly tribal wisdom. It is often his role to assist a white protagonist. This is, of course, quite racist, and draws from the same well as the idea of ‘savagery’ upon which the British Empire was built. As a game storyteller, I might spot that idea in a piece and immediately nope it out of the narrative. But wait. Does the trope really mean that we can never include a Black man with mystical powers in any story? Should I dodge it by ‘safely’ rewriting that character as white? Furthermore, can we never have a man rescue a woman ever again?

THE LONG ROAD AHEAD
What we can do instead is use the trope with our eyes open, shedding ignorance. Perhaps we subvert it, by having the protagonist go to the Black man at the edge of town expecting magic, only to find that in reality the magic is science, and their assumption gets derided. Or maybe we reaffirm the trope without glamourising it, dedicating serious time to why people marginalised by society might turn to ‘old ways’ or otherwise reject mainstream thinking, considering, for example, the well-documented real-world phenomena of ethnically unequal health service outcomes.

Writing almost any story is a negotiation with tropes, to a degree. Some tropes you’ll have to let slide (if you even notice them), and others you’ll have the space to really explore. The Rings of Power arguably lacks the latitude to challenge the trope of a sentient race being inherently evil, but it’s trying to confront the idea that almost everyone of note in fantasy stories is a white man. The point is this: embrace tropes, use them to your benefit as storytellers have since time immemorial. Do so with as little ignorance as possible, negotiating with their nuances. And who knows, perhaps the next great video game story will be about a parrot, detailing the highly unique and against-all-odds journey Polly must have lived to end up on the shoulder of a bonafide pirate. ©

“In many ways, tropes are the language of storytelling”

TROPIES IN PLAY
Open-world games often need an ‘infinitely playable endgame’ so the player can continue to hoover up all the content. Games which haven’t written this in smartly are forced to offer a menu saying “The story’s over, but do you want to continue anyway?”, after which everything feels non-canonical and hollow. Red Dead Redemption and its sequel both play with the trope cleverly, transitioning to a new character to reinvigorate the world after the finale, and allowing the writers to do whatever devilish things they like to the main protagonist at the climax of the story.
Recreate P.T.’s horror features in Unreal Engine 5

From a ghostly shadow that follows the player to a sinister telephone, here’s how to make some of P.T.’s scariest bits

It’s Halloween season and there’s something behind you… or is there? Here, we’re going to look at bringing some spooks into our Unreal projects by creating a ghostly shadow that follows you, an ethereal spirit that’s there one minute and gone the next, and a spooky telephone that reacts when the player interacts with it multiple times. There’s a lot of ground to cover, so let’s dive right in.

To begin, let’s create a ghostly shadow that follows you. You’ll see a shadow cast from a mysterious figure behind you, but if you turn around and look… there’ll be nothing there. We’ll be using the first-person example content for this exercise, but if you have an already set up first-person character, you can still follow along.

Let’s start making our ghost by creating a new Actor (Add > Blueprint Class, and select Actor). Name the newly created class BP_Ghost. Double-click to open the actor. Within our BP_Ghost, we’re going to add a SkeletalMesh that we could potentially pose and animate later on to add to the scare factor even more. For now, we’ll focus on creating and setting the SkeletalMesh.

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Select the SkeletalMesh to open the Details panel (usually found on the right-hand side of the screen). Within the Details panel, you’ll see a section marked Mesh with an empty SkeletalMesh entry. Select the drop-down and choose whichever SkeletalMesh you’d like to use. If you have Engine Content visible, you should be able to select TutorialTTP. If not, you can add example content from the Content Browser using Add > Add Feature or Content Pack (Figure 2).

Now to add the magic. We have a SkeletalMesh and the mesh itself set, but we need to do two things from here: make sure it’s invisible in-game, and ensure it still casts a shadow even...
Recreate P.T.’s horror features in Unreal Engine 5

Toolbox

Figure 3: As if by magic, your ghost will be invisible in-game but it will still cast a shadow.

though it’s invisible. Luckily, Unreal has settings we can easily change to achieve this result. Make sure you’re still in the Details panel for the Skeletal Mesh and scroll down to the rendering section to find the Hidden In Game checkbox (alternatively, you can use the search box at the top of the Details panel). Ensure the checkbox for Hidden In Game is ticked (set to true). Once that is done, head to Lighting and search for Hidden Shadow. Ensure that Hidden Shadow is set to true, too.

While we’re here, we might as well disable collisions to ensure the player doesn’t accidentally walk into our ghost. This should be on by default, but if not, you can search for the Collision Preset in the Collision section of the Details panel. Ensure that it is set to NoCollision. When you’re ready to give your ghost a test – compile, save, and place it within your level by dragging it in from the Content Browser (Figure 3).

There are going to be times where we want the ghost to be directly behind the player, following their every move. As an example, we’ll do this on every frame so it’s always there. But pay close attention, because what you learn next can be applied to having the ghost follow the player at specific times instead of all the time.

Head back into BP_Ghost, and go to the Event Graph. What we’re going to do is find where the player character is, and teleport our ghost to a space just behind them.

To do this, right-click in empty space and create a Get Player Character node, which will give us the character the player’s currently using. From the blue output pin, grab it and drag it into empty space and create a Get Actor Forward Vector node, a Get Actor Location node, and a Get Actor Rotation node.

We need a small handful of nodes before we can start hooking everything up, so in empty space, right-click and create the following nodes:

- Make Literal Float
- Make Literal Float
- Multiply
- Multiply
- Add
- Set Actor Location and Rotation

Connect the two Make Literal Float nodes to the second inputs of the two Multiply nodes, then plug the output of one of the Multiply nodes into “To begin, let’s create a ghostly shadow that follows you”.

To begin, let’s create a ghostly shadow that follows you

NODE TIP

If you’re having issues connecting the two Multiply nodes together, delete them and ensure the vector goes in first, then the float, making a Multiply (Vector * Float) node. This is a bug that should be fixed in future Unreal Engine versions.
Recreate P.T.’s horror features in Unreal Engine 5

Toolbox

the first input of the other one. For the first Make Literal Float, set it to ‘-1’, and for the second one, set it to ‘100.0’.

Plug the output of the second Multiply into the first input of the Add node, and connect the output of the Get Actor Location node into the second input of the Add node.

The output of the Add node can be plugged into New Location in the Set Actor Location and Rotation node. Whilst we’re here, the Get Actor Rotation output should be plugged into New Rotation.

The final two steps are to connect the output of Get Actor Forward Vector into the input of the first Multiply node, and to connect the input execution pin (the leftmost arrow) of the Set Actor Location and Rotation into the Event Tick execution pin (Figure 4).

What the code is doing is getting the player’s location, getting their forward vector (“this direction is forward for me”), inverting it to get the location behind the player, multiplying it by 100 to get 100 units behind the player, and then updating the ghost’s location and rotation to match that value. Now, if you play and test, you’ll see the ghost spookily following the player.

GHOST TRICK

The next stop on our spooky adventure is to create a ghost that’s there one minute but once you look away and look back again, it’s gone.

Before we begin, we need to know how we’re going to ‘see’ the ghost. We’re not going to be sitting watching the player as they play, so we need a trick to be able to get an understanding of what they can and can’t see. For this, we’re going to use a line trace and a little bit of magic.

A line trace is a line you can shoot out into the world to check if it hits something. For this example, we’re going to trace forward from our ghost’s eyes to make sure that it can hit the player without something being in the way, masking the view.

We’ll then double-check (to ensure no accidental misfires) that the player can or cannot see the ghost by converting its location from the world onto the screen to see if the world location can be seen by the player. With our two fail-safes in place, we’ll know if the player can or cannot see the ghost, so we can make it disappear once they’ve lost sight of it.

Let’s begin the implementation. Duplicate your Ghost Blueprint and call it BP_Ghost2. Open it
Recreate P.T.'s horror features in Unreal Engine 5

Toolbox

up, remove the old code, and ensure you turn off Set Hidden In Game (as we actually want to see the ghost this time). We're going to use an Arrow that we can trace from as a quick way of tracing from our ghost's eyes (Figure 5).

Create an Arrow component in the Components tab and set the Transform details as follows:

| Location: | X: 0.0, Y: 0.0, Z: 180.0 |
| Rotation: | X: 0.0, Y: 0.0, Z: 90.0 |

We're now ready to add the code. We want this to fire every frame, so create an Event Tick. The eyes will be the starting point for the trace, so drag your Arrow into the Event Graph from the Components panel. From the blue output pin, drag into empty space and create a Get World Location node.

For our endpoint, we can easily get the player's camera by using Get Player Camera Manager, so create that node now and, from the output, create a Get Actor Location node. This is the start and end of the trace we're about to make.

In empty space, create a Line Trace by Channel node. For the Start, plug in the output from the Arrow's Get World Location, and for the end, plug in the output of the Camera Manager's Get Actor Location node. Set the Trace Channel to Visibility and set Trace Complex to true, as we need to be as precise as possible (Figure 6).

Now that the trace has happened, we need to know what to do afterwards. As we want to act if the ghost and player can't see each other, we're only going to act if the trace reports it couldn't make the connection between the player and the ghost's eyes. To achieve this, from the Return Value boolean output, drag it into empty space and create a NOT Boolean node.

Remember earlier we said about adding magic to check the world location is on the screen? We need that information now. In empty space, click and create a Get Player Controller node. From the output pin, click and drag into empty space and create a Convert World Location to Screen Location node. For the World Location input pin, create a Get Actor Location node and plug it into that input.

From the output of the Convert World Location to Screen Location node, we're going to use the numbers to check against the size of the player's screen. If the numbers are out of range, the ghost actor isn't in view of the camera. We're going to split the output values into X and Y (left-right and up-down). We can do this by dragging the Screen Location output pin into empty space and creating a Break Vector 2D node.

Create two In Range (Float) nodes and connect the X output value to the first In Range's Value and the Y output to the second In Range's Value input. Ensure Inclusive Min and Inclusive Max are both set to true on both of the nodes.

Now we have values feeding into our In Range nodes, but we haven't told it the minimum or maximum values we require. If you think of the player screen as a 1920×1080 display – 0.0 would be the top-left corner, 1920×0 would be the top-right corner, and 1920×1080 would be the bottom-right corner.

Not all players have a 1920×1080 display, though. Luckily, there's a function that can help us. We can get the current size of the viewport. In empty space, create a Get Viewport Size node. Plug the Return Value X output into the Max input of the first In Range float (the one with the X output from the Break Vector 2D node). Plug the Return Value Y output into the Max input of the second In Range float (Figure 7).

We're almost done – we now need to hook up our three checks and act accordingly if (as a collective) they're true or false.

In empty space, create an AND Boolean node and press the 'Add pin' button to give us three inputs. Hook up the three boolean outputs we've created – the first from the NOT from MAGIC SAUCE

The Convert World Location to Screen Location node is the magic sauce of our disappearing ghost – it will tell us if the ghost is currently in a location on the screen. Combining this with our trace will tell us without a doubt if the ghost can be seen or if it is hidden from view.

“We’re going to use a line trace and a little bit of magic”

Figure 8: The complete Event Graph for our disappearing ghost.
Recreate P.T.’s horror features in Unreal Engine 5

Toolbox

Recreate P.T.’s horror features in Unreal Engine 5

the line trace and the other two outputs from the In Range (Float) nodes. Hook the output of this AND node into a Branch node.

There are only two nodes left to go. As we’re firing this every frame (via Event Tick), we need to make sure we don’t fire the ‘get rid of this ghost’ code multiple times or things could soon go wrong. To combat this, we can create a Do Once node. Before we continue, and if you haven’t already, plug the execution lines together from Event Tick to the Line Trace to the Branch’s execution input.

With this Do Once node, we can initially start it off closed, which means it has to be ‘reset’ before it will fire. This is perfect for our use case, where the player needs to see the ghost first before it disappears. Select the Start Closed bool on the Do Once node to true. Then plug the True output of the Branch into the Reset input of the Do Once, and the False output of the Branch into the execution input pin of the node.

Finally, from the output of the Do Once node, create a Destroy Actor node and plug the execution pins together. And that’s our see-her-once-and-she’s-gone ghost completed.

We have a spooky ghost that follows you and a ghost that disappears once you’ve seen it – we’re almost spooked out. But there’s still one other thing we can replicate from P.T. – a telephone that behaves differently the more times you interact with it.

GEAR

Remember, you can see engine and plugin content by pressing the gear in the asset picker and selecting the content you’d like to appear!

HOTLINE

Create a new Blueprint Actor (of type Actor) called BP_Telephone. As we have done previously in this guide, add a new component to this Blueprint – this time selecting a StaticMeshComponent (Static Mesh). Within the Details panel of the Static Mesh, set the Mesh to ‘Cube’ from the engine content. If you have an existing Telephone Mesh, feel free to use that instead.

If you’re using the Cube Mesh, scale the StaticMeshComponent to X: 0.1, Y: 0.1, Z: 0.1 so that it looks a tiny bit more like a telephone.

For this actor, we need to know when the player is nearby and can interact. We can do this by adding a Box Collision component. Go ahead and add that now, making it a child of the Static Mesh.

There are two things we need to do with our Box Collision: we need to know when the player has triggered it and when the player has left it. The idea behind this is if the player is inside, they can interact with our telephone, and when they’re outside, they shouldn’t be able to interact anymore. Luckily, there are two built-in events with Box Collision that can tell us when something has entered the Collision and when something has left.

Right-click your Box Collision (default name is ‘Box’) within your Components pane and go to Add Event. Select Add On Component Begin Overlap. Do this again for Add Component End Overlap.

With both events in your Event Graph, we can check if the player has triggered it by grabbing the Other Actor pin and creating a Cast to BP_FirstPersonCharacter node (as BP_FirstPersonCharacter is the player Blueprint in our project). Do this for both events now (Figure 10).

Figure 9: Here, we have everything set up for our ‘Telephone’, components-wise. Now it’s time to add the code to bring our phone to life.

Figure 10: These events check ‘is Other Actor the Player?’. If the cast fails, we know the Other Actor is not the player.
The Content Example FirstPersonCharacter has a built-in Event Dispatcher to deal with using items, which we’ll use for our Telephone. From the output pin As BP First Person Character in the Begin Overlap part of our code, drag it into empty space and type ‘Assign On Use Item’.

When you press ENTER, you’ll see it automatically creates an event and connects the bind to our cast and the event. The created event is what we’ll use for our Interact code, but for now, let’s head to the End Overlap code. From the output pin As BP First Person Character in the End Overlap code, create an Unbind Event from On Use Item node and hook the red input to the same event we created in the Begin Overlap code chain (Figure 11).

Now the player can only interact with the phone when they’re inside the Box Collision. Finally, all we need to do is track how many times the player has interacted with the phone and do something different based on the number of times they’ve interacted.

Create a Variable in the My Blueprint panel, calling the variable Interacted Times and set the type to Integer. Click the variable you just created and drag it into the Event Graph. When asked, select Get. Grab the output of the created Variable node and drag into empty space, creating an Increment Int node. Plug the execution pin into the output of the event created from the Assign (Figure 12).

Now to deal with what happens with this value. As mentioned before, we know that this number represents how many times the player has interacted with the phone, so we can do a simple ‘Switch’ to act accordingly based on how many times the player interacts. From the output int pin of the Increment Int node, drag it into empty space and create a Switch On Int node. Connect the execution input of this node to the output execution of the Increment Int node.

For our example, we want the phone to fire four times and, on the fourth time, we’ll make it do something different. Press the ‘Add pin’ button on the Switch On Int node four times. As we increment the int before we’ve even used it, we don’t need index ‘0’ as we will never use it; instead, select the Switch On Int node, and within the Details panel, set the start index to ‘1’.

Create two Print String nodes. For the second one, set the In String to ‘Boo!’.

“A telephone that behaves differently the more you interact with it”

“Figure 12: Increment int gets the integer value, increases it by one, and saves it for you automatically.”

Figure 13: The complete code for BP_Telephone.
or many gamers, Elite (and more recently Elite Dangerous) needs little introduction. For those who are unaware, though, Elite was a pioneering space trading sim released in 1984 by Acornsoft for BBC B and Electron computers. Elite featured 3D wireframe graphics and enabled players to command a variety of spaceships and travel across thousands of star systems. If you want to play an emulated version of the BBC game, you can find an online version at bbcmicro.co.uk.

For this sample, we’re going to remake the title screen from the BBC B version, which features a spinning wireframe Cobra Mk III ship. We’re using Pygame Zero and some pretty nuts and bolts calculations to create the wireframe ship without a 3D library. Some of the maths may seem complicated, but it’s all fairly straightforward trigonometry. You can find the types of calculations I’ve used in several places on the internet, but I learned these techniques from a book called Advanced Programming Techniques for the BBC Micro by Jim McGregor and Alan Watt.

The first thing we’ll need is a set of coordinates which make up the lines of our wireframe model. We’re in luck, as the data for the Cobra Mk III can be found at wfmag.cc/cobra-mk3. There are three coordinates for each vertex – x, y, and z – so that a point can be plotted in 3D space. These points are then ‘joined up’ by faces, which is a list of the vertices that make up the face. To draw the 3D model to the screen, we need to convert these 3D coordinates into 2D screen coordinates.

The first part of this transformation is to set up the scene variables with a function called initViewTransform(). We pass this function the parameters that make up the way the whole scene is displayed. These parameters are known as the radial distance (rho), the azimuthal angle (theta), the polar angle (phi), and finally, d, the distance from the viewer. With some use of cos and sin calculations, we can derive a set of multipliers for all our coordinates. We then transform each coordinate so that it’s rotated correctly in our scene using the viewTransform() function. To get our wireframe onto the screen, we need to convert all our 3D coordinates into flat 2D coordinates using the perspectiveTransform() function.

Now we can start thinking about drawing the model to the screen. All we need to do is run through our list of faces and draw a line between each transformed vertex listed as being part of that face. This will give us a wireframe model, but you’ll be able to see the faces at the back of the model as well as the front, and all the faces will look transparent. What we need is a way of only drawing the faces we can see – a technique called back-face culling. To do this, we calculate the ‘normal’ vector (a line pointing in the direction that the surface is facing) of each face and then compare that to the line of sight from our camera’s viewpoint. If the comparison comes back with a negative value, then the face is pointing away from the camera and we don’t draw it. We can also sort the faces to draw them from the back forward and draw the inside of the face in solid black to obscure any geometry that it covers. With these three ‘culling’ techniques, we end up with a solid-looking, wireframe model which we can rotate by changing the values of theta and phi. These calculations could be used to create any of the 3D geometry found in the original Elite.

Games are usually written in such engines as Unity, three.js, or Unreal these days, but it’s still a good idea to understand the fundamentals of how 3D scenes are created. ©

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Recreate Elite’s iconic opening title screen

Learn the nuts and bolts of displaying wireframe 3D objects in Python and Pygame Zero

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Players took the role of Commander Jameson and started their adventure in a Cobra Mk III.

Our re-creation of the original Elite title screen.
Here's Mark's code for a 3D wireframe Cobra Mk III. To get it running on your system, you'll first need to install Pygame Zero. Full instructions can be found at wfmag.cc/pgzero.

```python
# Elite

import pgzrun, math, pygame, numpy

angle1 = 90
angle2 = 90
xview = 0
yview = 6
zview = 250

def draw():
    screen.blit("background", (90, 5))
    drawShip(700, angle1, angle2, 1000)

def update():
    global angle1, angle2
    angle1 += 0.6
    angle2 += 1

def initViewTransform(rho, theta, phi):
    global va, vb, ve, vf, vg, vi, vj, vk, vl
    sintheta = math.sin(math.radians(theta))
    costheta = math.cos(math.radians(theta))
    sinphi = math.sin(math.radians(phi))
    cosphi = math.cos(math.radians(phi))
    va = -sintheta
    vb = costheta
    ve = -costheta*cosphi
    vf = -sintheta*cosphi
    vg = sinphi
    vi = -costheta*sinphi
    vj = -sintheta*sinphi
    vk = -cosphi
    vl = rho

def viewTransform(x, y, z):
    xe = va*x + vb*y
    ye = ve*x + vf*y + vg*z
    ze = vi*x + vj*y + vk*z + vl
    return (xe, ye, ze)

def perspectiveTransform(xyz, d):
    return ((d*xyz[0]/xyz[2])+400, (d*xyz[1]/xyz[2])+230)

def drawShip(rho, theta, phi, d):
    verts = [(32,0,76),(-32,0,76), (0,26,24), (-120,-3,-8),
    (120,-3,-8), (-88,16,-40), (88,16,-40), (128,-8,-40),
    (-128,-8,-40), (-224,-40), (-32,0,-250), (-128,-8,-40),
    (-32,0,-250), (-32,0,-76), (-32,0,-90), (-80,-16,-40),
    (-80,16,-40), (80,16,-40), (80,-16,-40), (-80,-16,-40),
    (36.8,-40), (-36.8,40), (36.8,-40), (-36.8,40),
    (0,76), (0,80), (-80,-6,-40), (-80,6,-40),
    (80,80), (-88,8,-40), (88,8,-40)]

    faces = [[1,2,20,21,20],[1,5,21],[5,0,22],[1,3,5],[4,6,0],[5,9,22],[0,6,2],[
    3,8,5],[7,4,6],[7,6,9,5,8,10,11],[0,3,1,103],[0,11,10,1,20],[20],
    [7,11,0,4],[18,13,12,19],[17,16,15,14],[22,23,24],[27,26,25]]

def drawShip(rho, theta, phi, d):
    verts = [(32,0,76),(-32,0,76), (0,26,24), (-120,-3,-8),
    (120,-3,-8), (-88,16,-40), (88,16,-40), (128,-8,-40),
    (-128,-8,-40), (-224,-40), (-32,0,-250), (-128,-8,-40),
    (-32,0,-250), (-32,0,-76), (-32,0,-90), (-80,-16,-40),
    (-80,16,-40), (80,16,-40), (80,-16,-40), (-80,-16,-40),
    (36.8,-40), (-36.8,40), (36.8,-40), (-36.8,40),
    (0,76), (0,80), (-80,-6,-40), (-80,6,-40),
    (80,80), (-88,8,-40), (88,8,-40)]

    faces = [[1,2,20,21,20],[1,5,21],[5,0,22],[1,3,5],[4,6,0],[5,9,22],[0,6,2],[
    3,8,5],[7,4,6],[7,6,9,5,8,10,11],[0,3,1,103],[0,11,10,1,20],[20],
    [7,11,0,4],[18,13,12,19],[17,16,15,14],[22,23,24],[27,26,25]]

    initViewTransform(rho, theta, phi)
    spoints = []
    vpoints = []
    for v in range(0, len(verts)):
        tpoints = viewTransform(verts[v][0],verts[v][1],verts[v][2])
        vpoints.append(tpoints)
    spoints.append(perspectiveTransform(tpoints,d))
    fOrder = getFacesDrawOrder(faces, vpoints)
    for fo in reversed(range(0,len(faces))):
        f = fOrder[fo]
        vp0 = vpoints[faces[f][0]]
        vp1 = vpoints[faces[f][1]]
        vp2 = vpoints[faces[f][2]]
        vect1 = []
        vect2 = []
        for i in range(0,3):
            vect1.append(vp1[i] - vp0[i])
            vect2.append(vp2[i] - vp0[i])
        n = getNormalVector(vect1,vect2)
        los = [xview-vpoints[faces[f][0]][0],yview-vpoints[faces[f][0]][1],zview-vpoints[faces[f][0]][2]]
        vis = n[0]*los[0]+n[1]*los[1]+n[2]*los[2]
        fpoints = []
        for v in range(0,len(faces[f])):
            v1 = v-1
            if v1 < 0 : v1 = len(faces[f])-1
            cv1 = faces[f][v-1]
            sx1 = spoints[cv1][0]
            sy1 = spoints[cv1][1]
            cv2 = faces[f][v]
            sx2 = spoints[cv2][0]
            sy2 = spoints[cv2][1]
            fpoints.append(spoints[cv1])
            if vis > 0:
                pygame.draw.polygon(screen.surface,(0,0,0),fpoints)
                pygame.draw.polygon(screen.surface,(255,255,255),fpoints,3)

def getFacesDrawOrder(f0, vp):
    favz = []
    for f in range(0,len(f0)):
        favz.append(getMostZ(f0[f],vp))
    forder = numpy.argsort(favz)
    return forder

def getNormalVector(a,b):
    x = a[1]*b[2] - b[1]*a[2]
    y = a[2]*b[0] - b[2]*a[0]
    z = a[0]*b[1] - b[0]*a[1]
    nv = [x,y,z]
    return nv

def getMostZ(flist,vlist):
    a = 0
    for i in flist:
        vz = vlist[i][2]
        if a < vz: a=vz
    return a

def pgzrun.go():
```

Download the code from GitHub: wfmag.cc/wfmag67

Cobra in Python

Here's Mark's code for a 3D wireframe Cobra Mk III. To get it running on your system, you'll first need to install Pygame Zero. Full instructions can be found at wfmag.cc/pgzero.

```
everyone warned us about the crowds. Nobody bothered to tell us about the heat. It was an unseasonably spicy 34°C as Wireframe arrived in Cologne for Gamescom 2022 back in August, and even a friendly policeman commented on just how freakishly sweaty the place was. “I’ve never known anything like it, and I’ve lived in Germany all my life,” he said, as we crossed a road in search of shade, any shade at all. “It’s not the weather for working; we should be sitting on a beach somewhere.”

Fortunately, the convention centre that hosts Gamescom – that’s the Koelnmesse to you – had air-con, so the situation was decidedly less sweaty once we made our way indoors. Which is just as well, because Gamescom really is gigantic: spread across eleven halls, each with two floors apiece, it’s one of the biggest gaming conventions in the world. In fact, walking around Gamescom is a reminder of just how gargantuan the industry as a whole has become: like a piece of civic architecture designed to make ordinary citizens feel humbled and tiny, Gamescom seems tailor-made to overwhelm. There are more games here than you could ever possibly see, much less play; there are huge, triple-A games, tiny games, and everything in between. You could walk the halls for all four days, without stopping to eat, drink, or go to the loo, and not wrap your head around everything. But still, your humble writers at Wireframe tried. Lord knows we tried. Here are a few of our highlights…

Our experiences, highlights – and a few lowlights – from Cologne’s truly massive gaming convention in August

Fear & loathing at Gamescom 2022

Cologne
Why take a taxi or bus to the show when there’s a lovely walk to be had? Crossing the river Rhine two mornings in a row offered a nice breather, and a good opportunity to take in Cologne’s natural sights before risking the crowded indoors. The party boat docked next to the bridge even had us thinking it’d be a great setting for a *Hitman* level. Alas, no bald heads were spotted this time.

Crossing the river Rhine

It exists! That was our first reaction after learning that Deep Silver’s long-gestating zombie horror sequel was making an appearance at Gamescom. And not just that, but that we’d get to play it. You know, with our hands. It was quickly after getting over this shock that we determined *Dead Island 2* to be... fine. But that feels like a win in and of itself considering that Dambuster Studios is the third developer to pick up its reins. Now set in sun-kissed San Francisco (not really an island, but we’ll forgive it), our demo saw us venture to the pier for a late-night flesh-eater beatdown. Lopping off heads was decent enough using a set of electrified claws, but we can’t say it’s anything we haven’t seen from zombie games before.

People-spotting

About 250,000 people crammed into Gamescom, so you’re bound to see a famous face now and again. Features ed Aaron saw Sony’s Shuhei Yoshida and presenter Geoff “Doritos and Mountain Dew” Keighley among the throng. Hapless editor Ryan saw several PlatinumGames staff walking the halls in matching t-shirts. He wouldn’ve said hello, but he got so starstruck that his already shaky knowledge of Japanese deserted him entirely. Sigh.

Slower-paced games like farming sims aren’t the best fodder for the *Pachinko* parlour-like tone of a gaming expo, but we found ourselves disarmed by this sci-fi-infused take on the genre. Think of it as *Harvest Moon* meets *Gundam*; it’s the future, you’re in a big mech, you have crops to plant and take care of, and farming equipment to build to help you with that process. You can also transform into a speedier vehicle to explore and gather resources, plus there’s an enigmatic narrative tying it all together.

Planet of Lana

We’ve had our eye on this cinematic platformer for a while now, so it was quite exciting to get some hands-on time with it. *Planet of Lana*, it’s fair to say, doesn’t disappoint. If you have fond memories of things like *Another World*, *Flashback*, *Inside*, or the co-operative puzzles of *Ico* – where you have to coax a computer-controlled character to stand on switches, distract enemies, and the like – then you’ll probably get on well with Swedish studio Wishfully’s debut. We’ll explore the game in more depth – and share our chat with developer Adam Stjärnljus – in a future edition of Wireframe.
Comedy’s a tricky thing to get right in games, but this FPS, conceived by *Rick and Morty*’s Justin Roiland, looks as though it’s hit the mark. The abrasive humour will be immediately familiar to fans of Roiland’s animated TV work, while the voice acting, from Roiland among others, seems top-notch. What really works, though, is the concept of a gun that happens to be a sentient alien creature, regularly commenting on whatever strange stuff is happening in your latest mission. Will the novelty wear thin after a few hours? Perhaps, but for the segment we experienced, Roiland’s trademark staccato worked superbly. “You happy now? There goes our ‘E for Everybody’ rating...”

A Wireframe cover star from way back in 2019, *Mineko’s Night Market* made a welcome appearance at Gamescom, and it’s a pleasure to see this much-delayed game making progress. About a young girl who finds herself in a leafy town populated by cats, it’s an adorable life sim that nods affectionately to the likes of *Animal Crossing*, *Harvest Moon*, Studio Ghibli movies, and other chunks of Japanese pop culture. There’s crafting. There’s farming. There are curious little minigames. *Mineko’s Night Market* is – finally – due out in 2022, and we can’t wait to get our paws on it.

Strategy video games have long drawn on the rules of their tabletop counterparts. But what if a strategy video game actually let you paint your virtual miniatures? That’s one of the eye-catching premises in *Moonbreaker*, an upcoming turn-based title from Unknown Worlds, the creators of *Subnautica*. Then there’s the news that sci-fi and fantasy author Brandon Sanderson is involved in *Moonbreaker*’s world-building, which should give the backstory behind all the dinky characters and vehicles an added sense of depth. What we saw at Gamescom showed real promise; by the time you read this, the game should’ve hit Early Access, so do head over to its Steam page at wfmag.cc/moonbreaker.

We couldn’t stick around for Gamescom’s final day, which capped it off with a cosplay contest. We still saw our share of costumed heroes prowling the floor, though. From an impressive light-up take on *System Shock*’s SHODAN to *Elden Ring*’s Malenia, Aaron and Ryan’s game journo cosplays didn’t stand a chance. Far from the thumping great pints we tend to get in the UK, bars in Cologne tend to dish out their beers in dinky glasses – all the better to keep your beverage nice and cool, we’re told. Prost!
Rhythm games mightn’t be as popular as they once were, but that hasn’t stopped a few studios from breaking in with a fresh spin. And while rock fans will no doubt already be knee-deep in *Metal: Hellsinger* by now, *God of Rock* has an equally great idea behind it. It’s a rhythm-fighting hybrid, where landing hits means pushing buttons to the beat of whatever track’s blasting in the background. *God of Rock* offers a lot of other stuff to get your head around, too, but it’s anchored around a great central idea.

*Hubris* might look like just another first-person showcase for VR on the surface, true, but believe us when we say it introduces all-new ways to look foolish in public. Film production outfit turned game developer Cyborn B.V.’s big standout feature is swimming, in which you must navigate and investigate an alien planet by dipping in the water, and quite literally using your arms to push through and witness the undersea sights. The best part? No armbands are required and doggy-paddling has never felt so powerful in a game.

Maybe we were just unlucky. For whatever reason, Wireframe had an absolute nightmare getting to and from Gamescom. On the way in, the air con on the train broke, leaving passengers fanning themselves with odd bits of paper in 30-degree heat. Then, on the way back across Europe, the train broke down altogether, leaving several of us stranded for several hours in yet another baking-hot carriage. It was a learning experience, let’s just put it that way.

In between pork knuckle (not actually the knuckle of a pig), schnitzel, and bratwurst, the local dish that stole our hearts was apple strudel. Layered beautifully with light filo pastry and accompanied with cinnamon custard, we’re now considering giving up crumble forever. Sorry, mum!

There were plenty of places to eat at Gamescom, and a lot of them seemed to sell chips and chicken nuggets. They were fine, in a ‘nineties school dinner’ sort of way. But 14 euros per portion? Yeesh.

For reasons unknown to us, *The Corkonian* is one of the most popular venues among games journalists visiting Cologne. To be fair, we had a pint there and it was perfectly pleasant. No tiny beers, though. Prost (again)!

Tens of thousands of people were visiting the convention each day, so of course it was crowded. But queues of an hour or more to play just one demo? It was a common sight.

This handsome Gothic structure confronted us as we left the main station in Cologne. Impressive, isn’t it?

**Honourable Mentions**

**Expensive nuggets**

**This cathedral**

**Massive queues**

**That Irish theme pub**
GAME
Soulstice

DEVELOPER
Reply Game Studios

RELEASE
Out now

WEBSITE
soulsticegame.com
With their wide eyes, long limbs, and outsized swords, the character designs in *Soulstice* take their cue from Japanese manga and anime, but that eastern influence is also married to a distinctly western take on dark, twisted fantasy. The whole experience pivots on the idea of two protagonists which the player can switch between during combat, explains *Soulstice*'s creative director Fabio Pagetti. Once that was established, much of the game’s art and design could be built around the concept. “After we decided that the protagonists of *Soulstice* would be two sisters, we started thinking about the details of their character design,” Pagetti says. “Briar is a strong-willed and determined Ashen Knight, and as a result, has been granted superhuman capabilities and regenerative powers. Her physique and the proportions of her body – especially her legs – are a bit exaggerated, because of the over-the-top actions she performs. Her armour is meant to protect her, but some parts are left uncovered on purpose, specifically because she must be very agile and mobile both in and out of combat. This is not only a ‘narrative’ assumption but also an important aspect of how the character is managed by our artists and designers.”

You can get a feel for Italy-based Reply Game Studios’ approach to crafting the rest of the game’s characters and world in the artwork reproduced here, from the devastated industrial look of the opening stages to the first area boss. *Soulstice* may be a game about fast movement and dizzying combat, but a great deal of time and thought has gone into its monsters and environments.
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n the murky moon of Lorian, presumably millions of miles away from our own, the story of *Ghost Song* is just beginning as a long-dormant Deadsuit awakens to seek answers. For solo developer Matt White, meanwhile, this journey has been over a decade in the making. With experience in illustration and creating comic book art, it was in 2011 that White felt the pull to develop a game that was “a mix of *Terraria* and *Metroid*” – despite having no programming experience. That didn’t stop him, though, as evidenced by *Ghost Song*’s various early iterations.

“It began as a Flash game,” White reveals. “I stumbled on a game engine called Stencyl, which allowed users to create games by piecing logic together through a visual interface, and through this engine, I made a number of demos and prototypes.” Eventually his aspirations for *Ghost Song* grew too large, leading it to become a standalone game created in Unity. The move didn’t dissuade White from retaining the game’s absolutely stunning handcrafted aesthetic, fortunately, and there’s a clear line to be traced from its Flash origins to the inky, graphic novelesque vibes it touts today.

Drawing and painting the atmospheric art in Photoshop is arduous, but White believes it’s worthwhile. “It was a long learning process,” he says, “figuring out how to best adapt what I knew about art into a game setting and creating proper game assets.” Animation proved an even trickier subject. “I ended up using a program called Spine to animate characters. It attaches 2D art onto a skeleton and animates it in real time, much the same way 3D characters are created in 3D games. This makes it easy to create and work with characters when compared to traditional animation, but the risk is always present that the character will end up looking overly flat. It’s a careful balancing act, and through this project I’ve learned a lot about what works best.”

As striking as *Ghost Song* appears on the surface, the aim was always to pay just as much attention to its RPG mechanics and story. True, it uses the bones and structure of Metroidvanias gone by, but White is adamant that narrative is at the heart of the experience. Players step into the shoes of the aforementioned Deadsuit, uncovering Lorian’s many mysteries while acquiring new abilities and battling cosmic terrors. Discovering what lies below means exploring every cavern and tunnel, all in the

Interactive / Ghost Song

How Old Moon’s Matt White used his graphic design background to create a more painterly style of sci-fi Metroidvania
hope of finding out who you are and what your purpose on this moon even is.

“Along with my writing partner, we’ve taken great care to construct a setting, a rich background lore, and a compelling and resonant plot for the characters in the game,” White says, explaining how Ghost Song handles narrative differently from other genre entries. “We hope players enjoy this aspect of Ghost Song, but being an action and exploration game, it’s always possible to mostly ignore these things.” It’s hoped that giving players enticing reasons to explore will encourage them to engage with snippets of story. “There are enemies, bosses, NPCs, weapons, and items to find… In Dark Souls fashion, we even have some side NPCs that wander the map and whose stories can be interacted with by the player.”

The Deadsuit comes equipped with staple moves like dashing and double-jumping right from the off, with discoverable upgrades instead relating to existing stats and optional weapons that you can alter and improve. Why the change? “I enjoy Metroidvania, but I found myself growing somewhat tired of some of the same tropes where items or abilities are frequently nothing other than glorified keys,” says White. “I’ve tried to avoid that. Things you find are either optional upgrades that make the play experience feel different, or natural upgrades that not only serve as a key but enhance your general moveset.”

Combat in Ghost Song, meanwhile, can range anywhere from peppering foes with your rapid-fire arm cannon, to using a mighty hammer prone to pulping them in an instant. With around 30 different enemy types (not including bosses), there are plenty of ways to get inventive with the Deadsuit’s abilities, allowing players to find their own playstyle through combat and the weapon upgrades they choose. Plus, the risk of encounters feeling too easy is mitigated by what White deems “mini-bosses”, which are elevated versions of regular enemies that present a tougher challenge.

From creating an original sci-fi world, to implementing meaningful RPG mechanics, and rethinking how a story can be told in a Metroidvania, Matt White has been careful not to miss a note when creating the long-in-development Ghost Song. Seeing it finally released on 3 November this year will no doubt be satisfying, then, even if he can’t see himself tackling such an ambitious project solo again. “I still enjoy the simplicity of working on a game project alone, and how liberating it can feel just doing what you want, but I doubt I’ll make another project on this scale alone again,” he sums up. “Standing here now, at the end of it, I don’t feel too much regret, as I’ve learned so much, and I feel there are better opportunities in the future because of it. I look forward to what’s next.”
The Nintendo 64 didn't have the largest of libraries, but there were some big, big hitters among its line-up. One of the console's key titles: *Lylat Wars*, known outside the UK as *Star Fox 64*. A colourful, blindingly quick rail shooter, it successfully built on the groundwork laid by its SNES predecessor, *Starwing* (known outside the UK as *Star Fox*). Seriously, what did Nintendo have against foxes in the nineties?).

*Lylat Wars* certainly left a lasting impression on British solo developer Ben Hickling, since he's spent the past three years or so making *Ex-Zodiac* – a 3D spaceship shooter with low-poly graphics that are designed to recall those 64-bit glories. “Ever since I played *Star Fox 64*, I often thought about doing my own take on it, but I never really had access to the right tools or the knowledge to be able to do it,” Hickling tells us. “Despite having had these ideas previously, *Ex-Zodiac* didn't actually come about directly because of that. I was working on a simple arcade-style flying prototype with a full range of movement, and I realised if I locked the movement along a fixed path, I could technically make a rail shooter. I did a bit more experimenting and decided that was the direction I wanted to take it in. The rest is history.”

Back in 2019, Wireframe remembers spotting an early build of the game at EGX Rezzed, and it immediately standing out among the other, smaller indie projects on display at the time. The game has, Hickling tells us, changed “a lot” since then, thanks in part to the help of publisher Pixeljam, and a bout of funding on Kickstarter helping to get the game into Steam Early Access. “The response has been amazing,” he says. “I honestly wasn’t expecting so many positive reviews on Steam – I actually thought the Early Access part would work against us, but that hasn’t been the case so far.”

That crowdfunding campaign helped Hickling in another regard, too: if he could spend less time at his day job and more hours on developing *Ex-Zodiac*. “The Kickstarter allowed me to go part-time from my main job, so that I was only working...”
Hickling began making games in 1998 when a friend happened to lend him a copy of the game-making suite Klik & Play. At first, he just used it to make “silly animated scenes”, but gradually began designing ‘proper’ games as his skills progressed. It’s a process of enjoyment and experimentation that he recommends to other would-be game developers.

“If you’re starting your first game, I’d suggest just having fun making stuff and sharing it with others,” he says. “See what kind of feedback they give and learn from that. You’ll probably need to make a few games before you’re ready to do something successful… I was making prototypes and small games for years before I had any kind of success. Just get your stuff out there and keep making things – you’ll learn a lot!”

As in Lylat Wars, Ex-Zodiac sees you take to the skies (and the depths of space) in a nimble fighter craft, blasting enemies and avoiding incoming fire with swift reflexes and the odd barrel roll. The action’s straight out of the 1990s, but runs on a distinctly modern game engine: Godot, a less well-known platform than Unity or Unreal, but one that is gradually gaining traction among indie developers. For Hickling, Godot offered some clear advantages over those bigger-name engines. “In Unity and Unreal, the default graphic settings are more geared towards getting nice-looking results straight out of the box, whereas Godot requires more manual setup in that area,” he says. “That could be seen as a pro or a con, but in regards to making retro projects like mine, it’s a lot less work since I don’t have to fight against some pre-existing settings. The GUI system in Godot is very easy to deal with, so creating the menu systems and the game HUD have been fairly straightforward. It’s also nice being able to modify the source code of the engine and fix or change things whenever you need; I’ve done this a few times while working on Ex-Zodiac.”

With the positive feedback from its Early Access launch suggesting that Hickling’s firmly on the right track, his next task is to finish designing the six-or-so levels that will form the game’s second half, and he also plans to add branching paths and a couple of additional game modes. And while the warm reception to Ex-Zodiac has taken him a little by surprise, Hickling thinks there’s a clear reason why people are keen to play it: the last game in the Star Fox series, Star Fox Zero, came out for the Wii U in 2016, and reviews were mixed. To date, Nintendo has yet to announce a port to the Switch – leaving a gap in the market for a title that harks back to the series’ glory days.

“It helped a lot that I was making a game heavily inspired by a franchise that many people grew up with in the nineties, and those same people were clamouring for a new entry in the series,” Hickling says. “Unfortunately, Nintendo were only interested in doing that if they could come up with something completely new and innovative, but that’s not what most people wanted. If you can fill a gap in the market like that, I’d say you’re on to something.”
How I became a... Narrative Designer

Square Enix’s Rhianne Murphy on her industry journey and how to crack a good game narrative

Can you remember the game that first made you want to get into games?
I remember being around eleven years old and for Christmas I asked my parents for *Kingdom Hearts II*. I’d never played the first game, or even any *Final Fantasy* games at the time, but there was something about it that made me gravitate towards it. Fast-forward to me completing it, and I’d never experienced anything like it. I loved the story, the characters, the music. I decided then that I wanted to create something like it.

How did you break into this industry?
After I realised making games can be a real job, I found a few courses after school that specialised in video game design and technology. I went on to graduate with a bachelor’s degree and spent the next six months applying for every job under the sun to get my first job in games. The applications were all over the world and [included] QA, design, eSports co-ordinator, and admin work. Finally, I got my first internship as a level designer for Sumo Digital in 2017. I think, in total, I applied for over 70 jobs!

What was the first game you worked on professionally, and are you still proud of it?
The first title I worked on was *Crackdown 3* alongside Microsoft. I remember feeling like it was a big deal since my first game was a triple-A title, and I definitely learnt a lot working on it. Most importantly, it was the title on which I discovered the role of narrative design. I’m proud of the 500 orbs I hand-placed around the game.

Did you always want to work in narrative design specifically? What’s the appeal if so?
I didn’t actually know that narrative design was a role that existed. That’s one of the interesting things about working in games – it’s such a fast-growing industry; there are new roles and opportunities around every corner. I’ve always loved story-driven experiences, so when the opportunity came about, I thought it sounded wonderful. It was during my time on *Crackdown 3* - I was able to help Microsoft’s narrative designer, who was spearheading the project. I loved helping implement story into the world, and I was hooked on becoming a narrative designer myself afterwards.

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What is the chief responsibility of a narrative designer, and how do you achieve it?
Narrative design is still such a new role in the industry. My experience with it so far is that you’re not just a writer; you need to understand design principles, and sometimes technical
Of course this was not the case; I’m still here over five years later. Just be confident in your passions, and if the design doesn’t stick, let it go and move on to the next.

Would you say it’s becoming easier to get work in games today?
It’s more accessible than ever to learn about making video games, but it’s still incredibly difficult to break into the industry. Even as an independent, the market is flooded with new and exciting games, so it’s hard to stand out. I don’t want to say that to discourage anyone, because even though it is difficult, it’s not impossible. Just keep working hard on your portfolio and never stop applying for jobs: the general rule of thumb is to wait at least six months before applying to the same company again.

What’s a mistake in your particular field that you made along the way, but ultimately learned from?
I think the writing process, in general, takes much longer than you think. Creating characters, a plot, scripts – in your head, it all seems to make sense, but once you get it out of your head, it becomes much more complicated. Always make sure you give yourself enough time to write and iterate, and make sure you communicate that to your team too.

What’s the one piece of advice you would offer to your younger self?
Be more confident. I have major imposter syndrome. For the first two years of working in games, I had convinced myself that I was bad at my job and that I’d be let go at any point.
From Isolation to Observation: the No Code story
Writer-director Jon McKellan tells the fascinating story of his path into the games industry, and how Alien: Isolation led to co-founding his own indie studio.

WRITTEN BY RYAN LAMBI

This article was originally going to be about suspense. About how writer-director Jon McKellan, first at The Creative Assembly and later at the studio he co-founded, No Code, has worked on some of the most tense, downright scary games of the past decade. First, there was Alien: Isolation, a survival horror title that seemed to come out of nowhere in 2014; establishing a battle of wits between the player and a computer-controlled creature that could pop up and kill them at almost any moment, Isolation was intelligently and elegantly crafted as few licensed games are. Then came No Code’s 2017 debut, Stories Untold – an anthology of quietly terrifying short tales that felt like a quartet of contemporary adventures written by Edgar Allan Poe. Next came 2019’s Observation, an absorbing sci-fi adventure that, while not exactly horror, was intense and uneasy, all building to an uncanny, mind-expanding conclusion that really crawled under the skin.

Beyond the suspense, though, there’s another, more interesting story about McKellan’s path into the industry – a journey that took him from a childhood playing pirated computer games on a Glasgow council estate to becoming one of the most interesting storytellers currently working in the British games industry. For people from working-class or under-represented backgrounds, getting into any creative industry is a risk; without a financial safety net, career moves like internships or low-paid, entry-level jobs simply aren’t viable. And that’s assuming you even realise these jobs are out there in the first place; as McKellan recalls of growing up in the eighties and nineties, his school “didn’t understand the creative industries [or] anything beyond factories and call centres”.

“My mum was very ill and my dad had to look after her full-time, so we didn’t have much money,” McKellan tells us. “We were on benefits. We couldn’t afford things – like, we couldn’t afford electricity half the time. It was a pretty grim upbringing at certain points – we had good times, but there were also bad points. And you had to pirate games; it was the only way to play something if you had no money.”

With little to spend on the latest computers, McKellan was often at least one hardware generation behind many of his peers. Still, he recalls sitting with his father, typing in code listings from magazines, and later, designing mods for Quake. But again, there were no signs anywhere that making games was a viable career move. “I was making DOOM mods when I was twelve, and getting really passionate about it, but then you talk to a teacher and they’re just dismissive. There were no university degrees back then that were useful to get into games. And growing up in the east end of Glasgow, I didn’t

“I was making DOOM mods when I was twelve, and getting really passionate about it”
McKellan's talent as a designer saw him land a job at The Creative Assembly, where he began working on *Alien: Isolation*'s retro-futuristic interfaces – all chunky fonts and mechanical keyboards. Recreating the original *Alien* movie's 1970s vision of the 22nd century seemed to unlock something in McKellan's brain, because while the game was still in the earliest stages of development, he began throwing out ideas that helped shape *Alien: Isolation*'s creative direction: far from background flavour, the old computer interfaces began to form one of its gameplay pillars. “As time went on, and being quite integrated into the design team, I began pitching features like the rewiring system and minigames – ‘I've got this idea and I can make it feel cool’. It became more integral as time went on.”

The Creative Assembly’s experimental approach to *Alien: Isolation*'s design meant that the team never quite knew whether the resulting game would succeed, though McKellan recalls the moment when they first got an inkling that they were on the right track. “I don't think many people truly understood what we'd made until the first press playtest,” he recalls. “We got something like 50-odd press from around Europe and the UK to come and play an hour of the game, which no one was expecting. They were all coming out just wide-eyed and, like, ‘Holy shit’. Coming from a strategy studio, people were just shocked by what they saw.”

Development on *Alien: Isolation* lasted a gruelling five years – today, McKellan still calls it “the hardest thing I've worked on”. But he also grew in confidence as the production wound on, until towards the end he was working as the creative lead on the superb Crew Expendable DLC, which recreates the 1979's film's plot, right down to its original cast of characters. Finally released to critical acclaim in 2014, *Alien: Isolation* served as the ideal calling card even know there was a games industry in the UK. It wasn't a job as far as anyone was concerned.”

As a result, McKellan left school and wound up working at a call centre for five years, then went to university to study graphic design. It was from there that he managed to get a job as a motion graphics artist at DMA Design in Dundee, where he landed his first game credit: 2010’s *APB: All Points Bulletin*. He was 28. “That was my first kind of break, but as a result, I lost maybe ten years of potential career time because there wasn't enough awareness of what was possible. Coming from a working-class background, there was no money to support me. I couldn't say, ‘OK, I'll go down to Cambridge to study programming’. I fell into it quite late.”

McKellan points to a video that journalist Sam Greer and YouTube channel People Make Games had uploaded the day before Wireframe caught up with him back in August. “That talks about the working class trying to enter the games industry. It’s definitely a middle-class-dominated industry, in the UK at least.”

### MORE STORIES UNTOLD?

Given that the *Stories Untold* games were relatively quick to make compared to *Observation*, we had to ask McKellan: are we likely to see another anthology of short games soon? “Between finishing *Observation* and some of the ports, we were actually working on a standalone story, like a one-off thing,” he tells us. “It was really cool and I think we'll revisit it at some point, but what we discovered is that it's a lot harder to make those smaller experiences with a bigger team. Because you have to find things for everyone to do... by the end of four or five months, we were close to having something finished. But to get it shipable, it will be months and months more work. I think revisiting *Stories Untold* is definitely something we want to do at some point.”

The theme of interacting with arcane old tech continues in *Stories Untold*'s second – and perhaps scariest – entry, *The Lab Conduct*. Although very different in tone, one of *Observation*'s commonalities with *Alien: Isolation* is its variety of UI-based puzzles.
for McKellan, who subsequently worked on Red Dead Redemption 2 at Edinburgh’s Rockstar North. Despite the security of a job in triple-A development, however, McKellan began to feel a little lost in the studio’s sprawl: “I was only there for nine months, a year, something like that. Because as soon as I got there, I realised I’d made the wrong decision.”

Working on Alien: Isolation’s DLC had given him a taste of what it was like to lead a creative team, try out ideas, and influence the path of a game’s design. At Rockstar North, he was back on UI design in the midst of a team numbered in the hundreds. Feeling restless, McKellan got in touch with a childhood friend, Omar Khan; they’d collaborated on all kinds of things in the past, including music for adverts and the odd game jam. What if they formed a development studio? Neither had much programming experience – Khan came from a background in audio and music production – so the pair jokingly called the company No Code. “Starting a studio with no savings isn’t a sensible idea when you have three children,” McKellan admits. “I didn’t have a safety net.”

McKellan already had an idea for a game – one that seemed like a logical progression from Alien: Isolation. Set aboard a space station, it cast the player as the craft’s artificially intelligent computer, tasked with protecting its lone human survivor as various life-support systems fail left and right. McKellan described the game as “2001: A Space Odyssey, but you’re playing as HAL”.

“It’s called Observation,” McKellan recalls telling Khan. “I want to make it. I don’t know how we’re going to do it, but we should.”

To get the studio going, much less build a working prototype, No Code urgently needed cash. McKellan had few contacts with publishers at this point, though he was still in touch with his old DMA boss, David Jones. “I’d done a lot of good work for Dave and really put a lot of effort in, and he recognised that. So when I came to him and said, ‘I need to start a studio, I need advice’, he was like, ‘How much money do you need?’ and gave us a little bit of cash to do some work for his company as a side hustle while we developed a prototype. So he basically invested in the company right away. But it was super-risky. Really risky. And I was leaving the biggest job in Scotland.”

As Observation’s initial prototype was being built, the fledgling studio, founded in March 2015, kept itself going by making a mobile game, Super Arc Light, while McKellan raised funds by doing UI contract work on Crackdown 3. In the midst of all this, McKellan and Khan entered the Ludum Dare 36 game jam. The theme was “ancient technology”. “I was talking to my kid, saying, ‘What do we do for ancient technology?’, and he said, ‘Those old games you used to play. Those are ancient’. That turned out to be a great idea.”

Such was the seed that led to The House Abandon, a horror short that cleverly repurposes and reframes that most archaic of genres: the text adventure. You’re seated in front of an old 8-bit computer, typing commands into the parser using its rattly keyboard. But as you play the adventure on the screen – essentially, a game within a game – it begins having increasingly unsettling effects on the ‘real’ world surrounding you. The House Abandon established a limitation that was later used to similarly suspenseful effect in Observation – your view is restricted to the

“Coming from a working-class background, there was no money to support me”

No Code co-founder, Jon McKellan. What’s the secret game he’s working on? An update on the studio’s site teases: “We have been crafting a nightmare”.

Alien: Isolation’s retro-futuristic computer terminals are one of the game’s key elements.
PUSH THE BUTTON

One of the common factors running through Alien: Isolation, Stories Untold, and Observation is an affection for retro technology. "I definitely have a soft spot for clunky buttons, switches, and dials," McKellan says. He and his team even have a nickname for the sorts of puzzles found in their games: "Kids’ activity boards." The idea being that "the puzzle is figuring out what does what by turning on bits of equipment and turning dials. It's a moment of discovery rather than telling the player what to do." McKellan contrasts this with modern interfaces that favour style over function – his beefs include things like virtual assistants that refuse to acknowledge his Scottish accent, or a wrist-watch activated by minuscule hand gestures. "I get really frustrated by UI designs that look cool but actually have zero function," he says. "And the worry that then manufacturers start to try and use it as a gimmick."

Interface
From Isolation to Observation: the No Code story

From Isolation to Observation: the No Code story
Interface

computer in front of you, and as the game goes on, there are noises and events that unfold over your shoulder or outside the room.

"It allowed us to road-test some ideas that we had lying around," McKellan says. "Locking the camera's perspective was a really conscious thing in Stories Untold. We were forcing you to engage with the horrors in front of you. Not jump scares, but uncomfortable situations. By not letting you turn your head and see the rest of the room, it made you wonder if there could be someone there [behind you]. You don't really understand the context of the place you're in, and that really adds uncertainty to the minute-to-minute experience. You're hearing a noise in the background and you want to be able to turn around, but it's not letting you – that's a very powerful thing. In Observation, it's planting that seed in the player's mind: what's out of shot? What can't I see, and why aren't you letting me see it?"

The House Abandon became something of a viral hit when it appeared online in 2016, leading McKellan and his small team to make it into Stories Untold, a small anthology of four games with similar themes, released the following year. The game jam prototype was polished up as the first episode, while the instalments that came after it, The Lab Conduct, The Station Process, and The Last Session, expanded on its ideas and established subtle commonalities between all four entries. Says McKellan: "The idea for an anthology was born almost immediately. In my naivety, I said, 'We'll be done in a couple of weeks!', but then it ended up taking six months. It was crazy."

In the meantime, Observation had found a publisher, Devolver Digital, which meant the game could finally go into full production. Despite the core team only amounting to eleven members at its peak, No Code managed to make a sci-fi game with visuals that approached those with a budget many times its size. Indeed, just how good the resulting game looks still comes as a surprise to McKellan himself.

"It was largely myself, Alanna [Butchart], and Lee [McKellan], my wife, who were doing all the artwork. A lot of us were learning that stuff for the first time. And we were getting help from some veterans who'd worked at Creative Assembly or previous companies, where we'd get them in to help us do stuff that was way too complicated for us to do on our own. But the lion's share of the game was made by a really small team."

Released in 2019, Observation was rightly praised for its absorbing plot and tense atmosphere; perhaps its biggest coup, though, was winning Best British Game at that year's BAFTAs. Among its competitors? Inkle’s indie darling, Heaven’s Vault, and Total War: Three Kingdoms, developed by McKellan’s old stomping ground, The Creative Assembly.

That BAFTA win has only helped open more doors for McKellan and his studio, but some of the stresses of running an independent studio still remain – not to mention the feeling of self-doubt that often gnaws away at those from humbler backgrounds.

"I think it comes back to the class thing," he reasons. "People assume that once you've released a hit game, you're rich and all that, which isn't the case. We continue to put everything back into the business; our wages are very modest. That success will come eventually if we keep doing the right thing, we hope, but for now,
we’ve put everything back in. We’re still running the company like it’s in our garage, for better or worse... over the past five years, I’ve learned so much about dev, tech, social networking. As someone with deep anxiety and imposter syndrome, it’s been a total challenge!

Today, No Code has swelled its ranks to around 20 staff, and at the time of writing, it’s two years into development on an as-yet unannounced title. “We’re working on the biggest project I’ve ever worked on,” McKellan says. “Even though it’s not the biggest team I’ve worked with, it’s definitely got the most pressure behind it, because I’m leading this one; I’m writing and directing it. So it’s, ‘Here we go, this is the big one...’”

Despite the risks and stresses involved in its founding, No Code has so far found its footing in a fast-moving and competitive business. But while McKellan has successfully forged his own path through the games industry, he argues that some of the same barriers to entry for people from less privileged backgrounds still remain in 2022. “I think it’s still the same, but there’s efforts going into changing that,” he says. “There are foundations set up to help people from lower class backgrounds to get into the arts, and to broaden the range of voices contributing to film, TV, and games. I think where the problem comes up is just inherent to class: if you want to start making games on your own, sitting in your house as a teenager, you need to be able to afford a PC, or a software licence. So there are fundamental barriers to entry – which is why the software I used as a kid was all pirated. I hold my hands up to that.”

Certain schools are also still “lagging behind” when it comes to encouraging pupils to take up arts subjects, McKellan argues. “In the schools that I went to and the schools I’m familiar with, they see the arts as something you do for fun. When you’re picking your subjects, they only let you pick one creative class – music or art. Like, why aren’t you letting people do the things they love? That seems wild to me. I don’t know if that’s just state schools or not, but it’s definitely something that needs to be addressed.”

There is, though, a glimmer of hope for the future, he adds. “I’ve visited schools and universities and said, ‘You see all those names that come up at the end of films and games? Those are jobs, and you can go and do those jobs. You can make this stuff’.”

“Why aren’t you letting people do the things they love? That seems wild to me”
Like many of you reading this, it’s still depressingly common to be met with confusion by normal people* when I tell them that I, an adult, like video games. “My son likes that one with all the cubes”, they say. “My niece wants V-Bucks for Christmas for an Ariana Grande glider”, and so on.

Aside from the fact that not all of those statements are true, it genuinely does make me sad to hear people exclude joy from their lives. I know that some people cling to the perception that games are for kids, or that the time could be better spent on more fruitful pursuits – heaven forbid the serfs should prioritise pleasure over labour – but in my experience, there’s a game out there for everyone.

This came into particularly sharp focus recently when, in the space of just over a week, tech-genius Rob Sedgebeer** and I took our silly little comedy gaming show on the strangest tour since pre-Covid times. From a hall of delightful nerds at lunchtime at Insomnia Gaming Festival in Birmingham’s NEC, to a basement under the litter-coated Edinburgh Fringe Festival for a more “mature” midnight comedy crowd, to a lecture hall of genetics students at Oxford University, to the only logical next step, a bar mitzvah for ten kids in London. Having previously done a wedding while the bride and groom signed the register, and a stag do versus hen do where – incredibly – no one died, we now only need a funeral to finish the set.

Anyway, the point is, my car did a lot of mileage that week. And as you can probably guess from that rather broad list of engagements, it’s reached a point where there is honestly not a single demographic that I’ve not seen go giddy at anything from Pong to Flappy Bird.

So, why do grown-ups continue to resist? We spent our entire childhoods wishing we were adults so we could do whatever we wanted, whenever we wanted, and yet none of my friends in primary school wanted to spend 20 hours a week commuting to a light industrial estate where they could develop new strategies for convincing other children to waste their sweetie money on pensions.

Consider this a call to arms. Between now and next month, find yourself a ‘normal person’ and introduce them to a game they might enjoy. Don’t be an idiot, though. There’s no point trying to get your nan hooked on Dark Souls unless she’s shown a previous talent for achieving the impossible; a nice gentle puzzler on their phone or a silly little party game on the Switch will be enough to let them have fun, and show them that the world isn’t always as awful as the gutter press has convinced them it is.

There’s plenty of people out there spreading the word about far worse things than Mario Kart, so let’s all do our bit to make the world a better place.

* boring skin husks
** All hail King Rob
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Unoriginal sin

Less than an hour into Saints Row, the new boss is looking suitably ridiculous. After visiting a few clothes stalls in downtown Santo Ileso, she sports offset pink pigtails, shades, and cowboy boots with elongated toes that curl up like giant bananas. A little later, she’ll be machine-gunning gangsters while dressed as a smiling ice cream cone, before switching to a violet business suit and a hot dog hat. None of which feels unusual in this franchise, of course; it’s more like a rite of re-initiation. Yet perhaps these outfits have more symbolic significance this time around—like them, Saints Row can be entertainingly silly, but also rashly assembled and barely coherent.

One thing’s for sure, more is definitely more here. The finest missions are those that escalate absurdly, and the more vehicles in a car chase, the more cathartic the explosions and pile-ups. Indeed, many of Saints Row’s unscripted highs arrive when you’re inside a vehicle.

The systems are set up to enable maximum mayhem, giving any car, truck, buggy, or jet ski you commandeer a robust health bar, in contrast to your all-too-combustible foes. A punchy sideswipe move is perfect for barging them into concrete pillars, or if you’re the passenger, you might climb onto the roof and direct traffic with an automatic rifle or rocket launcher. There’s also a decent range of scenery around the city, full of ramps and shortcuts to help you improvise greater destruction.

These thrills do, however, suffer from repetition, and once the novelty subsides, few missions manage to pick up the slack. Much of Saints Row plays out as a stubbornly old-fashioned GTA-like, ushering you to drive from A to B then gun down hordes of rival gangs or law enforcers. And shooting, unfortunately, is far less enjoyable than driving, thanks to twitchy controls, bland weapons, and enemies that simply swarm around, slowly draining your health until you’ve erased all of theirs.

Sequences that successfully mix things up, such as a chaotic prison escape boosted by Onyx’s hip-hop anthem, Slam, don’t come round regularly enough, so it’s left to the narrative context of your efforts, rather than the actual content, to create any impression.

The prime example here is a branch of the story focused on LARPing, where you wield fake weapons to invade rickety forts made by rival teams. The cardboard costumes and faux-medieval banter don’t change the fact that you’re still merely shooting plagues of idiots.

In such moments, Saints Row could be a parody of its own shallowness, as if pointing to the void of imagination and identity under its shell of superficial amusement. Indeed, it’s never

At best, the fun it offers is the same stuff you had 20 years ago

Info

GENRE
Open-world action adventure

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

DEVELOPER
Deep Silver Volition, Fishlabs

PUBLISHER
Plaion, Deep Silver

PRICE
£59.99

RELEASE
Out now

SOCIAL
@SaintsRow

REVIEWED BY
Jon Bailes
clear how this reboot wants you to relate to it. The decision to swap out the original series’ gangbangers with university grads turning to criminal enterprise to escape the gig economy could have felt relevant, but the characters in your crew are too flat to provide the texture. Convictions and meaningful biographies are replaced by personality quirks and quick-fire banter, and sadly the script is largely a dud – a catalogue of jokey references to millennial culture that feel targeted rather than heartfelt. The boss, meanwhile, is no more than a happy-go-lucky psychopath, and that’s never explained either.

The most interesting observation Saints Row nearly makes is about the pressure young people feel nowadays to monetise everything they do, turning hobbies and social activities into side hustles or business opportunities. Once you start building your criminal empire, instead of frittering away cash on outlandish footwear, you have to invest in new ‘ventures’ such as the returning Insurance Fraud, prototype weapon tests, or toxic waste delivery. The problem here, however, is that none of these are especially enjoyable in themselves – even Insurance Fraud is a bland shadow of its former self – and that the game’s joys rely on unfettered power fantasy, not tying you into an economic grind.

Nor does it help that even a few post-release patches down the line, Saints Row is bothered by invasive glitches and game-stopping bugs. You may get stuck in the clothing menu, for instance, while some of the game’s ‘challenges’, which reward you for completing various milestones (head-shotting 30 enemies, say), may simply not register as you play. You can add to that numerous occasions when execution animations detach from their targets, or cars boost into the air inexplicably, or mission objectives fail to appear, which can only be forgiven in the context of knockabout fun so many times.

Through the sheer weight of stuff to do that unlocks as you advance, Saints Row does sustain a kind of baseline hum of fun. The boss is acceptable as a swear-studded cartoon character, and the city is a welcome host to her reckless violence if you keep hopping between activities before they get cold. Yet it’s hard to get excited in 2022 about a game that too often merely heaves itself over such a low bar of achievement. At best, the fun it offers is the same stuff you had 20 years ago outrunning wanted ratings in GTA III. At worst, this is a blundering and unsexy reboot that hardly justifies its existence. No matter how big the comedy cowboy boots, there’s only so much that wackiness can substitute for inspired design.

**VERDICT**

A throwback urban sandbox with decent car chases but little guile or personality.  

55%
From Russia with guns

The art of a great remake is in reconstructing the gameplay and visuals in such a way that you feel nothing has changed, then Crypto's groove-filled jaunt through the 1960s doesn't disappoint. However, just as Black Forest Games meticulously recreated the original Destroy All Humans! in painstaking detail, franchise newcomers may find this souped-up sequel's mission design and humour equally dated. Still, the concept of a squat little alien running riot in an open world similar to our own still (somehow) remains a novel one 16 years on, and Reprobed gets by on the sheer peculiarity of its premise alone.

Though very much a direct follow-up to 2020's Destroy All Humans! remake, you're quickly caught up to speed with previous events thanks to an explosive tutorial-driven opening. After laying low under the guise of the president for a decade, Furon alien Crypto-138 is forced out of hiding once his boss and mothership orbiting above Earth are obliterated by a Soviet nuclear missile. What follows is an unabashedly frothy adventure that is more focused on spoofing the stereotypes and iconography of the era rather than taking itself too seriously. One of the best examples of this is Destroy All Humans! 2's centrepiece ability, "Free Love", which offers just as many laughs as it did back in the 2006 original. Whereas navigating environments in the first game could be a pain due to the risk of being spotted and the police being called, the sequel wisely lets Crypto temporarily stun enemies by forcing them to dance. The first game's holobobbing is also replaced by the much more practical body-snatching, which lets you roam the five beautifully cartoonish environments with a lot more ease until the time comes to cause chaos.

At your fingertips here is a truly creative suite of weaponry, the likes of which few modern triple-A games outside of Ratchet & Clank seem to provide. Whether it's sending shady government agents flying using the appropriately named Dislocator's purple flying discs or calling a comet down from space using Meteor Strike, there's plenty of fun to create with Crypto's upgradeable arsenal; it mostly makes up for the generic "go here" and "get this" school of mission design Reprobed suffers from.

Such slavishness to the source material is ultimately what holds the ingenious idea behind Destroy All Humans! back. By overhauling assets to meet today's standards, it makes characters, weapon effects, and locations more luscious, true, but it also shines a light on the core issues present in the skeleton underneath. Reprobed absolutely excels as a remake by being objectively better in every way, while making Crypto's sequel story more accessible for a modern audience.

I'm more interested, however, in seeing what Black Forest Games can achieve when it isn't chained to another developer's creaky template, where it can hopefully jet this once cult classic series to true "out of this world" status with a wholly original threequel.

VERDICT
Reprobed's cartoonish approach to open-world mayhem is refreshing in today's climate, despite its old-school design roots.

73%
Don’t look back in anger

Of the objects you can interact with in Hindsight, a red corded telephone isn’t one of them, but its presence alone is enough to telegraph tragedy. Its first ring is what calls protagonist Mary away from her busy life – on the eve of opening her restaurant – back to her childhood home following her mother’s passing. Cut to cleaning out the house while going through old belongings. Through this process, Mary revisits memories of her life, from birth to present day, played out in the space of two hours. Suffice to say that keeping tissues to hand is strongly advised.

Memories are presented as frozen 3D snapshots that you rotate around with the camera, taking in the scene: playing with a hose on a hot summer’s day, dancing with your dad to his records, strict piano lessons from your mother. Then an interactable object catches your eye, and as you rotate around it at just the right angle, another image appears inside it, transporting you into another memory. These are not always thematically related to the object in question, so don’t go in expecting a 3D version of Gorogoa. But that would be missing the point of Hindsight, which isn’t a puzzle game trying to stir your brain but rather pull at your heartstrings, much of it done purely by Kyle Preston’s minimalist but moving score.

At the end of each chapter you’re also presented with a few key objects from that memory; you’re only allowed to put one back in your suitcase for safekeeping. It’s as far as narrative choice goes, and won’t dictate how the story ends, but it’s no less meaningful nor painful. Indeed, real kudos goes to how the game pulls off the third act. It’s thankfully not a contrived act of narrative and emotional manipulation, but rather aptly a shift in perspective, and a renewed understanding that’s better late than never. After the waterworks have dried up, you may want to make a phone call of your own.

HIGHLIGHT

Evidence that some of the best storytelling comes from specificity, the tension Mary has with her seemingly stern and stoic Japanese immigrant mother – who tries to pass on her cultural heritage – is easy to relate to. It’s a deep level of personal authenticity made possible by writer Emma Kidwell and voice actor Reiko Aylesworth, each channelling their half-Japanese backgrounds to incredible effect.

VERDICT

A brief but completely unforgettable exploration of life, loss, and discovering new perspectives.

86%
Barlow’s writing and direction is matched by some captivating performances, most obviously Manon Gage in the lead role of Marissa. She subtly, confidently plays the actress at various stages in her career, from wide-eyed newcomer to jaded, would-be star. Then there’s Charlotta Mohlin, whose unforgettable character we’ll leave you to discover for yourselves.

**Immortality**

Be kind, rewind

*Immortality* does much to restore the eeriness that people must have felt back when cinema was still a new medium: the sense of peering back into the past at people and events that have long gone. A similar ghostly quality hangs thickly over developer Sam Barlow’s latest interactive adventure, which, like *Her Story* and *Telling Lies* before it, continues to find fascinating new modes of storytelling in the once-derided FMV genre.

The focal point is an actress, Marissa Marcel, who vanished some time in the late nineties after appearing in three unreleased movies. Given the task of finding out what happened to Marissa, you’re asked to pore through fragments of those movies – plus other bits of contemporary footage – in the hope of finding clues. You can fast-forward or rewind each clip, but the pivotal mechanic is your ability to pause the footage and click on people or objects captured in each frame.

Doing so will immediately transport you to another clip that is somehow related to your selection: sometimes, the connection is obvious; at others, it’s bewilderingly obscure. One second you might be watching a scene from a saucy historical drama set in the 1960s; the next, you’re watching a rehearsal for a low-budget thriller shot in the 1990s. But gradually, ingeniously, common threads begin to rise from the chaos: the way Marissa is constantly belittled or leered at by talk show hosts or corpulent movie directors. The biblical allusions and Faustian pacts that only grow more insistent as you follow the breadcrumb trail of clips and tumble further and further into the mystery. Some trails lead to dead ends, others throw out new information that completely changes your understanding of the plot. Still others, cunningly hidden, lead to some deeply unsettling imagery (and implications) straight out of a David Lynch movie.

There can be moments of frustration and even tedium in *Immortality*, but these are more than matched by those that are thought-provoking and, at times, even shocking. Barlow has taken his ability to tell non-linear stories to new heights here, not to mention his directorial talents: it’s easy to forget that the clips you’re poring over aren’t from the 20th-century time periods in which they’re set. Most of all, *Immortality* weaves a bleak, unsettling yarn that seems intent on tangling you in its threads. Even after the end credits roll, there’s always the sense that there are more secrets to discover, and more ghosts to lay to rest.

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**VERDICT**

Tiny fragments build to create an unforgettable, thought-provoking mystery.

88%
Arcade Paradise

Insert coins, build an empire

As you enter the King Wash for the first time, you hear the voice of your father via an answering machine message. Played by Geralt himself, Doug Cockle, he both admonishes his teen offspring for their lack of responsibility and gives them the job of managing his long-neglected laundrette. As Ashley, you’re tasked with washing and drying customers’ clothes, cleaning up rubbish, unlogging the toilet, and trying to turn a profit. Hidden in the back room, however, is a small selection of arcade cabinets, and with this discovery, the game’s real focus comes to light.

Your dad doesn’t want you running an arcade – to him, it isn’t a profitable endeavour. Your sister sees the value in coin-ops, though, and via a beige desktop PC in the office, she provides tips and support for expanding your gaming empire. The PC also provides the means to buy new cabinets, as well as real estate expansions and cool little perks. It’s all incredibly nineties – even the game menu is a PalmPilot, complete with its very own take on the endless runner in Llama.

New arcade cabinets appear the next day on the back of a truck after purchase, their crates falling open with pixelated sparks. The entire game is full of this gamified charm, where even mundane tasks like taking out the rubbish and pulling chewing gum from the undersides of tables are presented like one of the cabinets you’re curating, with scores and bonus cash rewarded for a job well done. Tending the washers and dryers in a timely fashion nets you money, too, which you can plough back into your secret backroom business.

Speaking of which, every arcade cabinet is playable. You start with the likes of Video Air Hockey, which is a bit dull after a couple of plays, but you soon add cabs like Strike Gold! (a Mr. Driller clone) and the OutRun-like Space Race Simulator. There are 35 games to add to your venture, and they can be hit and miss. But each one can be tweaked to earn more or less per play, have an increased difficulty, and they all come with in-game challenges for you to complete. Managing and expanding the arcade is a blast.

There were times early on where I’d find myself staring at the countdown timer on a dryer as I tried for an S-Rank by completing the task super-fast. This took away from my time with the star of the show, the arcade, but it equally felt like I was truly earning every new machine, and the fresh experiences those brought. There are so many awesome little touches and references throughout that have to be seen to be truly appreciated. Collecting money from hoppers has never felt more rewarding.

The excitement of a cab arriving is amped up by the music and effects that accompany its unboxing. You can then choose where to place your new money-maker.

VERDICT

A unique and fun take on the business management sim genre.

80%
This angsty Gen Z musical adventure has style and substance to life. The voice acting is also top-notch, with lots of recognisable gaming voice talent, including Yuri Lowenthal (Marvel's Spider-Man) and Erika Ishii (Apex Legends).

Gameplay is much more straightforward, by comparison. It offers everything you’d expect from a traditional point-and-click adventure, though much of the game also consists of selecting dialogue options. Thankfully, said dialogue is natural and flows well, but at times I wasn’t as immersed as I wanted to be, feeling like a passive bystander while following the characters’ journey. If only the choices available had a greater impact on the plot’s overall direction.

We Are OFK tells a relatable story that deals with an array of issues affecting many people today, including love, friendship, and career ambitions. It feels very real as a result, providing a slice-of-life look into the characters’ story arcs, which is where the game really shines.

Overall, We Are OFK is worth your time if you’re looking for a relaxed adventure about breaking into the music industry, mixed in with a slice of authenticity, relatability, diverse representation, and some truly killer music.

VERDICT
A fun, exciting, and visually stunning game that deals with highly relatable themes.

71%

INFO

GENRE
Adventure, visual novel

FORMAT
Switch (tested) / PS5 / PS4 / Mac / Linux

DEVELOPER
Team OFK

PUBLISHER
Team OFK

PRICE
£17.99

RELEASE
Out now

SOCIAL
@OFKband

REVIEWED BY
Laura Francis

HIGHLIGHT
Any game with music as its core focus needs a great soundtrack, and in this area We Are OFK absolutely succeeds. Follow/Unfollow is the standout, but almost every song matches the art style’s dreamlike quality thanks to the use of high falsetto vocals mixed in with hypnotic synth beats.
Whether *Cursed to Golf*, whose library of 70-plus labyrinthine holes is entirely handcrafted, can be accurately termed a roguelike is debatable. Still, Chuhai Labs’ unconventional sports sim, one that features boss fights and gravity-defying power-ups, shares many similarities with procedurally generated classic, *Spelunky*. In both games, you make your way to the bottom of hazard-filled caverns (or spend hard-earned resources to divert your trajectory upwards), relying on good reflexes and strategic planning to escape to the next level. Pixel-perfect precision is required: a barely perceptible nudge of the stick in the wrong direction, a button pressed with a tenth-of-a-second delay can make the difference between surviving for another moment and starting over.

The reason why *Spelunky* is a masterpiece and *Cursed to Golf* ends up being an intriguing but ultimately tedious hybrid relates to how sustained an influence you can exert on the happenings on-screen. Zooming out to scrutinise the layout of the level and launching the ball after carefully calculating the power and angle of your shot is – typically – the extent of your input. Yes, a welcome aftertouch mechanic lets you put on a spin that enables some measure of control after landing. But success or failure is mostly decided in-between and, unless you’re willing to spend one of the powerful (and rare) Ace Cards that let you steer your ball mid-flight, your role is reduced to that of passive spectator, helplessly watching it land on a patch of sand, bounce off a wall to sink in a puddle, or get impaled on a wall of spikes.

That inability to interject when it counts most might have been forgivable if it hurt only your course score. But, since *Cursed to Golf* plays more like an experimental, hardcore platformer and the fate of an entire 40-minute playthrough often hinges on a single stroke, the impotence as you observe yet another ball being swallowed by a mess of vines registers as deeply unfair. The frustration is exacerbated by abrupt difficulty spikes, random events that can render a hole virtually unwinnable, and the occasional run-killing bug, making escape from the game’s neatly mown underworld a near-impossible task.

There are nuggets of a good – perhaps even great – game here, buried among Chuhai Labs’ incongruous design choices. Every swing of the club carries a satisfying heft, and each level’s branching paths (some presenting a more direct option to the hole, others compensating for their circuitous route with statues that grant extra shots if hit) present you with tantalising dilemmas. And there’s a chance that with a few tweaks, such as cheaper Ace Cards, more bouncy walls to redirect ball movement, and allowing for a bit of control while in flight, it may get there. As it stands, however, the quintessential snapshot of the *Cursed to Golf* experience remains the split second when all your progress is eradicated and you shuffle back to Hole 1, the ensuing grind feeling a lot like the purgatory your protagonist is trapped in.

**VERDICT**

A promising concept turns tedious errand due to sudden difficulty spikes and stuttered engagement.

47%
Why not try…

Itch.io roundup

Picking out some of the platform’s standout titles

REVIEWED BY Nic Reuben

Kid Canary & The Midnight Tower

fake gamer comics / Name your own / wfmag.cc/kid-canary

The inhabitants of the Midnight Tower – whether they be slime-cursed cats or sentient fungi – are definitely trying to kill you, but with charming sketchbook art and a dreamy synth soundtrack, it’s still a strangely inviting place to spend some time. A contiguous HP count and stat sheet follows you from one encounter to the next, and the tried and tested roguelike reward choices await you between fights. It’s not the most tactical – your options are limited to attacking, and progress is mainly about health conservation. But short blurbs of biography for each enemy, along with colourful attack and item descriptions, make this a worthwhile crawl through an endearing and creative dungeon.

Ordinary Day

Late Night Studios / Free / wfmag.cc/ordinary-day

I’ve written a fair amount in the past about the unsettling potential of lo-fi or other self-imposed graphical and artistic limitations on a game’s atmosphere, and hand-drawn horror Ordinary Day fits the bill perfectly. Its ghostly, graphite-and-paper world imparts the feeling of stumbling through a macabre pop-up book, with too-perfectly shaped houses and streets static underneath a uniquely aberrant sky. A monochrome palette lets deliberate and deceptively simple lighting choices add contrast to the world. Things get dark, and quickly. And fair warning, it’s not the most nuanced portrayal of mental health. But it is grimly funny and gruesomely satisfying, if that’s your jam.

Voracious Riches

SomeoneInflative / Name your own / wfmag.cc/voracious

This ultra-difficult roguelike card battler kicks off with a warning about its punishing challenge, but also a note saying that the developer believes in you, which is more than FromSoft has ever said to me. Despite complex systems involving buffs, debuffs, and a mysterious resource called ‘Fwoomp’ that makes your party grow giant pot bellies, the core here is easy to grasp classic card battling, as you push through the dungeon expanding your deck with bonuses and passives. Loveable sketchbook enemies and lively music complete the set.

Rat in Space

Rat / Free in browser / wfmag.cc/space-rat

I will stop recommending low-effort games about rats when they stop curing my depression. So far, it hasn’t happened.

The bonus game this month is Squirrel Away (wfmag.cc/squirrel), in honour of collectively preparing for a brutal winter brought about by senseless corporate greed and lobbying by Tories who care more about adding an extra wing to their stately homes than starving, freezing children. Look at its cute nose!
Taylor from okStranger on the power of jump scares and what Twitch means to her

What would you say is your favourite game of all time, and why?
Of course, several games come to mind when I think about favourites, but one that will always be close to my heart is The Legend of Zelda: Majora’s Mask. It was the first game I ever completed by myself as a kid – it really made me fall in love with the Zelda series and gaming in general. I really liked collecting the masks and how weird it was – thinking about the moon still gives me anxiety. I keep the original gold Collector’s Edition cartridge on my desk.

What is it about horror games in particular that makes for such great streaming entertainment?
I think people find watching horror games entertaining for several reasons. Some are too afraid to play the games themselves, so they like having someone else in control. Others have played the game before and enjoy watching people do first playthroughs of their favourite ones and seeing their reactions. The most entertaining part has to be the jump scares, though. I love when one really gets me good, and chat explodes with laughter after. They like watching me suffer, sickos.

Has there ever been a time when you felt like you needed to take a break from gaming/streaming?
Absolutely. I think it’s fair to say that any type of creator runs into burnout at some point. Entertaining people live can be mentally exhausting. Playing a game, reading chat, and keeping conversation going for hours can really take a lot out of you, and eventually that can build up to a major crash. Usually when I start to feel the need for a break, I plan to take a few days away from stream, or switch up my content to make it feel fresh.

For you, what’s the appeal of streaming? What do you get out of it?
The people I’ve met through streaming is the most incredible part. Every time I go live, it feels like I’m having a party with good friends. I feel so lucky to have attracted such a cool group. The other part of streaming I enjoy most is sharing the whole gaming experience. Most of what I stream is first playthroughs, so we are experiencing it together for the first time, and when something really cool happens, it’s awesome having a whole crowd reacting with me. All of this has brought me a lot of happiness, and hopefully I provide the same feeling to the people who watch me.

Watch Taylor stream horror games regularly on Twitch at wfmag.cc/okStranger

“I think it’s fair to say that any type of creator runs into burnout at some point”
The best PC games, according to Wireframe, catering for whatever your mood might be

The games for... BIG ADVENTURES

- Elden Ring / Bandai Namco / 95% (Issue 61)
- Assassin's Creed Odyssey / Ubisoft / 93% (Issue 1)
- Yakuza: Like a Dragon / Ryu Ga Gotoku Studio / 90% (Issue 45)
- Amnesia: Rebirth / Frictional Games / 87% (Issue 46)
- Death's Door / Acid Nerve / 87% (Issue 55)
- The Last Campfire / Hello Games / 86% (Issue 47)
- Resident Evil 2 / Capcom / 86% (Issue 7)
- Stray / BlueTwelve Studio / 86% (Issue 65)
- Lost in Play / Happy Juice Games / 86% (Issue 66)
- Journey to the Savage Planet / Typhoon Studios / 84% (Issue 33)

The games for... REPEATED PLAY

- Hades / Supergiant Games / 94% (Issue 44)
- They Are Billions / Numantian Games / 88% (Issue 20)
- Sekiro: Shadows Die Twice / FromSoftware / 87% (Issue 11)
- Streets of Rage 4 / Dotemu/Lizardcube/Guard Crush / 86% (Issue 40)
- Trials of Fire / Whatboy Games / 84% (Issue 50)
- Katamari Damacy REROLL / Monkeycraft / 84% (Issue 4)
- Spelunky 2 / Mossmouth / 83% (Issue 44)
- Hitman 2 / IO Interactive / 82% (Issue 3)
- Alba: A Wildlife Adventure / ustwo Games / 82% (Issue 46)
- Slay the Spire / Mega Crit Games / 81% (Issue 45)

The games for... SOLID STORY TIMES

- Disco Elysium / ZA/UM / 94% (Issue 28)
- Life is Strange: True Colors / Deck Nine / 89% (Issue 57)
- Mutazione / Die Gute Fabrik / 86% (Issue 26)
- Whispers of a Machine / CliffTop Games/ Faravid Interactive / 85% (Issue 14)
- The Forgotten City / Modern Storyteller / 85% (Issue 55)
- Mythic Ocean / Paralune / 84% (Issue 36)
- Sunless Skies / Failbetter Games / 83% (Issue 7)
- Arise: A Simple Story / Piccolo Studio / 82% (Issue 31)
- Assemble with Care / ustwo Games / 81% (Issue 27)
- FAR: Changing Tides / Okomotive / 81% (Issue 61)

The games for... FIRING UP BRAIN CELLS

- Telling Lies / Sam Barlow / 92% (Issue 24)
- Kentucky Route Zero / Cardboard Computer / 90% (Issue 33)
- Slipways / Beetlewing / 90% (Issue 53)
- Heaven's Vault / inkle / 89% (Issue 12)
- Immortality / Sam Barlow, Half Mermaid / 88% (Issue 67)
- Total War: Warhammer / Creative Assembly / 87% (Issue 60)
- The Pedestrian / Skookum Arts / 84% (Issue 35)
- Dorfromantik / Toukana Interactive / 85% (Issue 63)
- Two Point Campus / Two Point Studios / 85% (Issue 66)
- The Legend of Bum-Bo / Edmund McMillen / 83% (Issue 31)
The games for... **HIGH-INTENSITY PLAY**

Tetris Effect / Monstars Inc./Resonair / **90%** (Issue 4)
Sayonara Wild Hearts / Simogo / **89%** (Issue 25)
Chivalry 2 / Tom Banner Studios / **88%** (Issue 54)
Hot Wheels Unleashed / Milestone / **86%** (Issue 56)
Star Wars: Squadrons / EA / **86%** (Issue 45)

LEGO Star Wars: The Skywalker Saga / TT Games / **86%** (Issue 62)
Devil May Cry 5 / Capcom / **84%** (Issue 10)
Black Bird / Onion Games / **84%** (Issue 3)
BPM: Bullets Per Minute / Awe Interactive / **83%** (Issue 45)
Resident Evil Village / Capcom / **82%** (Issue 52)

The games for... **CURING THE INDIE ITCH**

If Found... / DREAMFEEL / **92%** (Issue 44)
Can Androids Pray / Natalie Clayton/Priscilla Snow/Xalavier Nelson Jr. / **90%** (Issue 21)
Tales From Off-Peak City Vol. 1 / Cosmo D / **89%** (Issue 39)
Baba Is You / Hempuli Oy / **88%** (Issue 10)
TOEM / Something We Made / **87%** (Issue 57)
Afterparty / Night School Studio / **86%** (Issue 33)
Witcheye / Moon Kid / **86%** (Issue 30)
Hypnospace Outlaw / Tendershoot/Michael Lasch/ThatWhichIs Media / **86%** (Issue 11)
Haunted PS1 Demo Disc / The Haunted / **85%** (Issue 39)
OlliOlli World / Roll7 / **84%** (Issue 60)

**PC Top 10**

1 **Elden Ring** / 95% (Issue 61)
   A game of massive scale, packed with intelligence and mystery. A towering achievement.

2 **Disco Elysium** / 94% (Issue 28)
   Smarter and deeper than anything else; truly an RPG in a class completely of its own.

3 **Hades** / 94% (Issue 44)
   Proving ‘roguelike’ isn’t a dirty word, learning-and-dying is a joy from start to finish.

4 **Assassin’s Creed Odyssey** / 93% (Issue 1)
   The point where Ubisoft realised over-the-top adventures were the right direction.

5 **Telling Lies** / 92% (Issue 24)
   This FMV mystery asks more of the player than most, with rewards to match.

6 **If Found** / 92% (Issue 44)
   A compelling and beautifully illustrated narrative, as moving as it is memorable.

7 **Yakuza: Like a Dragon** / 90% (Issue 45)
   A bold, brash, and joyous rebirth for the long-running gangster series.

8 **Tetris Effect** / 90% (Issue 4)
   The question is ‘how do you better Tetris?’ The answer is: like this. This is how.

9 **Kentucky Route Zero** / 90% (Issue 33)
   Abstract style meets concrete commitments in this fantastic magical realist adventure.

10 **Neon White** / 90% (Issue 65)
   A free-flowing, first-person speedrunner that will have you chasing divine perfection.
The original *Castlevania* on a Sega console? Regrettably, it never happened, mostly thanks to the aggressive licensing deals that Nintendo tended to make with publishers in the 1980s. It was only later, when Konami (and other companies besides) renegotiated those deals in the 1990s that we began to see things like *Castlevania IV* and *Contra: Hard Corps* appear on the Sega Mega Drive.

Sega’s 8-bit consoles, the Master System and its handheld brethren, the Game Gear, did get at least a taste of *Castlevania*, though: 1992’s *Master Of Darkness*. Like the first *Castlevania*, it’s a side-scrolling platformer that unfolds at a deliberate pace, is drenched in a gloomy, midnight atmosphere, and sees the player fend off a variety of ghouls with close-quarter melee weapons and longer-range secondary attacks.

The resemblance to *Castlevania* frequently borders on the actionable, in fact. The style of the stage layouts is distinctly Konami, with power-ups and health-giving items hidden behind destructible bits of wall, and perfectly diagonal staircases guiding the player around the twisting, turning stages. Enemies will also knock the player backwards, though fortunately, you aren’t sent reeling into pits quite as often as protagonist Simon Belmont was in his first outing.

Speaking of protagonists, *Master of Darkness* has one of my favourite character names in the history of gaming. You control Dr Ferdinand Social, a dapper psychologist investigating a string of murders across London where the victims are found with their bodies drained of blood. You can probably guess who – or what – the culprit is. Developer SIMS, which made a number of lesser-known but mostly solid games for the Master System and Game Gear, capably evokes a murky horror atmosphere straight out of a vintage Hammer movie. The sprites and backgrounds lack the outright brilliance of *Castlevania*’s, but there’s a palpable grubbiness to the first stage’s Victorian London, with Westminster Abbey peeking out of the foggy distance and bats flapping around dank sewers beneath your feet. Later stages take in a museum of wax statues that spring to murderous life as you approach, and a graveyard full of zombies that ought to have had Konami reaching for the phone to call its lawyers.

Where *Master of Darkness* differs from *Castlevania* – albeit only slightly – is in its weapons. Where Simon Belmont favoured a whip, Dr Social goes into battle with what looks like a potato peeler. Whatever the weapon is, its short reach means it’s quite a relief when you get rangier items like a sword or an axe, while secondary weapons like bombs and guns are extremely handy for keeping pesky dogs or bats at bay.

The Master System and Game Gear’s middling sales in the US meant that it never got a release on those shores, which might partly explain why *Master of Darkness* is a relatively expensive game to buy these days. Not that it’s some forgotten classic necessarily; but just as a middling B-movie can make for the ideal fodder for a cold Halloween night’s viewing, so this half-forgotten *Castlevania* wannabe is worth dragging out of its crypt for a quick playthrough.
The teased X68000 mini-computer we wrote about last month really is happening. Japanese firm Zuiki formally announced at the Tokyo Game Show in September that it’s making a miniature take on Sharp’s eighties computer. There’s little more to go on as yet, but we now know it’ll be packaged with a working keyboard and mouse, and we’ll be able to program it like a proper computer. Games, release date, and price are still currently under wraps, though Zuiki boss Yuki Yoneuchi has said his firm plans to make the device far more affordable than the infamously expensive X68000 was back in 1987.

Looking Sharp (again)

The teased X68000 mini-computer we wrote about last month really is happening. Japanese firm Zuiki formally announced at the Tokyo Game Show in September that it’s making a miniature take on Sharp’s eighties computer. There’s little more to go on as yet, but we now know it’ll be packaged with a working keyboard and mouse, and we’ll be able to program it like a proper computer. Games, release date, and price are still currently under wraps, though Zuiki boss Yuki Yoneuchi has said his firm plans to make the device far more affordable than the infamously expensive X68000 was back in 1987.

British console modding experts RetroSix comes out with new and intriguing products on what seems like a weekly basis. Its latest offering is the GG CleanLight – a kit that adds eye-catching lights to your Sega Game Gear’s buttons. The kit’s available in a range of primary colours, including a Rainbow option if you’re after something really vibrant. You’ll have to pair them with a set of clear buttons and perhaps also a translucent custom shell to get the full effect, but the kit looks fairly easy to install at first glance. Once we’ve had a chance to get a hold of the mod for ourselves, we’ll be putting the GG CleanLight through its paces in a future edition of Wireframe.

Wolf Mother

Prowling the sticky floors of a late-eighties amusement arcade, and you probably would’ve stumbled across an Operation Wolf cabinet – notable for the absolutely huge Uzi submachine gun jutting out of its front. Shooting gallery-type games had been a mainstay of arcades way before video games were even a thing, but Operation Wolf brought the genre right into the testosterone-fuelled, post-Rambo 1980s era. It asked nothing more of the player than to gun down relentless hordes of soldiers, tanks, and helicopters, while avoiding hostages and shooting items that replenished your munitions and health. Thanks to French developer Virtuallyz Gaming (and publisher Microids), Taito’s old rail shooter is making an unexpected comeback, with Operation Wolf Returns: First Mission scheduled for release in 2023 for most consoles. PC and Quest 2 owners, meanwhile, will get the shooter earlier, with their version due this autumn. Once again, it’s a shooter that’ll be high on action and low on complexity, as you (and a friend, if you have one) are charged with wiping out a criminal organisation with an assortment of firearms. Will it recapture that Reagan-era jingoism? Well, the stills we’ve seen so far don’t fill us with confidence, to be honest – the bold sprites of old have been replaced by some very brown, low-poly 3D models that look like something from the PS2 era – but let’s not judge it by its looks too harshly. Couple this with a Sinden Lightgun, and we could have a likeably lowbrow evening’s entertainment in the offing.
The general meme is that 1993’s DOOM runs on anything, right? A calculator, a thermostat... Hell, John Romero and John Carmack’s iconic first-person shooter can even be played on a treadmill – presumably to unleash maximum gains or something. One format we’ve yet to see it run on, though, is that of our own reality. Well, that day has arrived thanks to YouTuber Bill Thorpe. He recently took it upon himself to recreate the original DOOM far more accurately than any cinematic, high-budget adaptation featuring Dwayne “The Rock” Johnson ever could. And why? Because his love letter of a short film uses an ungodly amount of cardboard, which works wonders in achieving that classic geometrical aesthetic we all associate with the Doom Slayer’s first brutal trip from Mars to Hell.

The eleven-minute video opens with the ringing endorsement of Romero himself, and it’s easy to see why. Backed up by an appropriately pulsating techno soundtrack looming in the background, we’re immediately treated to a lo-fi door sliding upwards (complete with that oh-so-familiar “whoosh” SFX). The Doom Slayer, clad in a cardboard helmet, is instantly ready to rip and tear through all manner of demons. After treating our ears to crunchy gun reload and ‘healthpack acquired’ sounds, it’s into a first-person view and straight into the action. An Imp gets chainsawed, a zombieman is shotgunned to the head, and for the finale, a Baron of Hell turns up to smack-talk the Slayer while on his way to retrieve the BFG (the gun, not the friendly giant).

The nature of a fan-made film such as this is that you’re working with a limited budget, so the fact that this condensed version of DOOM manages to look and feel like the 1993 original at all should be commended. Thorpe shows a clear affection for the source material in what he’s able to include here, which ends up working both for and against the film overall: when it ended, I was left wanting so much more. By the time the Slayer travels to Hell, removes his helmet, and picks up a tag embossed with the name of his pet rabbit Daisy, I was raring to go. Luckily, Thorpe has already promised that a second part is in the works, and I’m hoping that – as well as delivering on the film’s cliffhanger – we might get to see a full level engineered in this style.

Just as interesting as the film itself is the end credits sequence, featuring a brief montage that offers insight into how certain effects were achieved almost entirely through practical means. Castle interiors, for example, are roughly a fifth the scale you’d expect them to be, hinting that some pretty ingenious camera tricks were used to make you think the Slayer could walk through them. I also imagine it was a nightmare to film the action safely whenever Hell’s flames are involved, given just how flammable the set, enemies, and items were, being made out of cardboard and all.

The aptly titled DOOM (2022) short film may only be brief, but it’s still the result of months of hard work. I know because the creation process has been thoroughly documented on Thorpe’s YouTube channel, GAMES made of CARDBOARD. See the effort that went in to making a faithful re-creation of DOOM for yourself here: wfmag.cc/Dooms-Day.
Barcade archive

When I would holiday by the seafront as a kid, the set piece of any nearby arcade would always be *Time Crisis II*. I had enjoyed my time playing Namco’s light-gun classic at home alone on my PlayStation, sure, but witnessing the sequel’s setup for the first time meant I could enjoy the thrill of ducking and shooting with a friend by my side – with separate screens offering different perspectives. It’s no wonder, then, that when a Four Quarters “barcade” finally opened in my home city of Bristol, *Time Crisis II* was again where I spent most of my time.

There are plenty of other great cabinets to enjoy, of course, including *The Simpsons*, *Teenage Mutant Ninja Turtles*, and *Mortal Kombat II*. But Four Quarter’s policy of having each machine run on tokens rather than real-life money is a game-changer. It meant I could finally see the end of an arcade game I initially played some 20 years ago without having to remortgage my apartment. I know what you’re thinking: “Couldn’t you just buy the PS2 version?” Possibly, but it seems fitting that I beat the game in its natural setting, within the comfy hustle and bustle of a local arcade.

8-bit blasphemy

The demake-ification of beloved games is unending! Only this time it’s not “what if *Bloodborne* or *The Last of Us* was released on PSOne?”. This one is a bit more of a sidestep. 2019’s *Blasphemous* is a tough-as-nails action-platformer that was lauded at launch for its mixture of tough enemy encounters, grim atmosphere, and purposefully bleak take on select religious iconography. It also looked amazing wherever you played it thanks to its detailed pixel art. But can you make a sprite-based indie game look more retro? Yes, apparently.

Twitter user @nekocrocodile’s vision of what *Blasphemous* would look like if released on the original Game Boy is extremely convincing, not least because the lime-green filter only accentuates the game’s oppressive aesthetic further.

Mind you, I’m not sure how battling nightmarish creatures, giant disembodied heads, and gothic knights would go down using just the A and B buttons, but I’d happily give it a go. Sadly, this 8-bit *Blasphemous* only exists as pure fan art for now, but to not make it playable would surely be a sin.
Apple Arcade should be a good way to introduce mobile players to an abundance of great games they wouldn’t otherwise check out. However, it does often leave those of us without iPhones scratching against yet another walled garden, begging for the exclusivity period of certain titles to end whenever something interesting pops up. This was exactly my case with Little Orpheus, a likeably comedic action-platformer from the same folk behind (among other things) the evocative first-person adventure, Everybody’s Gone to the Rapture, back in 2015. I was curious about how developer The Chinese Room’s typical arthouse sensibilities would translate to something a bit breezier in tone. That’s why, with its arrival on Nintendo Switch, I soon discovered a loving throwback to classic B-movies and pulpy sci-fi serials that’s equal parts charming and surprising.

Little Orpheus’ affection for cinema’s early Technicolor period is made evident almost instantly. We pick up with cosmonaut Ivan Ivanovich, rendered in scratchy black and white, being interrogated by his Soviet superiors regarding the whereabouts of the atomic bomb he was sent to retrieve three years ago. Turns out the only time we’re treated to luminous purples, radiant greens, and more is in the midst of the side-scrolling action – it works expertly to contrast Ivan’s larger-than-life adventures with the usual, bland duties of a dedicated “comrade”. The interrogation framing device also ingeniously makes you question his account of events. For instance, does this mysterious world of dinosaurs and giant worms beneath the Earth’s crust even exist? In practice, the legitimacy of Ivan’s narrative doesn’t really matter, because the purpose of all nine chapters is to simply treat you to a varied number of otherworldly

Journey to the centre of the Earth
This month, Aaron loses himself in the cheesy sci-fi stylings of 2D platformer Little Orpheus
settings to explore. Whether it be an undersea kingdom, prehistoric jungle, or the inside of a whale, each location is intent on one-upping the outlandishness of the last. This approach helps stave off the routineness of the gameplay – move this block, climb this rope, pull this lever – early on, in between the otherwise bombastic set pieces.

I'm glad I chose to play Little Orpheus on Switch, as opposed to the other consoles it's now available on, because its episodic nature makes it ideal for a handheld. From the way Ivan and General Yurkovoi's dialogue doubles up as narration to offer context to your on-screen actions, right down to how a cheesy announcer will end each chapter with a “Next Time!” speech, controlling Ivan on his quest to find Little Orpheus genuinely feels like tuning into an old school Flash Gordon or Buck Rogers adventure. The main difference now, though, is that you don't have to wait a week to learn what happens next.

The overall campy approach to atmosphere and storytelling in Little Orpheus is something to be admired, being yet another example of risks being taken by the indie scene. It's hard to imagine that a triple-A publisher would dream of dedicating a large budget to a project carrying this aesthetic. I've already mentioned that Ivan's journey isn't the most inventive in the mechanical department, however, with the game's origins as a touchscreen platformer being glaringly obvious right from the opening moments. There are little flashes of brilliance here and there, though, such as when you must crouch and hide behind furniture in the foreground so as to not be gobbled up by a giant creature. Yet, for the most part, you're simply swinging, climbing, and jumping to the next legendary lost kingdom.

Everybody's Gone to the Rapture also left a lot to be desired in terms of player action, merely asking “walk here” and “look there”. Similarly, Little Orpheus is far more interested in absorbing you in its mood and ambience as opposed to posing any real challenge. Yet what it lacks in gameplay, it more than makes up for in whimsical style and storytelling. It's very much the anti-inside – excellently discussed by Ryan last issue – in that way, trading singular, monochromatic characters and locations for a kaleidoscopic exuberance that can't help but draw your eye. No doubt there are countless other 2.5D platformers that play better. But hey, few others let you catapult a walrus skywards using an ice see-saw.

With its quirky protagonist and endlessly creative environments, Little Orpheus kept me smiling from beginning to end. I'm aware that some players won't jive with the game's surface-level approach to puzzle-solving or traversal, but that doesn't take away from the excellent job The Chinese Room has done channelling the vibe of a brighter and more optimistic brand of sci-fi. Not knowing what lies around the corner of the next episode's contents proves much of the fun in this adventurous jaunt to the centre of the Earth. Who cares if Ivan Ivanovich might be making half of it up as he goes along? 🤔
How safe spaces have long provided a refuge from the stresses of the survival horror genre

**Resident Evil**

It may seem cruel by today’s standards, but manual saving was the norm back in the PlayStation era – to the extent that picking up where you left off was a luxury afforded only to those fortunate enough to own a memory card. The first *Resident Evil* smartly capitalised on this model, going so far as to build a literal save room into the body of the game to add further tension, as opposed to simply asking whether you wanted to save between chapters. There are no codes you can input to reinstate progress, either. Rather, the onus is entirely on you to pick your save points wisely.

Ink Ribbons were ultimately done away with by the time of *Resident Evil* 4’s release, being yet another indication of that game’s swerve to a more action focus instead of outright survival. The purity of the save room remains, except now they can be situated anywhere, from a rickety outhouse, a dimly lit mine, and all the way up to a lavish castle dining room, due to the environmental variety present in Leon’s mission to rescue the president’s daughter in rural Spain. It wasn’t until the less fondly remembered *Resident Evil* 5 and 6 that save rooms would be totally abandoned.

It’s no coincidence, then, that with the arrival of *Resident Evil 7: Biohazard*, a game openly intended to return the series back to its survival horror roots, that save rooms returned. They were a franchise staple and a huge part of its constant tussle between tension and release, after all, as is the music that accompanies each of the spaces when you enter them.
Though appropriately haunting, the dull acoustic guitar plucking coupled with strings you hear when entering a save room in the first *Resident Evil* set a precedent for the series’ effective use of audio cues to ease stress. That’s why, where a save room exists in a *Resident Evil* game, so does an eerily calming musical motif. Arguably, though, none have ever bettered composer Seiko Kobuchi’s original *Safe Haven* theme.

The concept of a safe and/or save room may have been born out of Capcom’s need to work around the PlayStation’s limited RAM capability, but they’ve since grown to carry a legacy much larger than just *Resident Evil*. Whether used as a way to give *Left 4 Dead*’s party of survivors a chance to restock in between zombie-riddled locations, offer a method of travel à la bonfires in *Dark Souls*, or to further the concept of a make-believe dream world as seen in *The Evil Within*’s portal realm, offering players moments of respite as well as effective scares is a useful weapon in any good scary game’s toolbox.

As time has gone on, some developers have continued to toy around with a save room’s rule set. At their most cruel, for instance, certain games will betray the trust they’ve built up with players by letting whatever monster would typically claw at the door break through – the *PROJECT ZERO* series being a prime example. Other titles like *Hollow Knight* have doubled up on the purpose of such a location, using it as a storytelling device to let players engage NPCs and educate themselves with pieces of lore. For horror veterans, though, they’ll always represent that brief moment of relief before venturing back out to see what nightmares lie beyond the door.

**Knock-knock**

It wasn’t just save rooms that were implemented in the original *Resident Evil* due to technical restrictions of the hardware. Rendering the entirety of the Spencer Mansion in real time as one interconnected space would have been impossible on the PlayStation, even with pre-rendered background being used to somewhat lighten the load. As such, the iconic image of *Resident Evil*’s slow-opening doors came to be. This afforded Capcom a way to load in the area of the mansion you were about to explore, all while maintaining a consistently deep sense of atmosphere.
Next Issue

ON SALE 3 NOV

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