RETRO*
GAMER

VOLUME TWO   ISSUE FIVE

Sensi
Soccer
back on the box

>SYNTAX ERROR!

>MISSING COVERDISC?

<CONSULT NEWSAGENT>

SIT DOWN M

retro gamer
#2.05

RETRO*
GAMER

Sega Special
Game Gear, Mega-CD & Sonic

Back to Skool
...with the game's creators

Gaming Ages
Dawn of the digital era

Mortal Kombat
Blood 'n' guts gaming

eMag

hello

How great are magazines? You can buy them in a shop, take them home, carry them from room to room, read them at leisure, read them on the toilet if it suits. And when you've finished with the latest issue, you can file it away for future reference. Magazines really are great.

However, when it comes to relating up-to-date news, magazines are a little snail-like, with websites reporting in seconds what can take weeks in the world of print media. This isn't normally a problem in *Retro Gamer*, as by its very nature the contents aren't time-sensitive, but occasionally some of the things we report can be a little old hat by the time you read them. For example, as I write this, Retrovision organiser Mark Rayson has just confirmed the dates and venues for his next two events. Taking place in Manchester on Saturday 10th and Sunday 11th of September will be Back in Time Live, a collaboration of Mark and C64 Audio's Chris Abbot. Then, in late February next year, the full-blown Retrovision 2006 show will take place in Kenilworth. Details are a bit thin on the ground at the moment, but seeing as you're reading this in the future, further details are probably all over the retro Web like a rash. Head over to **www.retrovision.org.uk** if you don't believe me.

That's me done for another issue. As always, enjoy the magazine (particularly if you *are* reading it on the toilet), and I'll hopefully see you all again next month.

**MARTYN CARROLL
EDITOR**

‹Content v2.05

Desert Island Disks P20
Paul Drury chats with freelance games programmer Paul Carruthers

The Old School P44
Mark Green talks to the creators of Skool Daze, Dave Reidy and Keith Warrington

A Brief History of Videogames Part 2 P62
Spanner Spencer follows the history of videogames through the 70s and early 80s

‹Regulars

Namco is 50!

Pac-Man creator celebrates birthday in style

Namco has never been a company afraid of re-releasing its classic back catalogue to a new generation of fans, and we've had plenty of retro releases from the games giant over the last few years. Namco is now gearing up to launch a new range of classic arcade titles, this time to celebrate its 50th anniversary.

The new release, imaginatively titled Namco 50th Anniversary, will appear on all major formats including PC, PlayStation 2, Xbox, GameCube and GameBoy Advance – so no matter what your poison, you should be able to grab hold of a copy. All home versions will feature 14 of Namco's greatest hits, with the GBA incarnation housing five

retro offerings. The titles on offer in the full-grown version are Bosconian, Dig Dug, Dragon Spirit, Galaga, Galaxian, Mappy, Pac-Man, Ms. Pac-Man, Pole Position, Pole Position II, Rally X, Rolling Thunder, Sky Kid and Xevious. The pack will include a hub section in the guise of a virtual arcade hall in which you'll be able to walk around and select games at your leisure, and Xbox owners will be able to upload their best scores

to the Xbox Live service.

The smaller, but perfectly formed, GBA version will contain Pac-Man, Ms. Pac-Man, Galaga, Dig Dug and Rally X. Strangely, this 'new' GBA outing is almost the same as the already available Namco Museum which has been doing the rounds since 2001. Oh well.

No firm release date is known at the time of writing, but we'll have a full review as soon as we can put our greasy mitts on it.

Arcade Memories

PlayStation 2 collection stirs recollections

Last month we revealed that there was a new Taito collection on the radar, but as we went to print no information on the game was available. Well, wonder no longer as details of this new Taito product have been announced.

Taito Arcade Memories Vol.1 will be a generous retro-powered compilation of 25 of the company's most fondly remembered titles, featuring old favourites such as Space Invaders, Darius, Rastan Saga and Bubble Bobble, as well as

some later games including Elevator Action Returns, Space Invaders DX and Puchi Carat. But given the large number of Japanese-oriented titles in this pack, don't be surprised if the final line-up changes for its eventual Western release.

All the games are going to be the coin-op versions, and the
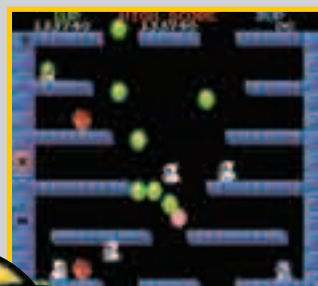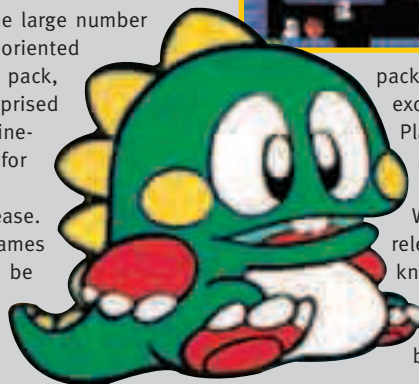
pack will be exclusive to the PlayStation 2. At the moment, a Western release date isn't known, but the Japanese version will be in stores

on 28 July. If all goes well, we'd expect a US release date a couple of months later, and a European date a little after that. Plus, as this is titled Vol. 1, we'd also expect to see further collections in the near future. After all, there are greats such as Rainbow Islands, The New Zealand Story and Puzzle Bubble/Bust-a-Move yet to come.

The latest retro news given to you straight

Handheld Heaven

Zoo promise retro fun for GBA

Brit-soft publisher Zoo Digital continues to support the retro cause with a slew of GBA games planned for release this year. The titles are labelled 'GBA compilations' and will each contain two or more arcade retro releases, redone and slotted into a single cart.

The initial three releases are scheduled for arrival on 1 July,

with the first volume containing Centipede, Breakout and Warlords. The other two packs will feature Super Breakout, Millipede and Lunar Landing, then Pong, Asteroids and Yar's Revenge respectively.

The releases continue throughout the year, introducing retro classics such as Spy Hunter, Super Sprint and Klax to the GBA.
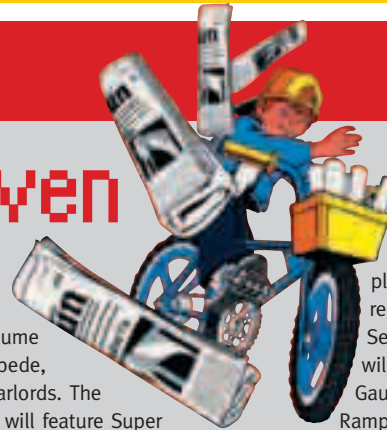
But our two most eagerly awaited packs are planned for release on 1 September and will feature Gauntlet and Rampart in one, and Paper Boy and Rampage in another – all classics, and all well suited to the GBA.

We'll have full reviews of these compilations when they arrive. In the meantime, it's looking very likely that Zoo will soon publish Robocop and Barbarian on the GBA, the former an update of the original 2D arcade game and the latter a reworking of the classic one-on-one sword-fighter (complete with the infamous 'head chop' move.) For more information, and to view the latest release schedule, visit **www.zoodigitalpublishing.com**.

Ikari Returns

Warriors, Warriors, coming out to play

It would seem like there's no end in sight to the TV games craze, with another new unit recently announced by major player Jakks Pacific.

The latest device will be a collaboration between Jakks Pacific and SNK Playmore. However, the new release won't deal with SNK's major product lines like King of Fighters and Metal Slug, but will take a much bigger step back in time and include retro gems Vanguard, Ikari Warriors, and its sequel Victory Road.

Ikari Warriors is the most recognisable of these titles.

Originally released in 1986, it featured superb scrolling action similar to Capcom's Commando, only with a great two-player mode and the ability to commandeer vehicles. Victory Road was released later in the same year and served up more of the same, though the levels and baddies were much more bizarre this time around. Vanguard, meanwhile, dates back to 1981 and is a vertical-scrolling shooter with decidedly garish graphics.

Despite announcing the games on offer already, don't get too excited yet as the SNK TV game

won't be available for some time. In fact, you'll have to wait approximately six months before you can play it. But out of all the TV game releases, we're especially looking forward to this one, particularly if the device replicates the rotational joysticks seen in the Ikari arcade games.

Gunstars Sighted

'Super' details revealed...

Sega has ending speculation by officially announcing Gunstar Super Heroes, the eagerly awaited update of Treasure's Mega Drive classic. Starring original heroes Blue and Red, the game once more sees the Empire attempting to resurrect the God of Ruin, with our fearsome duo vowing to stop its evil plans. The game will be exclusive to the GBA and deliver all the frantic gameplay we've come to expect from Treasure (including the introduction of multiple routes through the game). Gunstar Super Heroes should be available in autumn this year, in time for the original game's 10th anniversary.

Jakks' Back

New Capcom TV game...

Yes, it's another TV game, and yes, it's from Jakks Pacific. The new release will include Ghosts 'n' Goblins, Mega Man, Side Arms, Gun Smoke and 1942 (see this month's Desert Island Disks for more information on the 1942 port). But that's not all. Jakks is also going to release the Capcom Gamekey, a small device that will plug into the TV game and add extra games including Street Fighter II: Championship Edition, Mega Man 2, Mega Man 3 and more.

Sounds like a great idea to us, and maybe more developers will release add-ons like this instead of a never-ending series of sealed units. Both products should be out in autumn.

Diary

Alicia Ashby reports back from world's biggest gaming show, and reveals the latest retro products

What's it like to attend E3? Well, the best description I can come up with offhand is this: it's like being hit in the head, repeatedly, by a blaring neon brick. Once you step into one of the big convention halls, you're assaulted from all sides by flashing lights, roaring sounds, and gameplay footage blazing across dozens and dozens of jumbotron monitors.

At this year's E3, the emphasis was often on the biggest, best and brightest new games – especially with the Xbox 360 and the PlayStation 3 being teased – but there was also plenty of retro action on show, if you knew where to look.

Nintendo, Namco, and Sega all had displays that were particularly friendly to the retro gamer. Namco and Sega's new mobile game lines were rife with ports of classic titles for phones, including Sonic the Hedgehog. Namco's booth was dominated by a giant rotating Pac-Man, and they were giving away Dig Dug T-shirts with the classic logo. At both Namco's and Nintendo's booths, their demo stations were showing off new iterations of the Namco Museum for the GameCube. The Cube version is remarkable in how precisely it mimics the look and feel of the original versions, right down to blurry pixels, stiff controls, and arcade-authentic sounds. We aren't too happy with the way the control buttons have been remapped for each game, but that's just an unfortunate limitation of modern controllers. The version of the Namco Museum we played over at Nintendo's booth featured about six games, including Dig Dug, Pac-Man, Ms. Pac-Man, and Mappy. We can't emphasize how good the ports of Pac-Man and Dig Dug we played were, dodgy control set-up aside.

Elsewhere at Nintendo's booth you could play Space Invaders Revolution, the DS port of the arcade classic reviewed in last month's *Retro Gamer*. The upper screen of the DS shows an arcade-authentic display of classic Space Invaders, while in the bottom screen is a very modern-looking mock-up of what the controls for the little tank you pilot might 'really' look like.

Sonic spoils

Sonic seems to be making something of a resurgence lately, and this was in clear evidence on Sega's stand. In addition to Shadow the Hedgehog (the follow-up to Sonic Heroes for home consoles) and Sonic Rush (a new 2D title for the Nintendo DS), there was Sonic Gems Collection for the GameCube. Remember those old Sonic games they left out of the recent Sonic Mega Collection? Well, they're all here, including rarer titles such as Sonic CD, Sonic The Fighters and Sonic R. It's great to see Sonic The Fighters resurrected, as it was previously only available in the arcades, but we're especially buzzed about Sonic R – not particularly because of the game itself, but because it means Sega has finally cracked Saturn emulation. Surely we can now look forward to a glut of great Saturn games on the current home consoles. Nights anyone? Or how about a Treasure compilation...?

Sonic Gems Collection will also contain a number of Game Gear titles, including Sonic Spinball, Sonic The Hedgehog 2, Sonic The Hedgehog Triple Trouble, Sonic Drift 2, Tails' Skypatrol and Tails Adventures. The video preview we watched suggests that the emulation for all games is absolutely spot on.

In related news, it was revealed that Sega is in the process of updating several of its most popular franchises exclusively for the new wave of consoles. Titles mentioned included After Burner, Virtua Fighter, House of the Dead and, of course, Sonic...

CGE lite

Aside from the new products, the biggest slice of retro action was waiting in E3's 'basement', Kentia Hall. This area is smaller, quieter, and much weirder than the floors above. While the main halls are dominated by giant displays from massive companies like Sony and EA, Kentia is where a lot of independent developers and small manufacturers make their home. In the midst of bizarre offerings like the 'Gamer Chair', and more disc-repair services than I could count, was a long thoroughfare dedicated to the Classic Gaming Expo. Labelled the 'History of Video Games', this exhibit of retro systems ranging from Sega's 32X to the Odyssey

Classic game characters in attendance at this year's E3, including Pac-Man, Link, Frogger and Shadow the Hedgehog

Sonic The Fighters and Sonic R will be part of Sega's upcoming Sonic Gems Collection

were on display for the general public to reminisce over, and in some cases, play on. Even with Madden 2006 being displayed in South Hall, it wasn't hard to find people playing NES Football or listening to the Atari Music Visualization System, the centre-piece of the display.

You could also find an Atari and an Intellivision, along with a large selection of cartridges, ready for playing in areas that were designed to resemble living rooms of yesteryear – TVs housed in wood paneling, lumpy old couches, that sort of thing. Behind these two displays were

giant 'arcade' selections, with working versions of all the old greats ready to be played, for free, by any visitor. Finding any of the machines unoccupied was a rare occurrence, particularly with super-popular titles like Pac-Man. As if this wasn't enough, the History exhibit also featured a dealer and a collection of rare old merchandise. It was fun, and humbling, to boggle over old offerings like the Yar's Revenge flyspray and the original advertising materials for games like Pitfall. Capping off the whole experience were twice-daily performances by remix artist 8-Bit Weapon, followed by give-aways of his CDs. As impressive as the CGE exhibit was, it was actually a last-minute addition. CGE puts on a fuller show once a year, with the 2005 event taking place in San Francisco this August.

One to remember

The next 12 months will see a lot of incredibly powerful new systems hit the market, but it'll also be a year where people keep playing Pac-Man and jumping at the chance to check out Donkey Kong arcade machines. E3 never ends so much as temporarily fades away, since preparing for the show takes many companies the better part of a year. Similarly, classic games never really disappear – they just wait for the next version to come along.

Photographs kindly provided by Jon Jordan.

Convention-goers enjoying retro games in the relative peace and quiet of Kentia Hall

›Micro power

While not exactly a retro item itself, retro fans might want to keep an eye out for the upcoming GameBoy Micro from Nintendo. This is a new facelift for the disturbingly long-lived GameBoy Advance platform that shrinks it down to even tinier dimensions – a little bit smaller than an iPod. Much like the iPod, it also comes in a wild variety of differently designed skins. All the controls were in place, though we couldn't figure out where the right and left trigger buttons would be from Nintendo's admittedly stylish display. Still, the screen display was roughly the size of an iPod's, perhaps a bit smaller, and delivered an amazingly clear and sharp image.

We didn't get to go hands-on with the Micro, but the advertisements were claiming a battery life of about 40 to 60 hours – a figure amusingly phrased as "over ten times longer than those other guys." If you bought the recent NES Classics re-releases for the GBA, you'll now be able to fit the system that runs them in your trouser pocket. The Micro will also keep alive the vast library of GameBoy and GameBoy Color games.

BACK TO THE EIGHTIES

We're going back 20 years to June 1985, when the dark clouds of financial uncertainty were starting to gather around the top of Sir Clive's shiny bald head, whilst Acorn was left scratching its own... yet again...

The first signs of financial instability within Sinclair Research started to surface with the news that it needed £15 million to haul itself out of trouble. With rumours circulating about the possibility of Sir Clive selling off his ailing C5 subsidiary, Sinclair Vehicles, things were beginning to look ominous for Sinclair.

Reports suggested that several companies had already been approached as potential investors in Sinclair Research, so the likelihood of Sir Clive ultimately losing overall control of his own company looked to be highly probable. With the name of Robert Maxwell being bandied about as a prospective suitor, things were taking a turn for the worse. More on this saga over the coming months...

Another company that had already collapsed then been partially revived with a dose of French smelling salts was Oric. The new owners, Eureka Informatique, finally acquired the company from the receivers after a couple of months of negotiations. Eureka attained the rights to all Oric names and products as well as the remaining stock. They also indicated they would be resuming production of

Melbourne House expected all its new releases to be available in the shops some time in autumn

Oric's final project, the Stratos, as well as the Oric Atmos. Nice keyboard, shame about the software base.

And there was yet more woe for the Acorn Group, as the rescue package from Olivetti didn't seem to have stopped the company haemorrhaging cash from every orifice. Olivetti bought a 49% share of Acorn Group, and it was hoped this would be sufficient to stave off the company's financial problems – problems that seemed to be rife amongst the computer producers of the day.

Unfortunately, the cash crisis was not getting any better and, as with Sinclair, selling several of the company's subsidiaries was becoming a distinct possibility. To add further to its woes, later in June Acorn had to suspend its shares for the second time in five months. The outlook wasn't rosy.

It's show time!

It wasn't all doom and gloom, though, on the hardware front. With two major computer shows opening on either side of the Atlantic, there was no shortage of new machines being introduced to the public.

The Sixth Official Commodore Computer Show at the Novotel in Hammersmith, London marked the first UK appearance of Commodore's new C128 machine. With the computer attracting much press and fan interest, the long-awaited release would surely prove popular and profitable for the company. That said, no price structure had been set at the show nor even an official UK release date for the machine, though Commodore did let slip that the C128 would launch around September.

Over in Chicago at the Summer Consumer Electronics

Following the buy-out by Eureka Informatique, the planned Oric Stratos computer was replaced by the Telestrat

Show, Amstrad quietly sneaked out a preview of its new machine, the CPC6128. With the release of the CPC664 just a couple of months before, it was greeted with surprise that the CPC6128 should supersede the 'new' machine so quickly. It was revealed though that, initially at least, the CPC6128 would go on sale only in the US and exclusively through Sears stores. Apparently it would be available sometime in the autumn. Shortly after, Sir Alan Sugar was quoted as saying: "The 6128 will more than likely come to Britain early next year, as there is no need to add to Amstrad's range at present."

Staying at the SCE Show, software companies were pulling out some of the big guns for the remainder of the year. Epyx, responsible for the highly rated Summer Games, revealed its two biggest offerings, Winter Games and Summer Games 2. Featuring different sports but with the same formula, Epyx seemed to be playing it safe by giving the consumers more of what they wanted. Well, if it ain't broke...

A new game from David Crane, creator of Pitfall and Ghostbusters, was previewed to the unsuspecting public under its working title, There's Someone Living Inside My Computer. Granted, not the catchiest title in the world – which may explain why it was later renamed Little Computer People (look for a feature on this classic Sims forerunner in an upcoming *RG*).

Away from the shows and back in the UK, Melbourne House announced the long-awaited news that it would be releasing the first part of its Lord Of The Rings adventure trilogy. Having produced The Hobbit, already a
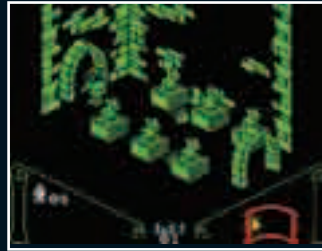
Knight Lore, Ultimate's all-conquering isometric adventure, was voted Game of the Year by *C&VG* readers

classic and a firm favourite with gamers over several formats, anticipation for these forthcoming adventures was starting to bubble quite nicely. The new adventures would initially be released on C64 and Spectrum with further conversions to follow.

And not one for sitting on its hands, Melbourne House also revealed news of another old favourite making a welcome comeback in the form of Mugsy's Revenge. The follow-up to the original Mugsy would feature the same distinctive graphical style and similar gameplay. So, more of the same then.

Pure gold

Computer & Video Games magazine ran the annual Golden Joystick Awards as voted for by its not-unsubstantial readership. Again, no big surprises when the joysticks were handed out at an awards ceremony in London, with Ultimate triumphant in three major categories. Not only did it have Software House and Programmer of the Year awards bagged, but also Game of the Year for Knight Lore. And, for once, Ultimate shed its air of mystery and sent along Louise Stamper to pick up its well deserved awards.

>Games watch

The computer manufacturers may have been in a constant state of torment and anguish, but the software houses were a rather perkier lot, producing some quality gaming fodder with a nice sprinkling of diversity thrown in for good measure.

In *Crash* magazine five games received Crash Smash status, and they were spread over an array of gaming genres. Shadowfire (Beyond), the Sega arcade conversion Tapper (US Gold), Witch's Cauldron (Mikro Gen), Runestone (Games Workshop), and Arnhem (CSS) made up the fantastic five.

Over in *Zzap*-land, and still buzzing from its premiere issue last month, the C64 magazine also had an agreeable gathering of top-rated games. The hot and throbbing Zzap Sizzlers in June's issue included MULE (Ariolasoft), Super Pipeline 2 (Tasket), Pitstop 2 (Epyx), Everyone's A Wally (Mikro Gen), Gremlins (Adventure International) and Lode Runner (Ariolasoft/Broderbund). Finally, two sporting offerings, International Basketball (Commodore) and World Series Baseball (Imagine) chipped in with the last two Sizzlers of the issue.

But the ultimate prize of the Zzap Gold Medal was awarded to an unlikely candidate. Theatre Europe (PSS) was a modern-day war simulation in which you could ultimately launch a chemical or nuclear missile strike on your enemy. To add to the atmosphere and excitement of the game, if you wanted to initiate a nuclear missile launch (which you always did), you had to make a real telephone call to a 24-hour phone line run by PSS which provided you with the authorisation code needed to deploy your weapons and nuke the world.

Finally, this month saw the release of a game with possibly the daftest title ever. Ladies and gentlemen, please be upstanding for Nonterraqueous by Mastertronic. Great name, average game.

We agree with the mighty *Zzap*. Game of the month has to be PSS's Theatre Europe

Other winners included Elite (Acornsoft) for Best Original Game, Lords Of Midnight (Beyond) for Best Strategy Game, Sorcerer Of Claymorgue Castle (Adventure International) for Best Adventure Game and Daley Thompson's Decathlon (Ocean) for Best Arcade Game.

And that was June 1985.

>Top Five Charts (June 1985)

Spectrum
1. **Shadowfire**
   Beyond
2. **Soft Aid**
   Quicksilva
3. **Starion**
   Melbourne House
4. **Tapper**
   Sega/US Gold
5. **Dun Darach**
   Gargoyle Games

Commodore 64
1. **Shadowfire**
   Beyond
2. **Dambusters**
   US Gold
3. **Pitstop II**
   Epyx/US Gold
4. **Soft Aid**
   Quicksilva
5. **Theatre Europe**
   PSS

BBC Micro
1. **Revs**
   Acornsoft
2. **Alien 8**
   Ultimate
3. **Atic Atac**
   Ultimate
4. **Knight Lore**
   Ultimate
5. **Magic Mushrooms**
   Acornsoft

UK singles chart
1. **Kayleigh**
   Marillion
2. **You'll Never Walk Alone**
   The Crowd
3. **19**
   Paul Hardcastle
4. **A View To A Kill**
   Duran Duran
5. **Suddenly**
   Billy Ocean

Rated

Welcome to the *Retro Gamer* reviews section. Read on to discover the team's opinion on the latest commercial releases...

Mortal Kombat
TV Game

Midway's gore-stained monster returns to rip the bloody spine out of the plug 'n' play market

Developer: Jakks Pacific ▦ **Format:** n/a ▦ **Price:** £24.99 ▦ **Players:** One-Two

Back in 1992 a right royal fistfight started in the videogame industry, with the king of all beat-em-ups, Street Fighter II, coming under attack from a young pretender to the throne. Midway's Mortal Kombat was let loose to cash in on the hugely lucrative one-on-one combat craze that SFII had started, and it wasn't long before the masses were firmly entrenched in their camps.

While Capcom's fighter was the better of the two games, boasting tons of moves, silky-smooth play and unrivalled tactics, MK was made all the more appealing thanks to its now infamous blood, gore and fatalities. And, rather than using sprites to portray the action, MK instead opted for a Pitfighter-style digitised approach. Real people were filmed performing various martial arts moves, and the developers captured their actions then squeezed them into the game. The result was an impressive-looking title with dark, gritty environments and realistic fighters spilling blood and gore

›Reptile!

The green-clad ninja can be found alive and kicking in the first Mortal Kombat, but doing so isn't easy. When you reach the Pit stage (with the long drop onto the spiked ground), watch for silhouettes flying past the moon. If you see them, you then need to manage a double flawless victory (don't take any damage), perform a fatality and never hit block during the whole fight (Scorpion and Sonya can't fight Reptile as their fatalities require use of the block button). If you do this correctly you'll be able to fight Reptile at the bottom of the pit. He's a very tough opponent, possessing the moves of both Sub Zero and Scorpion as well as more speed, but if you beat him you'll get a massive 10,000,000 points!

all over the shop. And, when you're a 13-year-old kid, this sort of blatant frosting is just the thing to make you pile in the 20p pieces. Now, thanks to Jakks Pacific, fans of MK can now relive those heady days with this new plug 'n' play release.

Jakks has created this attractive-looking MK unit to accurately reproduce Midway's arcade classic on your home TV, and at first glance the results are

very promising. Looking like a sort of mocked-up arcade unit, the game controller features a specially designed D-pad (complete with jump, back flip and crouch labels) and nicely spaced-out attack and block buttons. The unit is powered by 4 AA batteries (not included), and another watch-style battery (included) for high-score saving. One of the most interesting features, though, of the MK TV Game is the two-player option. By using the supplied connection cable, you can plug in another MK unit for some two-player brutality.

Fight!

The unit certainly looks the part, but is it any good? Well... yes, and no. From a purely impartial point of view, and not sitting in either the SFII or MK camp (we're reviewing the unit, not the original game), we found it a little disappointing. First and foremost is the actual game included on the unit. A quick glance at the packaging reveals true arcade-perfect screens, with the original high-quality sprites and detailed backgrounds. So we were quite excited at the chance to play the arcade original on TV after all this time. Sadly though, upon powering up the game we weren't rewarded with the arcade version of the game, but rather what appears to be a cut-down approximation of the original. Graphics are poorer quality, backgrounds are missing detail and animation, characters are lower resolution, sound is tinny and you can't help but feel slightly robbed. Presumably, these changes have been made to fit

›Finish him!

Of course, no game of MK is complete without the usual collection of over-the-top fatalities, and these mad finishing moves are the main reason why the game did so well in the first place. As you'd expect, this version of the game does have all of the gore and guts in place, including each character's trademark fatality. Here are four of our favourites, along with their button combinations:

Johnny Cage's head-lopping uppercut is the perfect cure for any hangover. *F, F, F, HP (close)*

Raiden delivers a high-voltage power surge to the cranium. *F, B, B, B, HP (sweep)*

Kano always wanted to be a heart surgeon in his younger days... *B, D, F, LP (close)*

Sub Zero gives a very thorough neck massage. *F, D, F, HP (close)*

the game onto to the hardware, but at least show us this version on the box, Jakks! That said, it's not a bad version of MK by all means, and sound aside, it's better than the SNES and Mega Drive home versions.

The game plays quite well, and the control system is effective enough. The main D-pad feels a little clunky, but it's fairly responsive and pulling off your favourite moves is easy. The battery compartment is located in the big red box mounted on the top of the unit, making the pad top-heavy. And once again this brings us onto the subject of batteries. Why oh why do companies insist on doing this? It's a TV game, not a handheld, so why not give us a mains power option, instead of forcing us to use expensive batteries? And, while we're seemingly on the rampage, having to pay for a whole extra unit for two-player games is a bit much, especially as the likes of Radica's recent releases have included two controllers in the one box.

Flawless victory?

So you may be under the impression that we really don't like Jakks Pacific's latest plug 'n' play game, but that's not strictly true. The actual game is fine, if in a rather limited, cut-down way, and the controls are also passable. If you're a MK fan we're in no doubt that you'll love this release, and it certainly saves having to drag out your old system to play it again.

But the lack of a real arcade version and mains power is irritating, and the two-player implementation could have been more generous. *Retro Gamer's* recommendation? Go for Radica's Street Fighter II game instead.

Rating: ⚔⚔⚔⚔⚔⚔ ⚔⚔⚔⚔

Sensible Soccer Plus

Radica resurrects the football legend, along with two of its Sensible stablemates

Long before the FIFAs and Pro Evos of the world were doing battle on the digital pitch for fan loyalty, Kick Off and Sensible Soccer were the two footballing giants kicking lumps out of each other. While the debate as to which was the better game still rages on, there's no denying that Sensi was the winner at the time, and its lighting-fast play and masses of teams, custom cups, leagues and players – as well as that all-important after-touch – made it a class performer in all areas.

OK, so Sensi was never really about realism, as today's games are, but the speed of the game meant that each match was a truly testing bout, demanding fast reflexes, tactics and mastery of the game's super-responsive controls. Yes, it was great, and

thankfully this TV game incarnation (a direct port of the Mega Drive version) is excellent. Although Amiga and ST purists may argue that the only way to properly play the game is via joystick, the Mega Drive version is still great, with all the speed and playability of the original. Even better is that the Radica unit comes with two controllers, so two-player matches are possible (and essential). As an added bonus, two other Sensible classics also make an appearance – the entertaining war game Cannon Fodder and the wacky god sim Mega Lo Mania.

Own goal

With the unit offering console-perfect reproductions of three

classic Sensible games, surely this is a must-have? Well, yes it is, but in truth it's not totally perfect, and there are some small problems – most notably with Sensi. In the game you can edit team and player names, create you own cups and leagues, even save your progress during a season, just as in the original version. Sounds great, expect that there's no actual battery backup in the unit, so once you turn the power off, all your progress and edits are lost. This makes the long-term season play so loved in Sensi pretty much impossible. If only Radica had supplied a save option (like Jakks have with its Mortal Kombat game). The other games aren't affected by this due to the use of passwords, so no problems there. In fact, the only other real problem we have is with Cannon Fodder. Basically, the game never really worked on the Mega Drive, and the lack of mouse control makes the later levels hair-rippingly difficult – you just can't perform actions fast enough with a pad.

Overall, however, we really liked this new Radica outing and there's no denying just how good Sensible Soccer still is. FIFA and Pro Evo may be the kings of football today, but Sensi is an amazing sporting gem that still raises a familiar smile from anyone who picks up a pad (usually followed by howls of disbelief as an impossible banana shot from 30 yards out pings into the back of the net). Cannon Fodder and Mega Lo Mania are great little games too, making this an essential purchase for fans of either title, or just those who want timeless two-player Sensi matches.

Rating:

›The World in your hands

The version of Sensible Soccer featured on the Radica unit is the original Mega Drive incarnation. This is great, and is truly one of the best footy games ever created, but (there's always a but, isn't there?) it would have been even better if Radica had opted for the improved Sensible Soccer European Champions. This enhanced version of Sensi was based on the Amiga/PC Sensible World of Soccer and boasted more teams (a massive 168 teams across 40 nations), extra options (including updated cups like the 1992 European Championship), and the excellent star-player feature that allowed you to bestow three of your team members with superior skills. Names were still amusingly altered, though, with such footballing greats as Eiric Centona, Raan Goggs and Devid Siaman kicking the leather around the pitch.

RETRO REVIVAL

With fresh news that that the long-awaited Duke Nukem Forever is *finally* creeping towards a release, we take a look at the history behind gaming's all-time cheesiest action hero. Hail to the king, baby...

uke's origins are a far cry from his better-known Doom-esque blasting antics. In 1991, Duke first appeared on our screens in a shareware 2D platformer, and a rather cutesy one at that. Even more surprising is that his name was actually Duke Nukum, not Nukem as it is now. This name change was down to legal reasons as a Japanese character also bore the name Nukem, so Apogee decided to play it safe and opt for the alternative surname. But, although the game and the

name were different, Duke was still the blond beefcake he is today – albeit in more sci-fi, Buck Rogers style.

In his first adventure, Duke is up against the evil Dr Proton, an evil genius – aren't they all? – hell-bent on taking over the world. It's a simple story for a simple game. Controlling Duke, you have to jump and shoot your way through the various levels (seen in full EGA, folks!). The environments are interactive, and you're able to destroy security cameras and smash open containers for ammo and energy (in the form of fizzy drinks).

Although a good game at heart, there's no denying that Duke Nukum looks awful, even for its time. The EGA visuals are very poor and the sound is truly ear-scraping. But the seeds were sown, and Duke would be back...

After some digging around, Apogee discovered that the name Duke Nukem wasn't part of a legal minefield, so Duke was bestowed his soon-to-be household name.

In 1993's Duke Nukem II, Duke's success at saving the world from Dr Proton attracts the attention of the Rigilatins, an evil race who ... wait for it ... want to take over the world. The Rigilatins decide that the best way to accomplish their goal is to capture Duke and copy his brainwaves using the dreaded Super Mega Encephalosucker (!) device. Obviously, Duke is none too happy about this, and by using an explosive charge hidden in one of his teeth (as you do), he blasts out of his cell and proceeds to punish the alien threat.

Duke Nukem II is a marked improvement over the original game, looking much better than before. The levels are also bigger, with the whole game four times larger than the first, and

the audio causes far less earache. The actual gameplay is pretty much the same, though, and the old platforming and shooting action is the order of the day.

Things were looking up for Duke, and people were beginning to warm to his carnage-filled adventures, but no one could have predicated how the third game in the series would completely blow the originals away.

Suck it down

By 1996, the gaming world was presided over by a single genre – the First Person Shooter. In this post-Doom era, game developers were frantically looking for their own Doom-killer, with only id itself really managing it with the release of Quake. But simmering within 3D Realms' HQ was a new title – a title that would take the world by storm. This game was Duke Nukem 3D.

A direct contrast to id's dark and demonic Quake, Duke 3D came along and delivered bubblegum comic-book action in real world locations such as Los Angeles. Quake may have had the technical upper hand thanks to its impressive 3D visuals, but

You could be forgiven for forgetting all about Duke's initial outing, a simple side-scrolling run 'n' gun game

The sequel is a straightforward extension of the original, with better sound and graphics, and larger playing areas

Duke had far more character, and people loved it.

Shot down over the streets of LA by an alien race invading the planet, Duke is thrust into yet another world-saving epic filled with guns, guts, gore and strippers. Yes, Duke 3D is no kid's game, and the seedy content, including the ability to hand out dollar bills to scantily-clad strumpets, caused quite a stir – so much so that the game was criticised by various government do-gooders and came under attack from the media.

Scandal aside, Duke 3D is an amazing FPS which uses a sprite-based approach to deliver a rich and interactive world. You can smash glass, see yourself in mirrors, leave bullet holes in walls, and utilise a range of equipment, including trains and security monitors.

The game also boasts several technological breakthroughs for its time, such as being able to create levels with rooms on top of rooms. Plus, the weapons on

offer are fantastic, including rocket launchers, 'freezethrowers' and the excellent shrink ray. And who could forget the genius of the laser trip bomb in multiplayer Dukematches? There's even a co-op mode in which two players can take on the alien menace together.

Duke 3D is a stunning title, even more so considering the simple platformers it evolved from. It came out of nowhere and shook the gaming world.

Come get some more

Duke was a big success, and it wasn't long before fans were creating their own maps for use in multiplayer matches. But people wanted more Duke, and several expansion packs were released. Official packs included Atomic Edition and the Plutonium Pack, and others came in more outlandish guises, such as Duke Xtreme, Duke It Out In D.C. and the bizarre Duke Caribbean: Life's a Beach, which features Hawaiian shirt-wearing pig cops, and

Duke Nukem 3D delivers good wholesome family fun

Always bet on Duke, but don't bet on him being on time. Will Duke Nukem Forever be worth the wait?

weapons like water pistols and coconut launchers! There was even Duke: Nuclear Winter, an official expansion by 3D Realms that sees Duke battling to save Santa's elves from the clutches of the alien baddies.

3D realms had a winning franchise and a veritable licence to print money on its hands. It was time for Duke to expand, and consoles were the obvious choice. Duke 3D appeared on the N64 and the Sega Saturn first, with the Sega offering beating the predictably toned-down Nintendo version. Sony's PlayStation eventually muscled in on the action, although the game the fans got was ill-received, being a shoddy version plagued by poor graphics and nasty controls. Duke then appeared in further console titles, including the third-person Time to Kill and the awful Land of the Babes. Zero Hour on the N64 was a little better, but the PC title Manhattan Project was terrible.

Forever and a day

Duke Nukem Forever is the next game in the core Duke series, and was originally announced way back in 1997. Videos since then have showed incredible scenes on a par with Half Life 2, but delay after delay has led many to believe that the game was in fact made up.

Well, thankfully the game has resurfaced of late and looks set to finally arrive some time this year (but don't hold your breath), courtesy of Take Two Interactive.

We were promised some brand new info at this year's E3 show, but besides assurances that 3D Realms is still actively working on the project, nothing of note emerged. Whenever Duke Nukem Forever finally arrives, let's hope that the game serves up the same comic-book action and adventure that Duke fans have been craving for nearly a decade.

›Mini Duke

In addition to his computer and console adventures, Duke has also appeared on a number of handhelds. A homage to the early 2D platform games appeared on the GameBoy Colour in 1999, and Duke even starred in his own handheld game systems from Tiger Electronics. (He appeared in an LCD shooting gallery game in 1996, while Tiger's Pocket Pro Portable gaming system received its own version of Duke 3D in 1998.) More recently in 2002 Duke appeared on the GBA in Duke Nukem Advance, a 3D FPS, and he's also made appearances in various mobile titles for phones and PDAs.

Duking it out on the Tapwave Zodiac PDA...

This month Jonti Davies spends some time with Taito's new Space Invaders compilation. He also looks back at one of Nintendo's finest puzzle games and ventures into Japan's distant past. *Itadakimasu!*

›Legends reborn

Cultural heritage and folklore play a major role in Japanese game design. We caught up with Goemon and pals to find out more about the historical roots of Konami's old Japanese games

Left, Konami's version of Goemon, and right, the character from Japanese history on which the games are based

Goemon isn't a Konami character. No, our friend with the dyed blue hair, who appears in Konami adventures on formats from the MSX and Famicom to the Super Famicom and PlayStation, is Konami's rendering of a real Japanese legend. Yes, Goemon actually existed – and spent much of his time in Kyoto!

Ishikawa Goemon, to give him his full name, was a notorious thief who lived from 1558 to 1594. The reason his life was cut short – and became the catalyst for so

many tales and Konami games – is that he was eventually executed by a rather nasty method: being thrown, along with his son, into a bath of boiling oil. In Japan today, the term Goemon-buro is used for a large iron bath such as that used to kill the Edo period's number one renegade samurai.

Some of the best Goemon games have been released in the West under the Mystical Ninja title, the original SNES game being the high point. But there are many Goemon releases that remain Japan-only productions – check out Ganbare Goemon 4 on

the Super Famicom for the craziest of all the games in the series. The 8-bit Famicom and MSX originals are also well worth tracking down. There's cross-pollination, too, with Goemon appearing in countless novels, fables, TV dramas, and *kabuki* theatre plays. A supposed descendant of Ishikawa, Goemon XIII, also appears in the excellent

Lupin anime series.

The greatest thing about Konami's Ganbare Goemon is its wonderfully Japanese sense of humour. Most of the time, for instance, Goemon's companion is more of a comical sidekick than a helpful aide. His name in Konami's games is given as Ebisumaru, but it seems likely

›Daihitto! Award

## This month's Daihitto! award goes to Nintendo's supreme Panel De Pon for the Super Famicom

If it's an unwritten law that block-based puzzle games should drop their blocks from above, then most games in the genre are law-abiding citizens. One unruly girl from Kyoto, however, insists that her blocks rise from the bottom of the screen. This is the upside-down, super-entertaining citizen named Panel De Pon.
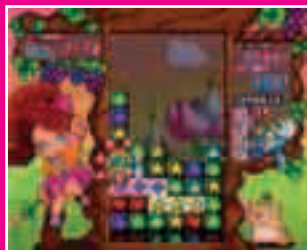
The logic behind Panel De Pon is simple. You control a cursor which can swap blocks one by one on a horizontal level: match three or more blocks of the same colour and they disappear, postponing that Game Over screen. Clever use of the cursor makes it possible to remove five blocks at a time – connected horizontally – and chain combos that bring mucho bonus points.

The two-player versus game is as compelling as any other multiplayer puzzler you'd care to mention. The screen is split vertically and good play sends bad blocks to the opposing player. It's the kind of two-player game you can play on an infinite loop – it never grows old.

But it's the little things that really confirm Panel De Pon as a puzzle great: the backdrops and animated characters, the character selection screen, the password system revealing new players and stages, and the mad catchy music. Only the soundtrack remains unchanged in Nintendo of America's Tetris Attack adaptation of this NCL classic. For our Yen, we'd recommend the Super Famicom original.

Ganbare Goemon 4 on the SNES (left), and Ganbare Goemon 5 – aka Mystical Ninja – on the Nintendo 64 (right)

that he too is based on a legendary Japanese character: Nezumi Kozo.

Like Ishikawa Goemon, Nezumi Kozo was something of a Japanese Robin Hood, robbing the overlords to help the underpaid. He lived a couple of centuries later than Goemon – being beheaded in 1832 – though, from a Japanese perspective of time, the two characters' lives are covered by the single Edo period.

Nezumi was, for some reason, affectionately known as 'Rat Boy'

– and this oddness is translated across to Ganbare Goemon where Ebisumaru appears as a camp yet likeable fellow with some very peculiar habits (witness his almost-naked hula dancing at the start of Ganbare Goemon 5).

OK, history lesson over. Now go and find some Goemon titles for your Nintendo consoles – there's no other series which so magically captures historical Japanese elements together with great gameplay and wacky humour.

›Space Invaders on PSP

We picked up a copy of Taito's new Japan-only Space Invaders compendium for the PSP. And it's rather good
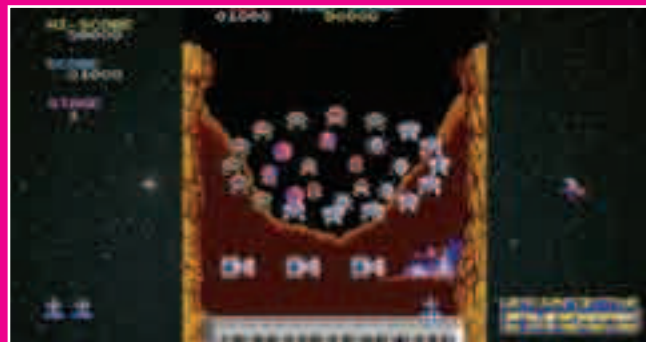
It all started more than 25 years ago, but that hasn't deterred Taito from porting Space Invaders to Sony's newest gadget. On the PSP-exclusive Space Invaders Pocket, almost every Taito Invaders release is here and presented immaculately.

For Y3,980 (about £20), Space Invaders Pocket collates perfect replicas of some true classics – Space Invaders (mono and colour-overlay versions), Space Invaders Part II, Return Of The Invaders, Majestic Twelve: Space Invaders Part IV (aka Super Space Invaders), and Space Invaders '95.

Of these, the original is in a league of its own. The PSP is hardly a natural environment for any 1978 release, but it actually looks very impressive on the PSP's amazing display. And the play patterns remain intact so there's no need to realign your Invader shooting habit.

But going back to Return Of The Invaders, and especially Space Invaders '95, is a revelatory experience. There are some crazy enemy wave dances in Return, and its difficulty curve is spot on. Plus it looks very nice to boot – not quite as pretty as Space Invaders '95, though.

SI'95, released in Western arcades as The Attack Of Lunar Loonies, originally ran on Taito's F3 hardware. This is a game from the same era as Bubble Memories and Elevator Action Returns, and it shows: it's the videogame equivalent of a packet of Starburst! The gameplay is intriguing – melding the original's design with updated vertically-scrolling progression, formidable bosses and lots of weird and cute characters, '95 is Space Invaders after a complete change of personality.

For all the quality of these games, though, we must air a few minor complaints. There's no multiplayer on this compilation, for one thing, and the only extra material is a brief screen of history text which accompanies each title. But the options menus are welcome, and the games (for the most part) are timeless.
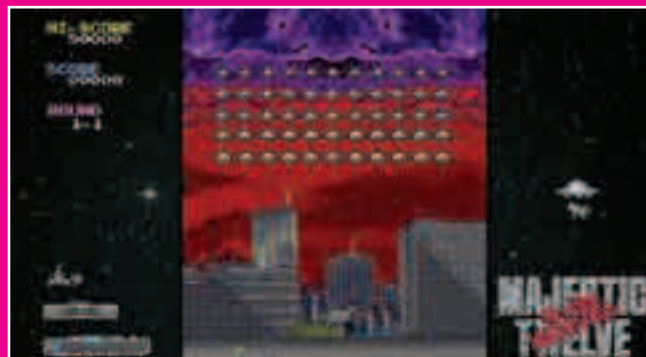
Desert Island Disks

ISLAND DISKS

Paul Drury chats to programmer Paul Carruthers. You may not recognise the name, but you've almost certainly played his games

Freelance programmer and all-round nice guy, Paul Carruthers

I got into games programming through plonking," smiles Paul Carruthers.

There's a pause while we start to worry that this is street slang for some bizarre sexual practice – and wonder how that could possibly have led to him setting up his own software house, programming Mortal Kombat for the Mega Drive and heading up the Warhammer Online team. Thankfully, Paul puts it all in perspective.

"With plonking, you fold a Kit Kat wrapper into a ball,

throw it from your seat and try and make it land in someone's tea. With a plonk."

OK. Still sounds bizarre, though less painful than the scene we'd imagined, and we're struggling to see the connection with a career in the games industry spanning almost 20 years.

"I was working at Loughborough University as a demonstrator on the Maths Undergraduate course," Paul continues, "which also involved producing educational software for the BBC Micro. It was a nice office, everyone clicked, and one bloke did a bit of animation with

a sprite of a teacup and a Kit Kat you could drop into it. It wasn't exactly a game, but it was kind of fun. We started adding other bits... I noticed a student had written that some senior lecturer "fucks chickens" on the back of a chair, so chickens went in. Michael Hayward and Ian Saunter, bosses from our publisher Logotron, dropped in one day, saw it and said the company was moving into entertainment software – and if it ever became a game to ring them."

Encouraged, Paul and another of the group, Ian Downend, completed the game in their spare time between tutorials – the Kit Kats had to go for legal reasons, but happily the chickens

make the cut – and the game was christened Xor. Released on the BBC Micro in 1987, and later appearing on the Electron, Spectrum, C64, Amstrad, Amiga and ST, it was very well received,
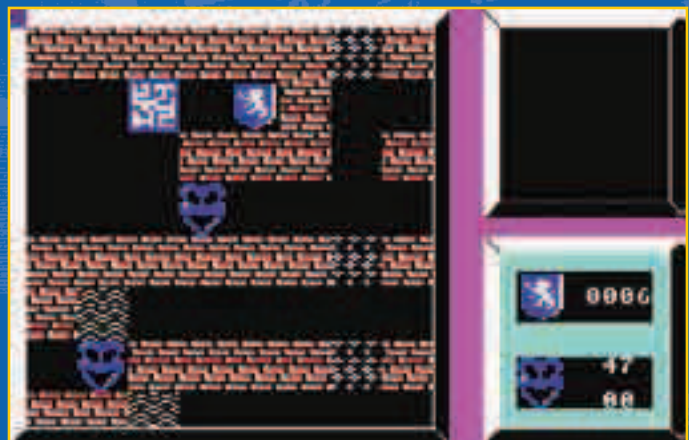
Xor, Astral's first game, was released on a number of platforms, and an updated mobile-phone version is currently in the offing

"We quit our posts at university and set up Astral Software... I remember my dad couldn't believe I was leaving teaching to write stupid games"

scoring an impressive 910 out of 1000 in *ACE* magazine. It has since spawned a number of remakes, including one by Ovine by Design which has graced the coverdisc of *Retro Gamer* (issue 4).

"We decided that, yes, this was our kind of job, so we quit our posts at the university and set up Astral Software – without any real idea of what we were doing. I remember my dad couldn't believe I was leaving teaching to write stupid games."

Astral plane

It must have come as quite a surprise to the Carruthers family – none more so than to Paul himself, who was rather late to games design. Yes, he could program in ALGOL 60, a language for mainframes – but this seemed to primarily involve bashing out punch-cards via a huge clunky keyboard, then handing over a bagful only to receive a message reading "Syntax Error Line 45" two days later. He didn't get his fingers onto the rather smaller rubber keys of a Spectrum until he was studying for his degree.

"Owning a Spectrum was magical, but programming a whole game seemed too complicated. I spent all my time doing arty animations. In fact, I did this visual sequence along to music, where sounds triggered changes in the graphics, and it won a competition in *Personal Computer World*. My prize was a Commodore 64 – presented to me by Barry Norman!"

Developing this primitive light synthesizer – and the talent he had for computer animation – had helped Paul land the job at Loughborough, where he'd produced animations to help illustrate experiments. They also proved useful skills when writing a game. With enough money from Xor to pay themselves a salary, the two partners confidently set to work on Quadralien. The confidence turned out to be misplaced.
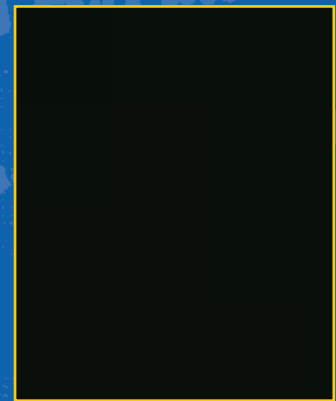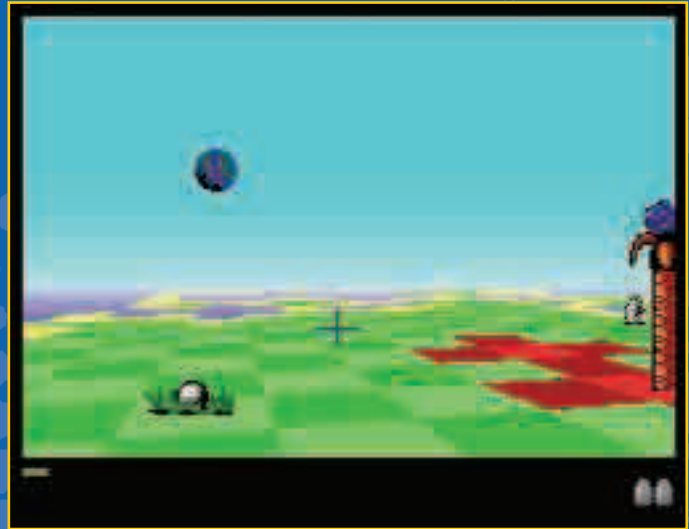
"It was a terrible game," he confesses. "Now we were part of a publisher and it was sticking its oar in. It said the game had to have shooting in and had to be in space, because that sells. It ended up a mixture of the puzzle game we wanted to make and what the publisher wanted – a hideous mish-mash and no fun at all. It was my first experience of marketing being seen as more important than anything else."

It wasn't to be his last experience, either. We wonder whether the environmentally-friendly theme of his next game, the fondly remembered Archipelagos (appearing on the ST, Amiga and PC in 1989), was actually his ode to Greenpeace?

"No, that too was down to marketing. Though to be fair, we had invented a very abstract game and you can't put those out, so the publisher made it into a story to bring the elements together." So are you saying that the follow-up, Resolution 101 (entitled Hoverforce in the States), which challenged you to stop the distribution of mind-altering drugs, was not a personal comment on late 80s rave culture?

Paul chokes on his pint. "God, no. Marketing again. I always operated from the game point of view, which was at odds with marketing, and still is today with story-driven games. We had a good 3D engine for those games – well, a clever 2-and-a-half-D engine, which worked when others struggled – and again the publisher added the storylines. But Logotron was an interesting company and we stuck with it."

Logotron was indeed an unusual publisher, prepared to take risks, and subsequently evolving into Millennium – which in turn split into Creaturelabs and Sony Cambridge. But Astral Software, despite going on to produce Horror Zombies from the Crypt and Stormball in 1990, wasn't evolving. Paul and Ian were still working out of an office at the back of a toy warehouse on an industrial estate in Loughborough, which was so

small one of them would have to leave the room if the other needed the toilet. Paul felt the need to move on, on many levels.

"Astral kind of fell apart. We were just on different paths. I wrote Stormball at home and it shows. I think the best games are when you have two or three people tuned in to each other and you can bounce ideas around. It was a shame Ian and I

split, but I realised it wouldn't always be possible to just phone up a publisher and say, 'I did Archipelagos and I have a great idea!'"

Probing around

By 1991, Paul was back on his own and so was especially pleased to receive a call from Tony Beckwith –

Following early success with Xor, and the misfire that was Quadralien, Astral garnered great reviews with Archipelagos (top) and Resolution 101
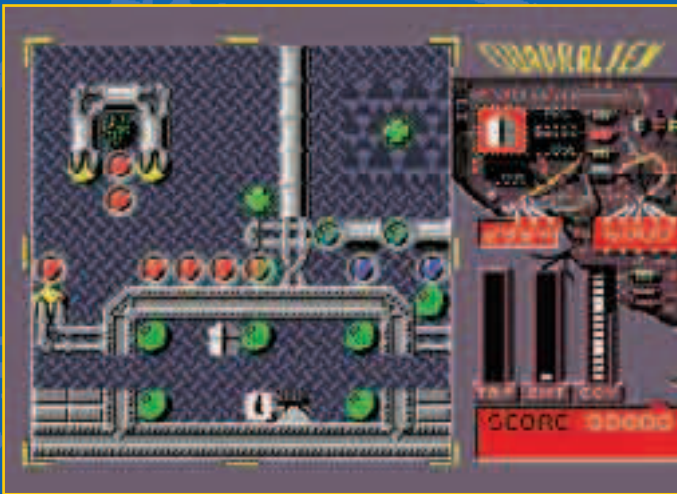
Other games by Paul include (clockwise from top left) Quadralien, Stormball, Terminator 2: The Arcade Game and Horror Zombies from the Crypt

producer of Archipelagos and Resolution 101 – who was now at developer Probe and looking for programmers.

"He was offering me twice as much money as I'd been on, plus it was Terminator 2: The Arcade Game. You couldn't say no. I had the chance to play the arcade game, then they sent me the graphics and I programmed it up... quite badly, I have to say. There were some bugs in there later on in the game that really pissed people off."

Paul then proceeds to apologise for the 'lost variable' that prevented you shooting the head off one unintentionally indestructible robot. He talks with a refreshing honesty about the projects he's worked on that were duds, though this was invariably due to external pressures, rather than a lack of commitment on his part to do a decent job.

"I had five months to do Terminator 2, so it wasn't a bad feat. Probe was the kind of company where you produced a product on a conveyor belt. There was no time to craft or finely tune a game – you were chucking them out. Be paid, chuck out another!'

So the Probe production line rolled on, and Paul was mighty fortunate to be handed the Mega Drive conversion of the first Mortal Kombat, this time with the original source code – allowing him to use algorithms from the arcade game to create a console version that compared favourably with its big brother. He sensed this was going to be big, but failed to convince his friends, until they all went to see the film Jurassic Park...

"Before the film started, there was an advert for Mortal Kombat and my game was up on the screen. I looked over and the whole row of my mates were pointing at the screen, then at me, going 'But isn't... that...' and I'm nodding, saying, 'I told you it was going to be massive!' Acclaim had spent an unprecedented amount of money on advertising and it paid off big time – it sold six million units. That's fucking good!"

We can't help but wonder if Paul ever saw much of the huge profits it must have created. He mumbles sheepishly. "Well, it did pay for my house..."

Maybe he'd now own most of his street if he hadn't turned down the conversion of Mortal Kombat 2 and instead opted to work on – wait for it – Pagemaster for the Mega Drive.

"That was very, very stupid. I thought all the hype around Mortal Kombat would mean the sequel would be banned and I thought it was time to move into movie licenses. Looking back, that was pretty stupid too. Marketing people get involved. Like with Batman Forever, they wanted a beat-em-up because they sold, but platform games do well, so we should make a two-player, platform beat-em-up – that'll be fantastic! You mix all that up and you just get mud. Nice graphics, shit game."

LA story

Paul's time at Probe also saw him complete Bubble Bobble for the PC and the Mega-CD version of Mortal Kombat (he grimaces when he recalls how the action froze and the drive clicked and whirred as character graphics were dragged from the CD into the unit's tiny memory). But by the mid-90s, things were changing. The launch of the PlayStation led to the bubble bursting for Mega Drive conversion work, and Paul decided to join the growing number of British programmers who'd moved to Virgin Interactive in Los Angeles – among them Dave Perry and Doug Hare – for a new challenge and hopefully some fun.

"Everyone was in the office from 8am till 6pm. It was this big, dark, hot building with silver windows, and you were in there all fucking day! By the time you were out, it was dark. I ended up thinking, 'Hold on, I'm

in a tropical paradise, but spend all my time in an office with a load of Brits – I might as well be at home.' That world just wasn't right for me – hot, but dull."

How apt, then, that the film-licensed game he was working on, which was never released due to the movie flopping spectacularly at the box office, was Escape From LA. Paul did exactly that.

"I came back and sat in a pub with a pint, a freelancer again, and just thought, 'This is a lot better.'" Paul did manage to leave the pub eventually and set up Anthill Studios, initially with old Probe colleague David Leitch, who'd been sensible enough to take on the Mortal Kombat 2 project. But whilst they had an excellent combined portfolio, they found the industry had changed and publishers were very careful who they handed out work to. The partners disagreed on how to move forward and David left, but Paul continued with Anthill and, between 1998 and 2000, produced two PC titles – Rat Attack and Archipelagos 2000.
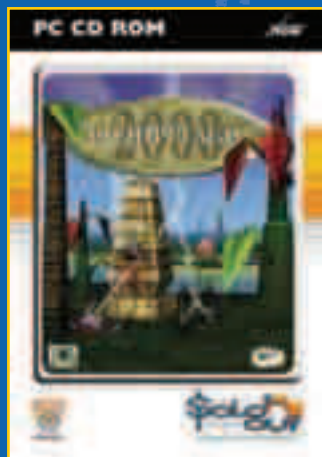
We assume revisiting Archipelagos allowed him to explore and develop the ideas he had back on the Amiga and ST, the modern hardware giving more power to his imagination…

"Did it hell," he laughs, this time actually spitting out his beer. "It was done for Sold Out, the budget label, and I had to do it in three months or lose money. I just broke even. But it was a full 3D version of the original at a cheap price."

With Anthill essentially a one-man band, Paul was starting to feel the strain. "I wanted to do the work, but not the accountancy, the sales, the employing people. I just wanted to be handed a game and get on with it."

So a call from developer Climax, who was looking to expand its single-studio operation in response to a growing workload, was certainly welcome. Initially, there were talks about Paul handling a Dreamcast conversion of Turok, but this developed into the suggestion that Anthill became a Climax Studio, and with friends around, many from Probe days, it was a very tempting offer. The icing on the cake was the big project they were to work on – Warhammer Online, a highly ambitious attempt to make a Massive Multiplayer Online game from a much-loved and internationally recognised franchise. What could possibly go wrong? The fact we aren't playing it and the way Paul is staring miserably into his pint speaks volumes.

"I don't really want to delve into all the stuff that happened. There were a lot of, erm, shenanigans… I left before the project was cancelled and I do take some responsibility for what went wrong, but there were so many people involved, each pulling it a different way and all trying to make something out of it the others weren't. I was in the middle, without any power, being blamed for something I didn't really have control of. And people forget how difficult and expensive producing an online game is. The first year was spent getting the contract done, which ended up a foot high – literally. The tech team were fantastic and the demos looked superb, but we were trying to

Paul hit the big time with the Mega Drive version of Mortal Kombat, then delivered a high kick to his own head by passing on the sequel

pour a quart into a pint pot. I prefer to think of it as all in the past."

The whole experience clearly left a nasty taste in Paul's mouth, which he now attempts to dispel through a large swig of bitter. But this story has a happy ending, and one with a delicious retro flavour. A former boss at Probe, Fergus McGovern, called with an offer of work, which he assured Paul he would enjoy. It was to produce conversions of 1942, a game he liked playing in the local chippy back in the day, and Fire 'N Ice, just the sort of puzzle-cum-action title Paul revels in, for the Jakks TV Game Plug and Play joysticks.

"To come back to bedroom coding was wonderful. After all the stress at Climax – managing a team of 50 people, doing spreadsheets, entertaining people who weren't interested in the game, having that constant Monday morning feeling and nothing to show after three years – now I wanted to get up every day and make something. And in three months, I had. It made me realise, at heart, I'm a creative person. I need that in my job."

2D roots

Despite not having programmed for three years, and confessing to a few nerves, Paul is pleased with how the conversions have turned out and is currently working on mini-games for an

unannounced project with Nokia. As we walk back towards 'Mortal Kombat Kottage', located in a particularly leafy part of Nottingham – the city Paul's called home since he was ten – he starts to enthuse about the potential of mobile-phone gaming.

"It's a new market, you can have really small teams and budgets are tiny, so people are taking risks and that's when interesting things happen. I firmly believe the 2D era of games was brutally cut short by the PlayStation and there's a whole swathe of games that weren't made because of the advent of 3D. So many people own phones, there's a real market for not retro games as such, but games with a retro feel – simple, fun, interesting 2D games. Whole new genres, perhaps."

With a pedigree that stretches back to the 80s, a profound understanding of the machinations of the industry and a clear belief that 'the game's the thing', Paul might just be the man to deliver something truly special. And all thanks to plonking.

Prior to his work with Climax, Paul put out Archipelagos 2000, an updated version of the 16-bit original, and Rat Attack, a console puzzler

›Paul Carruthers' Desert Island Disks

Arcadia
Imagine, 1982, Spectrum

I was living in a student house and we played this game night and day on the Spectrum. My fingers ended up all gnarled and pained. I was fascinated by how they could make a game like this, as I was still programming in BASIC. I kept thinking, "How can they do that – it's not in the manual!' Then I found out about this thing called machine code...
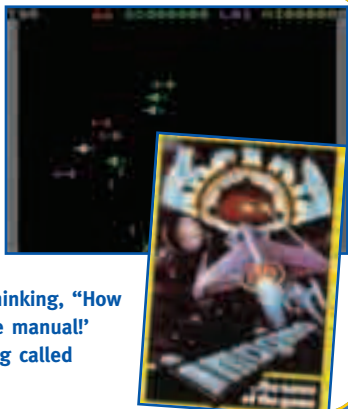
Super Mario 64
**Nintendo, 1996, N64**

For me, it encapsulated what a 3D game should be. I hadn't believed you'd be able to control a figure properly and make a playable game, but this is corking – everything about it is right. You look at the whole of the Mario series and there's not much wrong, but this just said that 3D games were in. And I thought that if people could make something as enjoyable as this, they were here to stay.

Phoenix
Amstar, 1980, Arcade

The first proper game I played a lot. At uni, there were two machines in the Student Union – an original Puckman and a Phoenix. I'd watch people playing over my pint and learn techniques – like how to defeat that mothership, which had been killing me every time. It was my first experience of really being drawn to a game – the visuals, the animation, the sound... it just held all my interest.
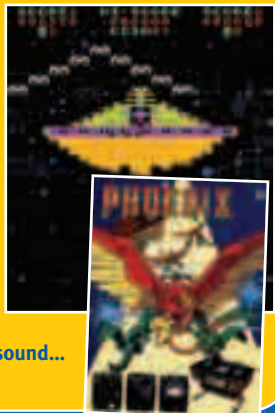
Deus Ex
Eidos, 2000, PC

I hate First Person Shooter games, but still play them. And I'm not very good. I've tried multiplayer and people at Climax will confirm that I'm rubbish. But this I love because it did other things – it experimented and it worked. A great storyline and just wonderful throughout.
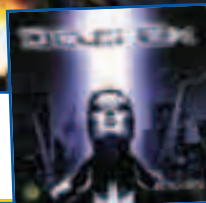
Little Big Adventure
EA, 1995, PC

This really grabbed me. I was struck by how big it is and the attention to detail. It was obviously made by someone who cared about it. Even the bits that are hardly seen are still good. I love the graphic style, which is just gorgeous, and it has a great soundtrack – unusual, very French and a bit haunting. The emerging story is just so integral to the game and I felt depressed when I finished it. I just didn't want it to end.

Fire 'N Ice
Tecmo, 1993, NES

I hadn't even heard of this before I was offered the conversion, and as I started playing I realised it was the perfect puzzle game. It's so simple, with maybe four or five elements in there, but they've made 150 levels from those components... plus gravity. The difficulty ramp is just perfect, starting easy and bringing in other elements, until halfway through it gets really challenging. You're staring at the screen thinking it can't be done, then you try some combination... fantastic!

Zelda: Link's Awakening
Nintendo, 1993, GameBoy

I fell in love straight away. I don't care if people call it an RPG – it's a puzzle game, with such wonderful, dynamic, interesting puzzles. I hadn't seen them hidden in a storyline before – the way you move through the world by solving them and how the tools you find allow you access to places you've already seen, but couldn't quite reach.. It took me ages to finish the first dungeon and then I found out there were 10 more or something. I thought, "God, I'm going to be playing this for the rest of my life!"

Zoo Keeper
Ignition, 2004, Nintendo DS

I can't stop playing it at the moment. It's a retro game, in that it has all those elements I think interest people in retro games – simple, perfect for five minutes before the bus arrives, and it has a certain abstractness about it... yes, they're animals, but they could be anything. You just have to place them next to each other. I could play it for hours. And have done.
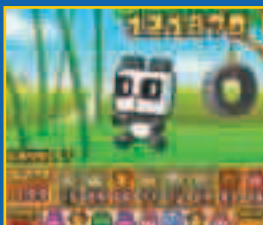
SEGA
GAME GEAR

When Nintendo first released the now-legendary GameBoy, Sega found itself suddenly lagging behind the redoubtable competition. Without a portable system, and with the Mega Drive struggling to overthrow the technically inferior Famicom, Sega was losing sales, and, more importantly, recognition. This was an intolerable situation for a company already having to put up with the fact that Nintendo had become a house-hold word, almost synonymous with videogames.

But it seemed that making a system to compete with and even crush the GameBoy wouldn't be difficult – the GameBoy had some major limitations, the most obvious being the unlit yellowy-green screen. Given the GameBoy's less-than-dazzling monochrome palette, and a screen almost impossible to see except in direct light, Sega assumed that a portable that fixed these issues would be almost certain to succeed.

Sega was also packing a second silver bullet into what they internally referred to as 'Project Mercury' – the new portable console would be essentially a miniaturised Master System with a more powerful video processor. The intention was not to make Project Mercury backwards compatible with the Master System, but to make it very easy to port Master System games to the new system. Basic ports could be accomplished by putting an unaltered Master System game into the physically smaller cartridges designed for Project Mercury. Any major porting work would be limited to updating the graphics to take advantage of the new system's expanded colour palette, and potentially enlarging sprites to compensate for the smaller display area.

Learning another lesson from Nintendo's brick-shaped and moderately awkward Game Boy, Sega designed Project Mercury to be shaped similarly to a Mega Drive controller, with the display in the centre. In theory, the curved sides and wider spacing between the left and right control surfaces would make Project Mercury much more comfortable to use than the GameBoy.

Mercury rising

On 6 October 1990, Sega unveiled Project Mercury in Japan as the Game Gear. Imitating one of the GameBoy's strengths, Sega made the Game Gear's first release and pack-in title a falling-block puzzle game, similar to Tetris, called Columns. It had already been released as an arcade cabinet earlier in 1990, but after the Game Gear release, Columns would become so popular it would be ported to every system Sega ever released. It would also eventually find its way onto almost every other major console, up to and including the

Early hits on the Game Gear included (clockwise from top left) Columns, Super Monaco GP, GG Shinobi and Ax Battler

Sony PlayStation 2, and would inspire innumerable PC clones in the shareware and freeware arena. The second game released simultaneously with the Game Gear was much less inspiring, a port of the now largely forgotten Sega arcade title Pengo.

Prior to 1990, Sega had seen some success marketing the Mega Drive as a more 'mature' system than the NES. The system's pack-in, Altered Beast, was held as a stark contrast to the cartoonish Super Mario Bros., and the company had launched a long string of adverts of varying levels of viciousness attacking the NES. This would cement the company's reputation as the bad boy on the block, and it was only logical for Sega to use the same techniques to market the Game Gear, which they were already positioning as the 'grown-up' alternative to the GameBoy.

The Japanese advertisements for the Game Gear were typically inoffensive Japanese commercials featuring typically inoffensive young Japanese ladies showing off the system. But for the Game Gear's overseas release in 91/92, Sega would begin using what would prove to be the most successful ad campaign the company ever devised. The earliest overseas commercials were the sort of unobjectionable 'hip for 12-year-olds' adverts that had sold the Master System, but these were quickly supplanted by a new campaign designed to go for the public's throat with a tone of calculated cool. In the UK, Sega used the brash slogan "To Be This Good Takes Sega." The American campaign was equally brash, though more immediate (and, some would say, more cringeworthy), using a simple staccato cry of "Sega!" to punctuate each advert.

This new campaign was anchored by surprisingly vicious attacks on the GameBoy, attacks largely focusing on the graphical deficiencies of the system. One declared the Game Boy's graphics to have "green spinach colour," while another said, "If you were colour-blind and had an IQ less than 12, then you wouldn't care which portable you had." This would dictate the tone of Sega's advertising for the Game Gear for quite some time. The adverts that weren't direct attacks were more cool and irreverent, like the infamous 'How'd He Do That?' commercial, featuring a tough, leather-clad biker in a vaguely Australian setting and his TV Tuner-equipped Game Gear.

The scorched-earth advertising campaign was markedly effective at grabbing attention, and, coupled with the runaway hit Sonic the Hedgehog, was effective enough that the Mega Drive finally moved into first place in the worldwide console market. However, the Game Gear had problems serious enough that not even a compelling advertising campaign could make it the success Sega wanted and expected it to be.

Bigger and better?

The development of the Game Gear had focused on making a handheld system that was technically superior to the GameBoy in every way possible.

> "The most important tradeoff was battery life. The Game Boy was capable of running for over 30 hours on four AA batteries. With the backlight, full-colour, 3.2in display, the Game Gear's power consumption skyrocketed, with the system requiring *six* AA batteries to provide just three to five hours of play"

"If you're still playing with GameBoy, it's time to grow up." Sega didn't pull any punches when it came to advertising the Game Gear

© 1991 SEGA

›Master of disguise

A popular misconception was that the Game Gear was intended to be a portable Mega Drive. In fact, it was almost a part-by-part copy of Sega's modestly popular 8-bit Master System console. The most significant difference between the two systems was in their graphical capabilities. The Master System was capable of displaying screen resolutions of 256x192, 256x224, or 256x240, and could display up to 32 colours on screen simultaneously, from a palette of 64. The Game Gear had a lower display resolution, 160x144, but could display 32 simultaneous colours from a palette of 4,096.

The two systems had other minor differences, the most obvious being that the Game Gear lacked a port for card-style games and could only play cartridges. It also didn't have the Yamaha FM chip for sound synthesis, but most Master Systems released outside of Japan didn't have it, either, so few games were ever made that supported it.

Sonic made a very decent debut on the Gear Gear with a scaled-down version of the 16-bit classic. Sequels and exclusive spin-offs duly followed...

Sega had addressed the graphics and physical shape of the console, and, in that respect, the system's design was a success. But there were several tradeoffs in that design to support the technical improvements Sega had incorporated.

The most important of these tradeoffs was battery life. The GameBoy had very low power consumption and was capable of running for over 30 hours on four AA batteries. This was largely due to what Sega pointed out as the GameBoy's biggest weakness – its display. The GameBoy's screen had no backlight, and the four-tone display itself required little

power. With the backlit, full-colour, 3.2in display Sega incorporated into the Game Gear, power consumption skyrocketed: the system required *six* AA batteries to provide just three to five hours of play. For all practical purposes, the Game Gear required the player to be

tethered to an optional AC adaptor, defeating the purpose of a portable system entirely. Aftermarket rechargeable battery packs quickly became a popular add-on. These typically required upward of eight hours' charging while not providing any additional playing time, but at least

mitigated the cost of feeding the Game Gear's voracious appetite for AA batteries.

There was a second, less glaring but more insidious problem with the new system, one Sega's engineers had seemingly overlooked. With the larger battery bay, bigger screen,

and generally 'better' but less miniaturised components, the Game Gear was significantly bulkier and heavier than the GameBoy, making it awkward for children or people with smaller hands to use. It certainly couldn't be carried around in a coat pocket either.

But in the end, the system's greatest problem would prove not to be a technical issue but a fundamental misunderstanding of the market on Sega's part. Sega had never paid much attention to third-party developers, preferring to keep development in-house as much as possible, under the control of the various numbered 'AM' divisions of the company. Although all Sega systems had third-party developers, their numbers were limited, and Sega did little to recruit them.

The GameBoy, for its entire life-span, sold itself on the basis of an enormous library of simple, inexpensive, pick-up-and-play games. While Nintendo had produced a few of these, most notably the runaway smash Tetris, the vast majority of games came from third-party developers. Nintendo did not produce a truly defining title, one that would cause players to gravitate to the system just for the sake of playing that specific game, until 1997's Pokémon. Before 1997, even the franchise GameBoy titles such as Castlevania Adventure and Super Mario Land tended to be simplified versions of their home console brothers, suitable for brief and relatively uninvolved play.

Misreading the GameBoy's success entirely, and deciding that the GameBoy succeeded despite its large but comparatively shallow software support rather than because of it, Sega began a campaign of porting popular arcade and console titles to the Game Gear. Games like Sonic the Hedgehog, Ecco the Dolphin, and Mortal Kombat soon formed the cream of the Game Gear's library; unlike the GameBoy's titles, the Game Gear's attempted to have gameplay as involved as their large-system cousins. This goal was hampered by the fact that the Game Gear's technical specifications, while superior to the GameBoy's, were still not sufficient to run a Mega Drive or arcade title without sacrificing graphical and audio quality. Because of Sega's failure to recruit third-party developers, and the company's drive to

create large 'event' titles for the system, the company assured that the Game Gear's library would never exceed 300 titles compared to the GameBoy's library of over 1,000.

Sunset of the empire

By 1996, the struggling system was still looking to make an impact in the GameBoy's market, and still hadn't attracted significant software support. The Game Gear's sleek black lines and full-colour display, once the system's major selling points, were looking hopelessly dated – a problem that never plagued the GameBoy, which hadn't tried to sell itself on 'cool'. Sega was turning its attention away from the 2D games market entirely, already preparing to shelve the

›Peripheral gain

The Game Gear had quite a few peripherals of varying types – most fell into the category either of power supplies or screen enhancers (such as magnifying lenses). Two of the more interesting peripherals, however, were neithe

TV Tuner

The TV Tuner resembled an enormous cartridge with an aerial and a channel selector, and, as the name implied, let the user watch television on the Game Gear. This was made possible by the fact that the Game Gear's display was essentially a miniaturised television. It was available in North America and Europe, but never became terribly popular, largely because it cost nearly as much as the system itself. Unfortunately, later versions of the Game Gear, as well as the Majesco re-release, weren't compatible with the TV Tuner.

Master Gear Converter

As the Game Gear was little more than a portable Master System, a curious contraption was released allowing Master System cartridges to be played on it. Called the Master Gear Converter, this device was very inexpensive owing to the fact that it had nothing in it but some crossed wires to map the pins on the Master System cartridge to the Game Gear's connector. It had no card slot, and so could only play cartridge games. Furthermore, some 4MB cartridges, like Sonic the Hedgehog, suffered graphical glitches on the Game Gear. Nonetheless, it was very well-received as it instantly expanded the Game Gear's somewhat diminutive library.

SOME OF THE GREAT GAME TITLES AVAILABLE
(See Back Page for the Sega Game Directory)

The Game Gear software library built up quickly, thanks to a constant stream of Master System ports

›Sega Nomad

The Game Gear was Sega's first and most successful attempt at a portable system, but not its only one. The company attempted to replicate the Game Gear's dubious success in 1995, with the release of the Sega Nomad.

The design philosophy of the Nomad was similar to the Game Gear's – it was essentially a miniaturised Mega Drive, based on the display-less Mega Jet miniature console Sega devised for Japan Airlines. It was designed with a comparatively advanced LCD display, one much sharper than the display on either the GameBoy or Game Gear.

The Nomad was very expensive, costing US$180.00 at launch, and had battery life just as poor as the Game Gear's. It was never popular, and although it went on sale in Japan and North America, Sega halted production of the Nomad before the rumoured European release. A PAL version never saw the light of day.

Mega Drive in favour of the newer Saturn. The Game Gear's days were numbered.

The same year, Nintendo made a coup that would finally kill off the ailing Game Gear, in the form of the GameBoy Pocket. A direct successor to the original GameBoy, the GameBoy Pocket was little more than a re-engineered, miniaturised GameBoy with a true black and white display, rather than the "green spinach colour." The GameBoy Pocket was wildly successful, breathing new life into Nintendo's system and simultaneously throwing the Game Gear's ungainly design into sharp relief. The Sega system went from seeming merely large, to being enormous and unwieldy compared to the diminutive GameBoy Pocket. Further, compared to the two AAA cells the GameBoy Pocket needed to run, feeding the Game Gear six AA cells was ludicrous.

In the midst of a frenzy of losses resulting from declining Mega Drive sales, poor Saturn performance, and the lack of acceptance of the short-lived Sega Channel, Sega quietly terminated support in Japan for the Game Gear in late 1996. Overseas support continued until 1997, but was soon stopped there as well, with the last few games trickling out early that year. The last Game Gear Sonic title, Sonic Blast, was released in November 1996.

In 1999, Majesco bought the production rights to the defunct Game Gear from Sega, and in February 2001 began releasing a slightly modified 'Core' version of the old system through Toys R Us outlets in the US, at the bargain price of US$29.99. However, the re-release failed to make an impact, and only two games were released before Majesco stopped production and the Game Gear was allowed to return to the grave.

Though roundly regarded as a failure, the Sega Game Gear was by far the most successful contender to the GameBoy's throne, with a 10-year lifespan and over 8.5 million units sold.

Engineering mistakes and poor marketing kept it from the greater level of success it might otherwise have seen. In the end, though, you should never underestimate the power of sheer bloody-minded persistence. ◉

The Game Gear made its last stand with the 'Core' version, but again buyers kept faith with Nintendo's GB line

›Ten of the best

The Game Gear may have lived in the shadow of the GameBoy, but it was still home to a number of great games spanning several genres. Here, in no particular order, are ten standout titles we feel deserve special mention

Ax Battler: A Legend of Golden Axe

Ax Battler is not just a port of Golden Axe, but an unusual and engrossing action RPG in the vein of Zelda 2 and Gargoyle's Quest.

Rewriting the Golden Axe storyline, Ax Battler follows the adventures of eponymous protagonist Ax Battler (really his name!) to recover the mythical Golden Axe from the clutches of Death Adder.

Instead of a parallax-scrolling world, Ax Battler presents an overhead view of the action, switching to side-view combat during random encounters and in dungeons. The combat sequences are wonderfully simple, and play much like the classic Golden Axe, albeit with a flat playfield.

Dr. Robotnik's Mean Bean Machine

The title notwithstanding, this isn't a Sonic game in any meaningful way. Rather, Sega applied some graphical changes to its famous Puyo Pop puzzle game and released it with a new name to cash in on the Sonic craze sweeping the world.

Mean Bean Machine, like Puyo Pop, has a competitive aspect to it that many falling-block games lack. Rather than simply building groups of beans, your objective is to chain together enough combinations to bury your opponent under a heap of the things. The game's competitive nature gives it a different feel to Tetris or Columns, but makes it just as addictive in its own way.
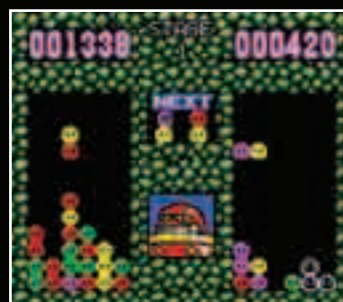
Shining Force II: The Sword of Hajya

The original Shining Force, released in 1993, was one of the earliest strategy RPGs and a fine addition to the Mega Drive's library. Shining Force II: The Sword of Hajya, released a year later for the Game Gear, was a stripped-down but still excellent addition to the series.

The major difference between The Sword of Hajya and the home console Shining Force games is the simplified gameplay. The exploration elements have been removed, turning the game into pure strategy combat. The combat engine is simple and engaging, while the large, colourful sprites make the game far more playable than most portable strategy combat games, even recent ones.

Panzer Dragoon Mini

Despite the name, Panzer Dragoon Mini more closely resembles Sega's classic Space Harrier than its popular Panzer Dragoon series. In fact, it plays similarly to a hybrid of Space Harrier and Afterburner, with some visual touches taken from Panzer Dragoon. These elements all add up to an addictive little shooter.

The player controls the action from a third-person perspective behind the Dragoon. The Dragoon's life bar and lock-on ability are the most prominent elements taken from the home console Panzer Dragoon titles, and add a depth of play that Space Harrier lacks.

Powerstrike II

Powerstrike II is one of many extremely fast-paced and highly playable overhead shooters from Compile, who also created the infamous The Guardian Legend and Blazing Lazers among others.

Powerstrike II is not atypical of Compile's shooters. The gameplay is gripping from the beginning, with bullets flying thick and fast. The player's fighter is upgradeable to include numerous powerful weapons systems, such as rotating shield pods and heat-seeking missiles. The boss ships are impressively huge and show off what the Game Gear is capable of graphically. Compile's overhead shooters are almost universally excellent, and Powerstrike II is no exception.

Shinobi

Shinobi has always been one of Sega's most identifiable properties, and it was inevitable that the Game Gear would play host to a scaled-down version. While Shinobi is essentially a port of the Mega Drive title, it has some unique gameplay elements that make it a worthy part of the Game Gear's library.

Shinobi was always a fairly standard sidescroller, and that remains unchanged in the Game Gear version. But from the first level, which has the ninja protagonist leaping along the tops of moving automobiles over a busy highway, the Game Gear Shinobi places a greater emphasis on dynamic and immediate gameplay than the slower-paced console versions.

Sonic Triple Trouble

Sonic Triple Trouble was one of the last Game Gear Sonic titles, and widely regarded as the best. It took good advantage of the handheld's capabilities, as well as introducing one of Sonic's more notorious enemies – Nack the Weasel.

Sonic Triple Trouble is, in many ways, merely a refinement of Chaos. Tails is once again playable, and his flight abilities are usable in new places. The gameplay is faster and has greater depth, introducing new moves such as the midair spin. Most interestingly, the game itself is much more expansive. Triple Trouble has huge stages to explore, as well as novel high-speed bonus rounds, each culminating in a fight with Nack.
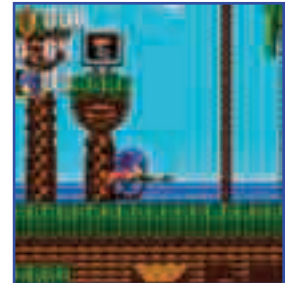
Sonic Chaos

A huge number of Sonic the Hedgehog titles were released for the Game Gear, most of which were poor cousins to the Mega Drive games. Sonic Chaos was one of the few that were worthy entries in the series.

Most noticeably, Sonic Chaos is one of the only Game Gear Sonic titles to feel as fast as the Mega Drive originals. It also introduces new gameplay elements, such as rocket shoes that, instead of merely boosting Sonic's speed, actually let him fly for a brief period. It also features Tails as a playable character with his own innate flying ability.

NBA Jam: Tournament Edition

NBA Jam was always unusual as sports titles go, emphasising fast and furious action and over-the-top comedy rather than any attempt at realism. NBA Jam: Tournament Edition for the Game Gear was no exception, and the simple and fun gameplay made it ideal for a portable system.

Tournament Edition is very much like other NBA Jam titles. It features two-on-two play and straightforward, intuitive rules. The simple controls allow it to be picked up and played with a minimum of fuss. The immediacy of play and the pick-up-and-go style, along with the large, cartoon-style graphics, make it one of the most fun Game Gear titles of any genre.

Super Columns

The original Columns was one of the Game Gear's few signature titles. Even though the oft-imitated falling jewel game was eventually released on every platform under the sun, it was long identified as a Game Gear game, much as Tetris belonged to the GameBoy.

Super Columns is an impressive update of the original launch title, introducing some interesting new gameplay mechanics. Fire gems eliminate whole rows of jewels at once, while arrow gems reorient the entire playfield, rearranging every gem on screen. The updated – though still simple – play makes Super Columns one of the best falling-block games ever made, and an essential part of any self-respecting Game Gear collection.
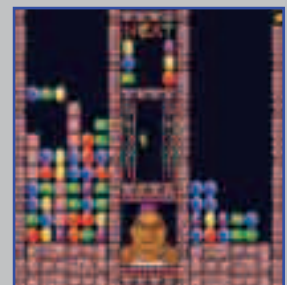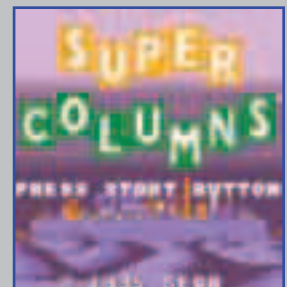
Next Level Gaming: SEGA MEGA-CD

15 years ago, Sega rolled out its 16-bit powerhouse, the Mega Drive. The system sold like the proverbial heated desserts and took a decent share of the console market from Nintendo. Sega raked in the profits. But when sales started to fall, Sega needed a little more muscle. And so, the Mega-CD was born. Aaron Birch takes a look at the highs and lows of the oft-ridiculed CD system

Seen by most as Sega's greatest success, the Mega Drive sold very well indeed, but still failed to really challenge the might of Nintendo in the massive Japanese and American gaming markets. Nintendo's consoles ruled the store shelves in both countries, whereas Sega was suffering falling sales. Even as early as 1990 (the system was originally launched in 1989 in Japan), Sega was already thinking of ways to bolster the product and beef up sales. Luckily for the games giant, CD-ROM technology was beginning to make its way into the public domain. In 1990, the first batch of CD-ROM drives was rolled out to the general public (courtesy of Sony and Phillips) and it was immediately apparent just how powerful the new medium was. The CD's massive capacity meant people could store huge amounts of data on a single disc – much more than could be fitted onto the meagre PC hard drives of the time.

This great leap in storage technology didn't pass Sega by – the developer quickly and correctly decided that the future of gaming was disc-based. Given that the medium of the time was the static cartridge, this was a bold step. And when you consider that Sega put its next-generation console on hold to fully concentrate on the Mega Drive addition, it's clear that the company was taking a big risk.

Sega wasn't far into the development of the Mega-CD before problems started to arise. Rather than simply offer a CD drive, Sega also wanted the module to boost the hardware capabilities of the Mega Drive. After all, the SNES had now been released and its longer development (due to its late arrival) meant that the Mega Drive was no longer the most powerful console available. Sega saw the creation of the CD unit as a way of addressing shortcomings, and the project became more complex and difficult as time went on.

Amongst the new additions planned for the system were powerful graphics scaling, biaxial sprite rotation (think SNES mode 7), CD-quality sound, FMV (Full Motion Video) and, of course, massive storage for games. Sega boasted that this growth in storage was 200 times that of a standard cart, causing people to imagine games so big that you'd still be playing them when you were collecting your pension. The advent of *real* video in games also had players drooling with anticipation.

The actual system specs of the Mega-CD were very impressive at the time. At the heart of the unit was a 12.5MHz Motorola 68000 16-bit CPU, which synchronised with the Mega Drive's own 68000 CPU. The graphics hardware was made up of a custom Sega ASIC processor (used for rotation, scaling and so on). The HAM (Hold And Modify) system boasted a 128-colour palette, and there were 256 colours available to the CinePak and TruVideo FMV capabilities. Memory-wise the system had 768KB RAM built-in, which supplemented the Mega Drive's existing RAM, doubling the available memory. There was also an extra 128KB RAM allocated to the CD-ROM drive, plus 64KB backup RAM (for saving games). But, as this was a CD system, storage capacity was the main selling point. The unit was fitted with an ISO-9660 Mode 1 compliant 1x CD-ROM drive. Discs could hold up to 500MB of data.

Impressive specs indeed, but it didn't take a rocket scientist to see that some of the Mega Drive's shortcomings were still present, including the rather limited colour palette and the ageing sound chip. But even with its limitations, the Mega-CD was set to be the most powerful console ever. Indeed, when it was first shown to the public at the 1991 Tokyo Toy Show it received plenty of interest. It was going to be big, and with Sega behind it, how could it possibly fail?

All systems go

With the new hardware in position and expensive advertising campaigns building the public's interest, Sega rolled out the system in Japan on 1st December 1991. Though it was expected to take the market by storm, the product didn't exactly shine and only sold a disappointing 100,000 units in its first year. Two main factors contributed to this less than impressive figure – the price and the games. At around Y50,000 (US$400), many considered the Mega-CD to be far too pricey, especially for an add-on. The two Japanese launch titles – Sol-Feace and Heavy Nova – were also well below par. Sol-Feace was actually an old Mega Drive shooter with some CD-quality audio tacked on, and Heavy Nova was a shockingly poor game that completely failed to demonstrate the power or possibilities of the system. Not exactly the best start then...

Luckily for Sega, a winning title eventually hit the market in 1992 courtesy of Game Arts. Lunar: The Silver Star was a mammoth RPG that took gamers by storm. It sold in excess of 100,000 copies and was directly linked to the Mega-CD's growth in sales. Thanks to its success other companies and potential supporters started to take note of the new platform – the future of Sega's risky endeavour was finally looking up.

But there was trouble brewing in Sega's ranks. Poor communication between Sega Japan and Sega US, and secretive cover-ups on the part of the Japanese creator made things difficult for the Western offices.

The Lunar RPG series, which has since graced the Saturn and PlayStation, memorably began life on the Mega-CD

›WonderMega

The technology of the Mega-CD may not have been demonstrated particularly well on the system's launch, but its potential didn't pass everyone by. A year after its launch in Japan, electronics company JVC licensed the technology and came up with the WonderMega. This was essentially a Mega Drive and a Mega-CD squeezed into a single, attractive unit. But as well as doing everything the Mega-CD could, the WonderMega also boasted many extra and improved features. It was faster and improved on CD access times, offered better audio playback, and included S-VHS and MIDI connectors, two microphone jacks and echo effects (for karaoke). It was even compatible with other CD formats, such as CD+MIDI.

Selling for around Y80,000 (US$600), the WonderMega wasn't cheap, but it came with a games compilation (the WonderMega collection) and a karaoke disc.

Both Night Trap (left) and Sewer Shark introduced Mega-CD owners to the dubious delight of FMV gaming

Eventually though, Sega US announced the Sega CD (the unit's name in the States) to its awaiting audience, although some believed the new product to be an entirely new system and not an add-on. Even Sega's own PR was pushing the Mega-CD as a new console. Things were finally ironed out in 1992 when the system was launched, rather grandly billed as the "console of the future". European gamers had to wait even longer for the system, until 1993.

Gimme games!

When the Mega-CD was released, it was ahead of everything else in terms of technology, including its main target, the SNES. But as we all know, a platform is only as good as its games. The Japanese launch had sported some dire titles, so would the device fare better overseas? And would gamers feel it was worth upgrading?
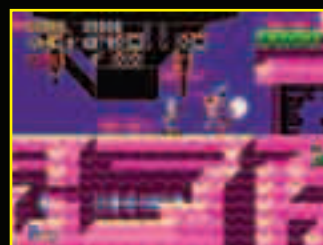
The launch titles for the US market were Black Hole Assault, Cobra Command, Chuck Rock, Night Trap and Sewer Shark (plus a couple of Make My Video titles that we'll thankfully ignore here.) Black Hole Assault was a very poor Street Fighter II clone and Chuck Rock was a straight port of the cartridge game with added CD audio, but the other releases showed more promise. After teaming up with a new movie house, Digital Pictures, Sega braved new ground and produced its first FMV games. Using the Mega-CD's fancy FMV capabilities, these really did demonstrate the power of the system. Sewer Shark was admittedly little more than a shooting gallery on rails, but the FMV was impressive and the atmosphere was great. And who could forget the *Apocalypse Now* 'homage'? "Don't you just love the smell of sewers in the

morning? Smells like victory!"

Cobra Command was another FMV shooting gallery game with the look of an anime cartoon. Much better was Night Trap, in which you took control of a number of real-time cameras in a house and were tasked with protecting a group of fun-lovin' young girls from evil-doers by using bizarre traps. The idea was undeniably clever – all the video tracks ran in parallel so you saw different scenes with each play, creating a truly interactive movie. Night Trap was a success and the massive controversy generated over the content (scantily clad girls plus violence equalled mass media panic) no doubt helped sales as people bought it to see what was really behind the salacious headlines.

The UK launch was a little more generous with games – there were more actual titles than showcases for the system. Besides the bundled titles (Sol-Feace and Cobra Command), the line-up consisted of Hook, Prince of Persia, Road Avenger, Wonderdog, Sherlock Holmes Consulting Detective and Sega Classics (crusty old Mega Drive versions of Columns, Streets of Rage, Super Monaco GP, Golden Axe and The Revenge of Shinobi

on a single CD.) Road Avenger was little more than Dragon's Lair in cars, and was every bit as rubbish as it sounds, while Prince of Persia was a simple port with improved sound and additional cutscenes. Wonderdog, however, was a great platformer that was well worth a shot, and Sherlock Holmes made excellent use of the Mega-CDs capabilities, featuring tons of speech, FMV and clever puzzles.

But, even with a few good games in the launch package, the titles on offer didn't really urge you to upgrade your Mega Drive. This would change though, and a number of great games would eventually arrive. Some would be Mega-CD exclusives but, as we would find out, many would simply be remixed Mega Drive ports.

Lights, camera, action!

As we've said, both Sewer Shark and Night Trap were impressive games in their own ways, but there were many more FMV titles around. The Sherlock Holmes games were amongst the best, as they used the technology well to present some great mysteries. Ground Zero Texas was also worth a dabble – admittedly, it was just another shooting gallery game, but the ability to switch cameras Night Trap-style and the tactical use of the camera guns increased its limited appeal. Then there was Double Switch, starring none other than Corey 'Where are you now?' Haim and 80s pop diva Debbie Harry. Double Switch was essentially Night Trap 2 (it featured the

Sonic CD was the blue one's biggest adventure to date, with an amazing 63 levels to explore

same style of gameplay) but with a bigger production budget. It was a decent title but it was clear that Sega was relying on the awe factor of FMV rather than in-depth gameplay. Other FMV titles included Fahrenheit, Wirehead, Midnight Raiders and Loadstar: The Legend of Tully Bodine. All of these games were pretty poor, but thankfully there were plenty other, more traditional titles around, many of which were based on existing Mega Drive games.

Sonic's expected Mega-CD outing came in the form of Sonic CD, which introduced the speedy hedgehog to the perils of time travel. The graphics weren't great (they were actually less impressive than those in Sonic 2 and were more akin to the first Sonic game), but the game used the power of the Mega-CD to provide awesome music and an amazing cartoon intro to impress your mates with. Each level in the game also had three versions (past, present and future), making this the biggest Sonic game ever. Sonic CD simply couldn't have been produced on the Mega Drive and was perhaps the first essential Mega-CD purchase.

Movie tie-ins are usually dire, but the Mega-CD version of Batman Returns was a clear exception to the rule. It was a conversion of the existing Mega Drive platform game, but the CD incarnation wasn't a direct port. Batman Returns was one of the best games for the platform thanks to the addition of an amazing driving section. This wasn't simply bolted onto the platformer as an extra either – it

was a fantastic game in its own right. Using the Mega-CD's powerful sprite-scaling techniques, the Batmobile scenes featured incredible visuals that were up there with the arcade driving games of the day. In fact, it was so good that Sega included the option of playing only the new driving sections in the game, ditching the relatively poor platform sections.

Another game that, to all intents and purposes, seemed to be a direct Mega Drive port was Terminator. Expecting a simple update of the Mega Drive game, Mega-CD owners were instead rewarded with a *totally* different game. Terminator was a platform shooter based on the first movie, but that's where the similarities between the Mega Drive and Mega-CD versions ended. While the Mega Drive game was fairly short and simple, the Mega-CD game had expansive levels (and plenty of them), much better graphics, smooth controls, great music, FMV video clips from the film and much more. The result was a totally unique and improved game.

Shine on

One of the best-loved Mega Drive games was Shining Force. Realising this, Sega released the Shining Force CD. Although the game was as good as ever and you couldn't really find fault with it, few enhancements had been made to the title, aside from the size of the quests (four whole adventures on one CD), the obligatory addition of speech (in the intro, not in-

The Mega-CD version of Batman Returns benefited from a series of excellent driving sections

game) and CD-quality music. Sadly, the elements in-between battles, like wandering around towns and talking to people, were stripped out of the CD version. Nevertheless, fans still consider it to be one of the best in the series.

In the wake of the one-on-one combat madness brought about by the release of Street Fighter II, Sega created its own SFII killer in the form of Eternal Champions. A vastly underrated gem, the Mega Drive version was great, with huge characters packing in masses of moves (including hidden Mortal Kombat-style fatalities), and yet the Mega-CD version managed to improve on it. Eternal Champions: Challenge from the Dark Side introduced extra characters, more speed, tweaked visuals and yes, CD audio.

One of the best Mega Drive games ever released has to be EA's Road Rash, and, accordingly, the Mega-CD also managed to get in on the tarmac-scraping, knee-shredding action. Road Rash on the Mega-CD was a faithful port of the Mega Drive version (bearing more of a resemblance to Road Rash 3: Tour De Force) and came with a slew of extras, including more tracks and bikes,

Terminator on the Mega Drive (left), and the vastly improved Mega-CD version
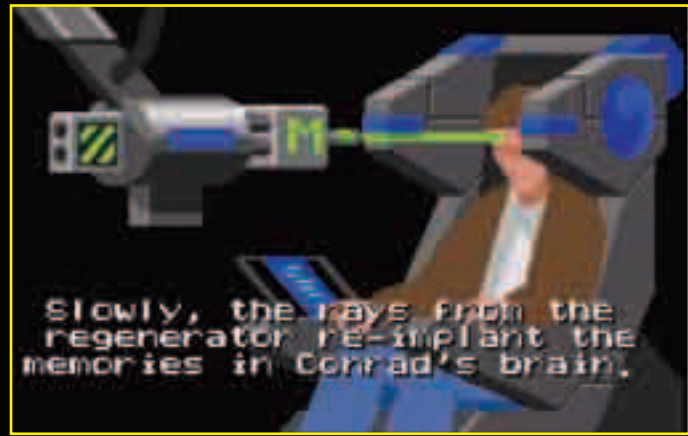
Flashback on the Mega-CD (left) introduced each level with FMV movies instead of the static cutscenes seen on the Mega Drive version

and a CD soundtrack featuring axe-merchants such as Soundgarden, Therapy? and Monster Magnet. The campaign was more involved too – you could talk to other riders, pick races and more.

Spider-Man also swung over to the Mega-CD in Spider-Man versus the Kingpin, a great port of the Mega Drive classic. Like the Terminator, this was much more than a simple conversion – it had better graphics, more levels, CD-quality music and impressive cutscenes.

Even Disney decided to have a go at CD games and produced Mickey Mania. This was essentially a direct port of the Mega Drive version, which featured CD audio and full speech throughout. A brand new level was also added to the CD version.

Barrel scrapers

So, there were a fair few titles that made the Mega-CD seem like

a sound purchase. But there were also games that fell flat. Some simply didn't cut it on CD and many were nothing more than basic ports. Take Sol-Feace for example, both the Japanese launch title and the bundled game in the UK. Originally released for the Mega Drive as Sol-Deace, the Mega-CD version didn't feature anything extra other than an improved soundtrack and voiceover intro. That's it. The game itself was identical to the cartridge version and there wasn't even any extra graphical trickery on show.

The excellent Flashback also made it onto the Mega-CD, but, like Sol-Feace, aside from the usual improved soundtrack, a few FMV movies (replacing the graphical cutscenes) and some speech, the game was identical to the original. In fact, it wasn't even as enjoyable as the cart version because the Mega-CD constantly had to pause to load up the speech samples from the CD. Puggsy was another rehash

that was only enhanced by an improved CD soundtrack.

Perhaps the biggest wasted opportunities were Ecco CD and its sequel, Tides of Time. Rather than taking the excellent puzzle-solving formula forward with better graphics and the addition of proper 3D elements to the mix, the games were little more than ports of the Mega Drive versions that came with the usual CD soundtrack, FMV clips and slightly smoother gameplay. They were good games, but they just didn't push the system.

A format for the future

The Mega-CD was home to a handful of great games, but it certainly didn't serve as the SNES beater Sega clearly wanted it to be. So where did it all go wrong?

The failure of the Mega-CD has to be levelled at Sega itself. The platform wasn't launched with its own killer app, so it suffered very early on. Then, as time went by, there simply

weren't enough good games released on a steady basis to support it. Instead, loyal fans got the occasional classic with some terrible titles thrown in to make up the numbers. This can be directly attributed to a lack of planning on Sega's part and the fact that it took the company far too long to release the console's SDK (Software Development Kit), effectively choking third-party support.

But perhaps the single biggest cause of the Mega-CD's failure was the console itself. When the system came out, CD-ROM technology was still in its infancy and companies had yet to get to grips with the possibilities it offered. Game developer's simply resorted to releasing lazy Mega Drive ports with CD-audio tracks, or tried to base games around the system's slightly flaky FMV capabilities. Very few developers made full use of the technology because, quite simply, the Mega-CD was a console ahead of its time. >>>

The Mega-CD versions of Eternal Champions and Road Rash introduced new features not seen in the Mega Drive originals

›Select CDs

While many Mega-CD games were ports, there were a number of exclusive titles released for the system. Here are six of the very best

Snatcher

Although Konami didn't really push the Mega-CD due to the fact that it was solidly tied up with the SNES, the company did release one of the best Mega-CD games available. Snatcher, by Metal Gear creator Hideo Kojima, was an anime-inspired adventure with more than a hint of *Blade Runner* thrown in.

Using excellent comic book visuals to depict the characters and environments, the game cast you as Gillian Seed, a Junker (read: 'Blade Runner') who had to track down and kill Snatchers – disguised androids who kidnapped people and assumed their identities. The game had a fully voiced script, was filled with solid puzzles, and featured an intriguing story crammed with atmosphere. Interestingly, although Snatcher was released on many systems (starting life on the MSX), the Mega-CD version was, and still is, the only one released in English, making this a very desirable title for many collectors.
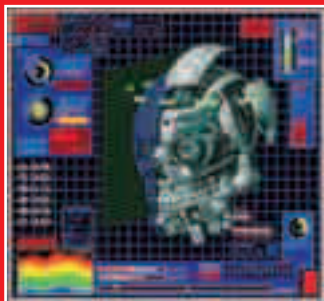
Silpheed

For the more action-oriented gamers who wanted a title that really got the adrenaline pumping, there was Game Arts' Silpheed. A conversion of the classic arcade shooter, Silpheed was totally jaw-dropping. It didn't feature FMV or groundbreaking gameplay, but it did manage to throw around more polygons than Mega Drive owners ever thought possible. This was 3D gaming like no other, and the in-game graphics were almost as impressive as the amazing polygonal intro. While zipping between asteroids and dodging laser fire you could hear the radio chatter of your wingmen, and the scripted events were simply stunning.

Jurassic Park

Based on the blockbuster film, this surprisingly sedate Mega-CD game cast you as an In-Gen agent sent to the island after the events seen in the movie. Your mission: to find and save eggs from each dinosaur species and get them off the island. Using a panoramic Myst-style view system, you had to navigate the highly detailed locations, find objects, solve puzzles and combat dinosaurs and other threats. FMV sequences were crowbarred in to show travel between locations and the audio was very impressive throughout, with realistic wildlife sounds and even FMV lessons on dinosaurs (the perfect excuse to get your parents to buy it for you).

Heart of the Alien

This Mega-CD double-bill featured an enhanced version of Dephine's Another World (aka Out of this World), but also the often-overlooked sequel, Heart of the Alien. The sequel was something of an anomaly, as it only appeared on the Mega-CD and put the player in the shoes of Buddy, Lester's friend from the first game. As Buddy you had to try to fight against the evil rulers seen in the original game in order to restore peace to your village. The game was very similar to the first, with the same artistic style, puzzle-oriented play, and frustrating instant-death scenarios. It wasn't quite up to the standard of Another World though, perhaps because original author Eric Chahi wasn't directly involved in the sequel.

Heimdall

Atari ST and Amiga owners will be familiar with Nordic RPG Heimdall. This isometric adventure was stunning on its home computer release, and the Mega-CD version was no different. The CD version was an excellent game that featured the original with bolted on speech, excellent music and much faster loading times. Where else could you catch slippery pigs and give busty wenches haircuts by throwing axes at them?

Shadowrun

We looked at this system-spanning title last issue, and the cyberpunk adventure's tour of duty on the Mega-CD was certainly a great game. Sadly, it was only ever made available in Japanese (although fans are currently translating it into English), but it was well received by fans of the series. It was also the last official game ever released for the Mega-CD, making it a true landmark game and one for the collection. If you can find it...

›Emulating the Mega-CD

There are a number of Mega Drive/Genesis emulators available for the PC, and several include support for the Mega-CD. AGES was the first emulator to run Mega-CD software, but this has been superseded by Gens, easily the best all-round Mega Drive emulator available, with a compatibility rate of 93%. Gens accepts both ISO image files (available for download from dodgy websites) and, for the less crooked amongst you, original Mega-CD disks. Mega-CD games are stored on standard ISO CD-ROMs, so you can drop a disk into your PC's drive and Gens *should* run the game from the original media. We say should because a problem with your OS's installed ASPI layer may prevent your CD/DVD drives from being detected, particularly on Windows NT/2000/XP machines. Don't worry though – we've provided a fix below.

You'll find the latest version of Gens on this month's coverdisc, but you may want to check **www.gens.ws** to find out whether an update has been released. You'll also need a Mega-CD BIOS file, which we sadly can't provide for legal reasons. You can, however, grab BIOS files from **www.eidolons-inn.net/old/sega/segacd_dev.html**. You'll need the right file for your region (Europe, America or Japan), and for the best compatibility, you should download Model 1 BIOS rather than Model 2. And, of course, you'll need a Mega-CD game (either as a CD image or an original disc).


1 Copy the Gens files into an empty folder on your Desktop, then download the correct BIOS file for your region and place it in the same folder. Run the emulator and select Bios/Misc Files from the Option menu. Click the Change button next to your region and point the emulator at the BIOS file.

2 If you want to run CD images, simply select Open ROM from the File menu and choose a game. Click Open and the game will run. The default keyboard controls are listed in the gens.txt file, but you can redefine the keys by selecting Option/ Joypads. Press Alt+Enter to toggle full-screen mode on and off.

3 To boot an original Mega-CD, insert the disc and select Option/ Current CD Drive. If you have multiple drives, choose the one containing the disc. Now select Boot CD from the File menu and Gens will play the game. Congratulations – you've turned your expensive PC into a fully functional Mega-CD player!
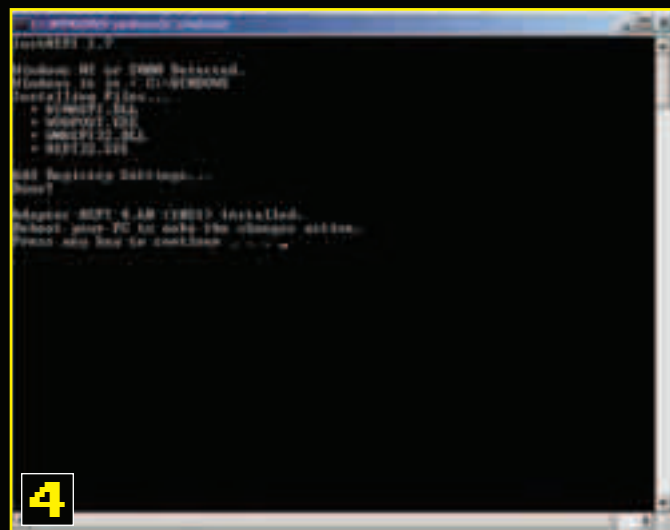
4 If you select Option/ Current CD Drive and a message reads *no drives detected*, you need to run ForceASPI from our coverdisc. Unzip the files and run DUMPASPI.BAT to back up your existing ASPI layer, then run INSTASPI.BAT to update the ASPI layer. Reboot your PC and the drives should now be detected.

The Old SkoOl

A rare photograph of the camera-shy Dave Reidy, taken for a 1986 feature in *Crash* magazine

In a *Retro Gamer* poll, readers ranked Microsphere's Skool Daze as the 10th best 8-bit game of all time. But for over 20 years the full story behind the game's creation has remained untold. Until now. Mark Green talks to the game's creators, Dave Reidy and Keith Warrington, and finds out how one of the best-loved Spectrum games was made

Dave Reidy can't recall much about what he learned at school. "What I remember best are the things *between* lessons. Kicking balls around corridors, playing conkers, firing a catapult, making fun of teachers, making fun of other kids. And that was basically how I wanted Skool Daze to be. There'd be a major task to perform, but if you wanted to spend all your time beating people up, you could. Just like school."

Dave lives in rural Shropshire, with the same woman who helped him run Microsphere over 20 years ago. His own school days are a fading memory – but his Skool Daze, the raucous, screeching, category-defying classic that Microsphere unleashed in 1984, lives on in the memories of thousands of little Erics. We'll come to Skool Daze in a minute, but there's a history lesson to get through first. Pay attention at the back!

Early learning

Decent home micros were a distant dream when Dave was at school. He didn't come across his first computer until his university days

in the early 70s – a laboratory mainframe that gobbled up punchcards and spat out the complex equation proofs Dave needed for his neurophysiology degree. By 1981, though, when Dave was working as a systems analyst for an engineering company, Sinclairs and Commodores were taking off – and a ZX81 was borne into the Reidy household.

"Initially, I wrote a couple of business programs for the ZX81 that were published by other people," remembers Dave (he retains that quaint 80s way of referring to games and applications as 'programs'). "There was PPP, which stood for Project Planning Package, and a spreadsheet program that came on a plug-in RAM pack because it was just too big to fit into the ZX81's memory."

Then the Spectrum arrived, lugging a monstrous 32KB of usable game space along with it, and there was no longer any need for bolt-on blobs of RAM.

Microsphere Computer Services Limited was actually born in November 1982 as a way for Dave to earn money arranging subcontracts for computer manufacturers. But as Speccy fever began to grip the UK, he saw an opportunity to publish his own software – and games.

By mid-1983, Microsphere was up and running in the Reidy's living room at Rosebury Road, London. You could phone Dave up or write him a letter, and he'd send you a cassette decorated with that LED-like Microsphere logo. Two of the first three products were utilities – ZX-Sideprint and the acclaimed spreadsheet Omnicalc. So while Crevasse/Hotfoot, the sole games tape, scored a rave write-up in *Sinclair User* and hinted at Dave's special way with the rubber keys, you'd be forgiven for thinking Microsphere would be specialising in business software from thereon in.

But then Wheelie roared in. An impressive little platformer, it

Prior to the release of the skool games, Microsphere scored an early hit with the bizarre but brilliant Wheelie

put Microsphere firmly on the map and remained the company's best-selling game thanks to glowing reviews ("I spent about three hours playing before I remembered I was supposed to write something about it!" confessed a startled *Crash* writer). Wheelie also introduced Dave's trademark border-flashing sound effects, which we would hear a whole lot more from later.

And that's Microsphere's early history in a nutshell. Dave's a quiet man, not too keen to dredge up the past, and this is only the second time in two decades he's resurfaced to talk briefly about Microsphere ("I only give one interview every 20 years!" he jokes, having already forgotten one he gave in 1999). So, rather than waste time pestering Dave for details on the making of ZX-Sideprint, we ring the bell for Skool Daze.

Extra curricular activity

Helen Reidy was, and is, a teacher, so it seems entirely natural that Dave would turn his wife's experiences into a videogame. But, as Dave explains, Skool Daze was more about taking the long English tradition of comics and books about naughty schoolboys – *Just William*, St Custard's, The Bash Street Kids – and making *you* the short-trousered hero.

"All the characters are those comic book stereotypes, because by and large all schools are the same," says Dave. "There's always you. There's always the popular people – who you hate, of course. There's always a bully. There's always a swot. Skool Daze was about giving people characters they would recognise, and making it funny and enjoyable to play. Which, of course, meant making it a little bit evil."

Skool Daze is, simply, genius. Unlike most 80s games, the main quest – to bash shields to hypnotise teachers into revealing the combination to the school safe – was little more than a distraction. The *freedom* you had to wreak schoolboy havoc was breathtaking. You could catapult teachers, sneak into classrooms at breaktime, sit on stairs, write on blackboards… If you play the game today, it's still thrilling to skip a lesson and wander the empty corridors – especially if you manage to dodge your livid teacher until you're literally saved by the bell.

The play mechanics were to come later, though. With comics as his inspiration, Dave's initial brainwave was entirely visual: a
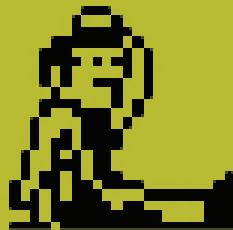
Education standards slip as Eric and pals run riot in the original Skool Daze

A version of Skool Daze was later released for the C64, but despite a few more on-screen colours, it was a direct port of the Speccy original

bustling school, alive with wandering kids and teachers, in which "each of the rooms would look like a frame in a comic." The graphics in everything up to Wheelie were Dave's own work ("as you can probably tell"), but it was clear that the ambitious plans for building a complete school on the Spectrum meant getting a proper artist in. Luckily, he had one handy – Keith Warrington, who'd already

illustrated the ads and packaging for all of Microsphere's games since Crevasse/Hotfoot.

Keith was a struggling illustrator at the time, a 23-year-old sharing a house with six other art graduates, just down the road from Dave. Now 45, he's married, living in Peterborough, *a teacher*, and exclaims "Crikey!" when we finally track him down and remind him about Skool Daze. Fishing around in his memory, he recalls that he had a very special lady to thank for the Microsphere gig: his mum.

As a boy, Keith grew up next-door to a girl called Helen Korol. When Helen's family moved to Muswell Hill, Keith and Helen's mothers kept in touch via Christmas cards. Years passed. Keith left home, and Helen became Mrs Reidy. And when Mr Reidy needed an artist to create the promotional artwork for Microsphere's games, mum got in touch with mum, and Keith got in touch with Dave.

The Skool Daze project came

just after Keith had polished off the artwork for The Train Game and Wheelie, by which time he'd given up on his professional illustrating aspirations and begun training as a teacher himself.

"I remember Dave saying that he'd got this new game idea," Keith remembers. "The graphics were going to be a bit... *more* than the other games. So he asked if I'd be interested in doing them. I was game for anything. I was mostly unemployed and I had the time. So I thought I'd give it a bash. I sat down with Dave and basically learnt everything – what pixels were, all that – from him."

Back home, with the living room floor of that shared house as his working space, Keith created some of the best-looking graphics Spectrum owners had ever witnessed... on graph paper.

"I didn't have a Spectrum to start with," he says. "It was easiest to do line drawings over squared paper, then block in the squares to make it pixelated. I just kept blocking in and rubbing out until I had something that looked decent when I stuck it on the wall at the far end of the room. For the animations, I used tracing paper to draw 'moving' legs and arms. Then I'd hand the whole lot over to Dave. After a while, though, I just thought, 'This is ridiculous'. So I bought a Spectrum to do it all properly. But I still often found it easier to return to the graph paper."

Over at 72 Rosebury Road, Dave was cracking on with getting Eric, Angelface, Mr Creak, Mr Wacker and the rest up and running on a Spectrum. Like Keith, he was working low-tech – actually writing the code on paper and using the raw numbers of machine code rather than the friendlier assembler language. When the pages of code were ready, it was Helen's job to type them in, digit by digit.

Keith, regularly gathering up his graph paper masterpieces and "walking over a couple of fields" to get to Dave's house, remembers watching Skool Daze come together very quickly. "It was encouraging. I'd finish the kids and the next time he'd have a version with the kids running around – but no teachers yet."

Lucky kids. But it wouldn't last. Gradually, a fully functioning school took shape – it was the

width of three tellies and populated by four teachers, three other 'big boys' and 11 titchy first-formers, all busily getting on with things with or without your intervention.

In an earlier interview, Dave recalled that everything in Skool Daze – the nursery rhyme music, the clickety-click walking, the school's timetable, the mini-missions, like avoiding Angelface and his unique recurring case of the mumps – emerged almost fully formed.

"It was just a case of adding the characters, scripting them to a certain extent, giving them ways they could interact with each other – which was pretty unusual in those days – then finding a suitably bizarre storyline as I went along. The difficult bit was working out how the characters would interrelate – how and where they'd all go during the course of a school day. All that was based on my admittedly shaky and very shadowy recollections of school."

Building blocks

Skool Daze was more than living up to Dave's dreams of an animated comic book, due largely to the fact that Keith packed each teacher and schoolboy with a remarkable amount of character for their 500-or-so dots.

"I just left Keith to it," recalls

›Brush with fame

Keith still works four days a week as a teacher, at the same school in Peterborough that he started at just after Skool Daze. But he has continued to paint. In 2003, he was one of twelve finalists in the *Daily Mail*'s 'Not The Turner Prize' art competition. He entered again in 2004 and was one of the runners-up, which is how we tracked him down – the style of his seaside scene, *When Gran Nips In To The Pick 'n' Mix*, was just too much like the Back To Skool ad to be a coincidence. Keith's 'third time unlucky' curse struck this year though, as the *Daily Mail* cancelled 2005's competition when he was halfway through painting his entry.

Dave. "What he came up with was really very good. The swot had an egghead, the bully was broad shouldered and butch, boy wonder was blonde and attractive and floated around the place – don't you just hate people like that? Where Keith got his inspiration from, I don't know. He was heading off to be a teacher then, so he probably modelled it on people he knew."

That's half right. Keith did take inspiration from teachers – but the ones from his own childhood rather than any he was working alongside as an adult. "I had my own little names for the teachers while I designed them," Keith recalls. "The Prof, The Duffer... I particularly remember the one I called Walker [Mr Withit in the final game]. He was partly based on a guy who used to teach me at Junior School, called Mr Sykes. My all-time favourite teacher. He was a real cool dude. He drove an old Rover, miles older than anything else on the road and in

everything." Similarly, everyone's been 'told on' at one point or another, which is why Einstein the swot got one of Dave's favourite lines – "Please Sir, I cannot tell a lie...", delivered just before a teeth-gnashing confession that you'd punched him in the face at lunchtime.

Still, if Einstein's tale-telling is burned in all our memories, our ears are permanently singed by the screech that came with being reminded by a teacher that "You are not a kangaroo!" Dave doesn't think that he created a noise that could wake the dead. "I wouldn't exactly call it ear-splitting," he says. "I never meant to be cruel."

Despite the anarchy going on behind the virtual headmaster's back, Dave couldn't help but side with the teachers from time to time. Skool Daze turned into a real history lesson when you were forced to cough up the date of ancient battles, in order to unlock the code letter 'hypnotically

Eric continued his 'studies' in the equally enjoyable Back to Skool, although the proposed third game sadly never materialised

"Skool Daze was about giving people characters they would recognise. And making it funny and enjoyable to play. Which, of course, meant making it a little bit evil"

good nick. He taught football, and he was smooth and good-looking – he had this slim moustache like Clark Gable out of *Gone with the Wind*. A real character."
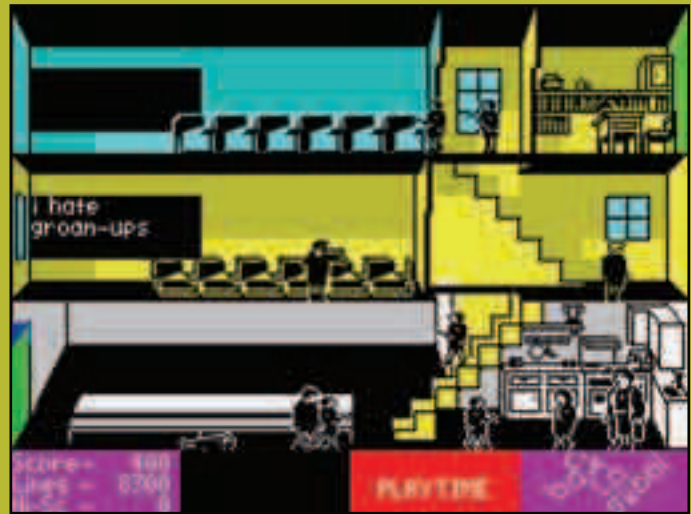
Being shackled by the limitations of two-colour 8x8 squares of pixels also had its benefits. "You couldn't do a normal person because they would have all looked the same," says Keith. "There had to be a little bald round-headed teacher with specs. One needed to be a smarmy bloke with a moustache. Another was bound to be an Open University guy, all beard. Just so you could tell them all apart, really."

Spectrum owners could take Keith's throwaway nicknames a step further and officially rename the teachers and pupils for themselves. That was an inspired touch – as Dave says, anyone who's suffered school could borrow the name of a real-life "crazy chemical teacher or a mad history teacher who forgets

embedded' in the mind of history teacher Mr Creak. In an era well before Wikipedia, more than one Spectrum fan dug around in the local library to find dates for preposterously obscure conflicts like the Battle of Clontarf.

In fact, Dave told *Sinclair User* magazine at the time that the only reason he wrote Skool Daze was to get lists of ancient battles in the hints-and-tips pages of Spectrum magazines. He still chuckles about it. "I remember thinking that it was probably going to teach people a few strange dates. I bet most people had never heard of the Battle of Lepanto until they'd played my game." (If you're interested, Lepanto was a 1571 clash between the Ottoman Empire and the 'Holy League' of Pope Pius V. The Holy League won).

As Skool Daze approached completion, the relationship between Dave and Keith wasn't entirely unlike that of teacher and pupil. "I think sometimes I did

brass Dave off with my relaxed attitude," admits Keith. "I'd go round to his house and we'd sit down and he'd tell me what he liked, and ask me to change things here and there. I'd say, 'Fine, I can have it done in a week.' And he'd go, 'Can't you do it now?' After all, it was his money. His commitment. He's got a real head on his shoulders, that bloke. A real brain box."

But Dave still isn't sure where the central goal of Skool Daze, and the idea of racking up lines until the game ended at 10,000, came from. "The pacing of a game is always quite difficult," he says. "You have to make people want to play it, and play it again and again. Which means it can't be too easy to achieve the objective, nor too difficult. They

have to get closer and closer each time. Skool Daze – like Back to Skool and Wheelie – just seemed to get it right."

Of course, that's probably news to Spectrum owners who wandered around bouncing on people's heads and scribbling rude words on blackboards without the slightest idea of what they were *meant* to be doing. Back in 1985,

COME ALONG WITH ME BOY

Dave told *Sinclair User* that "a game should not depend on the desire to achieve a single aim. In Skool Daze, you don't have to know what to do to enjoy it." We put it to the author that the school he created, operating almost independently of the player, was years ahead of its time. It was a sandbox-style game, decades early. Grand Theft Education.

Dave is a bit lost by all this. "Um... I never really played anyone else's games and I still don't. So I'm not really sure what you're talking about," he admits. "It just seemed to make sense to me – the characters, the school, and in particular the day being divided into things that you do."

Skool's out

On its release at the tail end of 1984, Skool Daze was instantly loved – at least by those who could get its extraordinarily fast, homebrewed tape-loading routine working.

"We sold around 50,000 copies of Skool Daze," says Dave. "Ten years later, we were thinking that we could have made a lot more money at the time, if we'd been clued up and actually done some proper marketing and merchandising. But I'm not going to cry at the opportunities we lost. We made a decent living out of Skool Daze. It paid for its development a few times over." Keith bought a second-hand motorbike from the proceeds.

Fan mail (and fan phone calls) poured in, and Helen gave up full-time teaching to concentrate on the day-to-day running of Microsphere. "We used to get together and write reports for people who sent us mail," recalls Dave. "Helen went through a phase where she read through letters, corrected the spelling, and sent them back."

Back to Skool followed – basically the same game with added frogs, bikes, conkers and

girls – and in 1986 the clever but frustrating Contact Sam Cruise used the same engine, and remains the only game to star a private eye who had to somersault onto dollar bills in order to stay out of prison. But then, despite hints from Dave about a third school-based game in two separate magazine interviews, it all went quiet. And that's largely for the same reason that Dave estimates 350,000 more people played Skool Daze than actually bought it – home taping.

"Going into 1984, people were copying so much," says Dave. "Somebody at the time estimated that for every game actually sold, there were seven copies made. That's probably about right. We used to get games returned as faulty from WHSmiths and Boots. Most of them played fine, they'd just been bought, copied, and taken back. Some of them had even been tampered with so people could 'prove' the game wouldn't load – recording a few seconds of silence, say. But there was nothing we could do about it."

As full-price games were shoved aside by the budget market, and the shadow of 16-bit systems fell over 8-bit gaming in general, Microsphere disappeared.

"The Spectrum was dying on its feet," says Dave. "Sales volume declined rapidly from 1985. By Christmas 1986, it was about 30% of what it was before. I don't think we made any money out of Contact Sam Cruise at all, so we thought it would be best to stop. It was time to get proper jobs." He wrote a "3D crossword
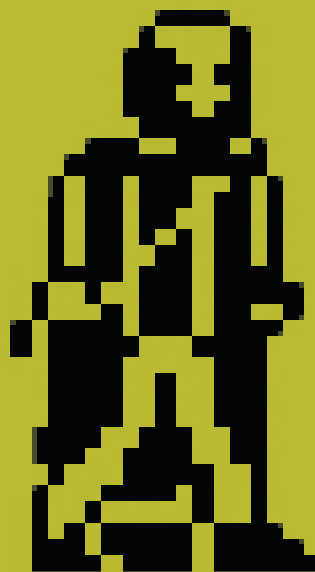
program" in 1990, and a couple of games for other publishers which were apparently never released – but those were the last games to emerge from Dave's fingers (or, more accurately, Helen's). He now runs his own electrical engineering company.

Keith recalls the sudden change of plans. "Helen and Dave went away for three months on some kind of round-the-world tour, a big holiday they'd wanted to do for years," he recalls. "When they came back, they wrote with a present – a little Chinese paintbrush. Next thing I know, I've got a letter saying they'd moved to Shropshire. And I've not really heard from them since."

Decathlon Daze

So what became of turning Skool Daze into a trilogy? Dave is sparing with the details, but the working title of the third game gives plenty of clues: Eric and Hayley's Decathlon.

"It may not have even gone out under that title, but a few things were planned. It involved a lot of sheep. Helen and I had moved to the country by then, so after the mice and frogs in Back to Skool, we had to have sheep being let loose and running in and out of the school. But generally it was going to be a pastiche of Daley Thompson's Decathlon, with 10 'sporting' events and various scenes holding it together. Events like Throwing the Hibiscus [a type of tropical plant]."

Keith remembers Eric and Hayley's Decathlon too – he did the artwork for it. "I was told to make it vaguely sports-related. I remember the picture of Eric and Hayley in the foreground, hurdling over the school fence or something like that. It was the classic hurdling pose, one leg out the front and one bent under. The school was in the background – it wasn't unlike the Back to Skool painting in that respect, just more polished and with a few speed lines added on. But that's honestly all I can remember."

Indeed, neither Dave nor Keith has much left from the Microsphere days. Dave threw out most of the materials 10 years ago ("We tend not to keep things"). When we spoke to him, Keith initially thought he might have the Eric and Hayley's Decathlon artwork in the garage

Eric and Hayley may have missed out on a third term, but there are a couple of modern remakes in the form of Klass of '99 (http://retrospec.sgn.net) and Skools Out (www.muckybaby.com)

somewhere – but then realised he'd binned it during a move.

Today, Keith is 'an FPS fan' and has his Spectrum, still working to this day, lying around somewhere. Dave, though, doesn't play many games, and isn't a big fan of today's interactive fare. "In terms of hours per pound, the games in those days were probably far better value than the games you get now," he says. "Do people really play a £50 game more than they used to play a £5 game? I'm not sure that they do."

It's a shame Dave isn't keeping tabs on the gaming scene. Because he'd probably be amazed to learn that, 20 years after the bell first rang for playtime in Skool Daze, everything's coming full circle. Genius publisher of Grand Theft Auto, Rockstar has just announced Bully – which, despite the fact that it's unlikely to feature catapults and short trousers, looks like doing for today's consoles what Skool Daze did for the Spectrum and C64.

In truth though, Dave probably wouldn't be too interested. Even with the cult of Skool Daze firmly established, he finds it odd that people are still playing and talking about something that he conjured up two decades ago as a kind of hobby. "I thought Skool Daze was an interesting idea," he says. "The characterisation and personality appealed to me. It was like a puzzle to perform – a case of making it work, and getting the look and feel that I'd imagined to come out on the screen. I never really thought about how to make it unique or special. It was just a game." 👾

›The Cassetteography

The complete history of Dave and Helen's living room outfit. Minus the obscure ZX81 stuff. And the hand-typed book about Spectrum ROM routines

Crevasse/Hotfoot (1983)
Impressive but oh-so-basic machine code 'action'. In Crevasse you guide a crosshair (ie buggy) across a splintering icefield, while Hotfoot is a near-psychedelic puzzler with a rabbit and a whole lot of coloured squares. "Both games are enjoyable," gushed *Sinclair User*.
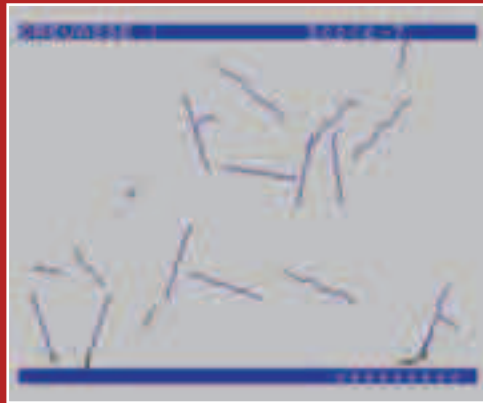
Onmicalc Series (1983)
This award-nominated spreadsheet software was aimed at the 'business market' that Sir Clive thought would be all over his Spectrum. For people determined to run a business with rubber keys, an expansion kit enhanced Omnicalc's printing power.

ZX-Sideprint (1983)
Yep – sideways printing on your ZX Printer. This one's shrouded in the mists of time, but Keith has fond memories of the inlay artwork. "Technically speaking, it was photographic. Not an exciting program and not an exciting cover – but I was really pleased with it."

Evolution (1983)
"The Spectrum took off in 83," recalls Dave. "Every boy between the age of 10 and 14 got one as a Christmas present." Evolution was his brave attempt to get them interested in 570 million years of natural selection – before he gave up and let them fire catapults at teachers instead.

The Train Game (1983)
An inspired puzzle game that's still great fun. As trains with dozing drivers make their way around the track, you press the keys to fiddle with switch points and avert disaster. Level one is tough – at level seven, you'll feel your brain actually tearing at the seams.

Wheelie (1984)
Microsphere's most successful game. Despite Dave's modesty, the animation in this strange platformer – in which the motorbike-riding hero dodges hedgehogs and leaps underground buses – is pretty good. *Sinclair User*, though, found the rider flipping over his handlebars "tasteless".

Skool Daze (1984)
"We used to get 40% of the £5.95 that each game cost," recalls Dave. "The rest used to go to the distributor and the retailer. From that 40% we had to produce all the artwork, the tape, everything. There wasn't that great a margin. But with Skool Daze, it was enough."

Sky Ranger (1985)
Microsphere's only misfire. Sky Ranger made an ambitious and largely successful stab at proper 3D. But Dave – like other coders who spent too much time fiddling around with show-off graphics routines on underpowered home micros – forgot to put a decent game in.

Back to Skool (1985)
The school got a facelift – and a new building next door – for the worthy sequel to Skool Daze that added more depth to the game. The ad was gorgeous. "You can see an Ena Sharples type wielding a wooden spoon," says Keith. "That's what I used to get at home."

Contact Sam Cruise (1986)
A nod to 40s private eye novels, this was essentially Skool Daze Plus, with the engine upgraded to allow Sam in and out of buildings (but not to let you see exactly where he was inside, annoyingly). It sold "as well as the other big games of the time," according to Dave.

›Skool Tour

Skool Daze artist Keith Warrington guides us around the school he built with his own two hands

DON'T HIT YOUR MATES

1. Head's office
"I tried to get an armchair in here, but I don't think it comes across very well. Our gaffer used to have an old leather chair in his office, so the room as a whole is a cross between that and the kind of staffroom you got in *Please, Sir!*."

2. The staffroom
"I had no real reference for this. When I was at school, all you saw of the staff room was the bottoms of people's legs and a lot of smoke. So this was based on staff rooms on the TV, and all the different odds and ends of furniture they had. I've since found out that's pretty accurate."

3. Stairs
"The steps never really worked how I visualised. People effectively walk on the white blocks, so the gap at the top should be on the near side – but then they'd appear to be walking over a big hole when they turned right at the top. I got away with as much as I could."

4. The paint job
"Nearly all schools are magnolia or pale blue, top to bottom. There was nothing like that on the Spectrum, so we ended up with that mustard colour. All the other colours were either too bright or just not right for an institution like this. It's not the colour I'd have picked if there'd been more choice."

5. The white room
"I thought I'd modelled the desks on the ones at my secondary school, but actually they're junior school desks – where the table folds up and out of the chair itself. The funny thing is the boards are on the sides of the room, and all the desks are facing the front."

6. The Canteen
"I don't like this. There's something naff about it. The amount of space there... I should have put some more tables behind that long one. And there's nowhere to get your dinner."
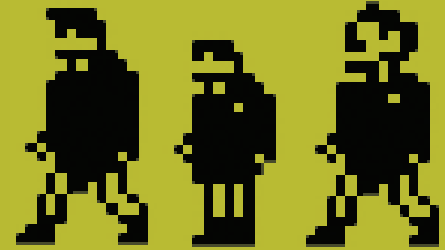
CATAPULTS ARE FORBIDDEN

12. Mr Wacker
"There's one missing pixel on the character's faces – the only way to avoid giving them huge noses. You actually *imagine* an incredibly thin line there. Your brain makes it complete. Look at the headmaster: his cane doesn't really exist and his face is just a white cross."

11. The map room
"This room looks rubbish. Look at the windows – it just looks like two rooms have been chopped together – a cut and shut job. That map, too – there's a mystery country in the Atlantic. It's supposed to be the UK. South America seems to be going a bit the wrong way, too."

10. The balcony
"I'm not sure many schools would let their kids run around unsupervised on a third floor balcony. Not best practice."

OF YOUR B

600 lines ERIC
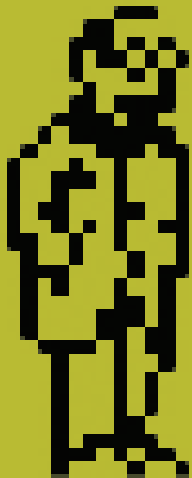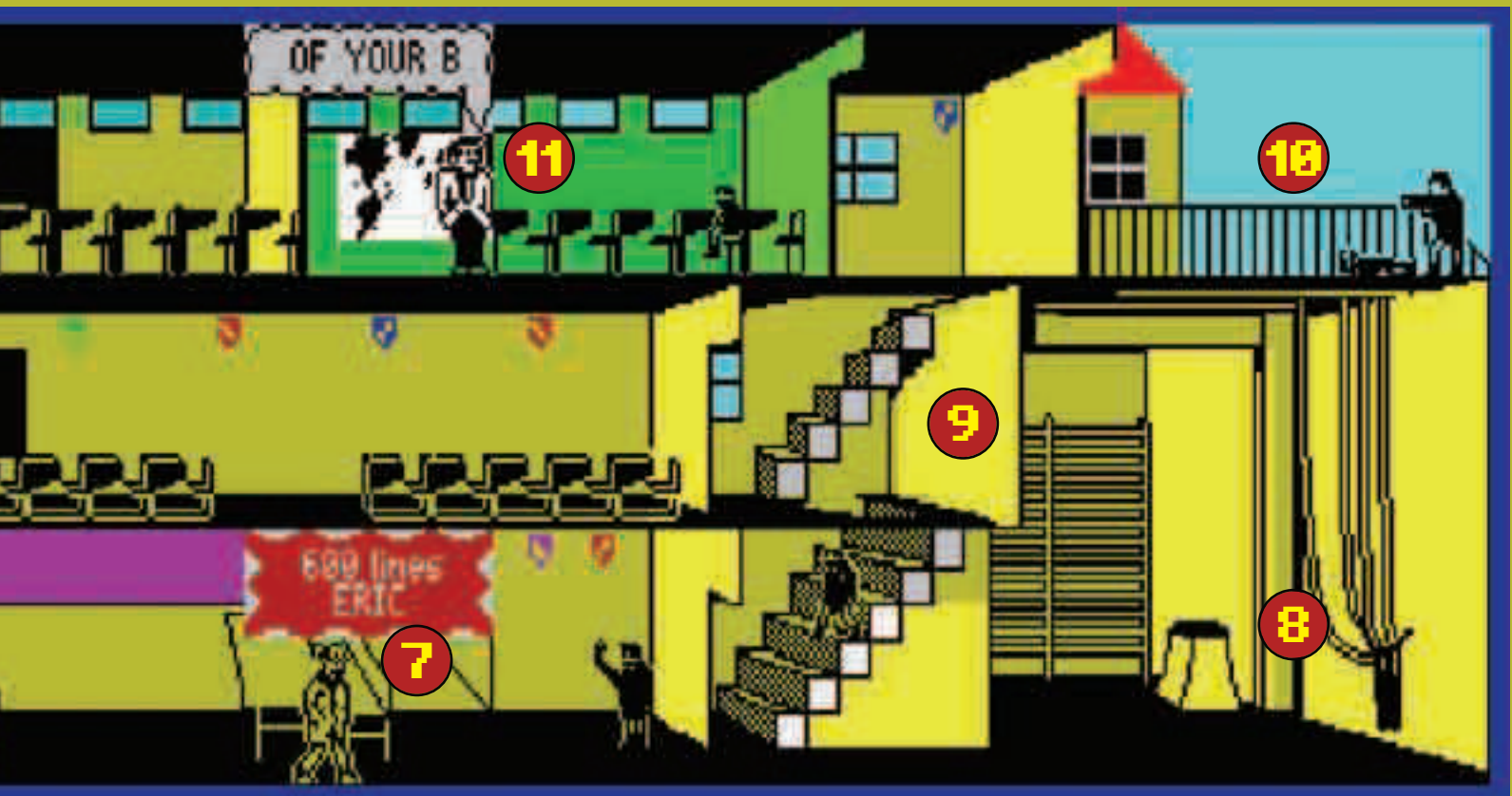
7. Mr Rockitt
"He's just a pair of glasses on a rectangle. That's it. He's got no forehead. Once you've done a pair of glasses on something that small, you've got no room for anything else."

DON'T TRY MY PATIENCE BOY

8. The gym
"I like this. It's just like my old school gym – wallbars that folded out, ropes on roof tracks, all that stuff. This area was never really used in Skool Daze, because the only time we used ours was when the P.E. teacher would let us play Pirates at Christmas."

9. The perspective
"Isometric would have been ideal to save memory. But I *hate* isometric, so I went with a perspective that means you're looking up at the top floor, straight at the middle floor, and down at the bottom floor. I like it, but every game before or since has decided that it's a crap idea."

Global Gaming

Retro Gamer is on the road again, shining a light on often-overlooked console and computer scenes from around the globe. This month, John Szczepaniak goes Dutch to show that there's more to Holland than just tulips, clogs and windmills

The countries of Western Europe, with regards to videogames at least, are often concealed behind the UK. One of the most unfairly ignored countries has to be Holland, since not only did it receive several significant hardware releases, but to this day has a thriving retro community.

One of the key figures in the history of Dutch games is Philips. The electronics giant is well over 100 years old, having been founded in 1891 by the Dutch brothers Gerard and Anton Philips in the city of Eindhoven. Philips initially started out making light bulbs before moving onto other electrical equipment, including the infamous V2000 video recorders which were soundly trampled by the more popular Betamax and VHS standards. In 1978, Philips entered the games

The Videopac G7400, manufactured in Holland by Philips, and seen here with its Home Computer Module

market with the release of the Philips Videopac G7000 videogame system (later renamed the Magnavox Odyssey 2 for the US market). Philips had other companies manufacture the machine for overseas markets, and so there are variety of different names across Europe (such as the Philips C52 in France), while in Brazil it's simply known as the Odyssey, where apparently it sold very well. (Look out for a full examination of the Brazilian game scene in a future issue.)

As a throwback to the company's origins, the early Videopac games bore the name Philips Bulb Factory. The system is perhaps comparable to the Atari VCS, though it did come with a seldom used, built-in

keyboard. The controllers, meanwhile, were regarded as being lighter and of higher quality than the Atari ones. Many games were released for the machine, mostly developed by Philips or Magnavox but some also made by outside groups such as Parker and Imagic. Ed Averett was the man behind many of the more well loved classics, including the famous Pac-Man clone, Munchkin. However, what exemplifies Videopac games the most is their absurdly high difficulty levels, with nearly all games offering only one life. This would prove to be no bad thing since, as the world would later discover, Dutch games players really are built tougher than most.

The Videopac was home to many unique titles, including some like Quest for the Rings that introduced a real board game to the proceedings

A Dutch-made Emerson Arcadia 2001 clone named Ormatu Video Spelcomputer 2001

Generation MSX

In the early 80s, Philips was also one of the licensees for the MSX format, and the scene that grew up around the system was the largest outside Japan. Philips went on to manufacture a large variety of affordable systems, and with the Netherlands being the small country that it is, the system spread very quickly. The only real competition in terms of home computers was Commodore with its C64. In contrast, the Sinclair and Amstrad machines didn't do as well.

The MSX spawned a fan scene that's very much alive today. There was a huge installed user-base for the system, so when local software releases stopped flowing in the early 90s (around the time Nemesis 3 came out), anyone who wanted fresh software for their MSX had to either import it from Japan or create it themselves.

Two MSX magazines – *MSX Computer Magazine* from the Netherlands and *MSX Club Magazine* from Belgium – played a key role in the continuation of MSX hobbyist activities. Another factor that kept the scene alive were large MSX clubs and fairs, sometimes visited by thousands of fans. The weekend club meetings allowed people to keep up to date with the latest releases and sell their own creations.

From such meetings, and with the advance of disk drives for the MSX2, copied games began to proliferate. Early on, there were those resourceful individuals who'd dump ROM cartridges and make them bootable from disk, after which they'd spread like wildfire. Some of the best dumped games even originated in other countries such as Spain. And this underground scene had its own champions, including one legendary figure known only as Martos whose Konami cartridge hacking skills were unmatched. An interesting side effect of copying these disk-based games was that the only way to bypass the copy protection (besides waiting for a crack) was to copy them on an Amiga, a machine perceived almost as a rival to the MSX2.

Regardless of the methods used, there was always a steady supply of games coming in from Japan. Notable titles included Xak, Ys, SD-Snatcher, Dragonslayer 6 and the famous Burai. Unusually the whole scene consisted of everyone playing these games in Japanese (resulting in much adoration for the culture), which perturbed no one and is something nearly unheard of in other Western countries of the time. It also fostered a very strong community spirit, as told by Patrick Smeets who was a

Hollanditis was a controversial Dutch game with a political motive

A two-player screenshot from Blade Lords, this month's free MSX game!

BombaMan, a Dutch-developed Bomberman clone by Team Bomba

CoreDump, an unfinished game by Parallax, the team behind Blade Lords

Philips released a number of MSX 1/2 computers that are still popular today. From left to right, the NMS 801, VG 8000 and the NMS 8220

member of the legendary developer Parallax: "Sure, people got stuck, but there was always some guide or friend who'd heard through the grapevine what the solution was. At some point it became a sport of sorts to finish a game that nobody else could, because no one knew what the hell was going on in them. Helping others became a sign of having good skills."

The scene moved ever onwards, and when the Japanese releases started drying up (with Illusion City on the Turbo-R being one of the last), a few of those coders started making their own games. Later on, people formed groups (such as Oasis) and started working on translations, with some of the best MSX game translations originating in Holland, for example SD-Snatcher. The continuing popularity of the MSX has allowed there to be something of a revival in Holland thanks to the efforts of Bazix (**www.bazix.nl**).

Dutch courage

Just like the UK, the Netherlands loves its retro games. Each month a sizeable volume of *Retro Gamer* magazines are sold there. And just like the UK, there are many retro-themed gatherings. As well as the standard MSX-based events, there are several annual retro conventions covering the whole spectrum of classic gaming. It's easy to focus on the MSX homebrew scene due to its vast size, but console gaming and importing were also popular over the years. No matter how you look at it, the history of gaming in Holland has been very different to the history of gaming in the UK or the USA, with dynamic elements and a unique flavour.

Along with the past, the Dutch also look to the future. In recent years they've had several large and successful companies creating games for a variety of systems from the SNES right through to the PSP. A more detailed look at a few companies, as told to us by Mr Ruud van de Moosdijk of Engine Software, can be found on the coverdisc.

As well as creating games for the modern world, the Dutch have shown they are good at winning them. In the same way that South Korea, and to a *much* greater extent Russia, have dominated various years of the World Cyber Games Tournament, it was the Netherlands that held the top position in 2004. Of all the tournament titles being played, over half of them were ultimately won by gamers from Holland. This clearly goes to show that those early years spent playing mega-difficult Videopac games did them no harm. The rest of the world has now been forced to sit up and take notice of this small nation as they take their rightful place in the global gaming spotlight.

Games and gamers can never be narrowly regarded as being comprised of only three main regions. Every nation has its own gaming history to tell and awards to win, and will make itself heard. ※

›Philips CDI

In 1991 Philips released its third hardware format: the ill-fated and fairly unpopular CDI. Developed by Philips, and to a lesser extent Sony, it played a variety of different CD formats, at one point even unsuccessfully attempting to gain a foothold in the games market (rumour has it that the CDI was actually a spin-off project from the MSX CD-ROM interface, of which only prototypes exist). Its failure as a games machine was due to pricing, marketing and a general lack of decent games (despite Burn:Cycle being released for it). What makes it such a landmark system, though, is that Philips is one of the few non-Japanese companies to acquire the usage of a Nintendo licence. Nintendo at one time planned to make a CD add-on for the SNES in conjunction with Philips, but the deal fell through and somewhere along the lines Philips acquired the rights to develop CDI games based on Nintendo characters. From this series of events Mario Hotel was born, along with the three infamous lost Zelda titles for the CDI, which the jury is still out on regarding quality.
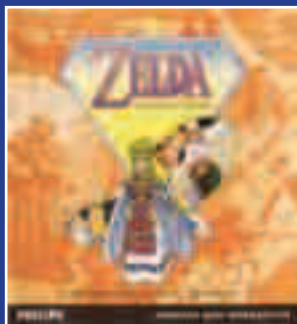
Retro conventions are *huge* in Holland, always attracting large crowds of classic gaming fans

$ PLAY to WIN

Back in the 8-bit era, cyber-athletes and professional game-players were unheard of, and the only people to make any serious money from games were the publishers and the developers who worked on them. But if you happened to be good at the right games, there were sometimes fabulous prizes to be won. Adam Dawes lifts the lid on the many gifts that were up for grabs, and reveals the winners who reaped the rewards

PiMania

Automata, 1982
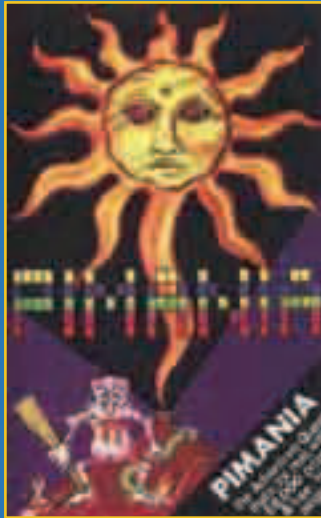
Kicking off the trend of game prizes in grand style, Automata strode boldly onto the scene in 1982 and offered 'The Golden Sundial of Pi', a De Beers award-winning trophy worth £6,000, in a competition based around its game PiMania. Advertising itself as "an investment", the game no doubt stirred up lots of excitement over the possible riches to be won, but the developers certainly knew how to make people work for them.

Released for the ZX81, Spectrum, BBC Micro and Dragon, the game was a terse and rather bizarre text adventure based around the Pi Man, an odd-looking creature obsessed with the Greek symbol Pi. It went out of its way to be difficult, with delightful tricks such as pausing for no apparent reason if you entered an unrecognised command.

To claim the prize, players needed to progress through the game revealing clues to the location of the sundial in the real world, plus the exact date on which it could be claimed. There was no shortage of ideas about where and when the prize would be found, including one from a man who apparently travelled to Bethlehem on Christmas Day – and must have been very disappointed on his journey home empty-handed.

It took nearly three years, but perseverance eventually paid off for two lucky winners, as Sue Cooper and Lizi Newman from Yorkshire claimed the prize. It was won on 22 July 1985 in the mouth of the White Horse, a chalk figure carved into the side of Hindover Hill near Eastbourne in East Sussex. For the bizarre solution to the Pi Man's puzzle, see **www.worldofspectrum.org/ hardware/answer.htm**.

Groucho

Automata, 1983
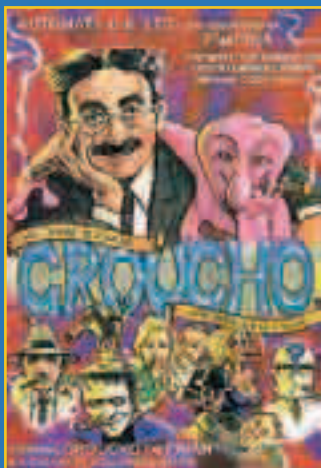
The Pi Man returned the following year to guest-star in an equally bizarre Spectrum game from Automata. Back to prove that it had the best prizes and the weirdest games, the player was put in pursuit of Groucho Marx as he toured across the US. If things couldn't get any stranger, the game's full title was 'My Name is Uncle Groucho, You Win a Fat Cigar'. It was perhaps slightly easier to figure out what on earth was going on than in PiMania, but you were still dropped in at the deep end and left to fend for yourself with very little in the way of instructions or clues as to what the hell was happening.

As with Automata's previous game, it may have been the lure of the prize that kept people playing. It was certainly worth playing for, with the winner whisked off to New York on Concorde, then jetted over to Hollywood before returning to New York for a stay in the Waldorf Astoria. Throw in £500 spending cash and a cruise home on the QEII, and you certainly weren't looking at a holiday in an empty bucket.

This time the player's task was to uncover a mystery celebrity, clues to the identity of which were scattered throughout the game. When you thought you had the answer you filled in the entry coupon that came with the game and posted it back, along with a tie-breaker slogan for Automata. That was the one and only chance to enter so it was important to be sure the answer was correct before the card was dropped in the postbox.

The prize was eventually claimed the following year by Phil Daley from Stoke-on-Trent. He identified Mickey Mouse as the hidden celebrity, and provided the slogan, "There's no blood in our games, it's all tomata (sic) sauce."

Sadly that was to be the last prize offered by Automata, but there were plenty of other companies ready to try the idea.

Splat!

Incentive Software, 1983

After the extravagance of Automata's glittering prizes, the competitions that immediately followed were rather more modest. Incentive Software offered the next challenge with what was to be the first of many prizes for its games: £500 awarded to the player that achieved the highest score.

Splat! was an arcade game released for the Spectrum, Commodore 64 and Amstrad in which the player ran around picking up grass and plums from a scrolling maze. But the scrolling was controlled by the computer, so you never knew which way it would turn next. Crashing into any of the walls or other obstacles resulted in a lost life.

Incentive built a clever score-verification system into the game to stop people cheating, and the highest score was submitted by 17-year-old James Tant, amassing an amazing 112,930 points. He claimed his secret was practising for between five and seven hours every day for several months. A bit excessive, some might say, but at least his effort was rewarded.

The Mountains of Ket Trilogy

Incentive Software, 1983

With its Splat! competition well underway and obviously proving popular, Incentive quickly launched the second of its challenges. This time the prize was £400-worth of video-recording equipment and the lofty title of 'Britain's Best Adventurer' awarded to the first person to get a score of 100% on all three games.

The trilogy consisted of The Mountains of Ket, The Temple of Vran and The Final Mission, which together formed a fairly sizeable 8-bit text adventure in which your character tried to escape a death sentence for a crime he hadn't commited. The game was enjoyable in its day, even without the promise of real riches at the end, though it did have some rather unfair combat scenes and a few random encounters that could render the game unwinnable.

The trilogy was finally completed by 47-year-old Tom Frost from Montrose, Scotland at the beginning of 1985. He was presented with his video recorder at Incentive's head office in Reading. Britain's Best Adventurer later went on to form Tartan Software, releasing a string of text adventures for the Spectrum.

The Staff of Karnath

Ultimate, 1984

Ultimate's debut Commodore 64 game was particularly memorable for its pseudo-3D graphics and its devilishly difficult gameplay.
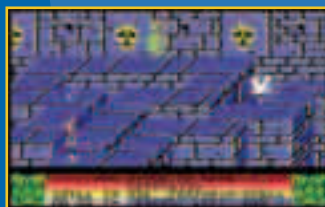
Just like Ultimate's later Entombed, many players found themselves wandering aimlessly around the game's dungeons, revelling in the ambience but not really sure what they were supposed to be doing.

Ultimate clubbed together with *Personal Computer Games* magazine and launched its own competition, challenging players to finish the game. A unique-looking trophy, inscribed with the words "The Staff of Karnath – Ultimate Play The Game", was waiting for whoever first submitted a complete solution for the game.

Several months later, the competition was won by schoolboys Lee Goldstone and Matthew Porter from Kent. By the time they claimed it, *Personal Computer Games* had bitten the dust, but the newly-launched *Zzap!64* picked up from where it left off, and featured the boys' complete illustrated solution in
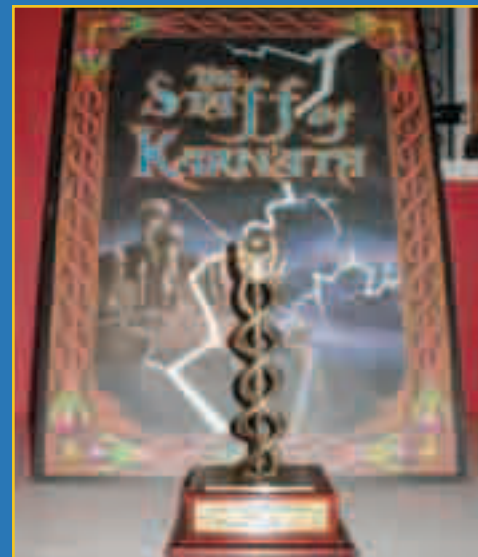
the very first issue (right).

We managed to track down Lee Goldstone and he still has the trophy on his mantelpiece at home (above). Wonder how much that would be worth now to an Ultimate collector?

SOLVED!
The Staff of Karnath

First detailed playing guide to the Ultimate block-buster

Here's another great Zzap! exclusive - detailed hints on one of the trickiest games ever to hit the 64. All over the country 64 owners have been scratching their heads over Ultimate's Staff of Karnath - and at time of writing, Ultimate have had only two claimed solutions - from Lee Guinstone and Matthew Purser of Newtown Longfield, Kent. It's they who are responsible for this guide to the game on pages [?] [?].

Just to make things a little more fair, however, we have deleted some of the information they gave, especially areas of particular perils and how to use. After all, you wouldn't want ALL the secrets given away, would you?

Lee Goldstone and Matthew Purser

The Ultimate trophy

Here's the stunning prize won by Matthew and Lee for their impressive efforts. The trophy was commissioned by Ultimate for a competition run with Personal Computer Games. Unfortunately PCG died before the competition had ended, so it was taken over by us. Matthew and Lee were the winners by a mile!
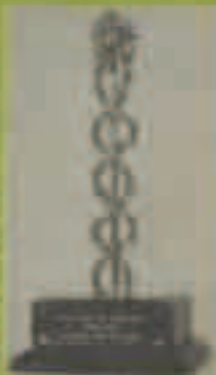
Psytron
Beyond Software, 1984

To promote the Spectrum and C64 release of Psytron, Beyond offered a brand new Sinclair QL to the game's best player.

Psytron was an attractive and stylish-looking strategy/shoot-em-up which increased in difficulty as it continued, requiring the player to perform to a certain standard on each level before the next could be accessed. Additional complexity was added during levels one to five, before the game eventually started for real in level 'F'.

Players looking to win the prize were expected to last a full hour in level F, which really was quite a challenge. A winner was eventually found though – Michael Wood from Exeter collected his QL at the end of 1984.
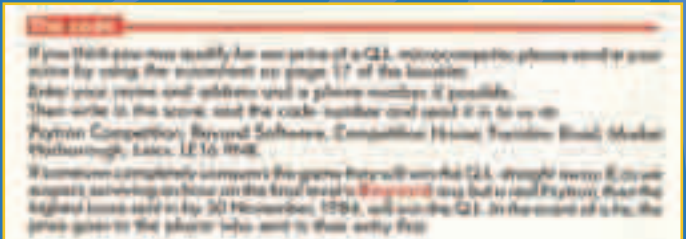
Jet Set Willy
Software Projects, 1984

One of the best-known prizes up for grabs was the one offered for the first person to complete Jet Set Willy and reveal the total number of items to be collected in Willy's mansion. The story behind this is legend and has been told many times before. In case you've had your head stuck in a toilet for the last 20 years, the original release was bugged and as a result the game was impossible to finish without the help of a POKE or two.

The prize on offer was six champagne glasses, a crate of Don Perignon champagne, and a flight over the winner's home town in a Jet Ranger helicopter with Matthew Smith. Not a bad prize at all, and with the popularity of the game, the competition must have been fierce!

In the end the winners were Ross Holman and Cameron Else from London, who pointed out that there were 83 objects to find (although one couldn't be collected because of the famous First Landing bug). Apparently unimpressed by the promise of posh plonk and rotor blades, the pair ultimately decided to take the cash equivalent instead to spend on new computers. Out of interest, Else developed a relationship with Software Projects and later ported Jet Set Willy to the MSX for the Liverpool-based publisher.

Hareraiser

Haresoft, 1984

Of course, there are no new ideas, only fresh interpretations. Predating all the competitions in computer games was a book called *Masquerade* by British artist and author Kit Williams. With the help of a series of riddles and intricately detailed paintings, the book hinted as to the secret location of a jewelled golden hare, created by Williams from 18-carat gold and inset with numerous precious stones. The book proved to be extremely popular, and in 1982 the hare was found by Ken Thomas in the Bedfordshire countryside.

After storing the hare in a bank vault for a couple of years, Thomas presumably decided that the hare had the potential to make more money than its face value, so he set up a company called Haresoft. The hare was re-hidden somewhere in the UK, and Haresoft released a two-part game to challenge players to work out its location, just as in *Masquerade* before it.

Unfortunately, the location of the hare was never discovered. The game received particularly bad reviews, and Haresoft went into liquidation. The hare was later auctioned at Sotheby's in an attempt to pay the company's creditors, selling for £31,900. Kit Williams himself was present at the auction, bidding £6,000 in an attempt to get his creation back, but was unable to bid any further. The hare has appeared once more since then, being auctioned for a second time in the late 1990s. It was bought by an anonymous bidder, and since then its location has become a mystery once again.

Eureka!

Domark, 1984

Written by Ian Livingstone for the Spectrum and C64, Eureka! consisted of a series of related graphic adventure games set throughout various points in history. The game had you hunting for pieces of a talisman in Roman Italy, Arthurian Britain, Colditz during the Second World War, and the present-day Caribbean. Each adventure was also preceded by a short arcade game in which you could increase your 'vigour' level for the forthcoming adventure section. Altogether the games made quite a memorable package – though certainly not an easy one to beat.

Domark had enough confidence in the release to offer an enormous reward of £25,000 to the first person to complete the challenge that came with the game. Each section of the game had a clue associated with it, and once all these had been solved they could be put together to reveal a hidden code and a telephone number.

The prize was won in 1985 by 15-year-old Matthew Woodley. Matthew had to call the telephone number three times before finally finding the courage to leave a message on the answering machine at the other end. No doubt he was very glad he did when he received his cheque.

Kokotoni Wilf

Elite, 1984

Elite was another UK software house that decided to jump on the prize-giving bandwagon. Unfortunately it eschewed the prizes of vast value that the likes of Domark and Haresoft were offering, deciding instead to give the first people to finish Wilf a copy of its next game (The Fall Guy) and a chance to meet the mighty Lee Majors, actor and star of the TV series on which it was based.

Kokotoni Wilf was a moderately enjoyable (though in places frustrating) platform game in which you guided a winged character through a series of baddie-filled screens based on different time zones. In each section a fragment of an amulet was to be found. Sounds familiar – though this is presumably coincidence as Wilf was released at about the same time as Eureka!.

When completed, a special message was displayed which could be used to participate in the competition. Players were informed upon entering of a somewhat cheeky extra condition they were required to meet in order to stand a chance of winning the star prize – it would only be awarded to the first five winners who had letters published in the computer press praising Kokotoni Wilf.

Whether any such letters were published we've been unable to determine, but Elite boss Steve Wilcox recalls that there were definitely a couple of tickets to the US up for grabs, and, with more than a slight hint of suspicion, they were 'won' by a *Your Computer* journo.

Doomdark's Revenge

Beyond Software, 1984

The long-awaited sequel to The Lords of Midnight continued the epic story set in the Land of Icemark. Luxor the Moonprince found himself struggling against all odds to rescue his captured son Morkin and destroy the evil Empress Shareth.

Each of these two goals could be completed individually, but to fully complete the game and reveal the mysterious Watchwords of Midnight, both objectives needed to be completed together. Beyond offered a model of Icemark and a set of lead figures of the major characters in the game to the first player to call them with the details of the Watchwords.

15-year-old Richard Harris from Lowestoft was playing the game before leaving for school one morning in November 1984, shortly after the game's release. He had sent his troops to rescue Morkin from where he believed he was being held, then continued onwards towards Empress Shareth. Much to Richard's amusement, a random dwarf finished the job before he got there. After a valiant struggle home, the game was finished and the Watchwords were revealed. Richard had to run for school, but the fear of someone else claiming the prize evidently got the better of him, and later in the day he was given permission to call Beyond from his headmaster's office.

But it took slightly longer to receive the prize than to complete the game. The models finally arrived a full 14 months later in January 1986. Beyond claimed they hadn't expected anyone to finish the game so quickly and it had taken them this long to get the models ready.

Gyron

Firebird, 1985

Finishing off this round-up in style, a fantastic Porsche 924 Lux sports car was an amazing incentive for players of Gyron on the Spectrum. This was never going to be an easy prize to win, though...

The game revolved around a virtual journey though a high-tech computer system with the player attempting to shut down the defence systems and destroy the computer itself. It was viewed from a smoothly animated first-person perspective that played very nicely, though the game was undoubtedly very difficult to master. There were reputed to be only four ways to solve the game, and it was also billed as being poke-proof.

33 players who managed to complete the game eventually played together in an international head-to-head, held simult-aneously in the UK, Spain and Denmark, to find who could complete a specially constructed level of the game the quickest. The winner was 16-year-old Juan Manuel Perez Vazquez from Malaga in Spain, who completed the level in a lightning-fast 18 minutes. (The creator of the level claimed that it was possible to finish in 15 minutes, so Juan was only just outside this target – the next competitor to finish took one hour and 37 minutes!)

Being too young to drive, Juan

WIN A PORSCHE 924 LUX

decided to take cash instead of the car and pocketed a tasty £12,800 for his superhuman Gyron skills.

Moon Cresta

Incentive, 1985

As a new year dawned, fresh competitions were gearing up to find more winning gamers, but as the era of the Multiface and Action Replay cartridges approached with their built-in cheat functions, these competitions were to be among the last of their breed.

Incentive returned with another contest, though, following on from the successful challenges set during the previous years. Offering its biggest prize so far, a genuine Nichibutsu Moon Cresta arcade machine was the item luring players to send in their high-score details this time.

The conversion itself was greeted with a lukewarm reception from the computer press. The game required the player to guide their three-part ship through a series of attack waves. Skilful players could dock the segments of the ship together to increase its firepower, though it also created a much bigger target for the invading forces to attack.

Anyone with a high score of 30,000 points or more was eligible to enter, the final winner being drawn at random from all the scores submitted. Over 4,000 entries were received, and the coin-op was eventually awarded to Ian Clark from Newcastle.

›Come on down!

Did you, or someone you know, win one of these prizes? Or maybe you won an equally amazing prize in a computer magazine competition? If so, send the details to **feedback@retrogamer.net** and we'll rejoice your good fortune in a future issue.

A Brief History

Part 2
of Videogames

1975 was a pivotal year in the life of the videogame industry we know today. The trifling drama of its two founding companies, Magnavox and Atari, would pale in comparison to the avarice of this new and mysterious business. Corporations deviously competing against themselves, rogue engineers reminiscent of hired guns, Yakuza bootlegging arcade games and... the rise and rise of a certain Japanese company called Nintendo. Spanner Spencer picks up the story

As the Odyssey's sales peaked after three years and 100,000 units, Atari was waiting in the wings with Home Pong. This was identical in concept to Magnavox's console, except it played nothing but the popular tennis game. What made it distinctive was the custom digital microchip at its centre (rather than the discrete analogue technology used by the Odyssey), making for a better-looking TV image, onscreen scoring and the trademark 'pong' sound effect.

After the steady decline in interest over the Magnavox Odyssey, most retailers were apprehensive about shelling out for a machine that only played one game, and the majority of the commercial world had yet to be persuaded that videogames were here to stay. Sears Roebuck, the largest chain of department stores in America, was finally convinced to carry the new system under its Tele-Games label and sold a staggering 150,000 units in a single season – the Christmas of 1975.

The successful concept of 'Pong-in-a-chip' had a substantial impact on the industry. General Instruments had already begun development of its own integrated chip at Glenrothes in Scotland, the AY-3-8500, which would become the foundation for over 500 different Pong systems. Of course, due to the previous legal entanglement with Atari, the Odyssey owners were due royalties on every chip sold, keeping both Magnavox and Sanders Associates in fine supply of champagne and caviar.

Coleco vision

General Instruments' first and favoured customer for the AY-3-8500 chip was the Connecticut Leather Company, more commonly known as Coleco.

Coleco had branched into the toy market some years before (having previously manufactured leather craft products then becoming the largest supplier of plastic swimming pools), and wanted a piece of the videogame pie. To this end, it developed the Telstar console using General Instruments' chip after the leading executives of the two companies were introduced by none other than Ralph Baer.

The word was out on the radical new chip and demand far exceeded General Instruments' ability to supply. Having shown an early interest in the piece, Coleco was the only company to receive a complete order, giving it a clear advantage in the upcoming commercial feud. The Telstar was then sent for the rigorous Federal Communications Commission's radio interference tests. It failed, and US$30 million of inventory was suddenly rendered unsaleable. But the FCC was not without mercy, graciously giving Coleco until the end of the week to come back with a renovated unit or be put to the back of the
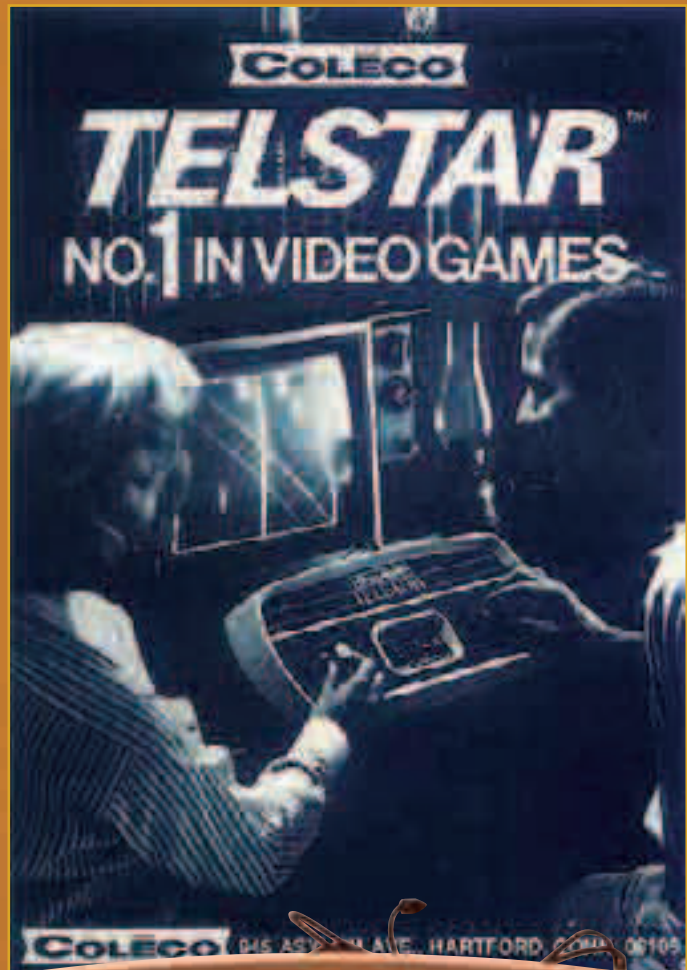
Coleco's first Telstar console made it to the market thanks to the help of gaming godfather Ralph Baer

Atari's Home Pong shifted massive numbers in Sears stores, but buyers soon wanted more than simple bat 'n' ball games

queue behind the gathering legions of rabid Pong developers.

In desperation, Coleco approached the company with the largest RFI test lab for help – Sanders Associates. At the time, the two companies were negotiating the infamous TV Game licence required by third parties wanting to produce a Pong clone, and on the condition Coleco signed up immediately and unquestioningly, Ralph Baer was made available to help out with the Telstar's shielding problem. The old campaigner solved the noise issue using ferrite cores as RF chokes (a relatively pioneering solution back then), and the machine made it to the FCC by Friday. It passed the test and went on to take over US$100 million, knocking Atari from the top in one stroke.

From that point on, the world was inundated with Pong variants. The ferocity of the competition drove developers to create every possible application of the Pong concept, flogging the genre to within an inch of its limited life.

Magnavox slimmed down its Odyssey system to release a Pong-only version (the Odyssey

100), Atari churned out clone after clone of its original machine, Heathkit came up with the GD1380 that required people to open up their TV and tamper with it to view the game picture, and the first English videogame console manufacturer, Videomaster, released 15 different systems before 1977 (several of which came in kit form). The market was saturated; swollen and unhealthy, it prepared for its first heart attack.

The Fairchild phenomenon

Signs that the industry was in trouble were masked by the sudden appearance of next-generation home consoles, which was both a necessary evolutionary step and a near fatality for the faltering market.

In 1976, the Alpex Computer Corporation filed for protection of its 1974 patent for inter-changeable videogame ROM technologies: this would become known as the notorious '555' patent. In August of the same year, Fairchild Camera & Instrument took up the Alpex licence and changed the direction of home videogames with the release of the VES (Video Entertainment System), the first-ever games console to have programmable, interchangeable ROM cartridges, which Fairchild built around its 8-bit F8 microprocessor.

Being a triumph of design over practicality, the VES failed to reignite the market and soon fell on its face. The innovative new concept, however, caused Magnavox and Atari to have synchronised anxiety attacks and set off running for their labs at full speed. Before either of them answered Fairchild's challenge,

RCA (still kicking itself for turning down Sanders Associates on the Odyssey licence) saw its chance to get on the ride. The RCA Studio II was the second cartridge-based games system available, but clumsily missed the lucrative Christmas sales to appear in January of 1977.

Reminiscent of the old Pong games in design, the Studio II featured only monochrome graphics and had numeric keypad controllers built into the base unit, rather than the popular handheld paddles. Only nine games were made and it quickly went the way of the VES.

1977 was also the year that apprentices to the videogame industry, Nintendo (in co-operation with Mitsubishi), entered the home console market in Japan. This was with its series of five dedicated hardware systems (akin to the early home Pong units), beginning with the Color TV Game 6, Nintendo's first-ever games console.

Atari, meanwhile, had a plan ready to take the next generation by storm, but didn't have the money to see it through. The controversial decision was made to sell Atari to Warner Communications, which subsequently poured over $US100 million of development money into 'Project Stella'.

Atari assault

For its launch in October 1977, Project Stella was re-christened the Atari VCS, or Video Computer System, in keeping with the acronymous style of name established by Fairchild.

Despite a similar arrangement to Home Pong – Sears Roebuck re-branding the VCS under its own label as the Sears Video Arcade – sales were mediocre at

›RCA Studio II

In the short gap between the release of the VES and VCS consoles, RCA entered the fray with its own cartridge-based offering

RCA, a TV manufacturer and rival of Magnavox, was decidedly annoyed at itself for turning down the chance to license the original Odyssey system from Sanders Associates. Its only attempt to get into the videogame business came with 1977's Studio II, a system based on its COSMAC 1802 processor which was only just beaten to the market by the Fairchild VES.

Although the original American system displayed games in black and white, this was apparently only due to the cheap video modulator used, and the games all contained colour graphics. A compatible system released in the UK called the Sheen M1200 played Studio II games with the colour component intact. A total of 13 games were available if you include the console's five built-in Pong variants – which we don't.

An interesting (if irrelevant) fact about the Studio II is the microprocessor it was built around. Designed by RCA, the COSMAC chip was also used in the Voyager spacecrafts, and is now one of the furthest man-made objects from the sun at over 14 billion kilometres away. Even after almost 30 years in space, the craft (and therefore the processor) is still working just fine.

Assuming it isn't hijacked by aliens wanting to play a rubbish version of Pong, Voyager is expected to continue operation until at least 2020.

best. After a year, Nolan Bushnell, who reportedly lost interest in the company when he no longer owned it, advised Atari's board to drop the VCS (or at least reduce the price to clear out the warehouses) and begin work on the next-generation console.

Ray Kassar, Atari President at the time, insisted the company poured its efforts into pushing existing products before developing new ones, causing a rift between himself and Bushnell. Later that year, Bushnell would arrange a board meeting excluding Warners' representatives and was consequently given his marching orders, though his contract secured him a golden parachute and a continued stake in the company's bonus awards.

Atari was rapidly becoming a company run by marketing executives rather than the 'work smart, not hard' engineers that used to live the hacker's lifestyle. The times they were a-changin'.

Not wanting to be left out of the industry it had pioneered, Magnavox scrapped plans to make the Odyssey2 a four-player console with 24 built-in games, and redeveloped it as a cartridge-based system with one significant difference. The base unit sported a 49-key membrane keyboard.

In retrospect, the keyboard was obviously a marketing ploy to grab the interest of any punters who would otherwise have been drawn toward the escalating home-computer market, and although one or two good uses were invented for

Nintendo's very first videogame console, seen here in all its garish orange glory

The original Atari VCS with its six control switches (later models moved the difficulty switches to the rear of the console)

The home videogame scene was gathering pace, but this was eclipsed by developments in the arcades, with games like Tank and Gun Fight pulling in the quarters
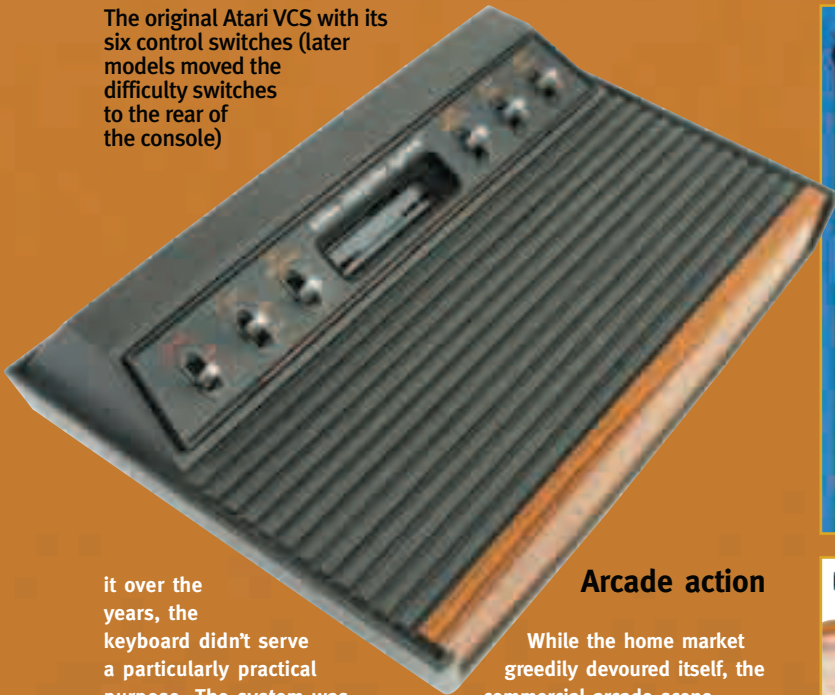
it over the years, the keyboard didn't serve a particularly practical purpose. The system was considerably more successful in Europe and South America than it ever was in the US.

By this time, it was 1978 and there were enough cartridge-based consoles appearing to make the dedicated systems worthless. Shops, suppliers and manufacturers were desperate to clear the backlog of old machines and began drastically reducing the price. Inadvertently, this caused the public to bypass the shelves full of new games machines, which they knew very little about, and head straight for the bargain bins full of Pong games being pawned off at a loss.

Everyone with half an interest in a games console at the end of the 70s bought a cheap dedicated system that would hold their attention for a couple of months at best, leading them to conclude that videogames offered a very limited period of interest. Consumers had no intention of buying these new, expensive systems.

Unable to cope with the glut of over-investment, fierce competition and consumer apathy, the market crashed – clearing out all but Atari and Magnavox. In light of the severely contracted market, it would take something spectacular to recapture the attention of the indifferent public. As fate would have it, there was about to be an invasion in the arcades that would change the fortunes of all involved.
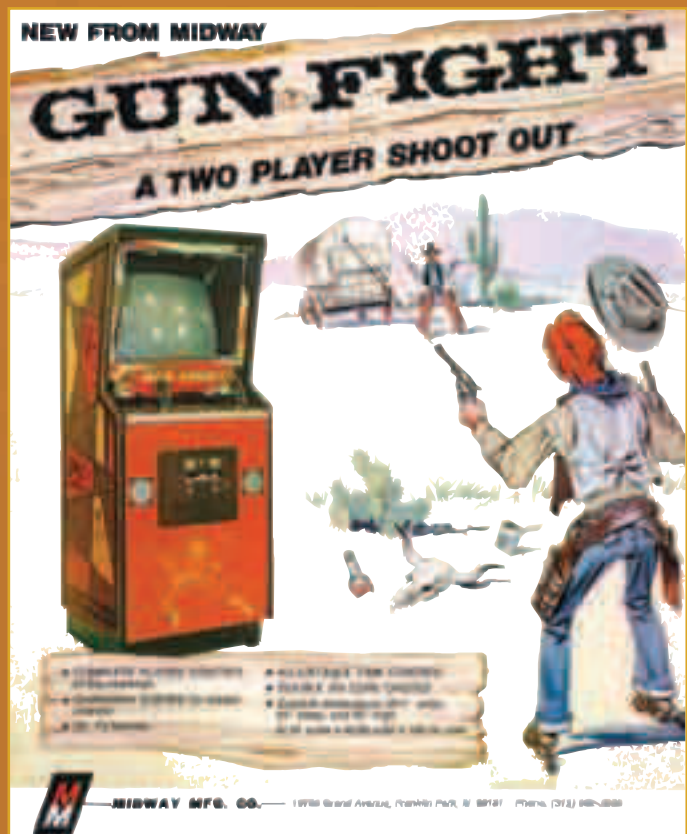
Arcade action

While the home market greedily devoured itself, the commercial arcade scene contrived troubles of its own.

In 1973 Atari had filed for a patent to its original solid-state design of the Pong arcade board, but not before duplicates were spreading like Egyptian locusts. When the papers finally came through, they no longer had any teeth. Because of this, Nolan Bushnell decided the only way to maintain Atari's lead was by producing a constant stream of new and different games, while the countless companies that inevitably churned out copies became faceless in the white noise of mass duplication.

Atari had bought an electronics consultancy in California run by two former colleagues of Bushnell's, Larry Emmons and Steve Mayer. Due to its estimable creative reputation, it handled all the research and development of Atari's next generation products, as well as being a brainstorming retreat for management and engineers. Rumours about their wet 'n' wild, booze- and pot-fuelled hot-tub board meetings at the aptly named Grass Valley sanctuary are completely true.

Distribution and market saturation of its new line of games was the key to Atari's continued success, but was hindered by an unusual method of business from within the amusement and music industry. Rival distributors had an unspoken policy of not supplying equipment from the same manufacturers as each other, effectively granting themselves exclusive rights to a company's products. This dated back to the early days of jukebox suppliers, primarily the domain of the Mafia. During 1974 and 1975, several other coin-op game developers began to infiltrate the arcades, exacerbating Atari's circulation woes. One such company, Kee Games, was headed up by Joseph Keenan, Nolan Bushnell's next-door neighbour!

Two major guns in the Atari defences immediately defected to Kee Games: Gill Williams from manufacturing and Steve Bristow from engineering. Atari and its high ranks were publicly outraged by the depth of this treachery and the two companies regularly engaged in mutual slander, libel and even industrial espionage.

Kee Games' initial venture, Tank, took a bold stance by becoming the first machine to store its graphics on ROM chips, granting it more detailed
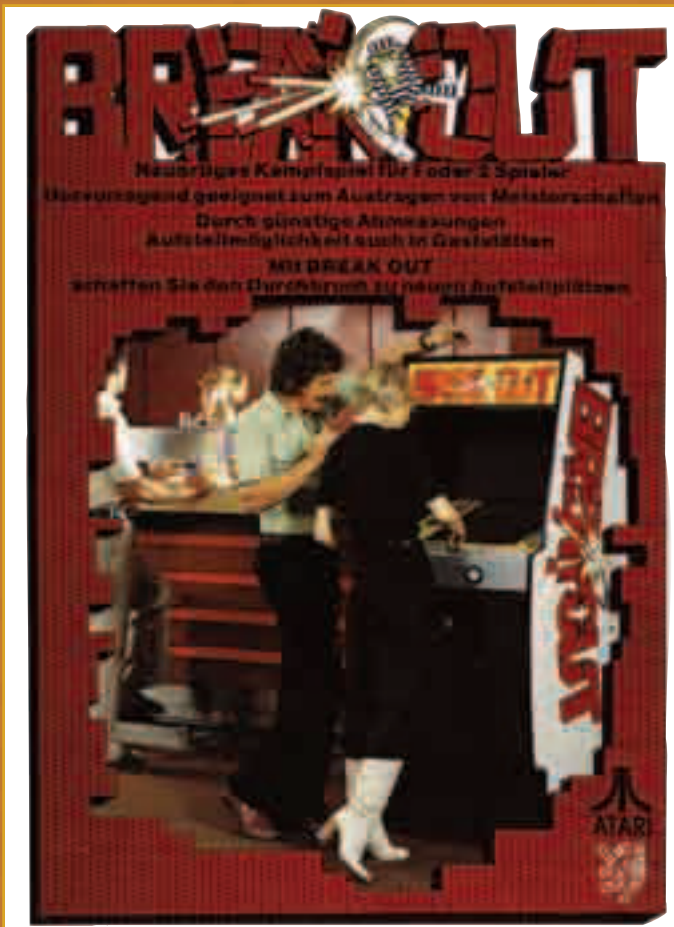
imagery than had been seen before. By December 1974 it was the hottest game on the arcade floor. Close on its heels was Gun Fight, the first Japanese title to be licensed to America. Developed by amusement giant Taito (meaning 'Far East' – the company had been established by a Russian to brew the first domestic Japanese vodka), Gun Fight was also the first game to incorporate a microprocessor.

Midway, who imported the game, hired Dave Nutting (brother of Bill Nutting of the now-defunct Nutting Associates, who'd published Bushnell's 1971 failed coin-op Computer Space) to revamp Gun Fight into a more dynamic playing experience. He added obstacles to the play area such as cacti and a slow-moving wagon train, and improved the computer-controlled player's intelligence and difficulty levels. After Nutting's overhaul, Gun Fight became a tremendous hit – and, for the first time, Atari saw its arcade dominance slipping.

Eastern influence

Midway wasn't the only one to recognise the importance of the Japanese contribution to the flourishing videogame industry. Atari had been attempting to break into Japan since 1973 with limited success, mainly due to the epic cultural contrast. Auspiciously, Atari Japan had dealings with a prominent newcomer to the electronic games market, Nakamura Trading, which soon bought out the Japanese wing of the company to

become the sole licensee of Atari's products.

The Nakamura Trading Company (better known as Namco) had developed an interest in the amusement industry when its ex-Naval engineer founder, Nakamura Masaya, started his business by purchasing two mechanical children's rides and installing them on the roof of a department store in Yokohama. There he personally refurbished, maintained, operated and cleaned the machines, graciously welcoming his patrons as only a Japanese entrepreneur would know how.

Atari's Breakout coin-op was rapidly tearing up the popularity scale in America, and Nakamura recognised it as a sure opportunity for success in his homeland. Regardless of his assurances that it would be spectacularly popular with Japanese players, Atari refused to grant him any manufacturing rights, so he imported as many units as possible. Then all of a sudden, replicas of the game began appearing throughout the Japanese arcades. After a bit of sleuthing, Namco discovered the duplicates were coming from a Yakuza clan. Knowing how Yakuza involvement with rivals Konami had sparked off a mob war and forced its owner into hiding, Nakamura decided not to get involved, despite their offer to 'suppress' his competition.

Instead, he approached Atari once more to ask for manufacturing rights in person, but was met by an uninterested (and allegedly colossally hung-over) Nolan Bushnell, whose

The Mattel Intellivision, the world's first 16-bit console, arrived in 1980 as a powerful alternative to the early 8-bit machines

Taking different tacks... Breakout showing that it was great fun to play games with other people, and Death Race demonstrating that it was even more fun running other people over

With its frantic shoot-em-up play, Space Invaders single-handedly re-ignited the fortunes of both the arcade and home videogame businesses

›Fairchild VES

Released in 1976, the VES was the first-ever programmable cartridge-based games console...

Despite being ahead of its time, Fairchild's VES (Video Entertainment System) is generally remembered with scorn – its most commonly quoted epitaph was written by an anonymous reviewer who said that playing its racing game was "comparable to losing a toe in an industrial accident." But in all fairness, Fairchild was treading virgin earth and had to grab the interest of a customer base who'd previously only known Pong.

The designer was Robert Noyce, inventor of the silicon-based integrated circuit. This was ultimately crossbred with the germanium-based miniaturised-circuit technology invented by Jack Kilby of Texas Instruments to form the modern microchip. Noyce then went on to co-found a little company called Intel.

The VES's games had the distinct look and feel of the dedicated hardware systems that had come before (and even had a Pong derivative built into the console). But the VES deviated from tradition somewhat with its unique controllers. Shaped like TNT detonators, the user held a stick-like hand grip, on top of which was mounted a stubby, triangular four-way joystick that also swivelled to work like a paddle controller. Pushing down on the triangular actuator worked like a fire button.

After the launch of the Atari VCS, Fairchild renamed its VES console the Channel F to differentiate itself from Atari.

In 1979, over a year after the Channel F was discontinued, a company called Zircon bought the rights to the machine and set about re-releasing it across the world. Among other names, it retailed as the Grandstand in the UK. Zircon put out an extra five unreleased games, bringing the Channel F's catalogue to a total of 23 games before its final departure in 1983.

casual demeanour inadvertently insulted the traditional Japanese man. Nakamura returned home incensed and began producing his own Breakout clones with which he established his company as a prodigious force in the Japanese games industry.

1976 also saw the beginnings of the perpetual controversy over videogame violence, with parental groups desperately looking anywhere but at themselves for reasons for their children's unruliness, after Exidy followed up its Pong clones with a game based on the 1975 film *Death Race 2000*. Both movie and game carried the slogan: "In the year 2000, hit and run driving is no longer a felony. It's the national sport!" This was a redevelopment of a game Exidy had licensed to Chicago Coin, who then refused to pay any royalties. As fortune would have it, the redesign kept stirring up angered debates, and every time it did, sales increased exponentially.

With all these thriving greenhorns springing up and swallowing the coins, Atari began to feel the pinch. It needed a fresh injection of cash to get on top of its new developments or risk falling behind. To this end, it announced it would be re-merging with its subsidiary company, Kee Games!

All the bitterness, mud-slinging and espionage had been a ruse to convince distributors they were rival manufacturers, so Atari could effectively circumvent the closed distribution network. Joe Keenan had proven himself to possess excellent managerial skills and came in as the new CEO of Atari.

With Pong firmly out of the picture, there was a world full of consumers desperate to throw their small change at whoever could offer them the same thrills Atari's flagship had done only a short while ago. This period in arcade videogame history bred a healthy diversity into the nascent culture, and the game-playing public were now informed enough to refuse to pour their money into multitudes of identical games. They wanted something new, and didn't mind paying for it.

Invasion day

In mid-1978, the Japanese economy suffered an unexpected problem – a severe shortage of the 100 Yen coin. Production of the coin had to be quadrupled to

Asteroids steamrolled into arcades in 1980, showcasing Atari's amazing vector-graphics technology

with row upon row of Space Invaders, every public space with a few feet of empty floor bought a machine, and all manner of small shops ditched their old inventory (whether vegetables, clothes or garden furniture) for regiments of the new gaming craze. It's no small irony that the world was actually being invaded by these alien machines!

In total, it's estimated that around 500,000 Space Invader coin-ops were sold throughout the world, with a substantial number of bootlegs circulating as well. These line-dancing aliens would also turn out to be the white knights of home videogame systems.

Atari had the genius idea of licensing Space Invaders to make a cartridge for its VCS console, the first licence of its kind. Taito agreed, and Atari spent the majority of its US$5 million publicity budget on this one game. The gambit paid off and Space Invaders quickly became the best-selling game of 1980, fanning the embers of the collapsed industry and renewing Archibald Q Public's interest. Many people were buying a VCS solely for the purpose of playing this one game.

Bring it on home

Mattel had been fortunate enough to sidestep the market crash in 1978 as its home

console was still in development at the time. When the Intellivision was released in 1980, Space Invaders had re-ignited the public's enthusiasm and the market had plenty of room for a quality machine.

Intellivision incorporated the first 16-bit microprocessor and was technically the most advanced games machine available. Although considerably more expensive than the VCS or the Odyssey, it was well received and by the end of 1981 had sold over 850,000 units.

But one of its major sales promotions never came to fruition, despite the US government insisting Mattel make good on it. When the Intellivision was released, it was touted as the heart of a home system that would allow people to "play games and balance their chequebook" with the planned addition of a keyboard and other various home computer-style components. But Mattel's failure to deliver these goodies didn't halt its game sales, and for many years it snapped at the heels of the VCS, with support continuing as far as 1990.

Atari's coin-op division hadn't been sitting on its hands either. Although the home market had diminished, the arcades noticed only a marginal drop in takings. Using the vector-graphics technology developed for its moderately unsuccessful Lunar Lander game (known as the

alleviate the situation. The reason for this shortage was the unprecedented success of Taito's new arcade game, Space Invaders.

Toshiro Nishikado had originally come up with the idea of shooting advancing soldiers in his new game, but as Taito didn't

want to suggest it was happy to openly show people being gunned down, he redesigned the assailants as aliens based on octopus-type creatures from HG Wells' novels.

Japanese arcades began to replace all their old machines

›Philips G7000 Videopac

The Dutch electronics giant Philips developed the successor to the pioneering Magnavox Odyssey...

Released in 1979 in the UK, this delightful gaming grandparent was also known as the Magnavox Odyssey2, Siera G7000, Schneider G7000, Philips C52, Radiola JET 25 and the Odyssey (in Brazil).

Initial plans were for an expandable four-player console with 24 built-in games, but as the trend turned toward game cartridges, the unit was redeveloped as the G7000. Becoming the first system to be powered by Intel's 8048 microprocessor, the G7000 was

equipped with 64 pre-defined letters and symbols built into its internal ROM code which made up the majority of its early games' graphics.

A screen resolution of 154x100 was capable of displaying 12 colours and four different types of graphics: background, sprites, single character and quad-character (made up of four single characters). Up to four of the monochrome 8x8 sprites could be on screen at any one time with 12 single foreground symbols from its internal character set.

Philips tried to differentiate its new machine from the Atari VCS and other competitors with a 49-key alphanumeric membrane keyboard on the base unit. This

idea was as much a sales gimmick and an attempt to pacify parents with educational software as it was a necessary part of the system.

'tooth-chipper' due to the strong springs on the large controller handles snapping back into place and smacking shorter players in the mouth), Ed Logg created his magnificent realisation of Lyle Rains' outer-space vision, Asteroids.

The first game to incorporate an initialled high-score table, it came out at exactly the right time to pick up where Space Invaders left off. Demand was so high, production of Lunar Lander was dropped so extra Asteroids units could be turned out. Connoisseurs may occasionally notice an Asteroids game in a Lunar Lander cabinet due to this change in mid-production.

Extra-large money boxes were fitted retrospectively to cope with the sheer weight of coinage the game was subjected to. To mark the 50,000th unit, a golden cabinet was made, which now resides at Ed Logg's house. Who wouldn't sell a kidney to own that little piece of videogame history?

Mass exodus

In light of the now-successful VCS, the programmers in Atari's consumer division thought they deserved more for their efforts – primarily financial benefits, but also recognition. They felt stifled by the CEO's policy of denying them credit for their games (presumably so they weren't poached by other developers).

The popular Adventure game and its hidden screen, thought to be the first videogame secret

This attitude led Warren Robinett to install a secret screen in his VCS game Adventure (a graphical version of the pioneering Colossal Caves Adventure text game created by Bill Crowther and Don Woods at MIT). Once players found their way in, the screen displayed the words "Created by Warren Robinett" in every available palette colour. This secret code took about 5% of the limited cartridge space, and if it had been discovered during development, he would have been sacked.

In 1980, after Robinett had left the company, a 12-year-old boy from Salt Lake City wrote to Atari asking them about this peculiarity in Adventure. A magazine called Electronic Games caught hold of the story and coined the term 'Easter egg'.

From then on, almost all Atari games included Easter eggs, whether management liked it or not.

In 1979, four disgruntled VCS programmers at Atari (Alan Miller, David Crane, Bob Whitehead and Larry Kaplan) could take no more of then-CEO Ray Kassar's tyranny and left to create Activision – the first independent, third-party software developer. Their intention was to produce games for the Atari VCS, and despite constant lawsuits from Atari which said they had no right to create games for its hardware, Activision was an overnight success.

Shortly afterwards, Bill Grubb (Atari Vice President of Marketing) broke away to form Imagic, taking several top programmers with him. Much to Atari's fury, Imagic was also a sensation.

Wokka Wokka Wokka

Toru Iwatani of Namco was a pacifist at heart, and had become fed up with the excess of shooting games. It was his aspiration to develop a non-violent title that would appeal to female players, and devised a maze game with a yellow character based on a half-eaten pizza.

Pac-Man was originally optioned to Atari (competition for import licences was becoming fierce and Atari were known to pay top dollar), but it turned the title down, saying it was too easy. Midway was next on the list, and although they took the licence, enthusiasm was minimal as most executives favoured another Namco title, Rally X.

Originally called Puck-Man due to the character's disc-like architecture, Namco was

In 1982, Philips attempted to reintroduce the G7000 series with the G7200, a unit identical in operation but with a built-in 9in black and white monitor. Released only in Europe and to very poor sales, the G7200 was touted as being a portable system, despite it weighing half a ton. The concept was it enabled the kids to play their beloved Videopac games while the parents were watching Crossroads, then afterwards plug it into the family TV and play as normal. Genius – in a hopeless sort of way. The G7200 is the rarest of the Videopac family, cropping up only very occasionally on the European eBay listings.

Philips released the G7400 in 1983. This was an update

of the basic G7000 system offering higher-resolution graphics and a larger display (256x192), thanks to the addition of extra memory (now up to an amazing 16KB!).

Backwards compatible with the G7000 games, two alternative types of cartridge were also released in very limited quantities. The Videopac+ cartridges worked on the old system as normal, but displayed higher-resolution background graphics when used on the G7400. There were also a couple of G7400-only games also sporting higher resolution sprites.

Although demonstrated at the 1983 CES show in America, renamed as the Odyssey3 Command Center, the G7400 was only released in Europe where Videopac sales had been highest.

By the time it was scheduled for an American release, it was already outdated and Philips was suffering from the collapsed industry. One or two prototypes of the Command Center have surfaced over the years, as well as a 300-baud modem and plans for a laserdisc attachment.

Module maker

The Videopac range was blessed with a number of fascinating add-ons. Certainly the neatest was the Voice Module that moulded itself nicely to the top on the base unit and allowed quasi-realistic speech and sound effects to be outputted through its internal speaker. The module was only released in America, although plans were in place for a Brazilian version that never

came to fruition.

Other than trying to make the G7000 swear like a drunken Liverpudlian, its uses were far less than its retro collectability would suggest. One or two games used the Voice Module (for SFX as much as speech), including Sid the Spellbinder, Smithereens and K.C.'s Krazy Chase.

The C7010 Chess Module was also made available. Since the main console lacked the memory and CPU power for chess capabilities, this ancillary module interfaced via a game cartridge, providing the extra oomph necessary for the classic game of strategy, intelligence, and tooth-splintering boredom. The cartridge contained an 8422 EPROM that held the game

25 years on and still going strong. Namco's Pac-Man is perhaps the most popular videogame character of all time

concerned the cabinet graphics would be subjected to creative vandalism (Luck-Man? Duck-Man?) and changed it to Pac-Man, a name suggestive of the Japanese folk legend, Paku, known for his voracious appetite.

Pac-Man quickly became the most successful arcade game of all time. It also proved to the Japanese they were able to break into the Western market, despite previous disappointments.

It's Mario!

Following the success of Space Invaders, Taito had abandoned its partnership with Midway and opened its own branch in America. Following suit, Nintendo decided its only way to break into the West was with an active American operation. Minoru Arakawa, son-in-law of Nintendo President Hiroshi Yamauchi, was assigned to the task.

No matter what he tried, he only met with failure – sure-fire games that had done well in Japan just wouldn't take off anywhere else. As a result, Yamauchi tried out some new development blood over in Japan, in the shape of toy enthusiast, Shigeru Miyamoto. As this would

code while the module itself contained an NSC800 8-bit CMOS processor running at 4.43 MHz (whereas the G7000's Intel 8084 ran at 1.7MHz). The C7010 was also equipped with 2KB of RAM and 8KB of ROM.

Prohibitively expensive (especially compared to the available chess game for the Atari VCS), and despite the fact the unit worked on any of the Videopac series of machines, it was still just an attempt to revive a dying species. The module appears to have had the capacity for additional gaming potential, judging by the chip listing and unused sockets on the PCB. The manual also makes mention of alternative module codes, but nothing ever materialised.

Finally, the C7420 Home

Computer Module was a hardware expansion in the same mould as the Chess Module which was designed to bring the G7400 console up to home-computing specs. The peripheral contained a Zilog Z80 processor with 18KB ROM and 16KB RAM, and granted the G7400 use of
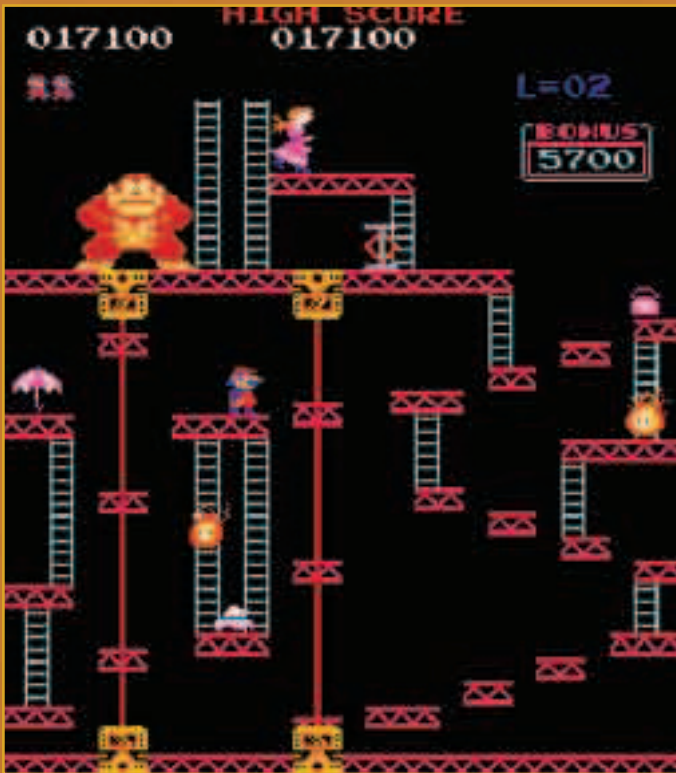
Microsoft Z80 BASIC, occupying approximately 10KB of the internal ROM. The C7420 had a graphics resolution of 320x240 with up to eight colours on screen at any one time. Access to the sound generator was also made available. In addition, there were two 3.5mm jacks for

connection to a cassette recorder for the loading and saving of programs.

If anyone ever made practical use of this inelegant peripheral, they covered their tracks very well. This module is as rare as the G7200, due to meagre sales during its short life.

Munchkin madness

It had been Philips' plan from the beginning to use videogames to sell TVs. When this strategy appeared to be ineffective, it pulled the plug on its programming team. Ed Averett was a sales rep from Intel who'd originally sold Philips the chips for the G7000 and believed that videogames had the potential to become a very lucrative business. He then
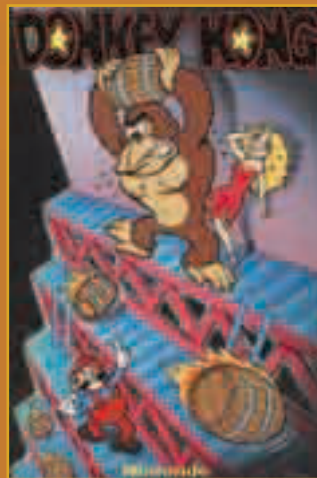
Nintendo of America's last throw of the dice turned up the phenomenally successful Donkey Kong, saving the company from imminent bankruptcy

> ### ›Next month

The great videogame crash of 1983 rocks the industry to its very core. Companies not directly involved in the crash, such as Nintendo and Sega, quickly fill the void and take over the gaming world. Atari attempts to keep up, but handles things badly. Tetris is invented and companies fight to own it with scandal and law suits. Ultimately, Tetris makes the GameBoy massively successful and the handheld battles begin. Atari begins to fail on all fronts, '16-bit' becomes the next buzz word, and a new generation of players takes up the market...

be Miyamoto's first encounter with arcade games (other than designing side art), chief engineer Gumpei Yokoi was assigned to help him out.

The game they designed (primarily for the American market) featured an escaped gorilla who kidnapped the girlfriend of 'Jumpman', and then tried to hinder his rescue attempts by throwing barrels at him.

Nintendo of America was in dire straits, already defaulting on their warehouse rent. Yamauchi told his son-in-law to hold in there as it had a game ready that would be a massive success. The intention was to build this new game into the stockpiles of unsold cabinets that filled their warehouse.

As Miyamoto didn't speak English, he thumbed through a translation dictionary for a name for his new game. He meant to name it Stubborn Gorilla, after the escaped ape character, but wound up choosing the word

'donkey' instead of stubborn, and 'kong' instead of gorilla. Through this mistranslation, Donkey Kong was born. In a Japanese apologetic gesture, Arakawa later renamed Jumpman after Mario Segale, the warehouse landlord who he'd previously been unable to pay.

The two (and only) employees of Nintendo of America, who'd worked on a commission-only basis and were preparing to file for bankruptcy, were made overnight millionaires in the wake of Donkey Kong's immense success, firmly establishing Nintendo as a world coin-op power.

Shakeout

By 1982, the videogame world was well and truly wallowing in the profligate riches it had earned itself, with executives and programmers alike going home to their mansions in solid-gold limousines to have their butlers rub money on their faces. It was inconceivable that anything like the crash in 1978 could ever happen again.

But there was a long way to fall from the top, and it would only take one or two bad decisions from a small number of high-level players to bring the entire industry crashing down.

began developing Videopac games on a freelance basis. By the time the system was pulled from the market, Ed was responsible for designing and coding almost half the Videopac's entire catalogue of games, including the infamous K.C. Munchkin.

K.C. Munchkin was a game inspired by the popular arcade game, Pac-Man. Ed Averett made a few changes to the gameplay (antennae on the character, shifting maze walls, floating dots etc) in order to differentiate it from Pac-Man and avoid any unpleasant litigation. Unfortunately, it wasn't enough. Atari had already procured the rights to bring Pac-Man into people's homes, and although Munchkin beat the VCS version to the

shelves (and was a superior game to the hasty Atari port), a court case ensued.

Chicago's Federal Court decided there were sufficient differences to ensure people wouldn't buy K.C. Munchkin

assuming it to be Pac-Man, and the game went on to sell more in two months than any other Videopac title had in a year. Atari took the case to appeal and the original ruling was overturned, forcing Philips to stop selling its

top game. This was a significant blow to the marginal headway the G7000 has been making in the competitive videogame market, and a distinct contributing factor to its imminent demise.
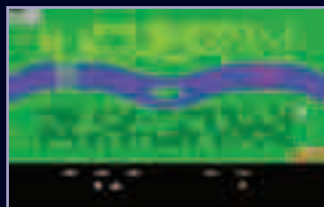
GTW
GAMES THAT WEREN'T

Combat Two

Atari, 1982, 2600

If you ever had an Atari 2600 then you probably owned Combat, its bundled game. You may have been sick of the sight of it and tried to swap it for a copy of The Smurfs, but the game was extremely popular nonetheless. A sequel was eagerly anticipated, and Atari announced just that in 1982.

Moving on from the original, Combat Two was to include a clearly defined playing arena, with a river spanned by two bridges. Two game modes were planned, the first with forest scenery the tanks could use to gain cover from shots, the second with brick walls they could either drive around or shoot through. Retaining the two-player-only mode, the tanks now moved forward by themselves, the players controlling speed and rotation. Each player started in their own base in separate corners of the screen, where they could now charge up a cruise missile to lock onto the opponent. And whilst the original allowed the tanks to shoot each other until the time ran out, the sequel would have a status panel with three lives – sustain three shots and a life was lost. This was a very different game to the original.

Graphically the game improved slightly over the original, though the main tank looked slightly squashed. Sounds were as you might expect, with the 2600 burping and farting in its usual manner. The action itself was a lot slower-paced than its frantic predecessor.

Atari ultimately decided to scrap Combat Two, possibly a decision made at the time of the videogame crash. To be honest, for a sequel that had a lot to live up to, it wasn't looking or playing particularly spectacularly.

The finer details of the game are known thanks to a prototype which turned up in 2001 and had a special release at the US Classic Gaming Expo in 2001. The prototype shows early stages of development – there are no helicopters, ships or aeroplanes, just tanks. There is, however, a built-in level editor that allows forest or wall terrain to be plotted, expanding the game's longevity slightly but not much.

While the game isn't complete, Retrodesign still issued a special cartridge release of the game, limited to 260 copies, in proper Atari-style packaging with accompanying manual. AtariAge (www.atariage.com) provides a home to the prototype ROM so you can see what you're missing – but maybe we're missing more, and a complete version is out there somewhere...
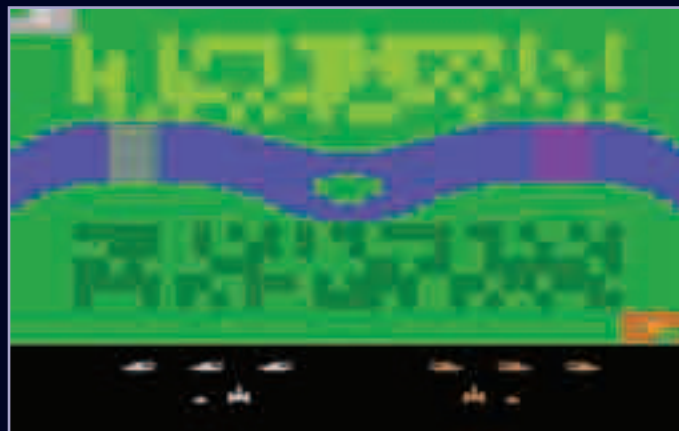
Putty Squad

Studio 3/Thalamus, 1992, GameBoy Color

Putty first hit Amiga screens back in 1991. Featuring jaw-dropping visuals and strong playability, the title was an immediate success and was quickly ported to other platforms. The player controlled a blue blob that moulded itself into different shapes, stretching around platforms and absorbing strange creatures in an attempt to defeat the evil Dazzledaze.

Eight years on, newly revived Thalamus Interactive began focusing on the GameBoy Color as its development platform of choice. As a first pitch to Studio 3 (formally System 3), a demo of Putty Squad was written in a two- to three-week period. Jon Wells, famous for his C64 work, coded and provided all the audio, while Michael Smith provided impressive graphics matching the original 16-bit versions. Andy Roberts contributed to the design and managed the project.

A limited preview was developed and it was enough to grab Studio 3's interest, so a
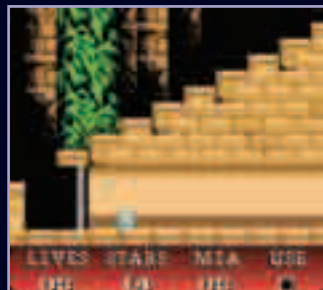
tentative budget was allocated. But putting it together with the time and monetary constraints proved impossible and the conversion was sadly scrapped. Andy Roberts reflected, "Even though the Putty brand was a strong one, it probably wasn't strong enough."

All was not lost, though, as Thalamus was given various other gaming jobs by Studio 3. And of course, the promising Putty Squad demo still exists, showing what could have been. To take a look for yourself, see the video clip on this month's coverdisc.
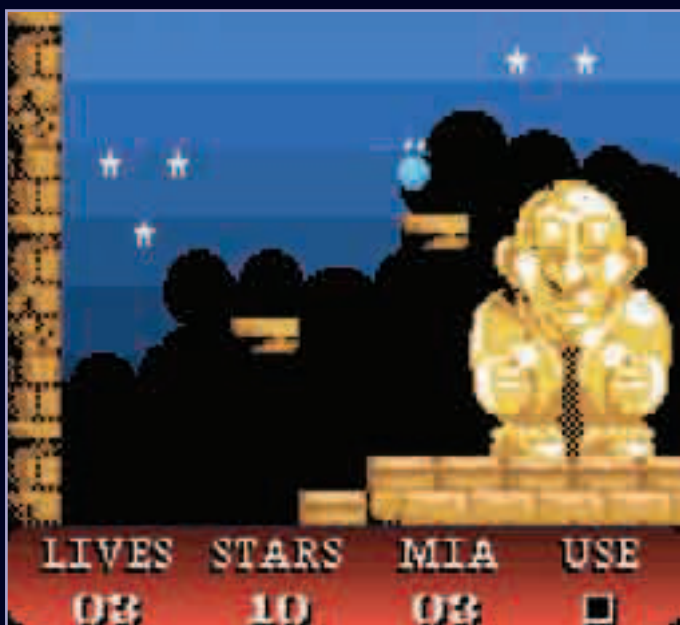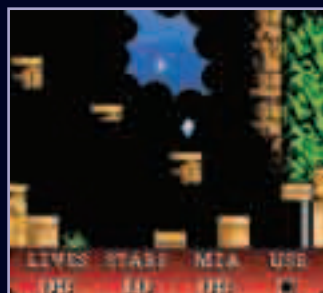
Pac-In-Time

Namco, 1994, Game Gear

Once a popular character emerges, it's only a matter of time before the gaming world is flooded with their continuing adventures. Pac-Man fits into this category, and after phenomenal beginnings in 1980, Pac was back in 1994 in a new Game Gear title called Pac-In-Time. In the story, our hungry hero has a spell cast upon him by an evil ghost-witch, making him younger and sending him back to 1975 – before he was even born. Pac has to make his way to the ghost-witch's castle and find the time portal to travel home.

The rather cheeky thing about this game is that it's an obvious rehash of the Amiga classic Fury Of The Furries, with Pac taking the place of Tiny. Namco licensed the game's engine from Mindscape.

Just like Tiny, Pac has a range of actions and the player can make him jump, swim, swing and shoot by selecting a specific mode during the game. This variety provides the perfect balance of platform and puzzling over 50 well thought-out levels. Each level has Pac collecting a number of pills in hard-to-reach areas and attempting to find the level's exit point.

The game was released for various home systems, but for some reason the Game Gear version (developed by Gil Espeche) didn't see the light of day, despite being complete. It was soon forgotten about, until the fantastic SMS Power (www.smspower.org) surprised everyone by recently releasing a prototype of the complete game to the world. SMS Power had been in touch with Gil Espeche, who kindly donated a ROM of the unreleased game.

Graphically, the game does the Game Gear justice with a well-animated Pac and detailed level designs. Levels are large (especially later on) and each one is that little bit more taxing than the last. A gradual build-up of difficulty and a good learning curve ensures that the game pulls you back for more. A variety of catchy tunes based on the original Pac-Man themes also accompanies the action.

Pac-In-Time is one of the best games on the Game Gear, but it's still unclear why it was never released. Was it possibly a licensing issue? GTWs are always full of mystery, but at least this gem has been recovered...
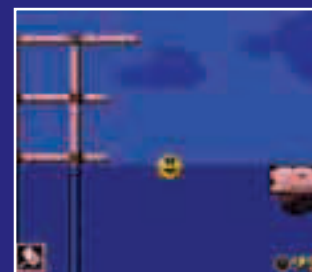
STRANGE GAMES

Edutainment is a rickety bridge. Once children figure out they're being preached to during their fun time, their defences will pop up like jack-in-the-boxes in full plate armour. Still, there were some brave enough to attempt to teach the younglings about medical conditions through the Super Nintendo. Per Arne Sandvik joins the frontline defence against disease
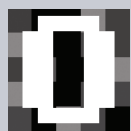
One of the developers willing to give it a go was Wavequest. In its platformer Bronkie, you control a young dinosaur in his quest for clean air. Some years ago the world was hit by a meteor, and the dinosaurs defied their lack of opposable thumbs to build a machine capable of blowing all the resulting dust away. But the bliss was not to last, as the evil Mr Rexo disassembled the apparatus and scattered the pieces across Pangaea. Why he felt the need to do so is not explained anywhere – but then again, he is a tyrannosaurus.

Not surprisingly, your job is to reassemble the contraption. But that's only half the challenge. You see, Bronkie suffers from asthma, and throughout his quest it's vital you manage his condition by keeping him away from cigarette smoke, cement bags, furry creatures and other asthma triggers. To make matters worse, every single citizen of the city San Sauran is out to kill him. Why this is remains an enigma. You'd think they were simply out to eat him so they could survive, thrive and procreate like dinosaurs do, but there isn't much of a need for that considering there's a grocer on every corner.

The enemies don't provide much of a challenge, though. The asthma aspect is what you'll want to stay focused on, since the screen grows darker as your respiration grows worse. This strongly affects the playability of the game, which – to some extent – is an appropriate way to transfer a real-life asthma problem to a platformer, but at the same time is one of the aspects making Bronkie a less-than-average SNES game.

Insulin insurrection

If you take Bronkie and replace 'asthma' with 'diabetes', you'll pretty much end up with Packy and Marlon, another release from Wavequest based on the same game engine. This time, you assume the role of a pair of diabetic elephants in a bit of a fix. During their holiday trip to Camp Wa-Kee (Native American for 'stupid-white-man pun'), a pack of rats steal the happy campers' insulin rations.

There are some elements that separate Packy and Marlon from Bronkie besides the swap to elephants. The weapons, for
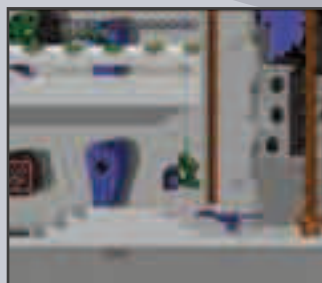
Help Bronkie dispel the nasty dust, but don't forget to deal with the little fella's asthma!

As with Bronkie, Packy and Marlon was a platformer with a serious message to spread

example: while Bronkie defends himself with a bicycle pump, the thick-skinned duo have their trunks to keep the rats at bay. Your standard projectile is water, which can be upgraded to peanuts. And curiously, the third and most powerful upgrade is blood. Squirting nose blood at your opponent can certainly be humiliating for them (and yourself, for that matter), but that doesn't make gunning down insulin-pilfering rodents with it any less unsettling.

Of course, make sure you don't pick up too many of the food power-ups along your path, or your blood sugar will shoot through the roof and you'll have to restart. On top of this, don't forget to check your medical logs and inject the right amount of insulin.
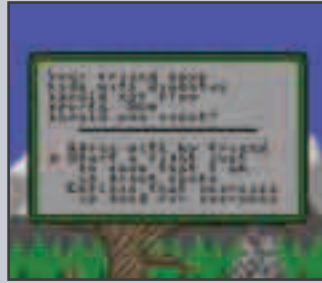
My one weakness!

Although Captain Novolin from Sculptured Software is in a similar vein to Packy and Marlon, it differs on several levels. Most importantly, Captain Novolin is a superhero. Well, that's a bit of a stretch. He doesn't have any powers. In fact, he can't attack and he's rubbish at avoiding enemies. On top of this, he'll eat any food he finds on the street until he collapses from diabetic shock. He does have a mask and a tight suit, though. And while the good captain is no match for a bowl of cornflakes, apparently he's the only man willing to help when the mayor of Pineville is kidnapped by deliciously evil snack aliens. To up the ante, the mayor is also a diabetic and only has enough insulin for 48 hours.

As with all the other games covered here, the controls are abysmal. At times, it feels like the only way to obtain quick enough reflexes to avoid enemies is to down a pound of sugar and ride the rush, sort of defeating the purpose of the game. But if you make it through the absurdly relentless stages leading up to the final boss it shouldn't be too

difficult to defeat him. He'll try to shock you by sending lightning through the metallic floor, but unluckily for him there's a giant lever reversing the electrical current right in front of you. Another poor choice was sitting on a metallic platform, but the poorest choice of all was waking up that morning and pulling on a pair of metal pants.

A fantastic voyage

The oddest of the bunch has to be another product from Sculptured Software – Rex Ronan: Experimental Surgeon. This action platformer tells the story of tobacco salesman Jake Westboro. He's been smoking since the age of 15, and is now dying from cancer. But he's not the main character: he's where the game is taking place. You assume the role of Doctor Rex Ronan, who shrinks himself and his vessel to microscopic size to travel inside the dying man's body to save him from within. Unfortunately, Blackburn Tobacco is afraid this will generate negative publicity and injects Westboro with dangerous microbots.

As you travel through the salesman's mouth, lungs, heart and brain, you not only have to fight these microbots off, but also remove dental tar deposits, pre-cancerous cells and plaque using a back-mounted ray gun similar to those in *Ghostbusters*. The gameplay is reminiscent of Super Mario Sunshine and Pilotwings, except that Isle Delphino was never covered in cancer and very few aspiring pilots have ever had to manoeuvre through clogged veins.

Rex Ronan is not a very good game. Its biggest problem is it disregards the rule of having two thirds of the screen in front of the main character. Most of the time, you're lucky to see more than a foot ahead of you, and at times it feels like you actually push the screen along with your forehead. Plus, there are times when you have to lose all your lives on purpose because you don't have the weapon you need to proceed. But come on, how many games have you played where you find bonus items *inside cancer*? And how many times have you encountered mini-bosses assuming the form of a blood clot at the core of a smoker's heart? It's all too

novel not to be amusing. For those of us who didn't have to play these games as children, that is.

Because it's obvious there had to be a number of children who were frustrated to tears by these games. They already dealt with glucose levels and inhalers every day, and giving them unresponsive and cruel platformers which made them manage their medical disorders all over again just seems unnecessary. But perhaps some children with catlike reflexes and the patience of angels played through these games and felt better about themselves. In that case, it's a shame AIDS Avenger for the PC is so hard to track down, as it would doubtless make thousands of lives a little bit better. ⁂

From top to bottom: Rex purges the mouth, lungs, heart and brain of the stricken tobacco salesman

The clock's ticking – you have 48 hours to save the major before he runs out of insulin!

THE STORIES BEHIND THE SCORES

This month Paul Drury talks turtle shells with high-scoring hero Perry Rodgers, holder of the Mario Bros. world record

Sometimes it's hard to be a high scorer. First the Galaxian record you've held for over two decades is snatched from you by a cheeky Mancunian. Then the modern era Space Invaders high score you set at the 2002 Funspot Tournament is beaten during the following year's competition. Fortunately for Perry Rodgers though, he didn't give all his love to just one game.

"Mario Bros. is definitely my favourite," says Perry, "the one I'd take to a desert island. There's something about that game – it has this subtlety and challenge. I still get drawn back to it. I know there's still more to learn..."

Perry has certainly learned a fair few of the nuances of the game. After winning his own machine in 1983 by playing Centipede for 19 hours in a competition sponsored by the now defunct *Video Games Player* magazine, he spent years honing his skills, until on 2nd July 1985, he amassed a staggering 3,481,550 in a 3 hour 45 minute game. Completing over 300 levels with only three starting lives (and the extra one awarded at 20,000) requires not only a deep understanding of the gameplay mechanics, but a great deal of patience too, as you seek the calm in the eye of the storm.

"You do have to use your peripheral vision – really take it all in and plan your next move. I kind of feel I'm playing five or ten seconds ahead, working out what's going to happen next, planning for it, and making my move. You see, for a high score, you need to be conservative, but not too conservative. You only have four lives and that makes them precious. You don't want to be risk losing them by going after a coin – it's always better to live and see another level."

Perry then gives a Mario Bros. master class. He explains the finesse required to walk under fireflies, the location of the few spots where you can jump fireballs and how you can fool them into believing you're on a different level. He sagely discusses the use of the POW feature, which causes all on-screen characters to lie flat ("don't be scared – use it when you feel you need it"), advises against gold coin greed, and stresses the importance of using the Bonus Stage to breath deeply and mentally prepare yourself for the next set of six levels.

It's like listening to a Zen Master instruct a young pupil on The Way of the Joystick as he reveals the intricacies of the single-player experience, which many of us have rather overlooked in favour of chucking shells at a mate. We wonder if Perry has equal mastery of the two-player game?

"I always thought it'd be fun to go for a co-op world record," muses Perry. "You'd have to have some rules, like when one player dies, the whole game is over and maybe the scores have to be within a certain range, so one


Perry in his games room. "My machines are fading away, just like my records," he says

guy isn't just sitting there... but I do find things get a bit crowded with two players on screen and that's why people tend to play competitively, not co-operatively."

Head to head

Whilst battling fellow high scorers isn't the norm, Perry did go up against none other than Eric Ginner (featured in *Retro Gamer* issue 15), at the Guinness Book Contest of World Records in 1985.

"I played in San Jose and knew Eric was going to be there.

MARIO·33000   TOP·33000
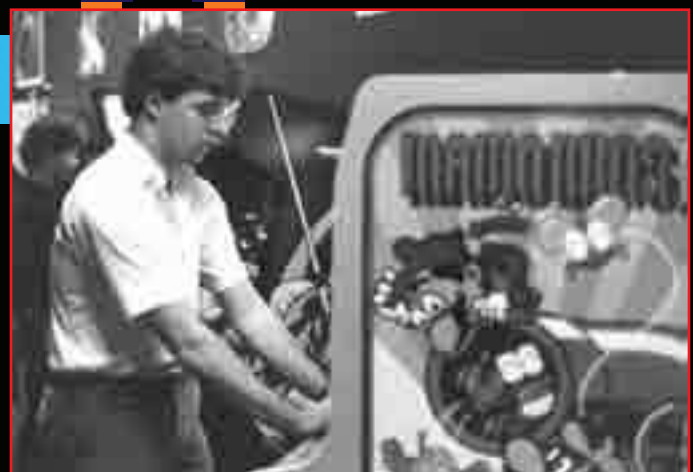
Perry playing his beloved Mario Bros., no doubt using his 'peripheral vision'

MARIO BROS.™

I didn't know him, but when I frequented arcades in the Bay Area, I'd see his initials on the high score tables and knew he was my main challenger. At the tournament, I put up a score of 1.7 million. It came to the last night and Eric sat down to play. He was having a pretty good game, but at 800,000 he died and I just breathed a huge sigh of relief. That was probably my proudest moment, more than getting the world record, because it was head-to-head competition – everything was on the line to get your name in the book."

And there Perry's name stayed until 1987, after which high scores were no longer included. He still plays today on that same machine, which sits in his games room, alongside Space Invaders, Galaxian, Carnival, Food Fight and several pinball tables. We wonder whether his love for Mario Bros. is why three years ago he moved up to Redmond, WA, the home of Nintendo HQ and formerly the location of 'Mario and Luigi's' Pizza Restaurant, which, legend has it, was the reason why Mario's slimmer brother was so christened?

"No, it's just a coincidence, but games have always been part of my life. Even before I went to college, I just knew I wanted to make games. I enjoy them so much, I wanted to make games others would enjoy. That's my motivation. I went to college for that and have been in the industry ever since."

Activate

Perry's programming career began at Activision, where he worked on the port of Double Dragon for the Atari 2600 and 7800, amongst other projects. He then moved to Sculptured Software in Utah, where he designed and produced Roger Clemens' Baseball for the NES and Boxing Legends of the Ring for the SNES and Sega Genesis.
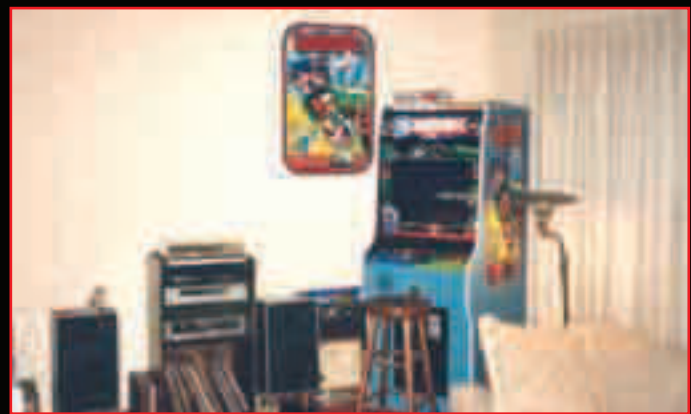
The Mario Bros. machine that Perry won during a videogame tournament victory in 1983

His next post took him to Sony, just before the release of the PlayStation. Was the company full of optimism, confident it was about to conquer and redefine the console market?

"Not at all. Sony really wasn't sure about it and didn't know the games market well at the time, but it obviously made some really good moves – fantastic marketing that really appealed to players."

Perry's six years with Sony saw him work with many of the big players, including Midway on Mortal Kombat and Naughty Dog on the Crash Bandicoot series of games. He now works for Wild Tangent (**www.wildgames.com**), producing Internet games, such as Championship Run 2005, a basketball game made in conjunction with Coca-Cola, and has some intriguing current projects, which, in classic industry-speak, he "can't divulge right now."

We decide to risk opening old wounds and ask if he was surprised that his Galaxian record was finally overhauled? Perry replies with typical magnanimity.

"I wasn't surprised when I knew Gary Whelan was up for the challenge – I knew he was really determined. I *was* kind of surprised someone out there was dedicated enough to get their own machine and put the practice in. It's a real testament to Gary and his efforts. He's a good guy and I appreciate his interest in the game. In January of this year I managed to get within 10,000 of the record – I missed out on my own personal best by 1,000 points, which kind of left me in agony, but that was my best score for 20 years and it convinced me I could get the record back. I'll be playing at this year's Funspot Tournament in June and hope to come over to London in August for the Classic Gaming Expo and play Gary there. A bit of friendly rivalry could be fun."

Be warned – if they start a doubles game, don't put your money down. You could be in for a long wait... 👾

The 1986 US National Video Game Team. Pictured left to right are Steve Harris, Perry, and Jeff Peters, presumably during a visit to the *Top Gun* set

Retro Scene

Find out what's new in the busy retro scene. Plus, we review the latest game releases

ZZap! to the Future

Classic gaming magazine rides again

Zzap!64, one of the most fondly remembered gaming magazines of yesteryear, is being brought back to life in a 64-page tribute magazine. The project, which is a collaboration between **www.zzapback.com** and **www.zzap64.co.uk**, will fondly look back at the C64 title that was first published in May 1985.

"*The DEF Tribute to Zzap!64* is a celebration of 20 years of

Zzap!64 (1985–2005), probably the best computer games magazine ever published," says Rob de Voogd, Editor of the tribute. "After being part of the team that created *Zzap!64*'s last issue (#107, March 2002), I couldn't let the magazine's 20th anniversary pass just like that. I decided to pick a number of often-overlooked but innovative classic C64 games (such as Raging Beast, Skool Daze, The Great Escape, TRAZ and six others), redesign the original *Zzap!64* reviews, blowing them up to two-page full colour spreads (some of them were originally half a page and black and white), and give them the *Zzap!*back treatment."

The tribute will feature all

Relive the glory days of *Zzap!64* with the 20th anniversary tribute magazine

Editor Rob de Voogd worked on *Zzap!64*'s issue 107. *The DEF Tribute* replaces the proposed issue 108

sorts of *Zzap!*-themed content, such as new retro-style game reviews, interviews, tips, and articles on retro gaming in general, such as overrated and underrated titles. The Shadow and the White Wizard will even make an appearance. The magazine will also include a double-sided A3 poster and 20 rare Oli Frey drawings that have

never been previously published.

The DEF Tribute to Zzap!64 is in production now, and will be available as a PDF download in the next few months. Rob is also looking at ways of getting the magazine professionally printed, so there's a very real possibility that you'll soon be holding the tribute in your hands. More on this next month…

CGEUK Battle Royal

High-score heavyweights scrap it out

As if there weren't already enough reasons for you to attend this year's Classic Gaming Expo, the event has now joined forces with Twin Galaxies ("the official scoreboard for videogame and pinball high scores") to offer up one almighty challenge to us Euro gamers. The gauntlet has been well and truly thrown down,

Twin Galaxies' founder Walter Day will be visiting the show in his role as official high-score referee

and an entourage of American and Canadian gamers will be invading CGEUK in a bid to prove that they are the best arcade gamers in the world.

Amongst the throng of world record holders will be Todd Rogers and Dwayne Richards. Todd has held a collection of world records over the past 25 years, while Dwayne was America's classic gaming champion in 1989, 2000 and 2002.

"This could be an historic moment in classic gaming," Todd told us. "The European and North American communities have never competed face to face before, and the European players feel its time for America to be put in its place. So, we'll see how we do."

Besides defending their long-standing high scores, the visiting champs will also hold discussions about the growth of classic gaming and retro matters in general. The challenges will take place during the course of the CGEUK event, with the winners collecting their prizes at 6.00pm. The discussion is set to kick-off at 2.00pm and will be headed up by

Gary Whelan will be attempting to beat his own Galaxian world record at CGEUK 2005

Twin Galaxies founder Walter Day, and current Galaxian record holder Gary Whelan. Gary will also try to top his own world record, so you could witness a new world record live at the show. We also have it on good authority that Tony 'TT' Temple (see last month's *Retro Gamer*) will attempt to beat Roy Shildt's Missile Command record at the show.

Classic Gaming Expo UK takes place on Saturday 13th August at Fairfield Halls, Croydon. The show runs from 10.00am to 7.00pm, and the latest information is available from **www.cgeuk.com**.

Joe Blade Returns!

New Speccy games from Retro-Soft

A raft of new Spectrum software is on its way courtesy of Retro-Soft (**www.retro-soft.co.uk**). Programmer Paul Griffiths has recently signed up with Retro-Soft

in order to resurrect his classic collection of Spectrum games. In his new role as Lead Coder, he plans to release classic titles such as Saracen, HawkStorm, Dominion and the previously unreleased Joe Blade 4! All of these will be compatible with any decent Spectrum emulator, and Paul is also working on porting many of the titles to other platforms, such as PalmOS.

"Apart from our PalmOS and Pocket Windows developments, we are currently considering developing for other portable platforms and for the Microsoft Windows environment. We're planning a big

**Freddy Mercury lookalike Joe Blade returns to control Britain's yob culture**

announcement once we have everything in place," said Paul Andrews of Retro-Soft.

Retro-Soft is currently in the process of adding a huge collection of new releases to sister site **www.download-trader.com**, including emulator images of Jonathan Cauldwell's popular Spectrum titles. Prices for the games start at a bargain £1.20 each.

Frogger Bounces Back

New homebrew game in the offing

Frogger is heading to the Atari 7800 thanks to Matthias Luedtke. He recently announced that he was developing a new version of the classic title and posted a downloadable version online. To get it, visit the AtariAge forums at **www.atariage.com/forums/index.php?showtopic=69060** and make sure you check for the latest version later on in the topic. The current version is still at an early stage, with a single level and plenty of bugs, but Matthias is keen for people to post feedback, and he's always on the forum updating fans on his progress. Despite the limited play at the moment, this is already looking like an impressive port, although there are no plans for a cart release yet.
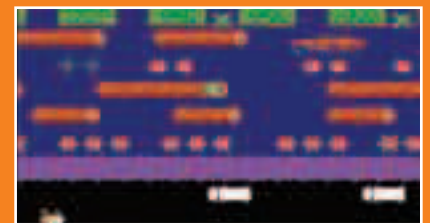
The Bells!

Hunchback swings onto the 2600

More 2600 homebrew is being served up, with a version of arcade classic Hunchback in the works. Developed by Chris Walton, the new game will be titled Hunchy and will be heavily based on the original Hunchback coin-op released in 1982.

As in the previous version, you take on the role of hump-backed Quasimodo on his quest to rescue his beloved Esmarelda from Notre-Dame cathedral. This means plenty of running, jumping and swinging, while avoiding arrows, guards and spiky pits. There are currently 15 playable levels and you can download the latest version from **www.atariage.com/forums/index.php?showtopic=67953**.

Astro Nell

Back in the day, VIC-20 owners must have felt pretty lonely, as their beloved beige box was perhaps the only popular computer not to receive a version of either Manic Miner or Jet Set Willy. Yes, there was Perils of Willy, but it's now well known that this came about after the original author failed to port Manic Miner to the machine – *and* it required a 16KB expanded VIC.

Fast forward 20 years and we have Astro Nell from Cronosoft. Author Matt Simmonds has somehow managed to squeeze a delightful Jet Set Willy clone into an *unexpanded* VIC. It really is an impressive programming feat, with loads of colourful screens packed with roving baddies. Sound is minimal, as you'd expect, but the graphics are great and the challenge is solid throughout. Having said that, the game thankfully doesn't rely too heavily on pixel-perfect jumping skills that were the mainstay of the Miner Willy games, although the annoying infinite death loop bug raises its ugly head. We're guessing that it's not included as a tribute to the genius of Matthew Smith...

Like most games of this type, your aim is to grab a certain number of items in the allotted time. In Astro Nell, this amounts to grabbing 88 fuel cells which are required to power up your stricken ship and escape the strange alien planet. As in Jet Set Willy, exploring each room is part of the fun, and there are plenty of locations to visit. Completing the game is probably beyond most mere mortals, but you're sure to have plenty of fun trying. Who needs Miner Willy anyway?

Rating:
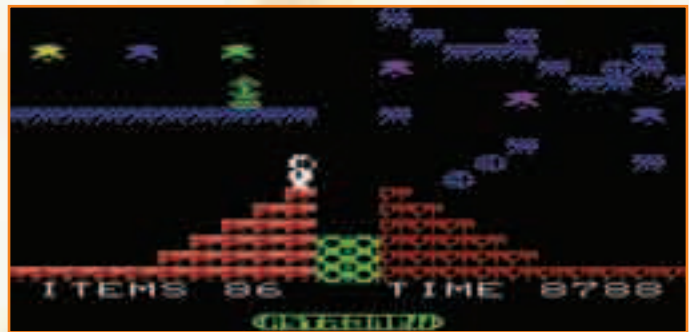
Higgledy Piggledy

Jonathan Cauldwell deserves a medal, for services to the Spectrum scene. The prolific programmer returns with another title that completely confounds anybody who thinks the Speccy is dead.

If you've played any of Jonathan's earlier titles then you'll know that a completely bizarre back story comes as standard. Playing as Eadwig Addlethorpe, interplanetary pig farmer by trade, you must round up your heard and ship them off to the pig processing plant. Sounds simple, expect that your pigs have evolved somewhat (must be the radioactive atmosphere) and have developed hollow bones and powerful wings. As a result, these pesky flying pigs are very difficult to catch.

Luckily, the resourceful Eadwig can move blocks from place to place. This allows you to reach parts of the farm that would be otherwise inaccessible and to control the movement of the pigs. You see, the pigs fly in a straight line until they hit a solid object, at which point they turn 90 degrees to the right and continue. So by carefully positioning blocks, you can guide them to the processing plant.

Higgledy Piggledy cleverly combines platform and puzzle elements, although the mix is not as heady as we'd hoped. The pace of the game is quite pedestrian, and continually moving blocks around (you can only carry one at a time) wares thin after a short while. Visually, the game is nothing short of stunning, with smooth, four-way scrolling and some devilishly clever coding that somehow eliminates the dreaded colour clash.

As a technical demo, Higgledy Piggledy is amazing, proving that Jonathan is easily one of the most talented programmers working in the scene. But as a game sadly it's a little lacking.

Rating:
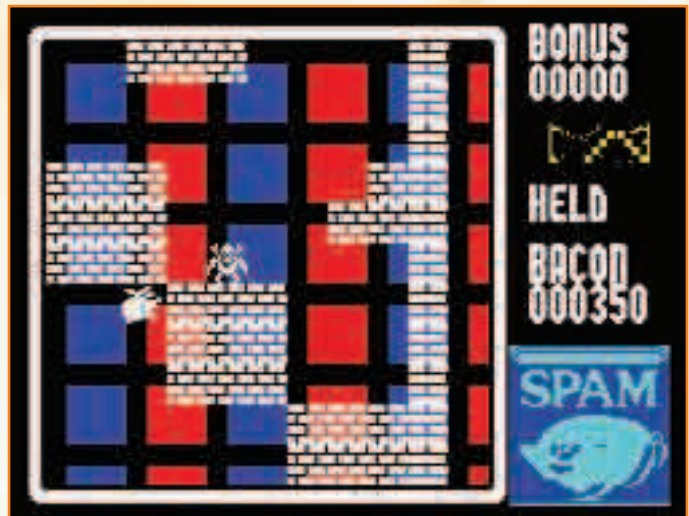
Platform Game Designer

Surely Cronosoft's most ambitious release to date, Platform Game Designer really does exactly what it says on the tin. The program is split into two parts – there's PDG Linear, which lets you design Manic Miner style games (ie successive single-screen levels that are completed in turn), and PDG Explorer, which you can use to create Jet Set Willy clones, with an expansive multi-screen game map that can be explored at leisure. As an added bonus there's an example of a PDG Linear game called Space Hopper.

Over time there have been several similar game design programs released for the Spectrum (CRL's 2D Game Maker springs rather painfully to mind), but none of them really allowed you to create a commercial-quality game. However, Space Hopper is up there with the platformers of the day. It's fast, challenging and looks great, successfully showcasing the power of PDG. And with no programming knowledge whatsoever, you can create games of similar quality. The tools are laid out in front of you, including sprite, background, sound and various other editors, and all the information you need to build your own unique platformer is supplied in the accompanying manual. As the loading screen states, all you need is a good idea.

This package is going to be big. Games created using PGD have already started arriving at our office for inclusion on our coverdisc, and it's only been out a few weeks! Cronosoft has also set up a competition to find the most original game created using PDG Linear, with the possibility of the winner getting their game published. If you're a Speccy fan and you've always wanted to create rather than merely play, Platform Game Designer is what you've been waiting for.

Rating: ✖✖✖✖✖✖✖✖✖✖

Tanks 3000

Fresh from the Protovision stable comes this C64 multiplayer combat title. Based on such classic games as Combat and Tiger Tanks, Tanks 3000 is a brand new update for C64 owners, pushing the machine into fairly uncharted territory when it comes to offering true multiplayer action.

The game plays very much like its ancestors, in that each player controls a tank and has to eliminate all comers to win the current round. These battles take place over several themed maps, including swamp, desert and snow, and the tank's projectiles can be controlled after they've been fired, just like a guided missile. But, and here's the real clincher, Tanks 3000 supports up to four players (providing you have Protovision's own four-player adaptor, of course).

Visually Tanks 3000 is very good, with the C64's palette producing some nice-looking environments and some well-presented menus and title screens. The tanks themselves are a little underwhelming, but this doesn't affect the gameplay. Sound is also great, and the music accompanying the proceedings is pleasing to the ear.

Actually playing the game is very enjoyable overall, but the experience is slightly marred by a couple of faults. Firstly, there's the tank control. When you attempt to steer while moving forward, the tanks stop and pause for a second, making the controls feel clunky and unresponsive. Also, there's no single-player support, so you need at least two to tango.

Tanks 3000 is a great little game and is certainly worth any C64 fan's time and money, especially if you can get a load of your mates round to make the most of it.

Rating: ✖✖✖✖✖✖✖✖✖✖

The Retro Forum

Have your say on all things retro and send us your letters, or stop by our busy online forum

The great Freescape

Hi there. First of all, I have to give the customary congratulations on a great magazine – I've never missed an issue and don't intend to start now!

I was wondering if you had any plans for a feature on the Freescape games and especially Domark's 3D Construction Kit, maybe following its history and filling in some of the blanks for us old users. For example, did Freescape's successor, Superscape, ever materialise?

I remember fondly the sense of community I had from being a member of the 3DCK user group, and I still own every issue of its newsletter. Can I suggest an interview with the group's chairperson, Mandy Rodrigues, as I feel she deserves recognition for the effort she put into everything, as well as her willingness to engage with strangers phoning her at all hours with queries on the most arcane and obscure aspects of the software with nary a grumble.

Of course, it would be great if you could actually wangle copies of the kit (preferably both incarnations) for your coverdisc, as I was an Amiga user back in the good old days and don't have a PC version. I suppose I could run the Amiga versions through emulation but the kit tended to strain the old machine's resources at the best of times – I think the best solution would be to run a native version.
Barry Metcalfe, via email

RG: Funny you should mention the Freescape series, Barry, as we were recently granted permission to interview the guys behind Incentive Software and the Freescape games such as Driller, Dark Side and Total Eclipse. It's a feature we're currently in the stages of planning so should be in the magazine some time soon. As
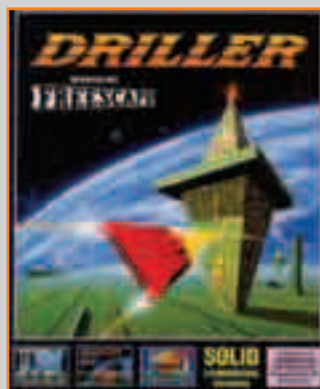
for Superscape, the 3D technology did eventually arrive and is still going today. It's been used in a wide range of applications, from 3D garden and interior design software to websites and mobile games. Visit www.superscape.com for more details.

Retro TV

I've been enjoying *Retro Gamer* so much I felt I had to get in on the act, and have enclosed a few discs that may be of some use or amusement to you. Two are DVD-Rs of some retro stuff I've culled from my collection – the disc titled '1984' contains a video starring a barely post-*Tiswas* Chris Tarrant, his grip on videogames extending almost exclusively to hysterically parroting the blurb on the box, which makes games sound a lot more dramatic than they deserve. Little has changed! The disc is padded out with the BBC2

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http://from.the.retro.forums

This month we asked you which items in your retro collection you'd save if your bedroom was ablaze and you only had time to save three things from the raging fire. Here are your posts...

ID: >Freddy Hardest<

1. My Lynx with APB in it.
2. My NGPC with Metal Slug in it.
3. A big box with my SNES and all my SNES games in it (I'm a strong lad, honest!).

ID: >Speedwolf<

1. Treasure's Gunstar Heroes (it even makes a guest appearance on my CV).
2. My boxed, almost-mint Mega Drive 2 to play it on.
3. Hmm, choice three... I'd probably grab my Tapwave Zodiac as it's loaded with loads of ROMs and emulators already. Does that count?

ID: >ZEUS_GB<

1. My 486 that has Doom, Doom 2, Final Doom, Rise of the Triad, Duke Nukem 3D, Stone Keep (the CD is in the CD-ROM drive), Tyrian, Alien Breed, Terminal Velocity, Mass Destruction, Jungle Strike, Scorch, Desert Strike and lots of other DOS games on it (My 486 is very light!).
2. My copy of Sonic 2 for the Mega Drive.
3. Third choice would be, hmm... Alex Kidd for the Mega Drive.

ID: >Godeye<

1. Terranigma for the SNES. It's one of my favourite RPGs.

Commercial Breaks documentary, The Battle for Santa's Software, which I'm sure you all have anyway – but there you go.

The second DVD is the result of something you may want to encourage your readers to repeat: I went through many of my old videotapes looking for ad breaks, particularly from material recorded in the Christmas period, and came up with a few bits and pieces. There are probably hundreds of old recordings out there whose owners don't realise there's a classic games commercial sandwiched in the middle. I can recall ads for Spectrum software on Saturday morning TV… it'd be great to find as many of these 'lost' works as possible.

Remember the 7UP ads from the early 80s that featured a 7UP Pac-Man machine? The music was *Bette Davis Eyes* by Kim Carnes (with reworked 7UP lyrics) and the power-ups were 7UP bottles. I loved those ads, and thought they'd be a fantastic addition to a *Retro Gamer* coverdisc. Unfortunately, none turned up on my tapes so I contacted 7UP via its US HQ and the company responded that as no transcript of these ads existed in its records, none could be provided. I wonder if perhaps this is because they no longer hold permission for the use of Pac-Man imagery? It's a shame, and maybe a reader could help? Someone needs to dig these up for your coverdisc!

The other DVD ('Retroclips') features the first, full-length,

controversial airing of the Sega Saturn Daytona USA ad. The driver's 'crown of thorns' martyr imagery got the God squad in a lather, but the real controversy was the glitzy ad with hardly any actual Daytona footage, most likely because it was, well, pants.

Following this is an overly-optimistic Philips CD-I ad, a NES ad from just before the SNES eclipsed it, the Sega 'cyber razor cut' ad, one of the original GameBoy ads, a Saturn chart from an old *Cybernet* show, then a piece on games and movies (such innocent days eh?) from *The Late Show*.

Next up is *GamesMaster* with the less crude, but less convincing, Dexter Fletcher at the helm, and a notable guest appearance from Danni Behr. Then another *Gamesmaster*, with a pretty ludicrous two-player Tomb Raider 2 play-off. This was the first episode of the last-ever series, complete with nice beach-effect set. Following this are some stories from Sky News, such as the Christmas PlayStation

shortage, the US N64 launch and the unveiling of Sega's Virtua Racing arcade machine. There's another *Cybernet* clip on failed systems (such as the Jaguar and 3DO) chased up by the Sega Nights ad (cunning stunts!). Finally on this disc there's a copy of the promo video that dealers were provided with for the SNES Mario All-Stars bundles, presented by none other than Craig Charles. Check out the *cough* unbiased review scores for Nintendo's own games, and a few mulleted heads still famous in gaming circles.

The CD-Rs contain scans of my own retro memorabilia. Disc one has some of the payslips and Christmas cards I received from *C&VG* during the golden years, plus a map special which I have several mentions in, and some communications with Tim Metcalfe and Claire Edgeley. On disc two there are scans of *C&VG* issues, a couple of which contain some of my work (a feat I've been dining out on ever since!), though I've yet to scan all the issues I had a piece in.

Maybe you can help me on something. My Jet Set Willy map in the June 84 issue is, to my knowledge, the first videogame map in print. Can anyone burst my bubble, or is this the case? My Sabre Wulf map is in the September 1984 issue. They always spelled my name slightly wrong (Aonghas should be Aonghus).

In the Nintendo folder there's a sugary blast from the past – a perfectly preserved Mario Cola can. The drink is long gone, but wasn't as memorable as the games. Sadly, preserving a Mario ice cream would have been too messy.

In the Sony folder there's the original PlayStation launch material, promo gifts, and a Psygnosis software brochure – notable mainly for Destruction Derby being listed as 'Demolish-em Derby'. The Sony watch was sent out after the first year of the PlayStation – it's a bit nicer

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2. Neo-Geo Pocket Colour with Metal Slug. It beats the PSP any day.
3. The current issue of *RG*, because I want to suck up and get in the magazine!

ID: >Officer Plankton Dibble<

1. My PS1 memory card that has all my saves from Kula World, Devil Dice, Castlevania: SOTN and

many other PlayStation games.
2. My minty-fresh copy of Castlevania Symphony of the Night.
3. An early issue of *Crash*, to re-read whilst waiting for the Fire Brigade.

ID: >Pottyboy<

1. My Spectrum +3 (It did cost me £50 on eBay, you know).
2. My entire collection of *Retro Gamer* and coverdiscs.
3. My laptop (full of emulators for Amiga, Spectrum etc, and tons of classic games).

ID: >slipmatt<

1. My PAL copy of Fatal Fury

Special on the Mega-CD.
2. My PAL copy of Shining Force on the Mega-CD.
3. My limited-edition Tomcat Alley package Mega-CD 2 machine.

ID: >borstal<

1. My copy of Sonic 2 for the Mega Drive because I may never see one again on a car boot to replace it!
2. My mint copy of ICO for the PS2. I've sold so many copies on eBay, but I just can't get hold of it any more.
3. Finally, my import

copy of Goldeneye for the N64. It cost me 80 quid to get it before the PAL release… so many good times… God bless the little fella.
4. LOOK, I REALLY WILL FIGHT ANYONE THAT TRIES TO STOP ME! My copies of Bangai-O and Sin & Punishment for the N64. They cost a lot!
5. My big-box Earthbound for the SNES. That's three… isn't it?

ID: >spikey_d<

The first thing would obviously be my precious Amstrad CPC464, which I've grown up with since

than the Sonic watch (in the Sega folder), but in the interests of preservation and in Comic Book Guy style, these have never been worn.

Ultimate, during its heyday, was very generous with its freebies, and I've scanned some of the posters and Christmas cards (signed by the famous team) sent to me, along with many of their complimentary slips and release notifications. I still have the T-shirt and cap, too. I've recently provided these scans to World of Spectrum, and they are amongst the most evocative images of the Spectrum period. I only realised while scanning them that the robot in Pssst is one of the robots from the film *Silent Running*. Tsk, piracy everywhere, eh?

Remember game ads in Viz? No? Well, I've scanned a few. See how Sega and Nintendo's different approaches to marketing separated the two early on. Nintendo doesn't do toilet humour, but if it did, who knows where it'd be today. Probably stuck in the U-bend.

I've only scratched the surface of my retro pile, which stretches from the Atari VCS to today's systems, but I hope some of the enclosed material is of some use if not amusement to all at *Retro Gamer*.
Aonghus de Barra, Dublin

RG: As long-time *Digitiser* readers we're familiar with your name, Aonghus, though we had no idea your work was printed in *C&VG* too. The discs you sent nearly

prevented this issue from going out the door on time, so thanks for that! We'd love to include some of this material on the coverdisc, but we'd need to have a lot of it cleared, especially the video footage, which would require a fair amount of time and money. We're certainly looking into it, though, and plan to show some of your clips at this year's CGE UK. Hopefully we'll see you there.

Puzzling...

I've been a huge fan of puzzle games for many years now, and I was wondering if you'd ever considered doing a feature on them or maybe a brief history of the genre. With the help of members of the *Retro Gamer* forum, I've compiled a list of 269 puzzle games so far, covering formats such as the C64, Spectrum and GameBoy. It's an ongoing project and one day I'd like to create a website dedicated to the puzzle genre. Some of my favourite puzzlers are Tetris DX (obviously), Mr Driller and Puyo Pop, though I'm continually discovering classic games due to helpful members of the forum. There's an abundance of them on the handhelds, particularly the GameBoy, which seems perfectly suited to the genre. All I need to do now is to find mint copies of them. I have a feeling it might take me some time!
Nick C, via email

RG: We'd certainly like to do a feature on the evolution of the
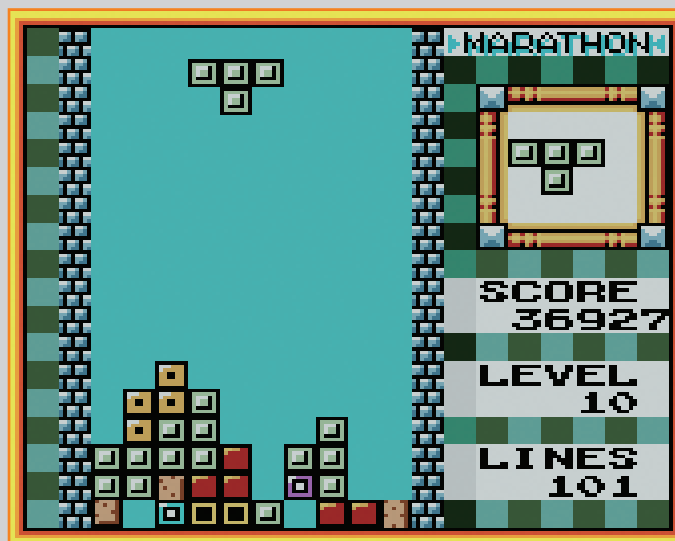
puzzle game at some point, but given the sheer amount of puzzlers and the masses of clones out there we're talking a mammoth feature spanning more than one part. Perhaps one day we'll be able to use your website as a handy reference guide!

The Quill is mightier...

I don't know how you're doing it, but Volume 2 Issue 4 was one of your best issues to date. I loved the piece on *Digitiser*, which I read every day throughout its time on *Channel 4*. It was fascinating to read about the people behind it and also their desert island disk choices.

The feature on Gilsoft was also a real eye-opener, as I'd been tempted to buy The Quill for the ZX Spectrum, but never got around to purchasing it due

to lack of funds. I'd be interested in finding any games written using that package to see what was possible with it.
Ryan Summers, via email

RG: The Quill was unique because it was used to create literally thousands of text adventure games, some of which were released commercially – and a select handful were actually published by big software houses such as Melbourne House and CRL. Few would disagree, though, that Delta 4 were the kings of The

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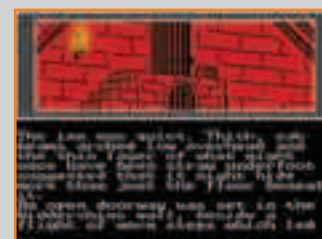
I was three years old. The second thing would be my copy of Streets of Rage for the Sega Mega Drive, because it was one of my favourites. Third would be my collection of Sonic figurines and plushies that I've had for ages!

ID: >Retronic<

1. Sega Multi Mega with Cannon Fodder in it (I'm not bothered about its condition as long as it works).
2. My copy of Last Ninja 2 for the C64. It's the 'Special Edition' version and I've still got the Ninja hood, rubber shuriken and map, you know. The box and instructions are still in

mint condition.
3. Finally, the original Tomb Raider for the PlayStation. It may not look that good any more but plays like a dream and I still believe it to be the best.

ID: >Retrology<

1. My Neo Geo AES and four games – that counts as one choice!
2. Samba de Amigo PAL version with maracas.
3. Secret of Mana on the SNES. I think I'll just go and check the smoke alarms.

ID: >consolepassion<

1. My Saturn Shining Force 3

Premium CD .
2. My mint, boxed ColecoVision.
3. My MB Vectrex.
Better check my insurance policy...

ID: >Fuz<

1. Pulstar – Neo Geo AES.
2. Waku Waku 7 – Neo Geo AES.

3. Radiant Silvergun – Sega Saturn. Though I'm tempted to say Super Metroid (SNES), Blast Corps (N64) and Vib Ribbon (PS1), just because I've already lost and re-bought them once, and would be loathe to do it again!

ID: >Spanner<

1. My full-size, upright MAME cabinet (assuming it didn't cause the fire).
2. My massive *Your Sinclair* collection (wibble).
3. Rather than rescuing anything else, I think I'd throw a C64 into the burning building, 'cause, well... you know. After that, I'd just sit back and wait for the

Star Letter

Want to grab yourself a quality piece of retro-gaming merchandise? Each month we'll select our favourite letter – one that makes us smile or think – and the winner can select one of our retro-themed T-shirts for free...

Forum

Being a new reader to your magazine (from Issue 13), I've missed out on a lot of what has passed (although I did also buy the *Retro Gamer Anthology*). But, one of the first things I did after reading your magazine was to join the forum.

Now, I was also a forum virgin and not sure as to what lay ahead. I'd just like to say to anyone out there who reads the magazine but hasn't joined the forum, to do so *now*! This has been one of the best things I've ever done (apart from buying the magazine in the first place). I've found the forum members to be friendly and helpful, while some of the items discussed have been informative and just downright ridiculously funny.

So, if you haven't joined, why not? You're missing out on a lot of what the magazine has to offer (other than the printed articles). To the forum members, I'd just like to say thanks.
Retronic, via email

RG: We won't take any credit for the quality of the forum as it's the members who make it what it is. We'd have to agree, though, that our forum is a great place to talk about all things retro, and we're lucky to have such an excellent roster of members ever eager to chat or help people out. It's also a very welcoming environment, and you can't always say that about retro forums – especially some of the edgier ones on the Web.

If you've yet to visit the *Retro Gamer* forum, then why not go along to www.retrogamer.net and sign up?

Quill, pushing it in ways that even Gilsoft didn't think were possible. Personally, we'd recommend The Colour of Magic (pictured) or The Big Sleaze.

Towyn treasures

Thank you for your fantastic magazine – I've been collecting *Retro Gamer* since Issue 3. Your magazine brings back many fond memories, especially of scouring the arcades in the mid-80s playing the likes of Yie Ar Kung Fu and Green Beret (I'm 28 now!).

Having just returned from a short break with my wife and son in Towyn, North Wales, imagine my surprise when I bought the latest issue of *Retro Gamer* and read your article Son of Arcade Hunt! Every day we passed the arcades in your article, unaware of the treasures they held. Luckily living in Chester we're only down the road from Towyn, and since returning from our short break my wife suggested we could return for day trips. After reading your article, I couldn't agree more!
Steve, via email

RG: Well, that's what we like to hear – stories of people enjoying these old coin-ops, rather than tales of commercial enterprises snapping them up for profit. Enjoy your return trip to Towyn, Steve – and while you're around that neck of the woods, why not visit some of the other resorts dotted along the North Wales coastline. If you find any interesting arcades, let us know and we'll feature them in a future Arcade Hunt.

insurance wing-wangs to start pouring in. Then it's eBay city, baby – and I'd be the new mayor!

ID: >Lolly<

1. Zelda Game & Watch.
2. Secret of Mana on the SNES.
3. My GameBoy with Tetris.
Since I live on the top floor and wouldn't have a hope in hell of getting out, I'd probably have to use my PC to smash a window then abseil down with the excess cables.

ID: >MintFresh<

I wouldn't take any of the new retro stuff I've bought recently – it would have to be the original systems I still have from when I was a kid. These are:
1. My Spectrum 128K with Fantasy World Dizzy.
2. My Amiga 1200 (in a tower case with a hard drive, so it has loads of games installed including Monkey Island 1 & 2).
3. My Master System, probably with Wonder Boy 3: The Dragon's Trap.
So nothing rare or expensive to replace, but I couldn't bear to leave my old friends in the fire!

ID: >Warrior<

1. My boxed Spectrum 128 – this probably had the smallest production run of all the Speccy models, so is a little harder to find, but it would be dead easy to track down the original cassettes for it or download .tap files and convert them to tape...
2. The PAL pre-release/review version of Fighting Vipers for the Saturn that I once 'acquired' from a videogame-store-owning pal of mine. Finding a regular copy of FV would be easy, but it'd be damned hard to locate another one of these.
3. My Neo Geo Pocket with whatever game happened to be stuck in the back of it at the time (Probably Fatal Fury: First Contact), to give me something to play while waiting for the firemen to come.

ID: >king monkey<

If my collection went up in flames it wouldn't be spontaneous, it would be the missus. And, if I could only save three items, I think I'd sit amongst the flames playing Tetris and burn with everything else.
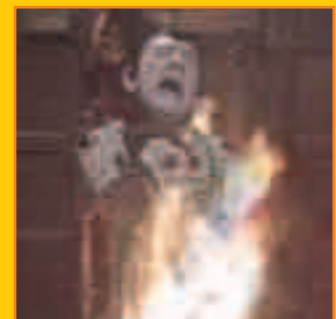
RETRO AUCTION WATCH

Richard Burton returns to the wonderful world of eBay to track down unusual, rare and downright rude online auctions

Would you pay £40 for a computer magazine (cough, *Retro Gamer* issue 1, cough)? Well, that's exactly what eBayer and supreme scanmeister Mort did when he bought up a very rare copy of *Commodore User*. This June 1983 release was actually a pilot magazine specially put together for the 4th International Commodore Show, and so only available in extremely limited numbers. The official first issue of *CU* didn't hit the news-stands until October.

Another month and another Amiga CD32 game features in the Auction Watch. The Lotus Classic Trilogy is a suite of Gremlin's three Turbo Esprit racing games. Usually this title wouldn't command a second glance – in April the same game on eBay France managed to make a measly £11 for the seller. This time around, though, the price jump was like a mini earthquake, causing a substantial £97 shockwave on the eBay scale. With CD32 games seemingly becoming more and more sought after, it might be worth keeping those eyes peeled at the local car boot sale for discarded CD32 games.

Willy worship

One of the most interesting and unique offshoots of the Jet Set Willy phenomenon were the various small software houses (one teenager in a bedroom) who set about producing JSW editors. These nifty bits of code enabled you to alter the screens, sprites and backgrounds to create your own personalised versions of the game without any programming experience at all. Being produced in small numbers and sold through the small ads section of computer magazines, it's safe to say that these programs didn't sell in huge quantities. This is precisely why they are so sought after amongst software collectors and JSW fans alike.

Probably the most well known 'company' was Softricks who produced two versions of its editor, unsurprisingly named Mk1 and Mk2. A copy of the first version made an ultra-rare appearance on eBay UK – the first in over two years – and promptly whipped up considerable interest, pushing the final auction price to £30.

Pure filth

After covering a few, shall we say, less than wholesome games on the NES format in previous months, the last place you think you'd find games of an adult nature would be on a family-friendly Spectrum. Oh yes, your hot rubberised box of wonderment has had its fair share of seedy software too.

With the offer of colour-clashing cheap thrills just a few minutes' loading time away, the bait was just too much to take for one eBayer when a rare set of three games from filthmongers to the Sinclair world, R&H Microtec, was seen loitering

around the red-light district of eBay UK. The games in question were Fantasy: An Adult Game, Cover Up! and Peep Show. After a slow, steady start the auction action culminated in a frenzied bidding climax which ending with a satisfyingly expensive pay-out of £89.90.

Also available on eBay: one box of Men's Kingsize Kleenex tissues (unused), available for just 87p excluding postage…

Retro Coverdisc

It's a high-octane bullet-fest of a month on the *Retro Gamer* coverdisc as we've gathered together some of the very best homebrew 2D shooters around for your blasting pleasure. We have speedy vertical shooters aplenty and more side-scrolling eye scorchers than your retinas should be exposed to. No matter what your shoot-em-up preference, be it R-Type, Galaxian, Thunderforce or even Space Invaders, we have something for you. There are even some titles that dare to be different, infusing the classic formula with innovative gameplay. So, scratch that itch on your trigger finger and give them all a blast

step 1 Place the coverdisc into your CD/DVD drive and it should start automatically. If not, select Run from the Start menu and enter D:\browser.exe (assuming that D: is the letter of your CD/DVD drive). When the browser appears, click OK to accept the declaration.

step 2 Some of the games/programs are provided as executable files and these will run or install straight from the disc. If an setup wizard appears, simply follow the onscreen prompts and then wait while the files are copied to your hard drive.

step 3 Many games/programs are stored in zipped archives, so you might need an archive manager like WinZip, which is under the Utilities browser tab. Extract all the files from the archive using the Extract feature and place them in an empty folder, then run the executable file.

step 4 If you're looking for a particular program, click the Search button and enter a keyword. The browser program will search the disc and place all the relevant results under the left most browser tab. They can now be accessed directly from here.

Problem solving

If you're having a problem with a particular program on our coverdisc, please view the help file in the program for assistance. You might also consider visiting the website of the program author for further help. Otherwise, email techsupport@livepublishing.co.uk.

If you are having problems with the CD, first check that it is not dirty or scratched. CDs can be cleaned by holding them under the cold water tap and gently rubbing the silver side with a tissue. Dry it carefully with another tissue.

If the disc still doesn't work, then it may be faulty. Faulty discs should be returned to Retro Gamer, Live Publishing International Ltd, Europa House, Adlington Park, Macclesfield, Cheshire, UK, SK10 4NP. We will replace all genuinely faulty discs.

Coverdisc helpline
01625 855051
techsupport@livepublishing.co.uk
(Monday-Friday 10am-4pm)
Helpline for coverdisc problems only

DISCLAIMER

Some of the programs on the Retro Gamer disc interact with your PC on a fundamental level. We strongly advise you back up your personal data before using the disc. Due to the way the Retro Gamer disc is compiled, Retro Gamer, Live Publishing International Limited and/or any associated company and/or individual cannot take responsibility for damage to your PC or otherwise arising from use of the coverdisc. You use the programs on the disc at your own risk.

Thunder Slash

TechnoSoft fans rejoice! This homage to all things Thunderforce delivers some excellent 2D blasting, and borrows elements from ThunderForce III and IV. Just as in the originals, your ship boasts multiple speeds and a wide range of selectable weaponry. Of course, there are also waves of devious enemies and plenty of massive bosses to tackle.

Cloudphobia

As a flying mech, you're equipped with a heavy blaster and a number of homing missiles to lock onto those waves of foes with. Warning indicators give you a head-up on incoming craft and you can use your boosters to zip through the level like lightning. But at this speed, staying alive isn't easy...

G-Type

R-Type and Gradius are two of the most popular retro blasting titles, and with good reason. Any fan of these classic shooters should definitely give this fusion of the two giants a go, as it takes the best elements of both games and mixes them up to create a truly impressive blaster.

Noiz2sa

A strange one. Noiz2sa is a visually striking vertical shooter that incorporates basic move-and shoot play (no power-ups or extras) with artistic and stylised visuals. Taking place over a number of levels, you guide your ship through wave after wave of bullet-spewing foes while dodging projectiles and collecting precious score-boosting pick-ups.

Galax

This is an inventive vertical scroller that includes all the usual high-speed blasting and bullet dodging you'd expect, but also features a clever move system. Lock onto enemies, press the correct move sequence, and you'll unleash a powerful attack. This system can take a little time to master, but there's a training mode included to help you on your way.

Takatis

Don't be put off by the apparent sluggishness of this side scroller. Make it through the first couple of levels and things soon pick up speed, then before you know it you're zipping along, dodging asteroids, avoiding traps and using your power-ups tactically to survive. A slow-burning but solid blaster.

<<<Endgame>>>

After braving the perils of Robotnik's latest scheme, and traversing the planet the Eggman has taken over, Sonic finally puts an end to the evil genius' plans

Robotnik may be cracked, but the planet's shackles start to collapse. Sonic, ever the good guy and ladies' man, promptly swoops in and saves Amy

Meanwhile, now that Robotinik's machinery is destroyed, the strange planet breaks its chains and ascends into the clear blue sky

In a final show of gratitude to the mighty hedgehog, the planet launches a huge fireworks display culminating in the smiling face of our hero!

After saving Amy, the world, and even time itself, summer arrives and flowers suddenly spring from the ground. You're too cool, Sonic. Too cool...

Sonic CD comes to a climactic close as the heroic hedgehog puts a stopper in Robotnik's plans (again) and gets the girl in one fell swoop...