

LIFTING THE LID ON VIDEO GAMES

A shoot-'em-up classic blasts back

Pushing pixels A sprite-drawing masterclass

Getting personal Developers making life experiences into games

Night Trap The FMV genre's unlikely return







UPGRADE TO LEGENDARY

















BOX

eaocgaming

ebuyer.com

It's time to expect more from the games industry

et's get some assumptions out of the way: games are art, art is political, games are an entrenched part of our media landscape, and this landscape informs how we view and engage with the rest of the world. I'm not going to reiterate these views, because we already do this like clockwork. These are things I believe. And that's a big part of the reason why, when looking at 'noteworthy' releases, I fluctuate from bored to outright despondent.

Remember *The Elder Scrolls III: Morrowind*? Set in a colonial occupation, *Morrowind* isn't a game about easy answers or obfuscating its interrogations. Players are literally forced into the colonial machine. To create a character is to be processed by forces so large and external that the full shape of them can only be seen and understood by engaging fully with the game.

Morrowind makes small moves, and in doing so, builds out existence in a remote imperial holding. There are settlers and unwilling citizens, resistances that are at odds with one another, the devout desperate to survive with their religion as traditionally practised, others reconciling their faith in an imperial context, and all the various pre-colonial entities finding ways to maintain or consolidate what power they can. In the chaotic flux of occupation are all the things that flourish: black markets, slavery, conspiracy, forced disappearances.

Everything from the broader ecology to the individual psyche is shown to be affected. All given weight and embodiment in the systems, NPCs, factions, and quest lines that make up the game. But little, if anything, in the way of answers is afforded to players – the game expects us to do the work, to interrogate the vast and often conflicting ideas given to us, and derive meaning. *Morrowind* is a game that requires players to be actively present.

What players are more frequently confronted with is an expensive spoon-fed blitz of regressive ideology. Publishers like Ubisoft, Activision, and now even



DIA LACINA

Dia Lacina is a queer indigenous trans woman writer, photographer, and founding editor of **CapsuleCrit**. **com**, a monthly journal dedicated to microgenre work about games. She tweets too much at @dialacina.



Bethesda are far more interested in spectacle and maintaining the status quo. *Call of Duty, Tom Clancy's The Division,* and *Far Cry* can't say they're political, but can ascribe to Shoot Bad People, Don't Shoot Good Ones (typically aligned with deeply conservative or neoliberal political ideologies). *Wolfenstein* can bid us to shoot more Nazis, but they're depoliticised Nazis, just paper dolls to churn through mindlessly. To say nothing of the failed 'satire' of *Grand Theft Auto* and its ilk.

These games expect nothing from players but to be awed, which isn't just irresponsible and dangerous – it's also an unsustainable dead end. Spectacle is as exponentially consumptive as colonialism.

It's easy to pick on the big studios with their ballooning budgets and thousands of often overworked, under-credited employees who are wildly and disproportionately compensated for the labour of actually making the games (and often want to make *better* games) for timid executives who don't want to upset the status quo or their shareholders. It's worse at those big studios, but indies aren't free from these problems either.

Which isn't to say spectacle is inherently bad. As Mary Poppins teaches us, "A spoonful of sugar helps the medicine go down." *Night in the Woods* – with its rich, nuanced explorations of relationships, mental illness, and the creeping desolation of capitalism – is a lovingly polished delight.

Morrowind builds its politics into a fantasy realm so vastly stunning and overwhelming I had to buy a new video card at the time. But what if there's nothing but sugar? What if it's easing the taste of not medicine, but poison?

If there's hope to be found, it's in the developers willing to push back internally, or strike out on their own to challenge players and the landscape. We should place a premium on them, not the safe mediocrity of corporate dazzle. @


Attract mode

- **06. R-Type Final 2** Kazuma Kujo talks exclusively about his shooter sequel
 - 10. Neo Cab A back seat ride through an automated future
 - 12. Contra: Rogue Corps Nobuya Nakazato explains why Contra's going twin-stick
 - **16. Incoming** Sentient jelly, soup shenanigans, and fractured worlds

Interface

- **18. FMV revived** The developers bringing back full-motion video games
- 24. MegaSphere A gorgeous-looking roguelike shooter from Russia
- **44. Making it personal** When designers turn real-life experiences into games
- **50. Glen Schofield** Inside the mind behind Dead Space and Disney karting







Toolbox

- 28. Design Principles How scheduling affected Atari's infamous E.T. tie-in
- **30. CityCraft** Planning your own sci-fi city of the future
- 32. Pixel art

A masterclass from veteran artist Stoo Cambridge

40. Source Code

Code your very own top-down racing game



Rated

- **56. Wolfenstein: Youngblood** New co-op mechanics fail to get the blood pumping
- 58. Exception It's Tron, set inside an old lady's computer
- 61. Can Androids Pray A minimalist, moving adventure about facing the end
- 62. Church in the Darkness

This action adventure's the epitome of games as a service

WELCOME

Where would video games be without H.R. Giger? Whether the late artist's work appealed to you or not, his fingerprints are all over our favourite medium - this issue of Wireframe alone features two long-running game series that took direct inspiration from his art. It's no coincidence that *R*-*Type* and Contra first emerged in 1987 - precisely one year after the release of director James Cameron's sci-fi movie sequel, Aliens. Giger's dark, biomechanical art style was a key part of the franchise's rising horror, and his work evidently left its mark on the makers of R-Type and Contra.

But while Giger's art has informed everything from Contra to Duke Nukem to Halo, the artist's direct interaction with the games industry was all too brief. In the early nineties, Californian developer Cyberdreams licensed Giger's artwork for their pointand-click horror, Dark Seed. The game was far from perfect, but there were moments either in its dream sequences, or where its mullet-and-jacketwearing hero stepped through a mirror into an alien dimension where it really felt as though we were trapped inside one of the artist's disturbing landscapes.

Giger died in 2014, having spent the last years of his life setting up a museum in his native Switzerland. If games like *SOMA* and the forthcoming *Scorn* are anything to go by, though, Giger's work will continue to lurk in the minds of video game artists for many years to come.

Ryan Lambie Editor

FORCE FILLER CONTRACT OF THE STATE OF THE ST

We talk to designer Kazuma Kujo about R-Type Final 2, and why he's reviving a classic shoot-em-up series

rom its downbeat score to its funereal pace, *R-Type Final* certainly felt as definitive an end to the series as its name implied. Publisher-developer

Irem was also true to its word: when *R-Type Final* emerged for the PlayStation 2 in 2003, it marked the end of a shooting saga that had endured since the original hit arcades in 1987. Barring a couple of unusual spin-offs (the *R-Type Tactics* titles for PSP) and some download-only remakes of the first two games, we haven't seen a new *R-Type* entry in almost 16 years.

At the time, *R-Type*'s quiet retirement made sense: by the early 2000s, the horizontal shoot-'em-up, once a mainstay of arcades from around the mid-eighties to the mid-nineties, was beginning to dwindle, with action thrill-seekers shifting their attention to newer, more sophisticated genres. But all these years later, Japanese designer Kazuma Kujo – who worked on series entries *R-Type Delta*, *R-Type Final*, and *R-Type Tactics* – has begun thinking again about a style of action game even he'd once regarded as a spent force.

Now stationed at his own studio, Granzella, Kujo has made the surprise decision to licence the *R-Type* property from Irem and revive the series. And despite initial fears that the announcement of *R-Type Final 2* was a joke (partly because its grand unveiling took place on 1 April, of all days), a successful Kickstarter campaign means that a new entry really is on its way in 2020.

The stated aim is to make a sidescrolling shooter that harks back to the series' most familiar elements – its Force weapon, which acts as a roving cannon, shield, and battering ram, for example – while adding modern luxuries like online leaderboards and a 16:9 play area. Keen to find out more about *R-Type Final 2* – not least, the decision behind that curious title – we caught up with Kazuma Kujo to talk about the revival of a 32-yearold franchise.

R-Type Final was intended as the end of the series, so what prompted you to start making *R-Type Final 2*? Was it based on fan requests, your own desire to continue the series, or maybe a mixture of both?

The purpose is not to continue the series. Back in 2003, I was feeling stuck in sidescrolling shooter games. But now, I think I can find a new breakthrough to make

a new *R-Type*, and I want to make it happen. That's one of the biggest reasons. The second reason is that there are fans who welcome that decision.

Why is it called *R-Type Final 2*? Did you consider other names like *R-Type Rebirth* or *R-Type Resurrected*, for example?

Of course, I did consider some of those titles. But I didn't want to sweep the fact that I already created [*R*-*Type*] *Final* under the carpet. I just wanted to be straightforward that this game would come after *R*-*Type Final*. It may sound weird, but as long as the game is good, I don't think people care about the title. \Rightarrow

 The biomechanical monsters of earlier games are still in evidence: this new kind of enemy is called a Gauper.







The indestructible Force - part shield, part loyal satellite - has bee in every game aside from *R-Type Leo*, and it's back in Final 2.

around plenty of ships, bullets, and explosions.

Is the name an in-joke? In a 2003 interview, you said, "Final 2 isn't going to happen!" [NB: here's a link to the translated interview: wfmag.cc/rtype]

Yes, you're right about that. The title came out of a joke for sure [laughs]... But I found myself wanting to create a new *R*-*Type* game, and fortunately, I was given the opportunity to do so. Now I think only about realising and completing it.

Why are there so few horizontal shooters coming out of Japan compared to vertically scrolling ones, do you think?

I think it's because side-scrolling shooter games don't receive support from game users in Japan. I think it may be because there's an overwhelming number of people who play vertically scrolling shooters rather than horizontally scrolling shooters.

How will *R-Type Final 2* innovate over the earlier titles?

R-Type Final 2 is a shooter game designed for consoles and PCs, but I want to make it



The R-9A player ship may have originated as a piece of pixel art, but it still looks sleek when rendered as a 3D model.

something where you can feel the tension and excitement of plaving arcade games. I want to get closer to the essence of sidescrolling shooter games without caring too much about numbers or the volume [of sales]. But the rules and functions of the past series are passed on to R-Type Final 2.



What new weapons systems and ships can we expect to see? It looks from the early screenshots and footage that you have some quite different weapons in this one.

We're going to pursue the weapons system that appeared in the past *R*-*Type* series. I will make them playable with new expressions rather than creating new weapons from scratch. In that process, we may find new ways of using the weapons, but we'll continue to polish the existing ones.

Have you experimented with different ways of using the Force that players haven't seen before?

We're currently building the mechanism of the Force and [we're] now experimenting with some ideas in the process.



When it comes to creating enemies, do designs begin with a pen and paper? Do you draw inspiration from nature, for example?

I start with brainstorming the shape and functions based on the playability and strategies we want to create in the game. After that, I work on the designs that satisfy them. By taking the location to place the enemy and the necessary functions or shape into account, I come up with the background (the reason for the occurrence or birth) of the enemy and determine the materials [it's made from]. I write down that information and ideas on paper and share it with our artists.

Do you recall the impact the original *R*-*Type* had in Japan when it released in 1987?

Of course, I do! When the original *R-Type* came out, I was still a student. It made a huge impact on me.

Have you been conscious of what the core parts of *R*-*Type*'s design are? What is it about the series that sets it apart, in your opinion?

I think the core parts of *R*-*Type*'s design are 'enemies attacking from all 360

The weapons will be broadly the same as earlier *R-Type* titles, Kujo says, but their effects will be devastating if this shot's anything to go by.

degrees of view' and the invincible Force given to players. Our game design also emphasises where to use the Force and Wave Cannon, and the exhilarating feeling when it turns out successful. Also, I think the core parts of the graphic representation are 'the fusion of machines and organisms', and 'the game isn't visualcentred, rather the gameplay is reflected in the visual representation'.

What are your memories of making *R-Type Delta*? I gather its development was difficult, given that it was the first game in the series made in 3D.

That's right. Since *R-Type* series had been popular for its pixel art, we thought fans might feel awkward about 3D [graphics]. Also, since the game rules had been set assuming it was for 2D gameplay, we reviewed all the rules while [moving] from 2D to 3D. We tried to maintain the original charm of [the earlier] *R-Type* games as much as possible when replacing 2D with 3D visuals. We thought [about this] until the last minute, when we adopted the rule that ships won't be damaged by terrain.

Is making *R-Type Final 2* more accessible to new players important to you? And is that why the genre's popularity waned, do you think, because they were too difficult?

That's a very difficult and important question to answer. I think one of the reasons side-scrolling shooters have lost momentum is that they don't work well with consoles. Shooting games were just right for the play style of inserting a coin to play. The difficulty was set based on this, and it gave players a sense of tension and achievement, in addition to building a kind of relationship between the game and the player.

But when games were made for consoles, game difficulty became an issue that was difficult to maintain. Game creators gained a responsibility to provide buyers with a game that was worth



the few pounds they were paying, and the difficulty had to be in line with that.

Now, we're brainstorming about it together to come up with ideas to make it possible to lower the difficulty level while providing challenging and enjoyable game experiences.

Will we get the same huge line-up of about 101 ships [as *R*-*Type Final*]?

I can't say the exact number of ships at the moment. Creating 100 ships is not the goal of this game [...] I want to add new ones, but increasing the number of ships is not [a priority], so I hope I will be able to add a couple of distinctive ships.

We've seen all kinds of indie developers revive the platform and other older genres. Is there more to be done with the shooting game, do you think? More ways to push it and innovate within it?

Back in 2003, I felt there was nothing more I could do with shooter games. But that's not the case now. I see a possibility in shooter games. I think the development of networks has provided an opportunity to create excitement similar to what you gain from playing arcade games for consoles, too. As well as new stages, *R-Type Final 2* will also recreate a level from the previous game in glorious HD – which one hasn't yet been announced.

Attract Mode

Interviev

Over the past 20 years or so, 3D games have developed to create a large market. But as the market matured, by its reaction, I think it also brought about the demand for side-scrolling shooters and side-scrolling action games. If game creators are able to evolve shooter games to the point where they're no longer old or obsolete, I think the genre will create a sizeable market. I'm trying to explore a way of making it happen, and I'm sure it is possible.

Now that the Kickstarter campaign's over, how far are you into development, and what do you have left to do?

Since the development of *R-Type Final 2* has just started, our main job right now is to build the basic system. Also, since we want to make it a game that continues to evolve even after its release, we're now considering the mechanism that will be the basis for that. @

R-Type Final 2 is due for release in 2020 for Switch, PS4, and Xbox One.



LIFE AFTER IREM

When Kazuma Kujo founded Granzella in 2011, it was with the express purpose of making games that he simply couldn't get off the ground at Irem ("It was becoming more and more difficult to do what we wanted," Kujo said in a 2013 interview with YourPSHome.Net). To this end, Kujo successfully revived *Disaster Report 4* in 2018 – a survival sequel that had lain dormant at Irem

since its cancellation seven years earlier. With Granzella now working on a continuation of *R-Type*, could this mean we'll see Kujo return to other series he's worked on in the past – like, say, the quietly brilliant 1993 submarine shoot-'em-up, *In The Hunt*? "Right now, I'm focusing on *R-Type Final 2*, so I'm not really thinking about reviving other games," Kujo says. "I don't have plans for *In The Hunt* at the moment, but I will think about it when the production of *R-Type Final 2* is complete." Our fingers remain firmly crossed.



Neo Cab sees you maintaining your humanity in a future bereft of it

GENRE Uber-'em-up FORMAT PC

PC DEVELOPER Chance Agency

PUBLISHER Fellow Traveller RELEASE

2019

 The game is non-linear, though it does have a story running through its core.



ber, Lyft, and the gig economy services like these helped to facilitate will go down in history, and it's unlikely they'll be remembered positively. But there's

another innovation, fast approaching, that will have an even greater impact on people, their lives, and their ability to survive in the capitalist system: automation. It's a buzzword that might be easy to laugh off as 'we're waiting for our new robot overlords', but nevertheless, it's coming. *Neo Cab* takes a look at what this inevitable future might be like.

Players take the role of Lina Romero, one of the few remaining human drivers in a world ruled by Al-driven 'autocars', as she picks up passengers, listens to their stories, and tries to offer something no artificial driver could: a sense of humanity. At the same time, Romero is trying to get to the bottom of the disappearance of her friend; it's a narrative spine that pushes



you through the largely open-ended mix of cab driving and chatting to passengers. Rounding it all off is the game's overt commentary on the real world's race to automate and innovate, and how evolving technology can affect our lives in ways we never imagined – both for good and for ill.

"This concept came from an intersection of several narrative and game-design threads," explains Patrick Ewing, creative director at Chance Agency. "From a story perspective, there's something unique and powerful about two strangers meeting for a brief moment in the intimate space of a late-night cab ride. There's a reason so many iconic movies either feature, or are entirely based upon, this setup: Taxi Driver, Night on Earth, Collateral, [or TV's] The Night Of. There's the sense that anyone in the world could slide into the back seat of your cab, and if they did, there's a chance of real human connection there, owing perhaps to the brevity of the interaction and the anonymity of both parties. I've found this from my own experiences driving for Uber - if you give people a space to open up and be their honest selves, some people just leap at the chance."

Additionally, the ride-sharing element adds a layer to the narrative design, Ewing says, with passengers giving star ratings at the ride's – and conversation's – end. This cumulative rating contributes to Romero's ability to survive through the game. "This aspect," Ewing says, "counterbalanced by our Feelgrid emotional system, raises the stakes of each decision you make, and hopefully complicates the tired



'good guy/bad guy' choices one often finds in narrative games."

Writing a game focusing on human interactions in a confined space proved more challenging than the team expected, with non-linearity and the need to guickly establish a foundational relationship between two strangers for a conversation to proceed proving particularly tough. "Our story editor, Paula Rogers, would often joke about just how many constraints we'd put on ourselves in terms of writing this game," Ewing explains. "In particular... we branch our dialogue and available choices using the Feelgrid system. This last bit is core to what makes Neo Cab special - the player character's emotional state is explicitly visible on screen, and it's always changing based on what's happening in the story and what choices the player makes.

"This meant writing multiple versions of Romero's dialogue to reflect that full spectrum of emotions, and in many cases writing several alternate branches of

each story to reflect these differences," he continues. "This was difficult, but ultimately so satisfying – it adds an emotional

realism to the character, and hopefully a sense of alignment between her and the player, as the consequences of the player's choices send subtle (but meaningful) emotional ripples into the story."

Neo Cab isn't a call to arms against technology, nor is it specifically railing against the inevitable automation of many industries and the subsequent losses of livelihoods that will follow. At its heart, it's a story about someone making

 Romero is one of the few remaining human drivers in a world of autocars.



their way through life, trying to make the right choices, trying to be professional and courteous, and trying to just get through it all. It's inherently relatable, and gives this often eerie sci-fi tale an emotional core.

On the studio's expectations – and hopes – for *Neo Cab*, Ewing is hopeful, realistic, and even

"At its heart, it's a story about someone making their way through life"

€ 60 € ○

a little philosophical: "Even if we don't get (or don't want!) a gadget on our wrist telling us to practise self-care," he says, "I like the idea that

HELLO SAV

playing *Neo Cab* will inspire one or two people to check in with themselves the old-fashioned way. We're all prone to being pushed too far once in a while, and we owe it to ourselves, and the people around us, to pause and recentre ourselves once we realise we're off the emotional map." @

 Passengers are mostly strangers; establishing a common ground is key to getting some Good Chat.

REMOTE SPARKS

Neo Cab is Chance Agency's first game, and it's been a learning experience for the largely remote-working team. "It's both great to be in control of your own space and schedule, and also a lot of work to coordinate decisions and share creative feedback when we're all spread out across different time zones," Ewing explains. "But ultimately, one thing that makes this all worth it, and which I know is true, is that each team member put a lot of themselves into this game. Looking at the finished project feels like holding up a hologram to the light. Each angle you look at it from - be it narratively, visually, technically - you see a sliver of the creative spark of every team member in it. That's something rare and special, in my opinion."



Contra: Rogue Corps

Konami's classic run-and-gunner becomes a twin-stick shooter

GENRE

Arcade shooter FORMAT PC / Switch / PS4 / XBO

DEVELOPER Konami PUBLISHER Konami

RELEASE 24 September 2019

 It's dark and foreboding, but by no means is this a gritty and moody game - it's wilfully silly at times. ust when you thought it was safe to completely write off Konami, it goes and does something like this. *Contra: Rogue Corps* isn't just a brand new entry in a classic series – it also

brings back long-time *Contra* director and producer Nobuya Nakazato. For those unaware, he directed *Contra III: The Alien Wars* and *Contra: Hard Corps*, so this chap knows his *Contra*-ing.

Following a number of false starts over the past two decades, *Rogue Corps* marks a renewed attempt to restore a bit of lustre to the series, and as such, it aims to mix the earlier games' runand-gun elements with new ideas to attract both longtime fans and newcomers: local multiplayer for up to four players, multiple, upgradeable weapons, a selection of characters (including a panda), and a top-down isometric viewpoint with twin-stick controls. Yes, *Rogue Corps* eschews the traditional side-scrolling action for a surprisingly different take on the series. Eager to find out more, we sought out Nakazato and fired some questions his way.



"We felt the top-down twin-stick shooter format was the best way to bring the madness of *Contra* to the current-gen consoles," Nakazato explains. "*Contra* is great as a side-scroller, but it was clear that *Rogue Corps* was something bigger and it needed to break out into the third dimension. As for top-down, we tried various camera angles, and it felt right." With the new format comes a switch to 3D – and with that, more movement.

It's a big shift for a largely left-to-right series, and one Nakazato is very aware of. "Contra has always been about big moments, big surprises," he says. "Switching to 3D was a decision we felt would help the game expand and show off where the series can go. We've tried to remain faithful to the preceding Contra games and are sure that fans will feel like they're stepping right back in where we left off. The franchise is growing, so it needed to be updated for modern gamers – we're pleased with the results and think fans will be, too."

So with all the changes, are we looking at a different setup? An engaging, deep tale of camaraderie and loss on the battlefield? Well, no. There's a story, sure, but in classic *Contra* style, it doesn't actually matter very much, it's just *there*. "We have always tried to make sure the storyline is simple but entertaining," Nakazato says. "That way, no matter where you are from or what language you speak, people all around the world can enjoy it. That is the style of play that *Contra* became known for, and that is what we're trying to continue building on today."

With the pain the *Contra* series has put us through over the years, there's a sadistic part



of the brain that almost hopes development of the game is as difficult as those overwhelming boss battles. Not so, says Nakazato. "Compared to when we were working previously on major mainstream projects, this has been much easier," he reveals. "It's hard to believe we were ever able to make it work before. In the 8-bit/16-

bit age, there were no specification documents and everything was sort of improvised, which led to daily challenges. It's all much more organised these days."

So does this mean *Rogue Corps* will be a soft touch? Absolutely not, says Nakazato. "There will also be missions for the players who want to play at a high difficulty level, which is what you'd expect from a game in the *Contra* series," he explains, but he adds that there will be an element of balance to things – it's not the 10p-gobbling arcade approach of yore. "[It's] hard, [but] once players gather materials and strengthen their weapons, they'll find it easier.

The difficulty level is the same for both single-play and multi-play, so the missions become more manageable if players play in multi-play mode – all of this will help newcomers and series veterans enjoy this game."

Even though this is a return to a classic franchise, with enough changes to make some

 "We've always been hugely inspired by 1980s and 1990s
Hollywood action movies"
series stalwarts unhappy, the fact is the core – the heart – of *Contra* is still very much present in *Rogue Corps.* It will live and die by its

'over the top' arcade gunplay, but at the very least we know Nakazato is approaching his revival in the right way.

"We've always been hugely inspired by 1980s and 1990s Hollywood action movies; movies that were entertaining and engaging but which don't require a huge amount of deep thinking," he says. "That's what we like to go for in terms of action, with the design for the characters coming out of that line of thinking – good fun, entertaining, and memorable." @



PUSHING THE CLASSICS

Both The Alien Wars and Hard Corps, on SNES and Mega Drive respectively, pushed their home formats hard, with design focused specifically on each bit of hardware. "We were worried about how to use Mode 7 effects at first." Nakazato explains of the SNES game. "Although it was possible to rotate or scale, there was only one face. So we used a sprite with the patterns of 32 rotating directions to show a crack on the road and then overlaid this with a boss using Mode 7, [artificially creating a scrolling effect]."

For Hard Corps, things were different, with no Mode 7 but a stronger ability to push raw sprite counts, as Nakazato explains: "The Mega Drive was weak in the background [display], but relatively fast in processing sprites, so we used that point to show unique polyarticulated bosses."

Ah, back when there were clear, definable differences between the two main consoles...



Headlines from the virtual front



01. Superhot gives back

Polish studio Superhot, creator of *Superhot*, has announced a move into the world of indie financing. The company announced the initiative, known as Superhot Presents, alongside its first two funded projects: the *Frog Detective* series, about a frog who is also a detective, and *Knuckle Sandwich*, which is a stylish and strange RPG. We caught up with Callum Underwood, director of special projects at Superhot, to find out where this is all going.

"We've done quite well out of Superhot, and are able to sustain our development teams with the income we have. We thought it would be a good thing to try to help other developers out with the extra funds we have," he explains. "In the very early days of Superhot, the Kickstarter community really supported us, and enabled us to make the game we wanted to make. Sometimes a bit of money is the only thing between a game existing and never being made (or finished). We think we've become pretty good at the whole business of indie games thing too, so wanted to share some of those learnings with others. Also, it would be nice to work on games that aren't some variation of the name Superhot for once!"

There are no set parameters for the games Superhot Presents has funded

"We thought it would be a good thing to try to help other developers out"

so far, with each receiving money because it stood out rather than because of any specific element behind it. "Game aside," Underwood continues, "the developers want to ship the games themselves, and figure out all the mysteries and challenges of what that entails. We'd like to work with developers that don't need or want a publisher, or publishing services (think Q&A, submissions, porting, marketing, PR etc). Ideally, the games are able to launch on more than one platform, but we don't have a list of requirements – it generally comes down to whether we think it's cool or not."

Superhot's move is a result of some extra cash in the bank, thanks to the ongoing success of the studio's big hit. "We haven't taken outside investment

> for this or anything, we're just using money that is otherwise not really doing anything," Underwood says. "We've been incredibly lucky as a studio to be where we are,

but I also don't want to discount the hard work of the development teams and business teams. It's due to the employees of Superhot that we're able to do interesting things like this."

It's a small fund, so Superhot Presents isn't currently accepting pitches. That said, Underwood does say the team is open to inspiration: "You can always tweet us – our community team like to wake up to beautiful GIFs." **wfmag.cc/Megawarm**.





02. A-political game

Infinity Ward's latest retread of fictional takes on contemporary battlegrounds has received the resounding cry of ignorance from its campaign gameplay director Jacob Minkoff, who states *Call of Duty: Modern Warfare* is "not a political game," going so far as to say the term "doesn't mean anything."

Speaking with Game Informer, Minkoff says: "Do we touch topics that bear a resemblance to the geopolitics of the world we live in? Hell, yeah, because that's the subject matter of *Modern Warfare.*" So just to be clear here, it's a game based on fictionalised versions of modern conflicts, and one that factors in real-world geopolitics, but it's 'not political'. Got that? Good.



o3. Actually, it's about ethics in Ooblets

Upcoming Epic Games Store exclusive *Ooblets* has been on the receiving end of some rather ridiculous internet fury, owing to the fact the developer murdered some puppies in the middle of the street... wait, no – owing to the fact the developer signed on as an Epic Games Store exclusive. Hm.

Ooblets dev Glumberland has received 'tens of thousands' of emails in a targeted attack by *those* sorts online, but at least it has the support of Epic (and us), with a statement from the former decrying the 'disturbing trend' of propagating false information, harassment, intimidation, and hate.

"We remain fully committed, and we will steadfastly support our partners throughout these challenges," the statement reads. "Many thanks to all of you that continue to promote and advocate for healthy, truthful discussion about the games business and stand up to all manners of abuse." All these stories and more! (we have more space on the internet) can be found over on wfmag.cc

02





04. Marching in

There's a new *Saints Row* coming from series creator Volition, with a THQ Nordic earnings call revealing the existence of the first proper new game in the sincerely wacky sandbox series since *Saints Row IV* in 2013. The team is "deep in development", according to THQ brass, and the new game will be a "full entry" to the series, rather than the cutdown/spruced up *SRIV* or expansion *Gat out of Hell*. This is very good news, even if *Agents of Mayhem*, Volition's last game, was a complete dud.

Elsewhere, the call revealed *Dead Island 2* is still in development, now in its third set of coding hands at Dambuster Studios – Yager Development started it all off, and Sumo Digital also had a crack previously. Rare/Free Radical veteran Steve Ellis is also on board at THQ, helping to steer the course of a new *TimeSplitters* game. Neat.

Ninja's dead Twitch channel used to stream porn

Spelunky 2 delayed to 2020

Tim Willits joins Saber Interactive *Death Stranding* rumours surround PC release





Totem Teller 🛨

You'd be forgiven for thinking there's been a printing error here, but no – *Totem Teller* adopts a distorted, 'damaged' look that really helps it to stand out from a crowded market of equally gorgeous indie games. This is Australian team Grinning Pickle's first indie title after its two members worked at Spicy Horse Games on *Alice: Madness Returns. Totem Teller* carries on that surrealistic vision, but takes it the further steps you can when freed of the oversight of a large publisher.

The game tasks players – in the role of a muse – with uncovering folkloric stories from a broken world. On a very basic level, it essentially boils down to puzzle-solving, but *Totem Teller's* presentation lifts the game way above simplistic descriptors like this; it's a fractured world that the player has to figure out, one where stories aren't told, but are represented visually, and with a good deal of 'incorrect' post-production tricks used to craft such a unique look to things. There's real potential here from the imagination on show, so it'll definitely one to look out for when it emerges next year.

Rawmen **7**

Describing itself as 'hardcore online soup shenanigans' certainly paints a picture, and when you add in there '*Splatoon* meets seminaked men' you know there has to be something to it. *Rawmen* is in its early stages, but already looks great – and frankly, what game isn't fun when played with eight of you? And what game isn't fun when you're throwing pots of soup at each other? No game isn't fun in those circumstances. We're keeping our eyes on this one.





• Watch This Space

Space Invaders and Asteroids and Snake and plenty more, chopped up into pieces, popped into a blender, with this concoction the result. Watch This Space is a multiplayer mishmash of different classic games and styles, with a wonderfully bold visual flair to proceedings and some natty modern features like, say, physics. Its current form is fast approaching early access at the time of writing, and player feedback in this early stage will directly lead to new modes being developed. Party time.



Trine 4: The Nightmare Prince 🗲

Would you believe it, it's the fourth in a series. As such, you're not going to see a huge deviation from the established *Trine* formula, with number four bringing back the triple-hero dynamic from previous titles – using each character's unique strengths to overcome puzzles and enemies in a gorgeous fantasy world, basically. Think *The Lost Vikings*, but in the modern day and less plodding. While most features will be a case of the same, but a bit better, *Trine 4* developer Frozenbyte has gone to some lengths to reinvigorate the clunky combat system from previous entries. This one's a safe bet to be, at the very least, a good laugh.

XIII **7**

Announced earlier in the year, *XIII* is a remake of the PS2-era original, itself a first-person shooter based on a French comic. Originally set for release sometime this year, the remake – of which still very little has been seen – has been pushed back to 2020. More time to wait and wonder then, we guess.





Alchemic Cutie **7**

Imagine if the slimes in *Stardew Valley* were actually useful or interesting, and you're on the right track towards *Alchemic Cutie*.

A low-pressure RPG, the game sees you taming and raising wild jellies, as well as engaging in some general alchemical pursuits and getting involved with the day-to-day lives of the local villagers. It sounds pretty straightforward, but sometimes that's just what's needed.



Hexagroove 1

A new take on the rhythm action genre, *Hexagroove* sees players acting as a DJ and requires they regulate the energy of a virtual audience. How? By combining loops in real time and bringing the crowd to 'a state of euphoria'. The involvement of the lead developer of both *Elite Beat Agents* and *Gitaroo Man Lives!* lends the game some real credibility.



 \bigcirc

Poetry in Motion FMV'S UNLIKELY REVIVAL

WRITTEN BY STEVEN T. WRIGHT

The FMV games of yesteryear may be largely forgotten, but some fans of these cult 'classics' are determined to bring back the era of multimedia – and they're succeeding



prominent video game developer once glumly remarked to me that creators don't get to pick the name of a genre, even if they pioneer it. That axiom

probably rings true in other forms as well – hardly any creators willingly heft around the term 'mumblecore', for example – but it seems particularly resonant in the world of games, where observers occasionally lament the inherent goofiness of genre descriptors like 'shmup,' 'looter shooter', and 'walking simulator'. Out of the constellation of microgenres that have emerged over the years, however, only one reveals its fundamental obsolescence right there in the name: 'FMV game'.

Realism on a budget

Contradiction designer Tim Follin says that while FMV games present their fair share of complications, they actually solve many problems that narrative designers often face with more traditional styles of game. "If you think about all the money that people pour into making a human face look realistic, you can just get that by aiming the camera at someone," he says. "I never really set out to make a 'detective game', but it's pretty much the way to do it in video games, if you ask me. *Her Story* is absolutely the best example."

Perhaps the most widely derided technological trend to ever sweep the industry, even the term 'full-motion video' remains comically out-of-touch, transfixed in amber along with would-be innovators like Betamax and LaserDisc. Back in the mid-eighties, however, as video games progressed towards ever more elaborate machines that needed shiny software to show off their graphical horsepower, the intersection between the old guard of the film industry and the new industry on the block seemed like an easy bet.

The first attempt arrived with 1983's *Dragon's Lair*, an arcade game that leveraged cinemaquality animation to chomp away your pocket money, 10p (or more) at a time. Sure, the actual *game* part was entirely less than scintillating – in true quick-time event fashion, press the right button at an arbitrary time or die, often with little-to-no warning – but its sheer detail and charm offered enough novelty to get the gears of industry whirring in its direction.

IGNOMINIOUS ORIGINS

As any devoted scholar of gaming lore knows, the many attempts to capitalise on *Lair's* outsized success over the next decade proved mostly fruitless, as they all struggled with the **•**



Defanged

When Night Trap was re-released for its 25th anniversary in 2017, observers noted the vast rift between the game's reputation as a 'mature' experience and its actual content, which one writer called "incredibly tame". In a documentary made by the YouTube channel My Life In Gaming, the game's director, James Riley, said that the corporations sponsoring the project didn't want any "reproducible violence" in the game. That's why the vampiric antagonists are so bumbling.

same fundamental problem: nobody knew how to make the interactive part of the 'interactive movie' equation any good. And while there are certainly a handful of beloved games that rely on FMV elements – most notably the *Myst* series – those that leaned entirely on original footage to differentiate themselves have been rightfully consigned to the dustbin of gaming history, along with failed mascots of the era like Aero the Acro-Bat. (The joke is that he's an acrobat

who's also a bat. Get it? Why exactly a creature with wings would need acrobatic skill is up to your imagination.)

Of this forgotten crop of early nineties clunkers, only one

remains truly notorious: *Night Trap*. Filmed in the late eighties and released on the doomed Sega CD in 1992, it combined the voyeurism of Hitchcock's *Rear Window* with the trite antics of a cheesy slasher movie, with all of the grace that fusion implies. As a member of the dubious police force SCAT, the player is charged with the task of scrubbing through security footage to protect nubile young women from thugs in trench coats and ski masks who hobble around like they learned to walk from studying diaper commercials. Even in this gentler era, the lowgrade thrill of watching crypto-vampires attach



a bloodsucking device to Dana Plato's neck and carry her off into oblivion barely registered to the gaming audience, and the game was largely considered a flop. *Night Trap*'s director Rob Fulop calls the project not only a "failed experiment", but a testament to the limitations of movie/game hybrids – limitations that he feels are native to the form.

"People forget this, but *Night Trap* was the result of years of planning and development

of that technology," he says. "It might seem funny now, but the idea of playing multiple videos at the same time was considered pretty revolutionary [back then], and possibly had

big commercial appeal. But during and after *Night Trap*, it became apparent to me that you just couldn't do a lot with the technology...

"When people come to the movies, they want a story, and it just seemed like the game got in the way of the story. There were a couple of interesting things we could do with it, but it wasn't what we hoped."

STOKING CONTROVERSY

As Fulop recalls, he was aghast when pundits outside the industry began to point to his game as an example of the fundamental immorality of the video game medium, along with the infamous Mortal Kombat. But while Mortal Kombat featured superhuman shinobi who brutally ripped out their opponent's spine or burned them to a crisp, the implied violence against women depicted in *Night Trap* – while arguably sexualised to a problematic extent, especially in the glare of 2019 – came at a degree perhaps a hundredth of the films that inspired it, such as Halloween and A Nightmare on Elm Street. But the 1993–1994 congressional hearings that held *Night Trap* up as a plague infecting the industry didn't just annoy Fulop – rather, he says they caused him significant personal and professional hardship over the years.

"It got to the point that my girlfriend at the time broke up with me," he says. "She saw the stuff I was making on the TV, and she didn't know what to think. We were demonised for making a game that looked like a cheesy slasher movie, but it didn't have any of the blood or gore in it. What makes *Night Trap* worse than those

"The fundamental problem was, nobody knew how to make the interactive part of the interactive movie equation any good"

movies? I guess you could say that you can choose not to stop the violence, you can watch them take away Dana Plato, but I don't think that actually makes it that different. The people running those hearings didn't understand the game, but we were the ones who had to suffer because of it."

Yet 25 years later, some indie developers have begun to reassess the humble interactive movie genre, shooting hours and hours of high-definition video and stitching the footage together into new games they shunt onto the crowded shores of Steam. But while the revival remains somewhat nascent - constituting perhaps a few dozen games over the past five years, with only a handful rising to the level of notability - these new efforts are more willing to play with structure and form than their ancient progenitors, resulting in games that strike a far more experimental pose than the likes of Dragon's Lair. Take, for instance, The Infectious Madness of Doctor Dekker, which casts you as a psychiatrist trying to solve the murder of one of your colleagues by interrogating his former patients. According to developer Tim Cowles, it was a dream project for him and his wife Lynda, who wrote and developed the game.

FROM FANS TO CREATORS

As he recalls, the couple grew close in university through their shared love of the FMV games of the nineties, such as Phantasmagoria. Eventually, after going to a few too many murder mystery nights at pubs and the like, they decided to make their own take on an investigative game, with a supernatural element layered on top. Cowles says that while they were certainly inspired by the classics, it was specifically the success of Sam Barlow's FMV procedural Her Story that spurred the couple to begin in earnest. The games they enjoyed back in the day featured a large three-dimensional space with an interface that allowed for a high degree of possible interactions - typical fare for the point-and-click adventures of that era, but expensive and time-consuming to implement as developers on a budget. As Cowles puts it, Barlow's game proved that you didn't need a fancy GUI and a sprawling world to make a cinematic game - just one room and a couple of compelling characters. To help make the game stand out from the incipient crop of competitors, they decided early in the process that rather



than including a list of possible questions to ask the suspects, the player would simply type them in, in the style of interactive fiction games. As Cowles puts it, the consequences of this bold design element were even more profound than the couple anticipated.

"It's sort of *the thing* about *Dekker*," he says, laughing. "It's sort of like Marmite, you either love it or hate it. For the console release, we finally relented and put in lists of questions, because it was so controversial. Almost every negative review of *Dekker* mentions it, that the game ***** Night Trap was exhibited along with Mortal Kombat as a testament to the overreach of the video games industry in 1993.

 In Contradiction, you must arrange the facts of the case and determine which of them are at odds with each other, hence its title.



Interface Poetry in motion



Tim Cowles says that *Dekker*'s design was an exercise in minimalism similar to *Her Story*, down to using as little set dressing as possible.

Red light spells danger

Dekker uses a 'traffic light' system that allows the player to know if they have enough information to progress through the mystery. Cowles describes the unnecessary complexity of the three-stage system as one of the major regrets he has with the game. "The amber [yellow] really confused people," he says. "They don't know what that means. In future, I would just make it a two-stage system, for the sake of simplicity."

didn't parse their questions correctly. It's one of those problems that is really hard to solve, and we didn't realise the extent of it until we were sort of wedded to the decision... You can get most of the way to the credits of the game by simply parroting the nouns in the subtitles, because that's how conversations work, you know? If I'm talking about my pet badger, you're not going to ask me about my pet parrot. But people complain that it can't parse 'age/sex/ location'. Have you ever said that to another human being in person? I haven't. It just doesn't make sense."

Cowles understands that his fellow indie developers might view the FMV sub-genre with suspicion, but he says that the format has a number of unique advantages that aren't apparent at first glance. For one, the footage that was so costly to produce in the heyday of multimedia - Night Trap's budget was over a million dollars, in unadjusted mid-eighties figures - has become more reasonable thanks to the proliferation of cheap HD cameras. (It's especially cheap in comparison to the apparent alternative of building a full 3D game, with character models detailed enough to reveal the depth of expression rivalling that of a real human actor, as in L.A. Noire.) Even so, Cowles says that the form requires a deep skillset, since you're essentially producing an independent film and a video game simultaneously. "You have to know how to program fairly well, and you need

to know how to make a budget run," he says. "It's definitely not for everyone."

A LARK TURNS INTO A NEW CAREER

These caveats are echoed by an acquaintance of Cowles, a fellow FMV developer named Tim Follin, who got his start in the games industry as a freelance composer for classics like Blizzard's Rock N' Roll Racing. In the mid-nineties, he had the urge to make an investigative game in the style of the British horror movies produced by Hammer Films, where the player would shuffle around the facts of the case like cards on a table and attempt to suss out the contradictions. However, it wasn't until 15 years later that he had the technical know-how from working as a director of photography on independent films to actually put the thing together. Titled Contradiction: Spot the Liar!, Follin describes the experience of making the game as a trial by fire, one that revealed just how unprepared he was for the realities of mounting this sort of project as a solo creator.

"There was no money to pay anyone, really, so I just did everything myself, which was really not healthy," he says. "All of the actors were friends of the people that I had worked with in the film industry, one of my contacts basically became the de facto casting director. Everything that [lead actor] Rupert [Booth] brought to the character of Inspector Jenks, that was all him. People often ask me why the game strikes such a variety of tones, with some actors playing it straight, some hamming it up more. I encouraged them to do it the way they thought it should be done, but we also were running on a very tight budget, so we didn't have a lot of time for retakes."







Lizi Attwood describes *Telling Lies* as "an open-world game, except with text."

After eleven days of shooting, Follin hoped to craft it into an interactive thriller in less than six months, but it ended up being far more arduous than he expected, and took more than a year.

When *Contradiction* was first released on mobile platforms in early 2015, it didn't make the jump to Steam until later that summer, shortly after *Her Story* reintroduced the genre to a new

generation of curious players born well after the 'multimedia' era. As Follin puts it, *Contradiction* ended up being far more successful than he ever imagined, something he chalks up to the game's campy humour, which makes it play well in Twitch and YouTube streams – he says that an early video by noted gaming site Giant Bomb caused a surge in interest, for example.

While Follin says he's thankful for the success of *Contradiction*, he now feels like he's languishing in the second wave of FMV interest that he helped create. When he sat down to try to make a new project, he realised that he would have to totally overhaul his skillset in order to make a more traditional indie game refined enough to compete with the ever-heightening standards of the market.

So, he stuck with what brought him to the dance, and decided to make another FMV game, this time in the horror genre, titled *3am*. But now, a few years into development, he feels frustrated with the whole process of trying to merge the medium of games and film together. "I think I've fallen out of love with FMV games," he says. "Trying to do something as simple as making the hub area for this game, which is a haunted hotel, has turned out to be so much more difficult than I expected." Follin says he

has extensive reshoots planned in order to get around some of these issues, but says he's not likely to try to make another game in this style anytime soon.

Not so for Tim and Lynda Cowles – for better or worse, they're dedicated to the form, having recently announced their third FMV game, a horror-anthology collection of six short episodes. "I've never wanted to make any other sort of game," Tim Cowles says. "It's just a natural fit for us, and we've found our audience." Yet as one of the fathers of FMV with *Night Trap*, Fulop takes a more measured view. He had never heard of *Five Nights at Freddy's*, the hit horror franchise that originally relied on a central conceit not unlike that of his twisted child, albeit with the vampires replaced by animatronic

"If people want to take the idea and try to go further with it, more power to them... But I still think it's one of those failed experiments" horrors. Faced with the lasting legacies of his creation, he was a bit taken aback. "If people want to take the idea and try to go further with it, more power to them," he says. "But I still think



 Night Trap remains one of the most over-scrutinised games of its era.

it's one of those failed experiments. We couldn't do that much more with it, and it was just too expensive to make. That's why I stuck to kid-friendly stuff like [successful pet simulator] *Petz* afterwards. Didn't have to worry about anybody misunderstanding that."



Interactive

MegaSphere

The pixel artwork positively glows in Russian developer Anton Kudin's roguelike platformer

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

364

Interface



is at once futuristic and unfathomably old. Computer terminals blurt out arcane phrases like, "Only the Half-Dead God may pass the gates of Syn." There are towering locked doors; areas where metal structures have become so weakened with age that they come crashing down around my tiny

player character, who – with its big gun and spindly legs – feels somehow powerful and painfully vulnerable at

the same time. That big gun immediately makes me think of designer Manfred Trenz's 1990 gem, *Turrican*; the eerie sci-fi setting most obviously harks right back to Nintendo's seminal *Metroid*. Curiously, though, *MegaSphere* developer Anton Kudin has never actually played either of those action classics; in fact, he was more greatly inspired by a different genre of game entirely.

"I love to spend time in games, walking around, looking at the world, exploring the mechanics," Kudin says. "*Minecraft* is my favourite game because of that. So it was always the goal: make a procedural game that isn't 'fixed' like most story games."

MegaSphere's simple plot provides a convenient jumping-off point for its mix of exploration and blasting: it's the distant future, and you've docked with a gigantic, spherical alien craft that hangs in the space once occupied by Jupiter. Determined to figure out what the structure is, you venture inside and discover a complex maze of corridors, airlocks, traps, and deadly enemies that changes configuration each time you play.

The game's harsh

alien world is brought

to life with Kudin's

"I just loved how the main character finds himself in this never-ending maze world"

maze world" sumptuous pixel art, which feels pleasingly tactile and alive – neon-coloured spotlights wink into life as you approach; dangling electrical cables and ducts wobble and then shatter if you fire at them with your gun. The indie scene may be positively awash with good-looking pixel art these days, but the attention to detail Kudin's invested in his inscrutable alien world is plain to see.

"I always start sketching pixel art in Aseprite, then move to Affinity Photo to add effects and make actual sprites out of the artwork," Kudin says of his process. "Believe it or not, I don't









Kudin's background is in web and motion design, which explains why his visuals in MegaSphere are so captivatingly polished.



have a single sketch or handmade drawing of anything related to the game – so the art book will be pretty boring!"

Kudin cites all kinds of pop-cultural artefacts as an influence on *MegaSphere: The Matrix, Half-Life 2, Starbound*, and 2016's *Doom* have all gone into the mix, while its plot is partly inspired, he says, by Tsutomu Nihei's manga, *Blame!*, which is also about a heavily armed protagonist roaming a huge technological environment. "I just loved how the main character finds himself in this never-ending maze world, and how the story is slowly revealed, bit by bit," Kudin says of Nihei's saga.

MEGABLAST

Kudin may never have actually played the original *Metroid* games ("I know of them, of course," he's quick to add), but *MegaSphere* also appears to take a bit of inspiration from a rather more obscure title in a similar vein: *Rex* on the ZX Spectrum. Released in 1988, *Rex* was also a free-roaming arcade adventure – in it, a lizard wielding a giant gun leapt and blasted its way through a rambling structure called the Zenith. Growing up in Russia, Kudin's father used to build and sell ZX Spectrum clones, and *Rex* was, Kudin says, his favourite game programmed for that system. "The refined, detailed pixel art and animation of that game haunt my dreams to this day," he enthuses. "It's just so good!"





blockbuster. The Matrix.

Kudin's hoping to find a publisher to help bring *MegaSphere* to consoles. "I'm spread thin as it is," he says.

Shreds of ZX Spectrum memories also haunt the corridors of *MegaSphere*: the sounds and coloured borders on the game's computer terminals are taken straight from the Spectrum's loading sequence – just another example of the tiny details Kudin's carefully laced throughout his game.

"It's slow," Kudin says of *MegaSphere*'s development. "I'm a freak when it comes to details, and I just spend a lot of time working on every nook and cranny, every mechanic and sound, every pixel. So what's most difficult is to keep going while you see how little progress you've made in the past month or whatever."

It's now well over five years since Kudin first began work on *MegaSphere*, and looking back through his dev blog (**wfmag.cc/kudin**) lays bare the time and effort he's put into his sci-fi world, from early experiments with sprites and platforms to the atmospheric lighting and background detail of more recent builds. It's been hard work, Kudin says, but the online response to *MegaSphere* has constantly spurred him on – and better yet, players' support of the game via pre-orders and Steam Early Access have allowed him to work on the game full-time.

"What keeps me going? Honestly, the players," Kudin says. "I'm blown away by people's support so far, and I love how they react to it. [*MegaSphere*] just won't let me go until its complete." @

WEAPON OF CHOICE

While lots of 2D indie games have been created in GameMaker - Hotline Miami, Spelunky, and Katana Zero, to name a few - Kudin chose Unity as his engine for MegaSphere. "Unity's advantage is its ease of use and extensibility," Kudin explains. "Lots of my scripts were written from scratch, rewritten, and added to many times, and upgrading to keep up with bug fixes is a breeze. The rendering pipeline also seems better than GM or other 2D engines I've seen. I probably would never reach such visual fidelity in any other engine." And while those visuals have taken hours of tweaking to perfect, Kudin says that development on MegaSphere is on the home stretch. "[The visuals] went through a couple of iterations and upgrades - adding bloom was a big step up," Kudin tells us. "It's all pretty set at this point - I only need to add new mechanics and levels.'

My Rainbow Double Moon Heartache



LOTTIE BEVAN

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

"The female protagonists we see portrayed are strong, independent women who start out as Dora the Explorer and end up as Jean Grey" t is a truth universally acknowledged that a gamer in possession of even a few RPGs, visual novels, or Nintendo titles is likely in love with Japan. Our industry's long-standing Japanophilia seems alive and well: *Pokémon* remains king with this year's *Sword and Shield*, *Octopath Traveler* was a resounding success, *Animal Crossing: New Horizons* has its own otaku crowd, and the fabled *Shenmue 3* – allegedly out this year – has become the stuff of legend. But there's one Japanese genre that's strangely absent. Where are our magical girls?

Marvel knocks out superhero films like there's no tomorrow, and they seem increasingly happy to court a female-centric audience with films like Wonder Woman and Dark Phoenix. My Little Pony rages on in nerd subculture, famous enough for a reference in Stranger Things 3. Roblox, one of the largest platforms for young gamers, features a galactic quantity of purchasable jewellery, glitterwings, tiaras, magic wands, and dresses with five different skirts, all of which tell me that girls' interest in magical girls, even in the west, is extremely healthy. But while western games feature more female protagonists than ever before, and while magical girl IPs like Sailor Moon and Cardcaptor Sakura remain popular in our hemisphere, we appear to need more than a Starlight Honeymoon Therapy Kiss to interest western game developers. And yes, that is a real attack.



 Sailor Moon's magical team cheerfully embraces its pinkness.

The two blockers for western magical girl games that I can see are, firstly, the primary and perhaps exclusionary focus on women and girls, and secondly, the intense, ineffable Japanese-ness of it all. The latter is something the games industry has historically overcome. *PaRappa the Rapper* was totally nuts. *Katamari Damacy* had some of the most surreal moments I've ever seen in games. *Phoenix Wright* continues to sell while also stupefying with its un-western rhythms and tropes. So yes, a magical girl game is going to be niche, but if it's 'niche' in the same way as, say, *Doki Doki Literature Club!*, there's definitely some money not being made.

This leads me to conclude it's the hyperfemininity which puts people off. If you're not interested in make-up, accessories, jewels, and a whole load of the colour pink, magical girls are probably not for you. And this isn't what western feminism is. The female protagonists we see portrayed are strong, independent women who start out as Dora the Explorer and end up as Jean Grey. They don't come from the moon, they don't have a little sceptre with a heart on it, they don't fight magical evil with an animal companion that can inexplicably speak, and they are almost never a princess. Our female protagonists usually do what the men do: fight crime. Drink. Wear leather. They tend not to overcome their Aristotelian crises by leaning into the girlish side of femininity, like Reese Witherspoon did in Legally Blonde. I wonder if this is some infancy in our culture; if in a century's time we'll be comfortable enough with femininity to lean into pinkness rather than away from it when we style our feminist icons. Either way, it's strange that games seem so disinterested in the genre, when they're happily making and buying anime games, superhero spin-offs, and what I can only call 'tragical' girl games like Lollipop Chainsaw.

There's no shortage of cutesy, wholesome, and magical games out there, and perhaps the culture gap is just too large to broach. But if you're reading this and thinking, 'Hm, if only there were a market yet uncatered for in this cluttered indiepocalypse...' My dev, do I have a genre for you... @



Toobox

The art, theory, and production of video games

28. Design Principles How E.T. became a victim

of its tight schedule

30. CityCraft Tips for creating

Tips for creating the ultimate futuristic metropolis

32. Pixel art A masterclass from Sensible Software's Stoo Cambridge

- 38. Making Anew #8 How to present your indie game at a busy trade show
- **40. Source Code** Make your own Super Sprintstyle top-down racer
- **42. Directory** Find out about this year's Journo/Dev Swap jam



 Stoo Cambridge shows you how to make pixel art the Sensible way on page 32.



Discover the secrets of making a future city worthy of *Cyberpunk 2077*. See page 30.

The principles of game design

Howard revisits the making of E.T., and explains why it became a victim of its own brutal schedule



AUTHOR HOWARD SCOTT WARSHAW

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





s I mentioned in issue 19, the tuning phase is where most of a game's quality is generated. One case which truly illustrates the importance of the tuning

phase is my 1982 video game, *E.T.* I had all of 36 hours to do the design. Of course, that wasn't just for design: it had to include eating and sleeping and a Learjet ride to the presentation, 400 miles away. Nevertheless, I produced a plan which gave me a path to the finish line. This enabled me to begin a determined march toward a clearly defined destination. Then I started working my butt off toward that goal. A goal which sat ever so slightly beyond the fog plane for the next four and a half weeks.



I had created a design spec which reflected my concept, and all I had to do was reach it.

And I did. The fact is, *E.T.* achieved virtually 100 percent of the original design concept. What a disaster! Ordinarily, this doesn't sound like a problem, but I believe it's actually one of the top reasons why the game has problems.

"Hey there, how'd that project go?" "We achieved 100% of our original concept." "Oooh, sorry to hear that."

This conversation sounds ridiculous, but the fact is, most products deviate significantly from their original design. Why?

Sometimes a design is overly ambitious and cannot be realised, but this is more frequently the case for failed products. Successful products tend to deviate from design because they get *better*. As I move from vision to reality, stuff happens. I learn things. I achieve new perspectives and insights. Some of these provide improvements and alternative approaches I couldn't see at first. If I'm paying attention while I'm working, my understanding and capability are growing along the way. If I feed this back into the product, my target both moves and improves.

It doesn't have to go that way, though. Sometimes I'm too busy to improve my methods. Or I choose to remain married to my original concept and ignore any new information or feedback which arises. This way, there's no danger of veering off target (and no danger of doing better). Ego can be another block to progress. If I over-commit to certain game mechanics or elements, there may not be room for something better to find its way in.



 Despite his limited time, Warshaw came up with an ambitious adventure game concept for E.T., which involved collecting items on an open map.

What if I really believe in an idea and choose to defend it? There's an old saying about editing your own work: "It's tough to kill your children." It's also true that simultaneously holding commitment to a concept and remaining open to new directions is a tricky balance to strike.

For a variety of reasons, it's best to view original designs as launching points, rather than true destinations. Most developers shoot for a final delivery which is enhanced significantly beyond the initial concept. Many of my games benefited from this trajectory, but *E.T.* did not. There simply wasn't time. The *E.T.* video game was a victim of its own schedule.

FIRST PLAYABLE

Because the time available was so short, this game was going to have to be released at First Playable. In a normal development, reaching a proposed and accepted design is the first milestone, and the next significant milestone is the point when all the basic game elements are

represented, and all the rules are implemented. No real graphics, bells or whistles, just the bare essentials of the game. This is the first time the

game can be played and experienced largely as the design intended. This is known as First Playable. It usually occurs somewhere around 30 to 50 percent of the planned schedule. First Playable is really the starting point, because it's the first time you get to feel the game, to begin seeing what works and what doesn't. This launches the Tuning Phase, where you spend the majority of your time fixing, adjusting, and improving the game. Deviation from the initial design should be beneficial. First Playable is a basis for change.

E.T. delivered 100% of its original design concept for one simple reason: there was no time for a tuning phase. That's the cost of a



short schedule, or more accurately, that's half

short schedule, or more accurately, that's half the cost.

With *E.T.*, simply getting to First Playable in five weeks would be a considerable achievement. It was clear there wouldn't be time to tune the game. This put inordinate pressure on the design to be perfect (which rarely happens). This leads to the next problem with the game.

It's not just tuning time that is lost. Tuning means refining game mechanics which already exist. But what if, even after tuning, some mechanics still suck? Now I need to let it go for a bit and clear my head. Then come back to the game with fresh eyes, and hopefully new ideas or approaches. This is called rumination time.

"E.T. achieved virtually 100 percent of the original concept. What a disaster!"

This is the other major cost of a short schedule. The lack of rumination

time was a major issue with *E.T.* On a creative project, I need the

opportunity to create it, get sick of it, step away from it, forget it, and then come back to it anew. This is where giant evolutionary steps come from. This isn't adjusting, this is redirecting, and it can work miracles. I never had the chance to take any real break from *E.T.*, and that was a problem for the game.

The moral of the story is: try not to deliver your concept. Deliver the sum of your concept plus tuning plus rumination. Deliver the brilliant symphony you arrive at by the end of the journey which began with your concept. Remember: an initial design is not a goal, it's a launching point. Unless you're doing *E.T.*, then it becomes a landing zone. @

Second Thoughts

There were other games I launched at Atari... and abandoned. I'd work on them for a while, get them set up. and start tuning. Then I'd take a break and do my rumination thing. I'd kick it around, talk with other engineers about it. Make faces at it. Call it names for a while. But sometimes nothing really comes of it. In moments like this, it's important to remember two quotes: one, "Genius must be allowed to fail." And two. "The captain who goes down with the ship is dead." I recommend living to make another game.



 Director Steven Spielberg gave Warshaw his blessing to make E.T., following his successful adaptation of Raiders of the Lost Ark.



Designing a sci-fi city

Not unlike space, both science fiction and the variety of its cities is vast. Knowing where to start from can be crucial



AUTHOR KONSTANTINOS DIMOPOULOS

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

Traces of History

A sense of history helps ground sci-fi cities in their own reality. The Citadel's ancient and mysterious Keepers in Mass Effect, for example, added a sense of continuity to the game's gargantuan, modern-looking space station. Similarly, the architectural layers evident in Blade Runner and Half-Life 2 didn't make them feel less futuristic: instead, they amplified the futuristic by contrasting those elements with the old and time-worn.



settlements of innumerable types.

with holographic communication systems and cyborg doctors - can coexist with planet-sized metropolises in the same universe, just as easily as deep space cities can rely on vast agricultural centres for their survival, and whole worlds can be exclusively dedicated to a single dominant activity, such as recreation or industry.

To design a fitting city for your setting - and your gameplay needs - you'll first have to resolve a few core issues. Defining the fundamentals of your world is important, as is keeping in mind that the key rules of urbanism are always applicable: even the most exotic imaginary city must be coherent, fulfil certain urban functions. feature some sort of structure, and feel realistic enough to the player.



ASKING THE RIGHT QUESTIONS

Asking and answering the questions that define an imaginary city is a vital part of the creative process, and starting from the absolute basics is a must. Knowing where, when, and how big a sci-fi city is can provide us with varied answers and novel ideas, while also grounding a place's existence and defining its evolutionary options. These are things we need to know before planning districts, deciding on architectural styles, or commissioning concept art.

Starting with the question of 'where', we have to determine whether our city will be surrounded by the void of space, or based on a planet (whether Earth-like or otherwise). In the case of the latter, we have to decide on each planet's attributes, ranging from its atmosphere and geography to the races inhabiting it, and the tectonics or ecologies shaping it. Is our city set in a war zone, on an ice or a lava planet, or is it somewhere desolate like Mars? What's the climate like, and how could it influence local fauna, flora, architecture, and planning? The iconic Star Wars planet Hoth is a fine example of an Arctic world inhabited by mostly white-furred animals where humans survive the extreme cold by essentially hiding underground or in repurposed caves. Similarly, oceanic worlds, toxic wastelands, and jungles can all come with their own beasts and hazards.

The question of when our city exists is of equal significance. Sci-fi set 50 years in our future is bound to feature recognisable elements and cities that have retained some of their character and structure. Cyberpunk tends to favour this timescale, as do the more



Cyberpunk 2077's Night City features recognisable elements like concrete buildings and 20th-century power lines that would still make sense in the near future.

hopes, and predictions for the future. With cities being the spatial expression of social relations (necessarily constructed via the means provided by technology), a dystopian capitalist citv in the year 2500 will be very different from an egalitarian network of open settlements set in the same year.

A city that reveres its past is more likely to feature monuments to previous eras, while a besieged outpost town will be surrounded by

"Even the most exotic imaginary city must be coherent"

defensive structures. Societies with contrasting ideologies will also develop vastly different technologies. One society might, for example, have sentient weapons policing the

streets, while another might use droids to keep its plazas clean and decorated.

Societal organisation and technology also influence architecture and urban planning. The goals and needs of each city will determine whether it will need a processional road leading to a huge governance building, if urban centres can handle the bulk of agricultural production, who will regulate the traffic of flying cars, how class geographies are organised (should class still exist), and what the average size and style of a residence should be. A city's most prominent landmarks - its cathedrals, palaces, towers, or corporate headquarters - will always reflect its dominant ideology, while new materials could allow for the construction of taller skyscrapers. And, who knows? Some future inventor might even come up with a truly modular city that can rearrange itself according to the needs of its populace. 🖤

Sci-Fi Fantasy

Toolbox Advice

The elves, trolls, and mages roaming Shadowrun's cyberpunk cityscapes are proof that - when done correctly - fantasy elements can both fit into and enhance sci-fi settings. As Arthur Clarke famously stated. "Any sufficiently advanced technology is indistinguishable from magic", and sci-fi is big enough to accommodate traditional notions of magic - just like those Jedi space wizards everyone loved in Star Wars.





The Mass Effect series' Citadel is a large

scientifically accurate versions of the genre which tend to avoid travelling far in time and make sensible projections instead. On the other end of the time spectrum, we have universes such as Star Wars or the more outlandish Warhammer 40,000, which are so far removed from our reality that seemingly anything could happen. Defining the 'when' of the city not only determines the tech level or type of urban society we can play with, but also whether we will need to reference real human history, and whether reusing historical architecture would make aesthetical and functional sense.

The 'how big' question can also yield vastly different results when it comes to settlement types and their functions.

From relatively small cities on space stations, to agrarian villages on fringe planets, complex finance and administration

centres that take up whole planets, and megaconurbations that span entire solar systems, everything is an option. Furthermore, size defines complexity, the scale of the logistics needed for survival, and density of population and activity, as well as the number of functions a city will have to fulfil. Extreme size also poses new, interesting questions that demand outlandish solutions. How does one maintain a continent-sized palace in the 40th millennium?

TECHNOLOGY AND SOCIETY

Future cities won't be shaped by technological advances alone. Technology is, after all, mostly neutral - it is technology's application by societies that matters, and so our sci-fi cities have to take societal factors into consideration, too. The possible evolutions - or devolutions - of society are at the heart of science fiction, as it plays with and explores our anxieties,



Making pixel art, the Sensible way

Sensible Software's Stoo Cambridge gives an insight into his process of creating pixel art



AUTHOR STOO CAMBRIDGE

Stoo Cambridge is a games industry veteran: artist, designer, and writer, recognised for his work at Sensible Software, stoocambridge.com



Figure 1: Converting a row of paper pixels to binary, then converting those binary numbers into hexadecimal (or decimal) for inclusion in the game data

Figure 2: When Firebird published its £1.99 Graphics Editor, written by J. Fox, it was a real game-changer for budding video game artists like me





n the 30 or so years I've been dabbling with video game artwork, I've never given much thought to the processes I use when pushing pixels. More often than not, I just get on with whatever

presents itself as the best solution at the time. I don't even know if having the ability to draw 'analogue style' outside the confines of the

Though the hardware and software have

dramatically changed over the years, the basic

steps I go through have remained pretty solid.

In order to describe my understanding of what

makes good pixel art, I'll start at the beginning,

with my very first computer back when it was all

just microchips, cassette tapes, and A4 pads of

I cut my teeth on the Commodore VIC-20, that

old 6502-based machine with rather chunky

remember. Like many developers of the time,

editing graphics was done using no less than a

piece of graph paper, a pencil, and a scientific

graphics and less memory than I care to

graph paper - pre-digital. Well, almost.

PENCIL, PAPER, PIXELS

screen is a help or a hindrance when plotting those pixels, but what I do know is pixel art does require the mastery of several disciplines - something I learned early in my career.

"There was no graphics

editor to speak of, so everything had to be typed into a data table line by line"

calculator. There was no graphics editor to speak of, so everything had to be typed into a data table line by line for use in the game code - in hexadecimal, no less. As you can see in Figure 1, it was a tedious process, to say the least.

This rather basic approach to creating graphics didn't put me off, and once I'd upgraded to the Commodore 64, it wasn't long before I had a few

> techniques under my belt and discovered what could be done using dedicated software and a raw determination to create graphics. I gained experience

in anti-aliasing, tileset creation, and creating and animating sprites - all thanks to the C64 and those early graphic tools (see Figure 2).

The process of animating sprites can be a rewarding part of the job, but it's also timeconsuming, especially on complex animations. One time-saving trick I discovered was to create a rough version of the animation first before even attempting to finish a single frame. It's common for ideas and designs to change, so it's more efficient to edit a rough version using a single colour than go back over a finished animation later because something doesn't look right or the design changes. This also allows for greater experimentation without having to commit too much time if something doesn't quite work as expected, as illustrated in Figure 3.





TECHNIQUES, TIPS, AND 16 BITS

As much as I like talking about those old 8-bit days, the bulk of my experience comes from working on the 16-bit Commodore Amiga. The machine was a game-changer in every respect; the hardware was superb, the operating system was ahead of its time, and then there was Deluxe Paint – the Photoshop of its day.

The Amiga was great, but despite being a major step up from the 8-bit C64, most games used its 16-colour mode. The advantage was that, unlike the previous generation, those 16 colours were user-definable. Choosing the right colours was crucial in getting the most out of the Amiga's graphics: too many similar shades, and the palette would look washed out; not enough, and it could all look a bit fierce on the eyes. My first commercial Amiga project, *Renaissance-1*, actually used fewer than 16 colours as it ran in Dual Playfield – a screen mode that essentially split the screen in two, with each field containing seven colours and a single background colour (see **Figure 4**).

On a later project, I began reusing colours within the palette, so I wasn't just using the same shade of red for the glow of a thruster or as part of an explosion. I could pair it with another hue



and vary the overall look dependant on what colours were used together. This can be seen in the art for *The Last Starship*, a 1990 Amiga game that only ever got to a proof of concept stage.

It had to look like an arcade game, so careful planning of the palette was required to achieve a quality look throughout. The background graphics, sprites, and heads-up display all had to look like they were straight out of the arcades, and in just 16 colours.



 Figure 4. A 15-colour palette split between two playfields, with colour 0 defining the background colour. Both playfields are independently controlled.





finished, but the artwork shows what can be done with a carefully planned palette and strong design direction

facing up and down, but their arms were so

small. I couldn't move them more than a pixel –

so how was this illusion of movement achieved?

The way I did it was to colour-cycle the arm pixel

I roughly allocated the colours from the start (by scribbling some notes in my jotter pad) so I'd have a good selection to create the ship, explosions, lasers, and backgrounds, with the final palette being created once the basic art was drawn. I chose the hues carefully so they would work together

for maximum effect.

The ships were metallic, but I wanted them to feel warm, so I added a red hue to the greys; it's good to move away from stereotypes, and

can see more clearly how it works in Figure 6.

from light to dark, fooling the eye into believing it moved even though it didn't. Lighter pixels are far more noticeable than darker ones, so when combined with a moving pixel, the cycling of the

colour can extend the perceived motion further when the pixel stops moving – you

 Would Sensible Soccer have been the same without Stoo's dinky pixel footballers? We think not.



straight grey for metal is one I try to avoid if I can help it. Take the colours in the explosions It's a trick I've used many times over the years. - these could also be used to complement parts of the ship without looking out of place. The same applies to the blue and purple hues used for the moons and planets; combining them with the reds and oranges gives the game

a distinctive look (see Figure 5).

It's important to remember that when creating pixel art, it's just you and the pixels, so making sure you have a good workable set of colours is crucial. One example of this: the arm and leg swing on the 11-pixel-high soldiers in Cannon Fodder. The soldiers needed to be animated

PIXEL ART, BUT NO AMIGA?

With the development of modern PCs, I never thought pixel art would still be a thing. Thankfully, I was wrong, and one piece of software I've used religiously for pushing those little square dots about is the phenomenally excellent Pro-Motion by Jan Zimmermann (Cosmigo). It offers pretty much everything I could possibly want, including layers that can have their own palettes, countless shading effects, plus many other cool features that have helped streamline my workflow.

"It's important to remember that it's just you and the pixels, so making sure you have a good workable set of colours is crucial"







The use of layers really helped me with a recent project I worked on, *The Dwarves of Glistenveld*, developed by the lovely team over at Nysko Games in Colchester. My role was to create four types of animated dwarf, each with a different function and look within the game, so players could easily differentiate between them at a glance. The only strict instruction I had was their skin, hair, and beard hues had to be configurable in code so they could be individually tweaked. For this, I made sure I set aside specific colours for use on those respective parts and provided the hue values to the team so the dwarves could have customised hair and beards.

Creating these dwarves was a lot of fun. I could have jumped straight in and created a finished animation, but I wanted to make sure my interpretation was in line with what the team wanted, so to begin with, I presented a rough, bald-headed, semi-naked dwarf (as you do!) to use as a work-in-progress so the team could provide feedback on my design.

That's one of the most important things when working commercially: it may be your creation, and your work, but it's got to remain true to the IP you're representing. Once the rough was approved, I went on to create a more complete version in four directions before animating the characters' walk cycle. Once the cycle was approved, I added clothing, which was drawn on a separate layer so as not to disrupt the art of the base character. Subsequent costumes could then be added without the need to keep redrawing parts of dwarves' bodies – a huge time-saver (see **Figure 7**).



- Figure 6: With no room to move the pixels on the arms, cycling the respective colours to either lighter or darker shades creates the illusion of movement.
- Layers are useful for making pixel art, but don't overuse them as they can soon become more of a hindrance than a help if you use too many.



Figure 8: I separated and replaced the pixel shadow with a semi-transparent one, followed by semi-transparent dust clouds to complement the motion of the droid's caterpillar tracks

ANTI-ALIASING

I have a bit of a thing for antialiasing. But what is it, and why does it matter to me? The thing is, I really dislike un-aliased pixels, so I will always try and smooth them off if I can. To me, the point of anti-aliasing is to retain the integrity of the individual pixels without compromising the definition. As you can see in Figure 10, it's not a blur filter, and it's certainly not about smudging pixels out: it's a technique to smooth the pixels without negatively altering the appearance of the art. It's something I've done ever since I first started pushing pixels.

PIXEL ART 2.0

Most of the sprite animation work I've created over the years has been frame-based. This means that every frame of animation has been hand-drawn and saved as individual files or within a sprite sheet, locking it to the image canvas dimensions in the process. Great as this may be, it's rather limiting when it comes to fulfilling the visual expectations of modern games; what if you want to add particle effects, or animate outside the confines of the image frame, but within the animation itself? Well, all is not lost, as there are ways to marry old-school pixel art with contemporary game development techniques - one such method is to use a skeletal animation package. For Blobbit Push, we used a piece of 2D animation software called DragonBones (Blender, Spine, or Spriter will

achieve similar results, though, as will most commercial 3D animation packages.)

The original sprite was created at 48×60 pixels in size and included a rather harsh 'baked in' stipple-shaded shadow. I wanted to add some subtle enhancements to the sprite without detracting too much from the pixel art look, so a few edits were done before importing the updated frames into DragonBones for animating (see Figure 8).

The initial idea was to assemble the new box droid graphics within DragonBones, have the shadow positioned independently, and overlay the dust cloud animation via an attached bone for the desired movement effect. Once it was in place, however, it soon became clear that one instance of the dust cloud wasn't enough, so I duplicated it twice and positioned all three so they fully covered the back of the droid, offsetting the animation start times to make them appear more natural. The great thing about adopting this process is that the dust animation only had to be done once. Within DragonBones, I could rotate, scale, and fade the dust cloud's opacity to fit my requirements, and then just duplicate it if I wanted more - which certainly beats animating each pixel by hand (see Figure 9).

These are just some of the techniques I've used to create pixel art - an aesthetic that has survived the 16-bit era, and has enjoyed something of a renaissance over the past decade or so. Whether you're creating a piece of oneoff wall art or creating characters for your new indie game, pixel art requires skill, thought, and persistence to get right. If you're new to the art form, hopefully, the tips and techniques I've outlined here will help you create your first pixel art masterpieces. 🖤






 Figure 9: Combining pixel art with 2D or 3D animation expands your creative possibilities, without betraying the traditional look. Don't overuse colour - theme the look and the style so it appears natural. You may have 16.7 million colours to choose from, but that doesn't mean you have to use them all in one go.



FIXEL FRT STOO'S GOLDEN RULES

RESEARCH IT

It's always worth researching before you start drawing. There's a whole world of reference material at your fingertips, so make use of those image search engines. Research really can make a difference, igniting that spark of creativity when you're stuck for ideas. Research can also help clients to clarify exactly what they want from your artwork.

ROUGH IT

Working as a commercial artist, you soon learn that time is money. All of which means: don't overwork your art. Going back, tweaking, and adjusting... sooner or later it'll be time to hand over your creation to the client, so it's vital to get something down as quickly as you can. Create simple roughs at the start, balance the colours, shapes, and styles, and finalise the look you want to achieve.

CREATE IT GOOD, CREATE IT FAST

So you have the colours sorted, and overall it's looking good, but it's not finished. Now's the time when you really need to get this finished, whether it be a tileset, a series of animation frames, or a larger, one-off piece – get it done without delay.

COLOURS: LESS IS MORE

It's easy to get carried away and keep adding lots of colour, but when it comes to pixel art, less is more. Back when computers could display no more than 16 colours, and those colours were fixed, you had to make the most of what you were given. Those restrictions are no longer an issue today, but having constraints when it comes to pixel art is a good thing, and is as important as ever in recreating that classic look.

SAVE, SAVE, SAVE

One of the most frustrating things that can happen is to lose work, more so when it's down to bad housekeeping – and yes, I'm talking about being slack and not saving your work often enough. Get into the habit of making backups, save multiple times, even go into the folder, select the files and add them to an archive file if you like – anything, but please, just save!

EXPERIMENT, HAVE FUN

Creating pixel art should be fun. Build up a few techniques, experiment with ideas, look at streamlining your workflow, and don't give up. Overcoming creative challenges will make you a better artist. With so many art resources available online, use them, and learn by studying pixel art from over the decades.



 On the show floor, you want to drive as much traffic to your demo booth as possible.



AUTHOR JEFF SPOONHOWER

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

> The 'before' shot.
> Getting setup for PAX East 2019.



Indie reflections: Making Anew Part 8

Developer Jeff Spoonhower offers advice on showing off an indie game at a trade show



emoing your indie game live at a trade show or game festival provides an invaluable opportunity for outreach, promotion, and networking.

I've shown Anew at several events, including The MIX at E3, Indie MEGABOOTH at GDC and PAX East, Comic-Con, and Unity's Unite Showcase. I'd like to share some advice to help you have a successful, productive, and fun experience showing your game.

ON YOUR MARKS

Congratulations! Your indie game has been accepted into a game festival, conference, or marketplace. Competition is fierce for spots at these shows, so clearly the months (or years) of hard work you've put into your game are paying off. What's next?

First, solidify your travel plans as soon as possible. Developers usually receive notice of acceptance after hotel rooms are made available to the general public, so vacancies may be sparse. Airbnb-type options may be more affordable and spacious.

Create a playable, polished demo of your game that a show attendee can complete in 10 to 15

minutes. Shows are typically packed with eager gamers, so providing playtime to as many people as possible maximises your outreach. You'll be too busy to individually instruct each person how to play the demo, so the controls and gameplay mechanics should be intuitive or tutorialised through gameplay. Show off your game in its best light, highlighting its most unique, exciting, fun, and beautiful aspects. The show floor will be noisy and crowded, so the demo should be immediately captivating and fun.

Some essential items to bring include laptop/ desktop computers to demo your game; input devices (mice, keyboards, controllers); the largest monitors or HDTVs you can travel with and fit in your booth; over-the-ear headphones; banners and signs; marketing materials (postcards, buttons, business cards); power adapters, USB cables and batteries for charging phones, controllers, and other devices; plenty of hand sanitiser; reusable water bottles; and healthy snacks. Bring backup hardware such as an extra laptop and game controller, in case your primaries fail. Also, find out how much power will be available at your booth and ensure that the sum of your operating gear won't exceed the power supply.



In addition to these essentials, there are several nice-to-have items. First, a gel floor mat provides much-needed relief from long hours of standing. You can even share your mat with nearby developers to earn their friendship. If your budget and travel plans allow, bring an HDTV (50" minimum) and heavy-duty TV stand (ideally at least six feet high). Crowds are often dense and congested, and passers-by cannot see your game running on smaller monitors on a table. The large, elevated TV connected to a dedicated laptop running a gameplay trailer

on loop works wonders for visibility. Remember, you only have a few seconds to grab the attention of a potential player. Finally, small LED spotlights are helpful to illuminate your signage.

Demoing your game at a busy trade show is gruelling work. Going alone is nearly impossible, so bring at least one other team member to help. Take brief breaks every hour to refresh your mind and body, and don't forget to eat lunch!

THE SHOW MUST GO ON

Event organisers typically require booths to be configured the day before the show opens. Take your time and diligently set up each component. Connect and power on each piece of equipment and ensure everything works properly. Play through your demo several times, checking that input devices, computers, and monitors function as expected. Ask the event organisers about items that are safe to leave behind overnight. Never leave your computers or backup drives with code/builds at the show unattended, even during normal hours.

Each day of the event, arrive at least an hour earlier than the opening time to test your equipment. Then, take some time to stroll around the show floor to meet some of the other developers. We made excellent contacts during this quiet pre-show period. Once the show opens, your primary objective is to have as many people as possible play your demo. Stand in front of your booth and greet attendees coming by. Try a friendly "Hello!" or "Do you enjoy games such as [a successful title in the same genre as your game]? Then you should check us out!" Dressing up as a character from your game can be fun and attention-grabbing. Even if you're tired, keep your smile on and get out there – you're a salesperson! People are attracted to booths that already have large crowds, so the more people you steer to your demo stations, the more interest and engagement you will generate. If you experience downtimes, play your demo yourself to avoid

"Demoing your game at a busy trade show is gruelling work"

empty seats at your booth. Keep an eye out for press, streamers, publishers, and business development people. If they play and enjoy your demo, chat with them

more about your game and exchange business cards to follow up later. This face time is extremely valuable and difficult to obtain outside of shows.

Though you will be exhausted at the end of each day, reserve some energy to attend parties and social gatherings for additional networking opportunities. Before going to bed each night, spend time reflecting and organising your thoughts about that day. Make notes on feedback you received, bugs discovered, and important people you met and with whom you want to follow up.

When the show concludes and you return home, organise your business cards, review your notes, and send brief follow-up emails to your new contacts. Thank members of the press, and influencers, for playing your game, and offer them a standalone build or Steam key of your demo so they can play it again on their own time. This may lead to additional coverage on a website or streaming channel. Let publishers and business developers who seemed interested in your game know you enjoyed chatting and look forward to future conversations about working together.

Attending trade shows is expensive and timeconsuming, but the benefits of exposure, newly forged contacts, and gameplay feedback from 'real consumers' almost always outweigh the costs. Prepare thoroughly, travel safely, put on a smile, and have fun showing the world what you've been working so hard on. @ Be ready for a massive, eager crowd, ready to play your demo!

HOW MUCH?

The cost of showing a game varies widely. Smaller shows can be inexpensive and only require an entrance fee of a few hundred dollars (IndieCade, Indie MEGABOOTH at GDC). Larger shows, such as PAX, EGX, and Gamescom cost \$2000 or more to reserve booth space and rent equipment. Make sure you research all costs involved and plan your budget before accepting your invitation to the show.

 A photo of indie developers after the first day of demoing their game to the masses. (NB: not real corpses.)





Recreate Super Sprint's



AUTHOR

MARK VANSTONE

Making player and computer-controlled cars race round a track isn't as hard as it sounds

top-down racing



ecades before the advent of more realistic racing games like *Sega Rally* or *Gran Turismo*, Atari produced a string of popular arcade

racers, beginning with *Gran Trak 10* in 1974 and gradually updated via the *Sprint* series, which appeared regularly through the seventies and eighties. By 1986, Atari's *Super Sprint* allowed three players to compete at once, avoiding obstacles and collecting bonuses as they careened around the track.

The original arcade machine was controlled with steering wheels and accelerator pedals, computer-controlled cars added to the racing challenge. Tracks were of varying complexity, with some featuring flyover sections and shortcuts, while oil slicks and tornadoes provided obstacles to avoid. If a competitor crashed really badly, a new car would be airlifted in by helicopter.

So how can we make our own *Super Sprint*-style racing game with Pygame Zero? To keep this example code short and simple, I've created a simple track with a few bends. In the original game, the movement of the computer-controlled cars would have followed a set of coordinates round the track, but as computers have much more memory now, I have used a bitmap guide

"This snippet shows how you can get a top-down racing game working"

for the cars to follow. This method produces a much less predictable movement for the cars as they turn right and left based on the shade of the track on the guide.

With Pygame Zero, we can write quite a short piece of code to deal with both the player car and the automated ones, but to read pixels from a position on a bitmap, we need to borrow a couple of objects directly from Pygame: we import the Pygame image and Color objects and then load our guide bitmaps. One is for the player to restrict movement to the track, and the other is for guiding the computer-controlled cars around the track.

The cars are Pygame Zero Actors, and are drawn after the main track image in the **draw()** function. Then all the good stuff happens in the **update()** function. The player's car is controlled with the up and down arrows for speed, and the left and right arrows to change the direction of movement. We then check to see if any cars have collided with each other. If a crash has happened, we change the direction of the car and make it reverse a bit. We then test the colour of the pixel where the car is trying to move to. If the colour is black or red (the boundaries), the car turns away from the boundary.

The car steering is based on the shade of a pixel's colour read from the guide bitmap. If it's light, the car will turn right, if it's dark,

Top-down racing in Python

Here's a code snippet that creates a *Super Sprint*-style racer in Python. To get it running on your system, you'll first need to install Pygame Zero – you can find full instructions at **wfmag.cc/pgzero**

import math

```
from random import randint
from pygame import image, Color
controlimage1 = image.load('images/guide1.png')
controlimage2 = image.load('images/guide2.png')
cars = []
for c in range(4):
    cars.append(Actor('car'+str(c), center=(400, 70+(30*c))))
    cars[c].speed = 0
```

def draw():

```
screen.blit("track", (0, 0))
for c in range(4):
    cars[c].draw()
```

```
def update():
   if keyboard.up: cars[0].speed += .15
   if keyboard.down: cars[0].speed -= .15
   if(cars[0].speed != 0):
        if keyboard.left: cars[0].angle += 2
        if keyboard.right: cars[0].angle -= 2
    for c in range(4):
       crash = False
        for i in range(4):
            if cars[c].collidepoint(cars[i].center) and c != i:
                crash = True
                cars[c].speed = -(randint(0,1)/10)
        if crash:
            newPos = calcNewXY(cars[c].center, 2, math.
radians(randint(0,360)-cars[c].angle))
        else:
            newPos = calcNewXY(cars[c].center, cars[c].
speed*2, math.radians(180-cars[c].angle))
        if c == 0:
```

ccol = controlimage1.get_ wfmag.cc/ at((int(newPos[0]), int(newPos[1]))) wfmag21 else: ccol = controlimage2.get_ at((int(newPos[0]), int(newPos[1]))) if cars[c].speed != 0: if ccol != Color('blue') and ccol != Color('red'): cars[c].center = newPos else: **if** c > 0: if ccol == Color('blue'): cars[c].angle += 5 if ccol == Color('red'): cars[c].angle -= 5 cars[c].speed = cars[c].speed/1.1 if c > 0 and cars[c].speed < 1.8+(c/10): cars[c].speed += randint(0,1)/10 if crash: cars[c].angle += ((ccol[1]-136)/136)*(2.8*cars[c].speed) else: cars[c].angle -= ((ccol[1]-136)/136)*(2.8*cars[c].speed) else: cars[c].speed = cars[c].speed/1.1

def calcNewXY(xy,speed,ang):

newx = xy[0] - (speed*math.cos(ang))
newy = xy[1] - (speed*math.sin(ang))
return newx, newy

the car will turn left, and if it's mid-grey, the car continues straight ahead. We could make the cars stick more closely to the centre by making them react quickly, or make them more random by adjusting the steering angle more slowly. A happy medium would be to get the cars mostly sticking to the track but being random enough to make them tricky to overtake.

Our code will need a lot of extra elements to mimic Atari's original game, but this short snippet shows how easily you can get a top-down racing game working in Pygame Zero. ⁽¹⁾



- Three bitmaps are used for the track. One's visible, and the other two are guides for the cars.
- Four Formula One cars race around the track. Collisions between other cars and the sides of the track are detected.

Directory

Journo/Dev Swap 2019

The worlds of indie development and games journalism collide at this year's Journo/Dev Swap jam

Games journalism and game development are two disciplines that, although intrinsically connected, are often seen as entirely distinct. As its name implies, though, the Journo/Dev Swap game jam aims to break down the boundaries between the two fields.

Organised by Ukie and dementia research charity Alzheimer's Research UK, Journo/Dev Swap will see games journalists and game developers trade roles. The press will make their games to a theme within a strict time limit, while the developers will cover the event as journalists, submitting news, features, and reviews to be published at a real publication, and under real deadlines. Based on a jam Ukie hosted back in 2012, the event is designed to inspire empathy and greater understanding between journalists and developers, and to help both the journalists and game developers when they return to their day jobs.

Each journalist will be partnered with a student game developer to guide them through their intensive debut in the world of making games, while developers will have access to an on-site journalist mentor.

Alzheimer's Research UK are providing the theme for the jam, which will be taking place in the Ukie office in central London from Friday 27 September to Sunday 29 September. For more information, email **info@ukie.org.uk**.



GET INVOLVED

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

Indie devs can learn more about games journalism, and vice versa, at the role-switching Journo/Dev Swap jam.

www.filmstories.co.uk FILM STORIES

The UK's TRY SSUES **R** = = 99

with the code 'RASPBERRY'

PLUS

THE LATEST RELEASES REVIEWED

THE LATEST RELEASES REVID

DEN OF GEEK

webscribe.co.uk/magazine/filmstories

Making it Personal Turning experiences into games

Written by Kyle Hoekstra

Game designers tell us how, and why, they adapt their personal experiences into video games

> ike any work of art, video games reflect the experiences of the people who make them. Some designers embrace this, and are using video games to examine

their personal experiences and adapt them into playable ones. In *Consume Me*, Jenny Jiao Hsia and AP Thomson have developed a series of confessional prototypes about Hsia's experience with disordered eating into a darkly humorous game about her high-school life. In IGF-nominated game *Lieve Oma*, Florian Veltman takes the player on a meditative walk through the woods with their grandmother, and in *Northbound*, designers Arno Justus and Johannes 'John' Köberle use a road trip with old friends to explore the restless moment following graduation.

We spoke with these game designers and others to see how their personal experiences inform their games, learning how and why they have chosen to adapt the personal into the playable, and what challenges crop up when you set out to make art from your own life.

Food fight

In *Consume Me*, the relationship between the player and the creator is slightly more direct than usual. This is because the player assumes control of a teenage avatar of the game's creator, Jenny Jiao Hsia, as they slot *Tetris*-shaped food onto a plate to meet calorie targets, force her into workouts, and try to take a perfect selfie as they negotiate high school crushes. By making this interaction feel so clumsy and mechanical, *Consume Me* abstracts the obsessive mind of a high schooler into an absurd, slapstick spectacle.

"It started out with body image and dieting as the main focus, but slowly it became more about what happened to me in high school," Hsia explains. "When I was working on a game by myself, there were no other characters except for me. [Now] we have other characters to take into account, like my high school boyfriend and his mom and his family.

"Those interactions are not totally focused on body and self-image," she says, but "on validation and the belief that if you strive to work hard and get a hot body, you'll also get that boy that you like."

Consume Me began similarly to a number of Hsia's previous games: everyday routines in *Morning Makeup Madness* and *Wobble Yoga*, and also more serious subjects, as in longdistance relationship simulator *Chat With Me*. But as *Consume Me* grew in scope, Hsia recruited AP Thomson, with whom she had previously made the IGF-winning *Beglitched*.

Hsia is interested in better representation of different people and subjects in video +



 Inaka Project renders a picturesque version of the Japanese countryside.

and in the state





Consume Me began as a series of prototypes which drew from Jenny Jiao Hsia's relationship with dieting and disordered eating.

Recycling

Bringing AP Thomson on board helped Hsia tackle the scale of *Consume Me*. "[Thomson] stepped in and took all the crappy code I wrote, threw it in the trash and rebuilt a lot of the game from scratch." "Recycling," suggests Thomson.



games, but making games from her personal life also comes naturally, she says. "It's really easy for me to rely on my personal experience to make stuff. I guess it's hard for me to make stuff up. I also have a really bad memory, so I like drawing from things I'm familiar with."

In *Consume Me*, the themes drawn from this experience are communicated through a playful aesthetic and a sense of humour. "We've talked about how the most serious subjects are frequently darkly comedic," says Thomson. "A really important skill in communicating serious subject matter is how to actually find humour in what's going on."

Healing journeys

Whereas *Consume Me* began as a prototype based on Hsia's relationship with disordered eating, the personal core of *Lieve Oma* came to Florian Veltman as an imperative part of the design. Coming from a project that was proving too ambitious for a group of his friends, he set out to "make something smaller and more personal," he says. "The idea of making it about my relationship with my grandmother came later, but I did know that I wanted the game to be a soothing, 'healing' experience."

Lieve Oma was published in 2016 as an ode to his grandmother, whom he described as "probably the most important person ever to me." It sees the player collect mushrooms in an autumnal wood with a grandmother who wants to listen to their problems. The premise is inspired by, but not directly based on, real events. "I've not gone collecting mushrooms with my grandmother," says Veltman, "but I've been on walks through the forest with her. The mushrooming part seemed like the best way to ease the player into the narrative, giving them a short-term goal to push forward with."

Making the game more personal leant it an emotional resonance, however, "Originally, the game was going to have branching dialogue, where the player could basically 'vent' about various things," explains Veltman. "But by trying to write the dialogue for this, the story felt really bland and unnatural. The mere fact that a player knew they could've chosen something different, made the words of the grandmother have less weight." He decided to limit the options for player expression, but in doing so crafted a more affecting experience. "A lot of people tell me about how it made them think of their grandmother or someone else who has been there for them," says Veltman, "which was what I set out to do with the game."

My summer vacation

A similarly meditative 'walking simulator' which draws on personal experience is Inasa Fujio's Inaka Project, where the player assumes the role of a postman in the Japanese countryside. Fujio's design choices are based on his experiences, including a summer spent at his grandmother's house in Osaka. "It's partly because I am attracted to the mundane, but it's also to cover my lack of designing skills," says Fujio, the pseudonym for a second-year illustration student. "This includes the way I tell my stories, the way I create my characters, and the way I design the map. I believe reality is designed well enough for it to be a video game, and my job is to interpret my personal memories into an interactive medium."

Set in a peaceful world, *Inaka Project* has you deliver letters to locals, collect flowers, and take relaxing drives on long roads. It's influenced by *Boku no Natsuyasumi* (*My Summer Vacation*'), a PlayStation game about a boy spending his summer with family. "It holds a very nostalgic memory," says Fujio, "and I hope to create a piece just as emotionally impactful." Family seems to be a strong theme for Fujio, who describes his grandmother's house as "a second home, packed with childhood memories that I would like to retell in my game."

Meanwhile, a second game, *Rainy Season*, intended as "a stepping stone" towards *Inaka*



 "It's hard to appreciate things when you're in the moment," says Inasa Fujio, "and developing games has allowed me to revisit those memories."

Project's completion, is "a relaxing short story game about spending time with the family."

The attention Fujio's work has garnered online helps sustain his development through Patreon, though he concedes he's a little "confused" by his success. "I assumed my interests were very niche and walking simulators are not in demand," Fujio says. "Despite thinking this, I continued to work on it because it was something I wanted to make for myself." He relishes the chance to share his world with others. "I hope players will experience the same thing as I do, and even travel to the countryside themselves and create their own memories."

Authentic/romantic

One of the perennial challenges with creating such personal games is balancing authenticity with the player's immersion – something Fujio says he reflects on daily. "I value research and reference more than anything," he

says. "I'm inspired by ugly scenery, things that aren't shown in touristy photographs. Part of the struggle, however, is deciding what to exaggerate or romanticise while

keeping things authentic. As much as I want to create an exact replica of my memories, it's not very fun to play, so I try to find ways to keep things interesting while staying true to my goals." Fujio uses the protagonist as an example. "I needed an incentive for players to explore the map, and I thought a postman was a good idea," he explains. "The hardest question is, how much freedom do I give to players and how realistic should the postman gameplay be? As much as I want to replicate every detail of a postman's day, it becomes a job simulator and distracts from the real goal of exploration."

Similarly, what *Lieve Oma*'s Florian Veltman found most challenging "was to find a balance between making the game for me and making Florian Veltman initially published Lieve Oma, an ode to his grandmother, on her birthday.

the game for players. I wanted to make an accessible game that would speak to an audience that is larger than just myself, but realising that I had to talk about personal things to make the game work emotionally made it hard to balance accessibility and the insularity of the subject."

Hard talk

For the creators of both *Lieve Oma* and *Consume Me*, this challenge crystallises when crafting dialogue. "At first it was really hard," says Veltman of writing *Lieve Oma*'s grandmother. "I felt that the game would become more insular and inaccessible." But it occurred to Veltman that players' tendency to probe the limits of the game world resembled "a child testing the limits

"I'm inspired by ugly scenery, things that aren't shown in touristy photographs" the adults around them impose." Embracing this made writing the grandmother easier, as though she were "observing a child running around, doing the playful things a child

would do on a walk through the countryside. Once I figured out the tone of the grandmother, the child's personality was easier to write as well."

Creating compelling dialogue in *Consume Me* is important for Hsia and Thomson, but Hsia explains how finding that balance is difficult. "I'm OK at writing stuff that my mom has said to me and writing about what I think to myself," Hsia explains. "But it's just a whole different challenge to think about how my high school boyfriend's mom would respond when I'm talking about which college I want to go to." It makes it easier that Hsia and Thomson haven't aspired to write an autobiography. "In the beginning I was looking at old journal entries and looking at ***

Dream job

Interface Making it personal

Lieve Oma "had an incredible response, beyond my wildest dreams," says Veltman. The game was received so well, it helped Veltman get a job at ustwo Games, where he went on to work on Monument Valley 2. "I cannot be more grateful for this," he says.





We'd quite like to own a handheld console called Wonderdude, actually.



Montreal-based game designer Osama Dorias has spoken at GDC about Muslim representation in video games.



 Making Northbound "definitely helped in coping with the fact that university was coming to an end," says Köberle.

notebooks where I would write down all the calorie counts of food I would eat," says Hsia, "but actually I found that it became harder to figure out how to design something based on something so concrete."

Much of the game is therefore semiautobiographical, with certain people from Hsia's life combined or changed slightly. "Bizarrely," says Thomson, "it might be easier for me to write the dialogue since I wasn't around at this time and never met any of these people, so it's easier for me to take artistic liberty with it."

Teachable moments

Other creators, such as Montreal-based game designer Osama Dorias and Hungarian developer Adam Dubi, have sought to communicate their deeply personal stories through allegorical games. For Dorias, the xenophobia he's experienced, and also the love he nurtured through his faith, informed the story he authored as narrative designer on action RPG *Dungeon Hunter 4*, released in 2013.

Osama Dorias is a senior game designer at Warner Brothers, and co-founder of the Montreal Independent Game Awards. While working with mobile game publisher Gameloft, he was charged with developing the story of their flagship *Dungeon Hunter* franchise. "There were certain story beats that our bosses expected," he says, "but everything beyond that was a blank canvas. An opportunity to pour our hearts into our work!"

Born in Baghdad, Dorias and his family fled from the Iraq-Iran war in 1980 and eventually settled in Montreal, Canada. "Not unlike many children of immigrants," Dorias explains, "my life growing up in the west was garnished with one identity crisis after the next." He was often

> Adam Dubi made his game *Lost Memories* partly as therapy.



Abstraction

Northbound's designers struggled to balance how personal their story should be. "Abstracting our personal experiences and putting them into this mostly fictional setting was a big challenge," says Justus. "Even though there are fantastic games that are these very intimate experiences, we felt that we would make Northbound less relatable and harder to understand by doing that."

reminded of his status as an outsider. "My Islam was one of spreading love, understanding, tolerance, and peace," he says, "not the one portrayed in Hollywood or the news." Later, he says, "comments like 'You're one of the good Muslims' or jokes about me being a closet terrorist cut me deeper than I let on."

In the narrative he crafted, Dorias mined his own experiences to weave a tale about a human-like race called the Valen, who were locked in an interminable war with the monstrous Kenashi. The player would discover, however, that the Kenashi were more than they seemed. "Both peoples only wanted to live happy lives, while their ruling class manipulated them for their own nefarious goals," says Dorias. "Sound familiar?" The player would unite the factions in an alliance that endured into future games in the franchise.

Where Dorias explored xenophobia through an RPG, *Adam – Lost Memories* is a small psychological horror game, "based on a true story that happened to me as a child," says selftaught creator Adam Dubi. It's a claustrophobic and tense experience, set within dark environments where a discomfiting presence lurks. "I created this game because I wanted to show people how it feels to be a child who grew up in a family that's falling apart," says Dubi. The first release was published on itch.io on 26 May 2019: Children's Day in Hungary.

Art therapy

Dubi explains that his work on *Lost Memories* began three years ago, following the advice of a psychologist. "My psychologist said that the best thing I can do to get myself together after my childhood trauma is to release it in some form of art," he says. Dubi shares how he created a virtual atmosphere that conveyed the fear and claustrophobia he experienced. The visuals, Dubi says, were not developed on any references. "I just have the whole thing in my head. As I sit in front of Unreal [Engine], it's really easy for



 Designers of Northbound and Zurich University of the Arts compatriots, Arno Justus and John Köberle.

me to create the environments and puzzles without serious planning." The sound is more complex, however, and many of the effects are custom-designed by Dubi to match the "robust and 'heavy' concrete and metallic environments." He also uses a value called 'fear' based on actions performed by the player to create more dynamic environments.

The "hardest part", however, "was to defeat my inner thoughts about people who will laugh when they get to know that I have had panic

disorders and depression. It's not an easy task to speak about the things that I lived through, and child abuse as a theme is offensive for most of us." When asked if there was material he chose not to work on because it was too sensitive, Dubi says, "I didn't want to cut out anything, because my project's development is sort of therapy for me."

The therapeutic nature of Dubi's development suggests how the process of making personal games can help designers examine and articulate those experiences. For Dubi, creating his autobiographical horror title has been a cathartic experience. "Now I have released all of these memories, and it feels just the right thing for me," he says.

Dorias feels a similar way about the process of making *Dungeon Hunter 4.* "The time working on *Dungeon Hunter* forced me to confront the topic head-on in a way that I never had to do before," he tells us. "It helped me surface, and resolve a lot of issues about my upbringing and relationships past and present."

Euro trip

It was about halfway through developing their bachelor's thesis project *Northbound* when Arno Justus and John Köberle decided to make the anxieties associated with leaving university the central theme of the game. "That was when it really started to hit me that university was about to end," says Justus. "Making these experiences into *Northbound*'s narrative certainly helped me in sorting out my thoughts and processing them."

Northbound is about taking a road trip with old friends in the restless period after finishing university. Inside the bus, the player prompts discussion by interacting with characters and nostalgic objects. The narrative was inspired by their situation, while the characters and conversations are loosely based on people they know. The road trip itself is informed by the duo's childhood "love-hate" relationship with road trips. "While I certainly loved the adventure, I also hated it half of the time, because it was boring and could take forever." says Köberle.

> To capture this mood, *Northbound* incorporated a 'boredom' mechanic where players can exhaust all of the exploration options available to them and

must then wait for the next chapter to begin. The result is "awkward silence and slight boredom," says Justus. "That is exactly what we wanted them to feel, which, looking back, was a pretty risky move."

"My project's development is sort of therapy for me"

> From Northbound to Consume Me, we as players are connecting with the personal lives of their creators. "In the case of Northbound, the personal experiences really made the game more relatable," says Köberle.

Ultimately, when designers take advantage of gaming's capacity to communicate personal messages and discuss difficult topics, they're also contributing to a growing pool of human experiences and, in the process, helping to evolve the medium as a whole.

Distractions

Building Northbound's world was "one of the most fun parts," says Justus, who describes how they invented their own countries, brands, and radio programmes. Köberle agrees: "World-building has been a great distraction from the more tedious aspects of game design."

 Consume Me: seldom have minigames been quite so personal.





forgettable series



Developer Profile

Glen Schofield

Urban warfare, shocking horror, and... Disney karting

hrown into the public eye in the past decade or so, it's easy to overlook the fact that Glen Schofield - creator of Dead Space and one of the most visible faces of Call of Duty's (COD) past few years actually had a career before EA and Activision. And when you don't overlook that fact, there are some surprising snippets in the man from New Jersey's portfolio. Home Improvement, anyone? Most of Schofield's first dozen or so titles - all on the art side of the table - were of the licensed variety; he was known in contemporary circles for his focus on gritty warfare and shocking body horror before cutting his teeth on a licensed Simpsons game, as well as tie-ins with the likes of *Home Improvement* and *Ren* & Stimpy. Schofield's early artistic efforts aren't all forgotten, either, with the intentionally terrible Penn & Teller's Smoke and Mirrors (ironically cancelled and never released in its original form) remaining relevant to this day, thanks to its Desert

Bus section, which is still played annually at charity runs.

A spell at Crystal Dynamics followed, with Schofield stepping up to the role of director on the likes of *Gex 3D*, *Gex 3*, and... *Walt Disney World Quest: Magical Racing Tour*. The latter karting title – the latest in a line of licensed games – did have something of interest in its credits, though: Schofield was joined by producer (and future *Dead Space* compatriot) Steve Papoutsis. Directorial duties on the middling *Blood Omen 2: Legacy of Kain* saw Schofield's time at Crystal Dynamics come to an end, with the dev rising further up the ranks in the fold at EA Redwood Shores.

ARTS AND ELECTRONICS

Par for the course, Schofield's work at the soon-to-be Visceral Games was mostly in the realm of licensed titles – the well-remembered *The Lord of the Rings: The Return of the King* being a standout of his early days at the studio. But it was, of course, 2008's megahit *Dead Space* that thrust Schofield into the public eye in a big way. His role as creator of the game – latterly transmedia franchise – meant the



COD: Advanced Warfare tried something new



 Glen Schofield: more than just Dead Space

journeyman developer was thrust into the limelight. Happily, for those speaking to him, Schofield maintained an open, engaging tone, and talked readily about his sci-fi horror series and any other projects he'd worked on in the past. Schofield's candour would serve him well as he moved under the Activision umbrella - a corporate world where canned non-statements from development spokespeople are an otherwise regular occurrence.

I WANT TO BE YOUR...

But that's getting slightly ahead of things: following Dead Space's success, Schofield and co-conspirator in the Event Horizon-inspired classic, Michael Condrey, left Visceral Games to set up their own studio. In 2009, Sledgehammer Games opened its doors in Foster City, California - a purpose-built city close to Silicon Valley – and was quickly brought into the Activision family, maintaining its



independence but operating as a fully owned subsidiary of the giga-publisher.

Work on a new take on the COD format was underway, with Schofield promising Bobby Kotick and co a Dead Space-level impact for the series. A number of months' worth of development went into this third-person action-adventure COD before problems between Activision and Infinity Ward's founders led to an exodus of staff, and a

"Schofield promised a **Dead Space-level impact** for the COD series"

gap needing to be filled. Schofield's baby would have to wait, as Sledgehammer was drafted in to help out on COD: Modern Warfare 3's production.

That Dead Space/COD project never did happen in the end, with Sledgehammer instead shunted into the regular development cycle for the franchise. Schofield headed up a relatively radical departure for the series in the shape of 2014's COD: Advanced Warfare, before taking the series back to its roots with COD: WWII in 2017.



tie-ins were well-received



of Schofield's early career

While Schofield and Condrey may have formed Sledgehammer with the intent to do something different, they had both ended up being little more than cog-shaped contributors in the Activision wheelhouse.

There was no bad blood, no tabloid headlines or gossip and innuendo doing the rounds when Schofield announced his departure from Sledgehammer along with Condrey in February 2018, the two of them moving higher up the ranks at parent publisher, Activision.

That arrangement didn't last long, with Schofield's long-standing partner leaving for a new 2K studio in December that year, and Schofield himself opting to join PUBG Corporation in June 2019 as CEO of the company's newly created Striking Distance studio. It would be empty speculation to wonder why the move and subsequent resignation went ahead as it did, but it's a dead cert that Schofield's talents will be put to good use creating narrative-driven titles in the PUBG universe.

If Schofield still has the drive to create another Dead Space-level of hit, we're in for a treat. If he wants to make a new Home Improvement game, though... 🜚

Glen's Games 10 games, from rubbish to good

It's genuinely odd how all this led to Dead Space and COD



Barbie: Game Girl

Possibly not his *first* game – records were vague 25-plus years ago – but par for the course in Schofield's early career was *Barbie: Game Girl.* Licensed? Check. Basic platformer? Check. Absolute rubbish? Harsh, but: check. You can't blame someone for wanting to earn a living, though, and that's just what Schofield was doing with his early artistic forays in games.



Penn & Teller's Smoke and Mirrors

Mega CD / PC / 3DO – Unreleased The finished game never released, with publisher Absolute Entertainment going bust. It didn't stop the Vegas magicians' troll-package from seeing the light of day, though. Desert Bus, still played in a yearly charity drive, shouldn't be overlooked – Schofield inadvertently helped bring in plenty of pounds for a good cause.



Gex 3D: Enter the Gecko PS1/N64/PC/CBC-1998

Jumping up to directorial duties at Crystal Dynamics, Schofield showed an additional side to his talents with *Gex 3D*. The game was a decent platformer and reasonably funny, though really it was just another title trying to jump on the *Super Mario 64* bandwagon. And for some inexplicable reason, we got Leslie Phillips as the voice of Gex in the UK.





Akuji The Heartless

From cartoony and bright to gritty and moody, *Akuji* used the *Gex 3D* engine (itself using the *Tomb Raider* engine) to bring the literal heartless one to life. A violent platformer, it managed to gather itself a bit of an audience on release, but ultimately it's fair to say this one was largely forgotten – not even receiving the seemingly guaranteed PSN re-release on PS3.



Walt Disney World Quest: Magical Racing Tour DC/PS1/PC/GBC-2000

Another decent, ultimately forgettable licensed one from Schofield, notable mainly for it being the first time the director worked alongside future Visceral teammate, Steve Papoutsis. A basic karting title, the most shocking thing is that only Chip, Dale, and Jiminy Cricket of the Disney tribe show their faces.





Blood Omen 2: Legacy of Kain

 $\textbf{PS2} \ / \ \textbf{Xbox} \ / \ \textbf{GC} \ / \ \textbf{PC} - \textbf{2002}$

While Schofield received thanks in the Soul Reaver credits, Blood Omen 2 was his project – another shot at gritty and violent, this time with a strong narrative backbone. Blood Omen 2 was overshadowed by its Amy Hennig-fronted sister title, but it's fair to say this clunky romp has its moments and is worth a bit of reappraisal.



007: From Russia With Love PS2 / Xbox / GC / PSP - 2005

Jumping up to executive producer on yet another licensed title, *From Russia With Love* was notable for bringing together Schofield and future business partner Michael Condrey – as well as for the fact it saw Sean Connery reprise his role as Bond for the first time in decades. The game itself? Well, once again, it was *alright*.



Dead Space PS3 / X360 / PC - 2008

Sixteen years after debuting in the industry, Schofield was able to create *his* game – influenced by *Event Horizon* and the work of Isaac Asimov, *Dead Space* was a genuinely brilliant surprise. A new IP, a great game, some genuine scares, and a whole transmedia franchise created in one fell swoop. It remains to this day Schofield's best work.



Call of Duty: Modern Warfare 3

Forming a company alongside Condrey, Schofield intended to reinvent *Call of Duty*. Instead, he was put to work plugging holes in *Modern Warfare 3*. The result was... a *COD* game. As in, your mileage may vary. But it did see Sledgehammer receive billing alongside Infinity Ward; something hitherto unheard of.



Call of Duty: Advanced Warfare

Schofield's studio's good work on *MW3* meant Sledgehammer was handed the reins to its own *COD*. Sadly, the ambition of reworking the series took a back seat (as it did again in 2017's *COD: WWII*), but *Advanced Warfare* did show new ideas, and a rare creative spark in a series known for a same-old, same-old approach.





13 issues for just £20

Subscriber benefits

- > Free delivery Get it fast and for free
- > Exclusive offers Great gifts, offers, and discounts
- Great savings Save up to 49% compared to stores

Introductory offer Rolling monthly sub

- > Low initial cost (from £4)
- Cancel at any time
- > Free delivery to your door
- > Available worldwide

Subscribe for 12 months Receive all 26 issues

£40 (UK)	£75 (USA)
£65 (EU)	£75 (RoW)

Offers and prices are subject to change at any time



Digital subscriptions from



Visit **wfmag.cc/subscribe** or call **01293 312192** to order Subscription queries: **wireframe@subscriptionhelpline.co.uk**



Info

GENRE FPS FORMAT PS4 (tested)

PC / XBO / Switch DEVELOPER

Machine Games / Arkane Studios

PUBLISHER Bethesda

Softworks PRICE

£24.99 RELEASE

Out now

REVIEWED BY Aaron Potter



 Journals are laced throughout levels, detailing Youngblood's many new features like enemy-specific ammo.

Wolfenstein: Youngblood

Twin magic? Twin tragic

he art of Nazi-slaying has always been big business in *Wolfenstein* games, and with the previous two entries of this recent reboot series (three if you include 2015 spin-

off *The Old Blood*), business has been good. So good, in fact, it might appear strange to want to shake up the story-driven structure that has worked extremely well so far. With *Wolfenstein: Youngblood*, however, developer Machine Games has sought to do just that. And while it's true that the co-op approach may add a slight new dimension to gun-play, it's a shame that almost every other mechanic surrounding it rings hollow.

Fast-forwarding events 20 years beyond those of *Wolfenstein II: The New Colossus, Youngblood* doesn't waste time in placing you in the shoes of previous protagonist B.J. Blazkowicz's twin daughters. Jess and Soph are far less experienced than their war veteran father, and at first, it looks like this will give their mission to track him down within Nazi-occupied 1980s Paris a fresh feel. Every kill or collectable discovery is usually punctuated by a "Good job, sis!" or similar riposte being yelled, for instance, yet outside these brief soundbites, *Youngblood* fails to deepen either character beyond that of two gender-swapped dudebros. It's in instances like this where a true, linear single-player campaign, complete with cinematic cutscenes, would have worked wonders – just as it did previously in this very series.

Jess and Soph's journey instead boils down to what feels like a gauntlet of bite-sized missions, which ultimately struggle in their attempt to service the wider revenge-thriller plot. *Wolfenstein: Youngblood* seems more interested in stunting your progress rather than acting as a new entry in the Blazkowicz saga - the pure rinse-and-repeat formula of objectives is evidence of this. Jobs are dished out from your catacomb home base following a bombastic prologue, with the twins being the lucky pair tasked with taking them on. From here, it's all about running from one end of various openworld hubs to the other, pulling levers and rescuing hostages before returning to do it over again.

You'd think that the environments being more open this time around (thank you, Arkane Studios) would let you get more creative with killing, but action scenarios often just descend into all-out chaos. This is because enemies have an unprecedented ability to spot you from miles away, making the stealth option – easily workable in previous games – feel almost impossible to pull off. A cloaking upgrade can be purchased from your skill tree early on to help remedy this, but it's a patch to a problem that



know Jess or Soph properly as believable characters

really needed to be solved much more elegantly if regular frustration was to be avoided.

Moving through retro-futuristic Paris also feels surprisingly bland, with the glitz and glam of Wolfenstein: Youngblood's 1980s-injected marketing hardly anywhere to be found. Floppy disks and 3D glasses act as collectables, sure, but Nazi interior design seemingly hasn't advanced much since the events of The New Colossus. This makes getting around feel like a chore, especially when multiple objectives see you returning to the same locations over and over again, with the exact same enemies spawning where expected. It all feels procedural instead of authored, painted with

a brush labelled 'one size fits all' rather than having enemies placed in spots where the choice of going loud or being sneaky can truly be yours.

On a more positive note, Youngblood manages to

maintain the satisfying sound and general great feel of weapons. The shotgun, in particular, delivers an accurate bass-like punch when fired, and the subtle hum of laser artillery is still a great way to instil fear into any unsuspecting foes about to be vaporised. Granted, getting to use most of these is staggered by the new Destiny-like upgrade system, which requires you to buy a power perk before you're allowed

> The gruesome horror of Nazi tactics is only lightly touched on in Wolfenstein: Youngblood.



to carry and then store any heavy weapons. All skills are divided into three categories – Mind, Power, and Muscle - and you do at least level up at a sensible pace. The guns themselves can be buffed individually, letting you extend magazines, add attachments, and so on.

Of course, Wolfenstein: Youngblood is entirely playable in both local and online co-op, but again fails to really capitalise on the concept in some instances rewarding those who can't coerce a friend into playing. This is because the Al partner is almost too good, always there to

"Youngblood is playable in both local and online co-op, but fails to really capitalise on the concept"

revive you should you be gunned down, or ready to 'bamf' to you from across the map whenever Jess and Soph need to complete an action together. A nice touch is the ability to treat your partner to added

health or armour using a hearty thumbs-up, but there always being two of you around makes failing levels incredibly unlikely. A real-life buddy would have been appreciated if enemies weren't simply bullet sponges and required some degree of tactics. Alas, however, brute-forcing it through areas almost always works.

As an offshoot experiment of sorts, Wolfenstein: Youngblood is a Nazi-killing simulator that somehow feels lacking on every level. The attempt at anarchy-fuelled, co-operative mayhem is admirable, but all too often, this comes at the cost of everything that made previous entries so unique against the wider landscape of gritty first-person shooters. This, alongside the need to play co-op with a friend being somewhat redundant, sees Wolfenstein: Youngblood mark a new low for this once-great series. 🜚

HIGHLIGHT

Jess and Soph can carry a maximum of three shared lives at risk of being lost should either of them fail to be revived when they're downed. This raises the stakes during the heat of gunfights, but the time it takes to revive each other is still extremely generous.

VERDICT

Gunning down Nazis with a friend in Wolfenstein: Younablood is fun for a few hours, but little more.

42%

Rated Review

HIGHLIGHT

It's in the presentation that *Exception* really excels. Enemies (and bosses) are a little generic, but the vivid neon levels need to be seen in motion as sparks fly and your robot leaps amongst the chaos. Get hit and the graphics blur and shimmer in a pleasingly retro way.

 The story is presented in a fun, comic book-style - it's just disappointingly disjointed from the actual gameplay.



Exception

Get your anti-virus software in check



Review

ith its fast-paced gameplay, *Tron*-esque graphics, and impressive level flipping, *Exception* – the work of lone developer Will Traxler – makes

a good first impression. That is, if you ignore the story.

You play a robotic hero inside the computer of an old lady who's guilelessly downloaded a virus, resulting in dire consequences for the digital world behind the monitor.

This introduction, though, is entirely skippable – as are the comic book-style cutscenes between levels – which just proves how superfluous the plot is to the game.

Exception is all about gameplay. Speedy, twitchy, arcade gameplay. Your little robot flings itself around each side-scrolling level,

wall-jumping at top speed and swatting away enemies with a laser sword. Gradually, new obstacles are introduced: electric panels, jets of fire, and deadly liquids that steadily up the ante, while overly simplistic bosses punctuate each set of levels.

There are glowing orbs scattered around that, when touched, flip the entire level around. This not only looks cool, but also requires you to comprehend a level's geometry in order to both complete it at high speed and collect the hidden bytes. It adds a welcome puzzle element. While occasionally disorientating, level flipping also reveals secret pathways and shortcuts if you're skilful enough to exploit them. Reaching the end of each level takes little more than 30 seconds. The emphasis, then, is on short, sharp flashes of action, smashing time limits, and hitting the top of the leaderboard, all to a pounding synthwave soundtrack that's continuous from level to level. There's a hypnotic sense of flow to the game that gives it that 'just one more level' appeal. Soon, that old lady is forgotten.

Collecting the bytes has another effect of unlocking extra abilities, but these prove disappointing. The ability to throw your sword like a boomerang, for instance, sounds great, but it doesn't change the gameplay in any drastic way, making these collectables more hassle than

"It's all about

speedy, twitchy,

arcade gameplay"

they're worth. This isn't the only disappointment, either.

Any game like this requires absolute precision, but *Exception* features loose controls that, in later levels

especially, have the tendency to send your character careering off platforms. Worse, flipping the perspective retains your character's momentum in that direction, often straight into danger. All of this breaks the flow the presentation so carefully constructs. Couple this with a forgettable story (which you will more than likely skip), and a sense of repetition soon sets in.

But when the levels are so short, it's not long before you're jumping back in for another bitesized burst of dazzling, energetic screen flipping. And with only two buttons required, *Exception* makes for an ideal handheld experience on the Switch. For speed-runners especially, this game is a dream – even if it's not quite exceptional. @

Info

FORMAT Switch (tested) / PS4 / XBO

/ PC

Platformer

GENRE

DEVELOPER Traxmaster Software

PUBLISHER Traxmaster Software

PRICE

EII.39

Out now

REVIEWED BY Ed Nightingale

VERDICT

It might not be exceptional, but *Exception* is an addictive speedrunner's delight.





HIGHLIGHT

If you can overlook the handful of UX annoyances, the strongest sequences are undoubtedly those in which Foley assesses the crime scenes. With the added functionality to collect clues and rile up angry perps, *Dry Drowning* offers glimpses of how effective, and interactive, its storytelling can be.

Review

Dry Drowning

A pretty (cheesy) PI adventure that'll leave you high and dry

f *Dry Drowning* was a colour, it'd be beige. Neither a firm favourite nor grossly offensive, it's a curiously bland offering that excels in mediocrity. Yes, its visuals are beautiful, and yes, it's a curious conceit, but the dark themes at

its core are compromised by two-dimensional characters and a shockingly hokey script. It's 2066, and you are Mordred Foley,

a brooding, tobacco-obsessed PI that, naturally, shields his soft heart with a tough shell. Having fallen foul of the peacekeepers of hyper-vigilant dystopia Nova Polemos, he and partner Hera (who he incessantly treats like a child, much to my chagrin) are struggling, trying to scrape

together enough money to keep themselves and their firm afloat. A strange murder, however, sees them inexplicably pulled in to work alongside

local law enforcement, and Foley soon finds himself reacquainted with an old antagonist known as Pandora while fighting to clear the name of a dodgy politician.

For some inexplicable reason, Foley can tell if a perp is lying by watching them; their faces will glitch and temporarily don spooky masks if they tell a porky-pie. It's an intriguing idea, and one of *Dry Drowning*'s few original features, but it doesn't bring as much to the game as you might hope.

Stuffed with melancholic backdrops, broody characters, and a lore-rich tale, there's much to explore here, and its mature murder-mystery tale does, admittedly, suck you in. One part visual novel, one part point-and-click, there's plenty to do (and read), but it takes itself way too seriously, even if the world-building is painstakingly crafted.

You'll find many of its features – from the film noir environments to the gruff-PI-with-a-heart-ofgold trope – achingly predictable, and an absence of meaningful agency means those life-and-death decisions aren't always as dire as they might first appear. Even the Living Nightmare sequences, which kick you to a Game Over screen if you mess up one too many times, lack bite.

There's plenty to do, though. From questioning witnesses and suspects to collecting clues, Foley's story unfurls the more you explore. The investigative stuff is engaging, at least to

"The dark themes at its core are compromised"

kick off with, but Foley will often recycle the same old commentary whether the evidence is new or otherwise, and some items are so close together they're

easily missed. The screen is dominated by a distractingly gigantic cursor that swells as you point-and-click your way around crime scenes, and there's a lot of back-and-forth-ing – not to mention a pointless, compulsory minigame – that sure smells like padding to me.

That said, despite the cringy script, lack of originality, and unwavering sense that *Dry Drowning* thinks it's considerably more esoteric than it is, I was compelled to solve the case nonetheless.

But while there's a handful of neat puzzles and some lovely backdrops to explore, it's unlikely Foley's story will stick with you for long. © Survey your surroundings to gather the evidence and put together dazzling deductions. Be thorough - sometimes that cursor can make it difficult to find clues nearby.

> GENRE Visual novel FORMAT PC DEVELOPER Studio V

> > PUBLISHER VLG Publishing PRICE £17.99 RELEASE

Out now

REVIEWED BY Vikki Blake

VERDICT

Perfectly playable in a predictable, hokey, twodimensional kind of way.



HIGHLIGHT -

By establishing a simple set of rules then applying them to dozens and dozens of varied challenges. Gabbuchi feels almost timeless, like some long-forgotten classic that didn't guite make its mark on history. I can see it appealing to players - or budding designers - with an interest in how minimal, solid fundamentals can be applied to a range of diverse problems.

PC (tested) Switch DEVELOPER

GENRE

Puzzle

FORMAT

h.a.n.d., Inc. PUBLISHER **Aksys Games**

PRICE £5.79

RELEASE Out now

REVIEWED BY Nic Reuben

VERDICT

Minimal but more focused for it. Gabbuchi is the digestive biscuit of indie puzzlers. It's not the most exciting thing on the shelf, but once you start gobbling, it's difficult to stop.





Bite-size brainteaser



abbuchi is ravenous. A being of pure, insatiable hunger whose only instinct is to consume all that crosses its path, even if it means its own destruction. Gabbuchi is

also an adorable, Tamagotchi-looking bipedal dinosaur-thing, but don't let that fool you. I have no doubt that, given the chance, this minimonstrosity would devour you and all you have come to love

Gabbuchi is also an idiot who will eat any block the same colour as itself the instant it comes into contact with it. Yes, even if that block is the only thing between itself and

plunging into the abyss below. And yes, even if that block is the stepping stone it needs to exit a stage. Blocks come in red or white, and Gabbuchi can change colours between the two instantly. Your job, as the guide of this starving cube of pure stupid, is to hop and walk your way to the exit of short stages, chewing through blocks that hinder your path while making sure to leave the ones you need to jump to or run across intact.

As an extra layer of challenge, you'll also be trying to 'satisfy' Gabbuchi by collecting food pellets, and trying to complete each stage with a specific amount of colour changes. These elements are optional, but they do add a flexible way to adjust the difficulty, requiring different approaches to each puzzle. There's something like 200 different puzzles anyway,

so there's a lot here, should you decide *Gabbuchi* mastery is a worthwhile pursuit.

for Gabbuchi to avoid.

Working out the exact sequence of blocks to chow down on can be satisfyingly cerebral, but the game still requires some zippy platforming chops from time to time, causing a few issues. Gabbuchi's locomotion is solid enough, but a tad stiff and floaty. It's not enough to become a serious problem, but it can make the odd

stage more frustrating than it should be.

"It's a pleasant, clever. and only occasionally vexing puzzler"

All in all, it's a pleasant, clever, and only occasionally vexing puzzler that knows how to make simplicity work for it. A bite-sized brainteaser that I'd

say makes a lot more sense in five- or ten-minute bursts at a bus stop on the Nintendo Switch than the desktop I played it on, but one that left me satisfied nonetheless.



Each stage has an additional challenge: making it to the exit in a set number of colour changes, while satisfying Gabbuchi's hunger.



HIGHLIGHT

Your companion in death, Beatrice, has uncovered a revelation about Venusian society that could devastate morale, and raises questions about the validity of the conflict. It sets up a philosophical guandary for the game, but also drops tantalising hints about the wider universe that will make you hope for a bigger, fatter sequel.

GENRE Point-and-click.

existential panic FORMAT

PC (tested) / Mac

DEVELOPER Natalie Clayton / Priscilla Snow Xalavier Nelson Jr.

PUBLISHER Self-published

PRICE £575 RELEASE

Out now

REVIEWED BY Dave Hurst

VERDICT

Can Androids Pravis a healthy dose of existential anxiety in a minimalist. bite-sized package that will live in your head long after you've finished it three times.

90%

Can Androids Pray

Demise of the Robots

Review

here's a moment in Can Androids Pray which is absolutely terrifying - even though the entire game is a single, peaceful, 25-minute conversation, that all takes place one quiet morning. Conceptual peril is a hard thing to get right. It's easy to frighten people with a monster, or imminent danger. But scaring people with a revelation? One that has consequences for a fictional society? That's difficult, and rarely done in video games, a medium that tends to run on action and reaction, leaving little time for little things

like 'ideas' to be analysed. Like most games, Can Androids Pray is preoccupied with death. Though not a single shot is fired. You play one side

of a chat between the pilots of two downed mechs, on a dead Earth in the far future which has become the staging ground of an endless interplanetary conflict between the Mercury Protectorate and the Venusian Confederacy. Sounds heated.

The issue is that both of these characters are going to die, and there's no way to save them. No win state. No last-second reprieve if the player is smart enough to choose the right responses. Can Androids Pray is not a game about avoiding or inflicting death; it's about confronting death. What would you do with the certainty of oblivion - is it time to panic? Time to enjoy your last moments, freed from the perpetual burden of there always being a tomorrow? Time to comfort the person who's also dying, metres away?

The script – beautifully written by Xalavier Nelson Jr., whose previous credits include

brilliant 1990s internet simulator Hypnospace Outlaw - deftly teases your own philosophy of death out of you, and confronts you with it. It's an incredible feat, whether intended or merely an accident of the game being released just as I edge towards middle-age.

I've always been afraid of dying; I'm sure everyone is. The prospect becomes more intensely real as I age. I daydream about the reality of it; how, when, and where it might happen, and how unfair it is that we all have to face it.

25-minute conversation"

As clichéd as it might sound, Can Androids Pray helped me take those feelings out of their box, examine them, and process them. I'd be lying if I said it suddenly gave me a

healthy attitude towards oblivion, but I'm fairly sure it helped.

Can Androids Pray at least makes dying look cool as hell. The low-polygon presentation is phenomenally good - like the script, it does a great deal, very quickly, with very little.

Vast, long-abandoned outposts and smouldering, recently quietened battlefields; stark, harsh shadowing; light spilling over the horizon it's a masterclass in looking big and vast, while also feeling tiny and intimate.

The game's barely 25 minutes long, but it makes more effort to grab and shake you than most do in 25 hours - and you'll be thinking about it for weeks.

A short story worthy of Bradbury and Asimov; with a sharp script, beautifully bleak visuals, and a soundtrack that ties it all together. Play this game. Then hug someone you love. 🜚

"A single, peaceful,

wfmag.cc \ 61

Review

GENRE Cult-'em-up FORMAT

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

DEVELOPER Paranoid Productions

PUBLISHER

Fellow Traveller

£15.99

RELEASE Out now

REVIEWED BY Jon Bailes

HIGHLIGHT -

Whenever you complete your mission, it's fascinating to discover how your actions have affected Alex and the compound as a whole. Depending on the context of the scenario, it's possible to contribute to all kinds of outcomes, from the long-term stability of the camp to a mass suicide pact.

GIS SENT INTO CAMBODIA 1000s MARCH IN OAKLAND

The Church in the Darkness

The first cult is the deepest

he Church in the Darkness harks back to a past of revolutionary anger and utopian ideals, where the possibility of a space outside an imperialist, consumerist society

could still seem real. In a mode that's both nostalgic and cautionary, it reflects on a post-Vietnam USA rattled in its moral surety, from the perspective of a socialist commune in the South American jungle.

This is Freedom Town, where charismatic gurus Isaac and Rebecca Walker lead a few hundred idealists with a doctrine based on Christian values, anti-capitalist rhetoric, simple living, and paranoia. You play an ex-law enforcement officer who breaks into the commune to search for your nephew, Alex, a young convert who's ceased contact with his family.

With its roguelike setup, the twist is that each time you start the game the situation is different, not least the personalities of the Walkers themselves, and with them the atmosphere in the camp. Sometimes, Isaac and Rebecca have become ruthless dictators, sometimes they're hippie bible-bashers, sometimes there's discord between them. Accordingly, Alex may be desperate to leave, or might prefer to stay. The scenario neatly reveals itself as you sneak around the compound, absorbing its sights and sounds. In one game, you may notice more religious gatherings, while in the next you'll witness punishment rituals. And although most inhabitants are always hostile, a handful of friendly NPCs will talk straight about how things are going. But the main indicator is the Walkers themselves, whose voices ring out like God's word from the site's public address system. Whether they're quoting Lenin or Lennon, praising Jesus or Castro, decrying Nixon or Carter, through them you comprehend the disillusion, love, or duplicity that motivates their project.

It all ensures that when you finally find Alex, you'll have a plan of action in mind. Will you leave with him? Knock him out and carry him if he refuses? Or go back alone? Will you seek out Isaac or Rebecca before going? Might you

 Colour coding on enemy vision cones helps you quickly identify the most trigger-happy guards.



assassinate them? Kidnap one of them? Or hear them out? And what about the other commune members – will you kill any that get in your way? It depends what you think is right and how daring you feel, and should you succeed, the multiple endings reflect your choices.

But first you need to survive. The game's core is a set of simple stealth mechanics, where you use distraction items, hide in cupboards, sabotage alarms, and sneak-attack guards for lethal or nonlethal takedowns. You can rifle through desks and chests in the village huts for items, don a disguise that allows you to get closer to commune members before being spotted, or if all else fails, start shooting and looting bodies for ammo.

The simplicity gives it a good pace. Guards are mercifully dumb and short-sighted, with a vision range that's clearly visible when you crouch. It creates an easy rhythm, even

when it devolves into an odd staccato dance, as you alternate between squatting to reveal the wireframe cones and running into the spaces between them. And where guards conglomerate and cones overlap, throwing a rock to unify their direction is usually enough to slip past.

Sadly, it's too basic to meet the needs of the multipath narrative. The camp layout never changes, with only NPC positions reassigned with each restart, and you find yourself criss-crossing the same chokepoints and shortcuts time after time. After a few games, you know how everything works, despite the occasional new elements that unlock, so the only interest left is in triggering different endings. At that point, any failure feels like a waste of time, as there's nothing to learn from it.

The narrative content also loops around too frequently. The same posters and news clippings pop up game after game. Friendly NPCs reel off a near-identical chunk of unskippable speech with each fresh encounter. And while the Walkers make some pertinent points about class struggle and US exceptionalism, you hear them so often it's hard to care. If the aim is to give you the sense that you're being slowly indoctrinated, it kind of works, but it's tiring nonetheless.

It doesn't help that play can be unwieldy and unreliable. Visually, a murky palette makes it hard to pick out guards when the view is zoomed out, while zoomed in it's too close to be much use at all, and the top-down perspective can obscure your line of sight. Procedurally, being spotted during conversation is a real danger, so it's often best to chat from the safety of a cupboard. But with the poorly planned controls, you might accidentally throw a rock instead of hiding, attracting guards to your position. Then Alex might stand blocking your way as you try to flee the danger, or you manage to hide after all,

"It's too basic to meet the needs of a multipath narrative"

but two guards get stuck in each other's paths and can't leave the room. It's infuriating because errors can be fatal, wiping a promising run. And it's a shame, because

The Church in the Darkness is formed around an intriguing idea, not least in how it tests the assumption that social alternatives always fail, even if they often do, and asks you to consider your role in Freedom Town's fate. If only exploring these possibilities was a more substantial and robust experience.



When you first start playing, it's rewarding to search everywhere, to build a detailed picture of the situation.

VERDICT

An original and intriguing concept that never quite gets to shine.





 Being shot down isn't always fatal.
 Depending on circumstances, you might be held captive and have a chance to escape.



Rated

A wonderful score – at times moody, at times melodic – soundtracks your late nights on the Paris streets. *Night Call*'s dark, but humanistic charm is best enjoyed with a pair of noise-cancelling headphones.

Night Call

Review

 Potential fares, sources, gas stations, and your chosen route are all displayed on a 2D map of Paris. 00:33 292.44

90.5

Info

GENRE Visual novel FORMAT

PC (tested)

BlackMuffin / Monkey Moon PUBLISHER

Raw Fury

£15.49

RELEASE Out now

REVIEWED BY Andrew King

VERDICT

Night Call is at its best when it lets you piece stories together. It doesn't do that often.

56%

n *Night Call*, you are a priest. No, not literally. You're a French-Armenian cab driver getting back to work after a brush with a serial

killer lands you in a coma. On your first night back, a cop slides into your back seat to blackmail you into helping her gather information on the killer.

And, just like that, this open-world visual novel has you manning the confessional.

Each passenger comes ready to spill secrets (and, hopefully, pay their fare). A gay man confesses to hiding his husband from friends who think he's engaged to a woman. A washed-

up DJ shares his fury at a younger producer's success. Dialogue choices provide options to absolve them, pour salt on wounds, or stay silent. *Night Call* makes this

metaphor textual when a

priest clambers into your car. You trade stories – he of an old widower who worried it would be a sin to pursue love again, even years after his wife's death; you of the time you encouraged a Muslim woman to keep wearing her hijab after terrorist attacks, despite pressure from her husband to assimilate. 'Cab as confessional' seems to have been a guiding principle for developers BlackMuffin and Monkey Moon.

These conversations are hit or miss. Your mileage will vary, depending on how much you buy the conceit that people will spill their guts to a stranger after the briefest, gentlest prodding. *Night Call* is at its best when it resists the urge to tell all; when it allows you to play detective, piecing together human stories from snippets of overheard conversations.

The actual detective work you'll do in this game is less successful. It's a thrilling joy to nail the killer and lead them, unsuspecting, to the police, but less exciting to wrangle the overcrowded Pepe Silvia-style cork-board of clues back at your apartment. The interface is too busy, the process of sifting through evidence too sloppy.

Money and gas management are sore spots, too. On the easiest difficulty, you'll barely need to engage. But on default, you'll somehow bring in substantially less money than you spend.

"Each passenger is ready to spill secrets (and hopefully pay their fare)"

Noir Father, who art in heaven, visual novels be thy games

I managed to slog through, but ran out of gas on my way to the final confrontation with the killer. There was nothing I could do. I swore off playing *Night Call* 'as it was meant to be played' and started over.

Like a good cab ride, *Night Call* is mostly forgettable but pleasant enough while you're playing it. ⁽¹⁾

 Night Call's best scenes - like this young couple attempting to find a hotel where they can have sex for the first time allow the player to piece together what's going on.



They glance at each other nervously and occasionally grab hands affectionately.



Criminal representation

Car crashes and moral epiphanies in Grand Theft Auto V

t came out in 2013, so why the hell is Grand Theft Auto V the (as of August) best-selling game of 2019? Well, it's because Rockstar has put together a

captivating, endlessly updating, and genuinely fun online component that keeps people engaged and – importantly – excited enough about the game that they want to share the experience with friends, thus meaning those friends go and buy the game whenever it pops up in a sale, which is frequently. It's genuinely savvy work on the part of Rockstar, and that's about as positive as I'm willing

to be about the company, considering the things I won't talk about here thanks to 'laws' and 'libel' and stuff.

Anyway, *GTAV*. I'm still playing it. Genuinely, not just a claim

made to back up the 'best selling of 2019' news. I pop it on and burn my way through half an hour every couple of days, to relax, to muck about, and to completely lose myself in a world that really is better realised than almost any other I've seen in a game before. Six years on, and it still bewilders me how detailed, how smartly designed, how realistic-but-not San Andreas can be.

I don't bother with online, in part because of my woeful internet connection, but mainly because it's just not my scene. Leave that to the kids and those who can be bothered. For me, it's about losing myself in the atmosphere of the single-player experience, going for a drive, seeing what vague copies of landmarks I can recognise from my few visits to Los Angeles, and seeing how the world reacts to my interminable desire to dick about. And it is never ever not fun. At all. Ever.

Except... for when you stray into the actual missions, and have to sit through those cutscenes, and witness that characterisation, and hear yet another female character in the game who is a disposable sex object, a shrill beast deserving to be mocked, or a confident, powerful woman (also deserving to be mocked). Honestly, this sort of thing passed me by back

"Why the hell is *GTAV* the best-selling game of 2019?"

in 2013, I hold my hands up, but playing through it again and genuinely trying to keep a count of how many women are presented... just *normally* in *GTAV*, so far I've managed to tally up Absolutely None At All.

Not one. Play this metagame yourself and see.

But it would be a lie to say this has stopped me from playing the game, and that's the thing here: it's genuinely a struggle to break free of the desire to muck about in *GTAV*, to just put it on for a short while to kill time and blow off steam. The world *is* phenomenal, the mechanics and fundamental design made with such confidence, with such effort, that it almost feels insulting to not acknowledge the technical greatness on show here. From a storyline and characterisation perspective – important factors in *GTA*'s single-player, no doubt – the game is very much problematic. But I can't stop playing, and that makes me feel like the bad guy in a whole other way to what *GTAV* intends. ©

Wireframe Recommends



Sleeping Dogs PC, PS4, XBO, PS3, X360 Arguably a stronger atmosphere than *GTAV* in *Sleeping Dogs*' Hong Kong, and definitely a unique take on the sandbox world. Early on, you don't even have a gun, for example.



PC, PS4, XBO, PS3, X360 The high point for representation in sandbox games, purely down to the fact your protagonist can look however you want, be whoever you want, and it's all catered for. Also: genuinely funny!



Watch Dogs 2 PC, PS4, XBO

The hipster's choice, *Watch Dogs 2* sort of fizzled on release in 2016 – which is frankly ridiculous given it's one of the smartest, most fun sandbox games ever made.

Now playing Criminal representation

wfmag.cc \ 65



Doom

Your best weapon can sometimes be infighting

ID SOFTWARE / 1993-ON / PC, ALMOST LITERALLY EVERYTHING ELSE

Almost liberating. A room

full of baddies blasting that

one lone Cyberdemon"

his would probably be decried these days as a bug, resulting in your now-traditional hate campaign being launched from the seedier parts of the internet, in an attempt to shut down a dev team for having the temerity to unleash such

a Terrible Woe on gamers the world over. See, infighting in *Doom* comes about as a result of the AI not being smart enough to *not* shoot when you're standing in front of it, even if it has an ally between you and it. Maybe it came about by accident and was kept in, maybe it was an intentional design from day one – whatever the case, it's absolutely magnificent. **"When it happens, it's fantastic.**

See, *Doom* – when you're playing it on Ultra-Violence, as you should be (Nightmare is too much, sorry) – is a hard game. It's quick, it's treacherous, it has you grasping for as much ammo

as you can hold, and if you're offered help, you would take it in a second. But you're not offered help. At the same time, you soon realise you're not alone – a room full of enemies sees one species accidentally hit another while aiming for you. The enemy hit turns to face its assailant and... did that shotgun zombie just murder an imp? Why yes. Yes, it did.

It dawns on you soon enough that this wonderful accident (or *was* it?) can be used intentionally; it's something you

can attempt to actually master. On entering any room with a large collection of enemies, you're looking at the angles, seeing where you can position yourself in order to get something else hit, so the aggro will look the other way and you'll – essentially – have an army of demonspawn fighting for you. At least temporarily.

It's not something that's easy to master, mind, and it's too unreliable to be a genuine technique relied on with any real regularity. But when it happens, it's fantastic. Almost liberating. A room full of baddies blasting that

> one lone Cyberdemon is a bizarrely uplifting experience. They're not your friends, but for a brief moment, it might just feel like they are. Wait, this is veering off into a bizarre sadness. The infighting of *Doom* continued

through the series, though it was

formalised with a hierarchy in *Doom 3* and saw plenty of scripted infighting in the 2016 reboot. As with many things, it doesn't feel as anarchic and 'pure' any more – as though it was a little secret or mistake you weren't actually meant to find out about. That's how it felt first time around, and that's a great feeling for a game to confer on you. It's definitely nothing to launch a hate campaign against the devs about. But then, nothing really is. So perhaps people shouldn't do that. ©

Next Issue

ON SALE 12 SEPT



JOHN JOHN WICK HEX

Violent strategy in Mike Bithell's forthcoming Reeves-'em-up

Also

- Fanmade mods and homages to classic games
- Why developers love Brutalist architecture
- How hitboxes make or break a first-person shooter
- Exploring an uncharted ocean in Beyond Blue

Editorial

Editor Ryan Lambie Email ryan.lambie@raspberrypi.org

Features Editor Ian Dransfield Email ian.dransfield@raspberrypi.org Sub Editors

David Higgs & Vel Ilic

Design

criticalmedia.co.uk Head of Design Lee Allen

Designer Harriet Knight

Contributors

Jon Bailes, Lottie Bevan, Vikki Blake, Stoo Cambridge, Konstantinos Dimopoulos, Kyle Hoekstra, Dave Hurst, Andrew King, Dia Lacina, Aaron Potter, Nic Reuben, Jeff Spoonhower, Mark Vanstone, Howard Scott Warshaw, Steven T. Wright

Publishing

Publishing Director Russell Barnes Email russell@raspberrypi.org Director of Communications Liz Upton CEO

CEO Eben Upton

Advertising

Commercial Manager Charlie Milligan Email charlotte.milligan@raspberrypi.org Tel +44 (0)7725 368887

Distribution

Seymour Distribution Ltd 2 East Poultry Ave, London EC1A 9PT **Tel** +44 (0)207 429 4000

Subscriptions

Unit 6, The Enterprise Centre, Kelvin Lane, Manor Royal, Crawley, West Sussex, RH10 9PE

To subscribe Call 01293 312192 or visit wfmag.cc/subscribe

Subscription queries

wireframe@subscriptionhelpline.co.uk



This magazine is printed on paper sourced from sustainable forests and the printer operates an environmental management system which has been assessed as conforming to ISO 14001.

Wireframe magazine is published by Raspberry Pi (Trading) Ltd, Maurice Wilkes Building, St. John's Innovation Park, Cowley Road, Cambridge, CB4 ODS. The publisher, editor, and contributors accept no responsibility in respect of any omissions or errors relating to goods, products or services referred to or advertised in the magazine. Except where



advertised in the magazine. Except where otherwise noted, content in this magazine is licensed under a Creative Commons Attribution-NonCommercial-ShareAlike 3.0 Unported (CC BY-NC-SA 3.0).

ISSN: 2631-6722 (print), 2631-6730 (online)



UNLOCK YOUR GAME

gmaster.iiyama.com

RED EAGLE TM











GB260HSU | GB270HSU | GB2760QSU



GE2288HS | G2530HSU | G2730HSU | GB2530HSU | GB2730HSU

IMMERSE YOURSELF IN THE GAME



GOLD PHOENIX TM

BLACK HAWK TM

ENTER A NEW DIMENSION



SILVER CROW TM

GB2783QSU

)HSU | GB2530H

2530HSU | G2730

4K

1ms 75Hz

ť

Free Sync



GB2888UHSU

2560 X 1440



