The legend lives on: Psygnosis prepares to re-enter the PlayStation fast lane
Is videogaming a 'cool' pursuit? As much as some industry evangelists would have it, the answer is no. It's simply another pastime, like listening to music or going to the cinema. Crucially, however, it is no longer a pastime lumped together with trainspotting and stamp collecting, forever destined to remain in the realm of geekdom. Where once videogaming was a pursuit typified by lone individuals in darkened rooms, hunched over screens flickering with Tolkien-esque adventures, it has emphatically moved into the living room.

After nearly 30 years of development, videogaming is now, finally, a socially acceptable pursuit. Those who used to talk about their habits explicitly in the company of like-minded individuals – albeit in hushed tones – have happily come out into the open.

This month Edge showcases Wipeout 3, a continuation of a series whose birth was a major catalyst in the shifting cultural perception of videogames. The new game retains all of the values that made the original an event whose consequences were so far reaching: cutting-edge graphics, banging soundtrack, and peripheral artistic support from the Designers Republic.

With 50 million PlayStations already shipped, it's clear that videogaming isn't about to go the way it so famously did following the console crash of the '80s.

This is no longer kids' stuff. More significantly, though, it doesn't go hand in hand with the humble anorak either.
GAME CONTENT IS CHANGING – SOME WOULD SAY FOR THE WORSE. AN INVESTIGATION INTO ADULT GAMING

METROPOLIS STREET RACER

DREAMCAST RACING IN LONDON, TOKYO AND SAN FRANCISCO

CAN SMALL DEVELOPMENT TEAMS SURVIVE AND PROSPER IN THE FACE OF AN IMPENDING WAVE OF NEW TECHNOLOGY? EDGE LOOKS AT MODULAR PRODUCTION AND THE SOLUTIONS IT AFFORDS

It dazzled on the PlayStation when it debuted in the west, selling anti-gravity racing to a generation. Edge looks towards the new version of Psyonix's most celebrated brand and salutes its illustrious legacy.
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UK DREAMCAST TO DEBUT AT £200 WITH MODEM

While firm price details come as no shock, Sega's network plans reveal a company with a specific mission.

As originally intimated by Sega, the UK version of Dreamcast will launch in the UK at a pricepoint of £200. On September 23, the 128-bit console will debut in Europe, two weeks after it hits American retail with a price tag of $200 (approx. £124).

Perhaps more importantly than pricing issues, however, Sega insiders have revealed that the company will ship the western version of the console with a power supply, and the company now appears committed to luring potential customers with what might be termed 'extras'.

Iomega to lend support
It has also been confirmed that external-storage-medium specialist Iomega Corporation is to work with Sega engineers in developing an add-on Dreamcast unit capable of handling 100Mb magnetic disks.

It remains to be seen just how much effort Sega will put into its Dreamcast Internet push, but this is one area of commitment it can currently boast over Sony.

56K modem built-in. The original Japanese model was shipped in December last year with a 33.6K modem unit, and Sega's plans for western territories confirm that it is as firmly committed to selling its new hardware on the strength of connectivity out-of-the-box as much as it is to its steadily growing software catalogue.

Although Sega has yet to reveal any plans regarding multiplayer Dreamcast network gaming, the company will be building on the experience gleaned from its previous outing, via the Saturn's ill-fated X-Band modem, in building a stable environment through which players will be able to indulge in head-to-head experiences in the likes of Sega Rally 2, as well as use Web-browsing and email utilities. This positions the console alongside stripped-down PC Internet computers in what has become a fiercely competitive marketplace.

Sega knows full well that it is simply not able to compete with Sony's forthcoming console in terms of sheer technology, but the company's Zip drive technology is well-established in the computing field and is favourably regarded for both reliability and durability. And its Dreamcast unit will not be dissimilar to existing units, which offer a seek time of 29ms and retrieval rates of up to 1Mb/second.

Iomega has stated that the Dreamcast-specific drive will not only enhance standard gaming - enabling players to store 800 times as much data as is possible with a VMU unit - but is intended to work as a fundamental component in Sega's drive towards Internet connectivity and the potential it affords. Iomega claims that its unit will increase the capabilities of 'Web-based activities such as content saving of email in game-oriented channels'.

It remains to be seen just how much effort Sega will put into its Dreamcast Internet push, but this is one area of commitment it can currently boast over.
Sony, which has yet to release connectivity details for its next-generation PlayStation.

Such an initiative brings Dreamcast even closer to a PC in terms of capabilities, of course. More significant, however, are the implications this has on Sega's next-generation strategy. Like Nintendo, whose abortive attempts at modular storage technology lost it millions with its 8-, 16- and 64-bit formats, Sega famously failed to sell its modular improvements, the Mega CD and 32X, to a massmarket audience. Sega representatives have even stated outright that Dreamcast is intended to be an 'evoing' platform. Perhaps Nintendo, following its 64DD fiasco (see news, E71), should have a quiet word in Sega's ear.

Consumer demands

Regardless of technological embellishments, potential Dreamcast customers in the west are champing at the bit for software details. The machine will launch here with ten titles, including Virtua Fighter 3tb and Sonic Adventure, the latter expected to arrive in tweaked form, its original glitches having been ironed out. Meanwhile, 15-party titles Metropolis Street Racer (see p46) and Project Velocity (see E70) are also expected to ship on September 23.

Sega promises another 20 titles before Christmas, including Sega Rally 2 (possibly in updated form), The House of the Dead 2 and a Dreamcast-specific version of Cool Boarders (see p28).

Launch titles in the US, meanwhile, will include racing games Hydro Thunder and C.A.R.T. Racing (aka Super Speed Racing – see p88), Sega Sports titles NFL 2000 and NBA 2000, fighting games Soul Calibur (see p26), Marvel Vs Capcom (see p89), Mortal Kombat Gold and Power Stone (see E70), plus a new version of Castlevania from Konami.

Sega claims that pre-orders in America have reached the 30,000 mark, and the company expects to reach a figure of 200,000 before launch. It also claims that one million Dreamcast units shifted in Japan throughout the console's first four months on sale.

Iomega's Zip drives have proved enormously successful in the computing sector. The proposed Dreamcast version will use the existing 100MB capacity.

Three key launch titles in the UK will be the 15-party-developed Metropolis Street Racer (left) and Project Velocity (centre), plus Sega's Sonic Adventure (right), which could appear in more impressive form than the Japanese original.

TEAM EFFORT

Sega has already splashed out some of its proposed £90m Euro Dreamcast marketing budget by setting up a three-year sponsorship deal with Arsenal FC believed to be worth around £12m.

The contract, which will see the London-based club bearing Sega and Dreamcast logos on home and away shirts from July 1, is Arsenal's biggest ever – and believed to be the largest deal of its kind ever – replacing the previous arrangement it had with JVC.

Responding to the deal, a source close to Sega said that the company was prepared to "throw money at Dreamcast until it works."
Sony has home advantage

Dreamcast hardware and software sales are currently running at weak levels in its native Japan, however. Famitsu Express, the country's biggest gaming publication, revealed in its May 7 edition that PlayStation titles were leading the pack, with 78.6 per cent of all software sold in the previous week. N64 trailed with 12.5 per cent, and Dreamcast brought up the rear with 3 per cent. In the same period, PlayStation console sales were recorded at 36,288, Dreamcast at 13,348, and N64 at 12,129.

It's clear Sega needs to engineer its western launch with a phenomenal level of astuteness if it is to repeat the feat it achieved with the Mega Drive - that is, dominance over its rivals in both the US and Europe. But Nintendo eventually stole Sega's market leadership with its SNES, thanks largely to software support. Sega has the backing of such big-name developers as Namco and Capcom in its home territory, but many key developers outside of Japan, including the likes of Shiny Entertainment and new Rare break-off unit Free Radical Design (whose members - see p118 - were key figures in the development of the legendary GoldenEye and the highly anticipated Perfect Dark), have already stated that they're holding back on their commitment to Dreamcast.

Independent coders will not be pushed into developing for Sega's machine, of course. If, however, the company can market its new format with the bang that the proposed £90m first-year Euro-launch budget has the potential to afford - crucially maintaining impetus well into 2000 - then Dreamcast's coder-friendly architecture will eventually win over development support to ensure that it at least stands proud in the face of Sony's proposed onslaught.

Marketing matters

It's clear that £200 represents an extremely attractive pricepoint for a console with the capabilities Dreamcast offers. The problem Sega faces, of course, is that it is no longer targeting a savvy audience: the average videogamer of the late '90s is a markedly different beast to that of the early part of the decade, when the company last enjoyed major consumer-market success. An attractive pricepoint will not be enough to hit the layman where it matters. Perhaps more than any other elements of Sega's western operations, its marketing departments clearly have their work cut out.

(First row) Virtua Fighter 3tb; The House of the Dead 2; Sega Rally 2 - set to be the first title to test Sega's western Internet gaming mettle; Power Stone - another big title before the year's end. (Second row) Soul Calibur; Snowboarding Supreme; Cool Boarders: Dreamcast Version; Bio-Hazard: Code Veronica - all expected soon after launch. (Third row) Shenmue; Buggy Heat; Air Force Delta; Geist Force - all set for 2000 (if approved for the west)
WORLD’S BIGGEST GAMES EXPO TO ROCK LA
Over 400 exhibitors and 2,600 games expected at the interactive entertainment event of the year

After two years in Atlanta, E3 returns to Los Angeles, where from May 12-15 it occupies over 536,000 square feet offered by the city’s massive Convention Centre. Within the world of videogames, no other show comes close - not only in scale, but also in terms of importance. More publishers still choose to premiere their respective titles at E3 than at any other event.

Show of strength
Of all present at last year’s show, Nintendo emerged with the strongest line-up of titles, although certainly not the largest. This is something it will be looking to repeat 12 months on. A near-finished and hence playable Jet Force Gemini, Perfect Dark (the first three levels and multiplayer rumoured to be playable) and the public unveiling of Donkey Kong 64 (allegedly playable) should ensure Rare makes its usual mark. Namco’s Ridge Racer 64 will be reving up next to Video System’s F-1 World Grand Prix II and Star Wars: Episode I Racer from LucasArts, while other appearances include Eternal Oddworld: Munch’s Oddysee and Oddworld: Hand of Fate - a third instalment in the popular series and a realtime strategy title respectively (both are planned for PC and NGPs). Take 2 subsidiary Rockstar Games will unveil GTA2 and an updated Max Payne, while Interplay will have Galivan on show. Codemasters makes its first independent E3 appearance with No Fear Downhill Mountain Biking and Prince Naseem Boxing among others. Westwood’s eagerly awaited C&C: Tiberian Sun will show its face in public for the first time, and its action-RPG PC title Nox sounds promising. Traditional RPG fans should relish Dragon Valour from Namco, as well as Square’s Chocobo’s Dungeon 2, Final Fantasy VIII, Final Fantasy Anthology and Saga Frontier 2.

Sega will be keen to showcase its initial line-up in an attempt to reinforce its commitment to US gamers. Dreamcast-related announcements should form a substantial part of the proceedings.

Eager to impress
As Dreamcast’s US launch nears, Sega will be keen to showcase its initial line-up in an attempt to reinforce its commitment to US gamers. The House of the Dead 2, Sonic Adventure, Virtua Fighter 3tb, Power Stone, Super Speed Racing, Soul Calibur, Shenmue and Resident Evil: Code Veronica are expected. Dreamcast-related announcements should form a substantial part of the proceedings.

Psygnosis has one of the more substantial line-ups of the show. Wipeout 3 leads Formula 1999, Motocross Madness, G-Police: Weapons of Justice and others on PlayStation, while PC owners will no doubt be looking at Drakan: Order of the Flame, Hired Guns 2 and Metal Fatigue. In addition, a Ratchet & Clank sequel is expected to be present.

Konami replaces last year’s Metal Gear Solid with the integral version (see Alphahed, while driving offering Rally (working title) and the Bemani music range complete the new line-up.

Half-Life: Opposing Force and Team Fortress 2 from Valve should prove popular. Other interesting titles include Oddworld: Munch’s Oddysee and Oddworld: Hand of Fate - a third instalment in the popular series and a realtime strategy title respectively (both are planned for PC and NGPs). Take 2 subsidiary Rockstar Games will unveil GTA2 and an updated Max Payne, while Interplay will have Galivan on show. Codemasters makes its first independent E3 appearance with No Fear Downhill Mountain Biking and Prince Naseem Boxing among others. Westwood’s eagerly awaited C&C: Tiberian Sun will show its face in public for the first time, and its action-RPG PC title Nox sounds promising. Traditional RPG fans should relish Dragon Valour from Namco, as well as Square’s Chocobo’s Dungeon 2, Final Fantasy VIII, Final Fantasy Anthology and Saga Frontier 2.

Sony spurns speculation
At the time of writing, Sony is keeping ominously quiet about its E3 plans. Gran Turismo 2 is likely to make its official US debut, and will most likely be joined by Dino Crisis, Ape Escape, Omega Boost (review next issue), and Mario Kart clone Speed Freaks (as well as countless GT, Metal Gear Solid and Res Evil rip-offs).

Expect an exhaustive E3 special report next month.

(From top) Donkey Kong 64, Monaco GP Racing, Perfect Dark, Gran Turismo 2, Jet Force Gemini and Wipeout 3 are just some of the titles set to grab the attention of jostling crowds at this year’s E3 in Los Angeles.
PRESSURE RISES OVER VIDEOGAME VIOLENCE

Software companies sued for millions as another outrage spills controversy

The effect of videogame violence has once again fallen under the spotlight following a killing spree in an American school. More worrying for the games industry, a week before the tragedy, a lawsuit for over $100 million in damages was filed against a variety of firms including 18 game companies. This case resulted from an attack in 1997 in which a 14-year-old boy shot dead three girls at a school in Kentucky.

Unsurprisingly, some news reports suggested that the recent attack at Littleton, Colorado, which left 15 dead, was influenced by violent images, including videogames. NBC, in particular, reported that the two gunmen were fanatical Doom players and showed footage of the game in which it said, "players run down hallways destroying everything that moves." It was also suggested that one of the killers maintained a Doom forum on AOL. Other televised reports showed material being removed from the home of one of the suspects, including books bearing the Doom logo.

"I don't believe violent videogames lead to violence, but this was different," commented a student who knew both killers. "They'd play these games for hours and hours and hours.

The influence of violence in computer games is causing increasing public concern following high-profile attacks such as the recent school shooting in Littleton, Colorado, which resulted in 15 deaths.

"The games trained Michael Carneal [the killer] to point and shoot a gun in a fashion making him an extraordinarily effective killer, without teaching him any of the constraints or responsibilities needed to inhibit such a killing capacity."

Legal experts believe it has little chance of succeeding. Meanwhile, Spain is seeking to pass a bill in the European Union to restrict the availability of violent games. Unlike the UK, Spain does not use a rating system. Italy has also expressed similar concerns, and in France, a pressure group is calling for games such as Resident Evil and Carmageddon to be banned. The EU is expected to make a recommendation on the Spanish request in the next few weeks.

The wording of the lawsuit in the Kentucky case, however, is specific in its condemnation. It alleges that, "The games trained [perpetrator] Michael Carneal to point and shoot a gun in a fashion making him an extraordinarily effective killer, without teaching him any of the constraints or responsibilities needed to inhibit such a killing capacity." The other co-defendants in the case include Time Warner, responsible for the movie The Baseball Diaries, and three pornographic Websites.

One of the less obvious games cited in the Kentucky lawsuit is Mech Warrior II (left). Resident Evil (right) has the gore, but as a thirdperson title, did it really train the killer to point a gun effectively?

GAME COMPANIES SUED

Midway: Quake, Doom
Apogee: Wolfenstein, Doom
Id: Quake, Doom
Virtus: Quake
Acclaim: Mortal Kombat 1 & 2
Atari: Doom
GT Interactive: Doom
Interplay: Redneck Rampage
Nintendo: Nightmare Creatures
Sega: Quake
Virgin: Resident Evil
Activision: Wolfenstein, Mech Warrior I & II
Capcom: Resident Evil
Sony: Final Fantasy VII
LaserSoft: Doom
Williams: Quake, Doom
Eidos: Final Fantasy VII
Square: Final Fantasy VII
BULLFROG CO-FOUNDER LEAPS FROM POND
Further shake-ups at Britsoft darling as Les Edgar departs to pursue various projects

Les Edgar has resigned as chairman of Bullfrog, the company he co-founded with Peter Molyneux 12 years ago. Both Bullfrog parent EA and Edgar stress that the parting is amicable; he will maintain links with the company, developing its presence in the Asian market.

"I'm highly motivated by new challenges and the time felt right to hand over the reigns of Bullfrog in order to spend more time on the other interests I enjoy," Edgar told Edge.

One of projects he will be involved with is the Bullfrog offspring Lost Toys. "Bullfrog nurtured some amazing talent over the years," said Edgar, "but I can safely say that [the Lost Toys team] were among the best."

Lost Toys is currently in discussions with various publishers concerning its first title, due on PlayStation and PC next year. As well as supporting the venture financially, Edgar will act in an advisory capacity.

"I'd love it to aspire to Bullfrog's ideals," he explained when asked about his hopes for Lost Toys. "That is: creative, innovative and above all a fun place to be, where everyone feels they make a difference."

In addition to Lost Toys, Edgar is talking to a number of other small developers and has ideas for an Internet venture, too.

"I also plan to spend a lot more time with my kids, Jamie and Louise," he smiled, "now that they're old enough to focus-test games on!"

After Bullfrog was founded in 1987, it rapidly grew to become one of the UK's premier developers, producing genre-busting games such as Populous, Magic Carpet and Dungeon Keeper. The company was sold to EA for $40 million in 1995.

Rumours of more Bullfrog break-off teams are unfounded.

SONY STRIKES BACK AT CONNECTIX
Virtual Game Station loses the latest round of ongoing emulator wars

Sony's continuing efforts to clamp down on PlayStation emulation have finally borne fruit. After earlier attempts failed, a San Francisco Federal District Court granted it a preliminary injunction against Connectix. The ruling forces Connectix to stop shipping its Virtual Game Station emulator for the Macintosh, although the company says that it will not be recalling units already at retail. It was also ordered to stop development work on all products that used Sony's BIOS and hand them over to the court.

Sony claims the ruling upholds its claim that Connectix had infringed the PlayStation's operating BIOS code and diluted Sony's trademark. Connectix will appeal against the decision and claims it is still working on developing a Windows version of Virtual Game Station. "This is just the first stage of a lengthy process," commented Roy McDonald, president of Connectix. "We are confident we will be able to resume shipments once this matter has received further review."

Earlier in the month, Sony had failed to gain a temporary restraining order on blem's PlayStation emulator for the PC. Following 500,000 downloads of the demo, the finished product has started to ship. It is not known whether or not the Connectix ruling will set a precedent in this case.

In another development, Dave's Classics Website reopened with a temporary URL (www.davesclassics.warzone.com), shorn of all the ROMS that spurned Sony to slap a lawsuit on UGO, Dave's previous service provider.

Cuttings

Infogrames buys up west
In a move that continues its drive to become a global player, Infogrames has bought US publisher Accolade for $50 million cash. Infogrames' chairman Bruno Bonnell commented that the move was part of a business plan that will see the company's revenue top $1 billion by 2002. The acquisition follows the recent $23 million buyout of UK publisher Gremlin.

Crichton goes for games
"Jurassic Park" author and tech obsessive Michael Crichton is setting up a videogame production company entitled Timeline Studios. "Highly interactive, action-packed" games are promised, but it is not clear whether or not these will be based on his novels.

Sega enforces its views
In a bizarre move, Sega has demanded that five software companies, including Namco and Konami, should pay it license fees. Sega says that it owns the intellectual property rights for technology that allows gamers to switch viewpoints in-game. In order to strengthen its case, it has signed a cross-licensing deal with Atari, which possesses strong gaming technology patents. Four of the companies concerned have filed counter-claims with the Japanese Patent Office.

EB set to swallow Game
Electronics Boutique has put in a bid for rival retailer Game in a deal valuing the company at £99 million. Game has recently suffering disappointing performance, while EB is looking to aggressively expand its presence in Europe. The combined operation would boast 268 stores and EB says it will maintain the Game brand even in High Streets that have both shops.

Yaroze meets its maker
Sony has confirmed that it has sold the last of its Yaroze enthusiast dev kits. Around 10,000 of the black Yaroze PlayStation units were manufactured in one production run and over 20 per cent of the worldwide total were sold in the UK. Sony has pledged to maintain support for existing users, however.
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Emotionally challenged?

Sony's thought-provoking approach raises more questions than it answers

Nothing stands between the next-generation PlayStation and its dominance of the videogame industry. Not Nintendo's fabled new console, not Intel and Microsoft with the sluggard PC platform, nor Sega's Dreamcast. Sony Computer Entertainment has rocketed past the stars in a single burst. Or so you might think.

Somewhere far below, catching the intellectual fallout from Sony's success, are the gamers. Talk of a CPU dubbed 'Emotion Engine' is all well and good, but when did you last play a game that produced a sensation other than tension or fear? And how many videogames have made you cry? (Out of sadness, that is, not frustration.) The truth is that gaming's elite have swallowed Sony's plastic promises with amazing grace, conveniently forgetting that the PlayStation has hosted a pitiful number of games with emotional depth. Ask yourself: how many PlayStation titles stimulate your mind as much as they do your reflexes?

Other than perhaps Lionhead's hugely ambitious (and about to become hugely delayed) Black and White (previewed on p24), there are precious few titles capable of even touching the conceptual bounds of what Kuturagi-san and company have alluded to. A girl's flowing locks are a pleasant graphical trick, but few massmarket Hollywood movies - which address the exact same audience that Sony will be targeting with its next machine - are able to deliver a credible, stimulating plot - and videogames even fewer. Amid all the excitement surrounding the next-generation PlayStation, scarcely anyone has actually asked whether or not videogames should even be chasing a goal such as emotional response. Indeed, some of the talk from Sony and its fans carries disturbing echoes of the hype that accompanied the 'multimedia revolution.' Those Firewire and USB sockets are an indication of just how desperately Sony's other divisions want a piece of the PlayStation pie, but does SCE really want to pitch its überconsole as a 'home entertainment centre' when consumers are suspicious of what that means?

You only need cast an eagle eye over the next-generation PlayStation demos to see what's really on offer - Reiko Nagayama from Ridge Racer 4, a new Tekken and Gran Turismo 3. Or sex, violence and racing games, in other words. The industry - and Sony with it - has a lot of maturing ahead of it. Right now it seems to consist of little more than a lot of hype-laden but ultimately empty promises.

Despite considerably increased levels of detail, something like a Tekken sequel (left) cannot even hope to match the feelings evoked by Final Fantasy VII (centre) or even Ocarina of Time (right)

Edge's most wanted

The hotshots on the horizon

Perfect Dark

(N64) Rare

Five core members may have left the team (see p18), causing some to worry whether the project will suffer as a result. Not Edge, though.

Donkey Kong 64

(N64) Rare

A massive success on the SNES where the infamous ape enjoyed three of its series, Rare seems confident DK's first 64-bit adventure will amaze all.

Wipeout 3

(PS) SCEE

The anti-grav racer has been tarted up by 3-h, but it's the splashscreen that will sell WipOut to the latest generation of PlayStation owners.

Black and White

(PC) EA

Motyuen is cagey when asked about the game's ending - there may not even be one - but few may care if it delivers what it promises elsewhere.

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PRESCREEN ALPHAS
YU SUZUKI'S EPIC PROJECT RETURNS WHILE METAL GEAR SOLID GETS A NEW LEASE OF LIFE

SHENMUE

FORMAT: DREAMCAST  DEVELOPER: SEGA (AM2)

if Shenmue represents the measure of Sega's ambition for Dreamcast, it also demonstrates the potential cost of failure. While Yu Suzuki has predicted his masterpiece will sell a million copies, it has already cost over $20 million. And while it impressed many at the Tokyo Game Show, news that it will be released in at least two parts does little to convince sceptics the project hasn't spiralled out of control. One thing is certain, though - this is the best-looking DC game to date. The first part hits Japan on August 5.
METAL GEAR SOLID INTEGRAL

Don't get too excited – this is an enhanced version of the PlayStation classic rather than an entirely new game. The most notable addition is the ability to play through the game again in first-person mode once you've completed it. Other additions include 300 VR stages, new end-of-game bonuses, new time-limited sections, five difficulty levels, alternate outfits and PocketStation compatibility. Its Japanese release will be followed by a limited-edition run here.
JET FORCE GEMINI

Almost complete and set to make a playable appearance at E3, Rare's intriguing outer space-based, colourful 3D blaster has retained its appeal despite numerous delays. Expect the usual Rare production values (both graphically and sonically), great characterisation, outrageously powerful weaponry and possibly even a hint of old-school-style playability as you progress. Expect a comprehensive update on the game's progress in next month's E3 report from LA.

RESIDENT EVIL 64

And so, after much pleading, N64 owners will soon be able to enjoy the same experience PlayStation did over 15 months ago. Except it isn't quite the same – according to Capcom, the Nintendo version contains additional events and side-stories not present in the original version. The company's compression techniques must already be working overtime.
MARIONETTE HANDLERS

In concept, this is similar to Art Drick's Carnage Heat: you build a robot from one of the six basic models on offer and then pit it against an opponent within one of many 3D arenas. Your robot's performance is directly dependant on its fighting programme (determined at the outset via an icon-led interface) as well as the various body parts purchased from winnings. Eight-player tournaments will be possible, while VMS compatibility is a given.
DUNGEON KEEPER 2

This time around, Dungeon Keepers can expect the usual amount of improvements: a casino and a combat pit have been added, and new spells, traps and creatures are provided. Creature AI is more sophisticated too, with up to 35 stats controlling behaviour, including fear, location and herd instincts. More interestingly, the firstperson mode is better integrated into the gameplay with specific missions requiring you to relinquish your ‘god view’.

SHADOWMAN

FORMAT: PC/PLAYSTATION/NINTENDO 64 DEVELOPER: IGUANA UK

These latest images from Iguna UK’s forthcoming adventure come from three formats. Predictably, the PC version (main shots) leads the others in the visual stakes, although both the N64 (above left) and the PlayStation (above right) interpretations remain impressive. If Iguna can use its Zelda influences convincingly, Shadowman could be a stunning title.

BLADE

FORMAT: PC DEVELOPER: REBEL ACT STUDIOS

This hack’n’slash PC actioner, to be published by Gremlin, was originally previewed way back in issue. In the time since then, its Spanish developer has been working on implementing an accomplished combat engine, and engineering sublime particle effects for realistic water, fire and blood. Rebel Act claims its physics engine, too, is especially slick. More next month.
SOUL FIGHTER

Recently revealed as one of the few European-developed Dreamcast launch titles, Soul Fighter's first incarnation will, strangely, be as a Japanese coin-op. Mixing the core of a 3D beat 'em up and the plot elements of a RPG, French developer Toka is promising arcade action but with a console feel. The three playable characters fight a variety of animal avatars whose souls are collected. Next month's issue will feature a report from Toka.
KOUDELKA

A surprise announcement from SNK, Koudelka is radically removed from the type of title the company is usually associated with. A PlayStation RPG featuring Gouraud-shaded characters and 3D battle scenes, the game is set in a Welsh castle, 100 years ago. The combat system is similar to FFVII's, which is perhaps understandable considering the seven-strong team behind this is formed of ex-Square staff. Three characters will be playable.

X – BEYOND THE FRONTIERS

Open-ended trading and combat space sims have come a long way since Elite. X – Beyond the Frontiers (currently a working title) is the latest attempt to create a fully autonomous 3D universe. There will be six different species to interact with and over 30,000 space objects are promised. Out in June.

BREAKNECK

Boasting the ability to marry sim-like dynamics to arcade-influenced gameplay, THQ's racing offering has an appealingly colourful appearance as well as a varied selection of vehicles. Weather effects, variable race modes, 24 tracks, and seven alternate scenarios come as standard, and in true coin-op fashion, after selecting your mode of transport from one of 40 different classes you're offered the use of numerous styles of weapon with which to take out the opposition.
EVIL ZONE

In Japan, this title has been well received, probably as a result of it mixing manga-based characters and psychic attacks. In fact, much of the gameplay revolves around the latter – rather than adopt a Tekken or Virtua Fighter approach, Evil Zone encourages you to keep a relatively safe distance from opponents, and perfect those special and counter special moves. The game is published here by Titus, and is set to ship in June.

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COUNTDOWN VAMPIRES

Developed for the PlayStation by Bandai, this is one of the many Bio-Hazard clones present at the recent Tokyo Game Show. Like Capcom's horror masterpiece, the settings are pre-rendered and viewed courtesy of some dramatic camera work. At least 100 of such set-pieces are promised, along with 15 minutes of CGI-based FMV. In a neat twist, the vampires morph into different types throughout the game depending on your blood type, inputted at the start.

RIVAL SCHOOLS 2

FORMAT: PLAYSTATION  DEVELOPER: CAPCOM

Whereas its predecessor was originally developed for the arcade market before being ported across to the PlayStation, Capcom is developing the sequel directly on Sony's 32bit box. The game is presented on two CDs including a 'simulation' mode and PocketStation mini-games. You can create fighters and customise CPU characters to fight against a friend's.

STREET FIGHTER III 3RD STRIKE

FORMAT: COIN-OP  DEVELOPER: CAPCOM

Yes, another Street Fighter game. And would you believe it, this third version of SFIII promises new characters, new combos and new special effects, as well as improved gameplay. Nineteen fighters in total it is, then (four of which being newcomers), plus better detail and more realistic animation, and a new grading system based on offense, defense, technique and EX points. The game should be on test at select locations in London by the time you read this.
ONIMUSHA

FORMAT: PLAYSTATION  developer: CAPCOM

Essentially a Bio-Hazard set in medieval Japan, when samurai were more common sights than zombies, expect Onimusha to present a similar number of enemies, as well as a bundle of mysteries and a smattering of traps, the ultimate foe being a mad demon-like entity. The history-led plot has been entrusted to Capcom subsidiary Flagship, previously responsible for penning Bio-Hazard 2. Expect a release in Japan later this year.

“We’re excited about Creative’s approach to delivering a whole new 3D audio experience with Environmental Audio”

PAUL PROVENZANO, VP PRODUCTION AND DEVELOPMENT, FOX INTERACTIVE
BLACK AND WHITE

A penchant for burning ants, and watching black-and-white classics and dodgy 'Twilight Zone' rip-offs has resulted in Peter Molyneux's most important game to date. Edge revisits Lionhead's first project

Far from the monochromatic status its title suggests, Black & White's landscape is staggeringly beautiful, displaying a colourful, organic quality that is currently unmatched. The range of animations for the creatures is no less impressive.

When asked what inspired him to create Black and White, Peter Molyneux will mention 'King Kong' (the 1933 original, naturally) and an episode of the 'Outer Limits' ('SanzKing', if you must know). Oh, and the despicable yet strangely compelling activity of burning ants with a magnifying glass as a child. Needless to say, this isn't going to be just another platformer,

One of the most interesting features is your ability to select any of the world's creatures and turn it into your own towering bipedal pet.

driving or first-person shooting game. But then that's hardly the sort of thing you'd associate with the creator of Populous, which means that categorising it isn't necessarily going to be easy.

At BAFTA's London headquarters, Molyneux recently demonstrated a work-in-progress version of Black and White, and while the game has progressed well since Edge last saw it, the essence of the plot remains the same. You begin in Eden, a world of utopian beauty, populated by different tribes (Aztec, Japanese, African, Tibetan, Egyptian, Greek, Zulu) and a variety of creatures (lions, cows, sheep, rabbits, among others).

Not necessarily aware of the existence of other tribes, Eden's inhabitants are peaceful, busy people blissfully living their trouble-free lives.

As one of several wizards, your presence within their world will inevitably alter matters. In their eyes, performing magic is seen as possessing godly powers, so the simple citizens can be easily persuaded to worship you. This proves crucial, too, because your power, or mana, can only be replenished by regular displays of ritual adulation. As your power
increases, new spells are added to your magical repertoire, and depending on your tribe, there will be a bias towards that people’s natural ability.

One of the more interesting features in the game (and there are many) is your ability to select any of the world’s creatures and turn it into your own towering bipedal pet. This fascinating entity then becomes your responsibility. Its moral identity is shaped depending on what set of values you teach it. The behaviour you wish to encourage is rewarded, while unwanted activity is punished. Bear in mind, however, that your creature is continually learning. A wonderful example of this occurred halfway through the BAFTA presentation. Having seen its master gather the tribe for some timely worshipping before demonstrating the fireball spell, Molyneux’s ape-like pet began casting a seemingly endless series of fireballs in all directions. It was later found relishing the attention of a substantial number of villagers it had persuaded to chant and dance in a circle around it. Molyneux wasted little time in quashing the ape’s delusions of grandeur.

This is a perfect reminder of another of the game’s revolutionary aspects. Everything in the Black and White world is controlled via the mouse and the onscreen hand pointer. The screen is refreshingly clutter-free, and other than the mouse buttons there are no keys to press. Consequently, rewarding your freely wandering creature is a simple case of stroking its head, or other bodily areas (don’t ask). More amusingly, though, punishing it sees you slapping it around (scroll the mouse with enough momentum and you can sweep its feet from under it). Controlling the action becomes wonderfully intuitive.

Ultimately, your goal is to get the whole of Eden believing in you. Earning the inhabitants’ respect can be done either by helping them or terrifying them. It’s up to you. The landscape alters to reflect your character throughout the game as you work towards a goal which Lionhead is currently reticent to reveal.

To put it bluntly, Black and White is a stupidly ambitious project. But if it all comes together as Molyneux predicts, it could make as big an impact on the gaming world as the original Kong did at the cinema.

The creatures suffer damage during battles. Blood runs down the contours of their body, and once healed, the scars remain forever.

Perhaps expectedly, there are resemblances to some of Molyneux’s past titles. Nevertheless, expect his team to come up with something very special indeed.
SOUL CALIBUR

Will Dreamcast be able to fight its corner with Namco’s latest beat ’em up coming out on Sega’s side? It’s in the Tekken mode, and could be a worthy recruit.

Namco’s contribution to an embryonic PlayStation market will perhaps, in time, be accorded the significance it truly deserves. Although less poetic than the cancellation of the PlayStation add-on drive for the SNES, the role of Tekken and Ridge Racer in establishing Sony’s console is no less significant. Had Namco saddled up with Sega, history might relate an appreciably different account of the 32-bit console war. For Sega, then, Soul Calibur is a coup of some importance. That Namco is willing to lend its weight to the delicately poised Dreamcast speaks volumes in an industry context, but gamers will more likely appreciate the improvements it is implementing for this conversion.

As the arcade original runs on a modified System 12 board (the same, incidentally, used for Tekken 3 and Garou), an exact conversion would see the Dreamcast running a few cylinders short of full capacity. Recognising that, Namco is actively improving the title for its DC debut. The reportedly 30 per cent-complete version displayed at the recent Tokyo Game Show certainly demonstrated a better quality of animation (at 60fps). Similarly, its character models are crisp and refined. Like its predecessor, the enjoyable Soul Edge (known as Soul Blade in the west), Soul Calibur is billed as a ‘weapons-based fighting game.’ In practice, such weaponry acts as an extension of each character’s body. The game.

Namco has enhanced the visuals to run at 60fps. The results are stunning.

Format: Dreamcast
Publisher: Namco
Developer: In-house
Release: August (Japan)
Origin: Japan
Calibur is billed as a ‘weapons-based fighting game.’ In practice, such weaponry acts as an extension of each character’s body.

`Watch` mode, Calibur is, in this respect, comprehensive, yet generic. This is a fault common to almost all fighting games, but Namco itself once attempted to innovate with the RPG-esque Edge Master mode of PlayStation’s Soul Edge. Calibur would be similarly enriched by an equivalent section.

Soul Calibur received a lot of favourable attention at TGS where, along with Shenmue, it stood out among a faceless sea of titles. It's worth considering, though, that its predecessor was spurned by many purists as a poor man's Tekken. Calibur needs to convince hardcore gamers with quality of play alone. On the strength of its arcade counterpart, Edge is quietly hopeful.

Owes more to stalemated Tekken than the genuinely weapon-oriented Bushido Blade, but the addition of various armaments allows for an interesting array of fight dynamics.

Soul Edge was berated by purists for its rather simplistic control system. Many felt its elementary move sets and basic blocking system were inadequate; others took exception to the ease with which ‘button-bashing’ victories could be achieved. Namco has tweaked Soul Calibur to available from the start, with a further seven unlocked through successful play.

There’s nothing like a home conversion to test the strength of character design and the all-important parity between each. But, on evidence of its reasonable popularity in Japan, there is little reason to doubt the suitability of Soul Calibur’s protagonists. What is disappointing – for Edge, at least – is its predictable range of play modes. From oneplayer to Vs, from team battle to

The overtly showy nature of SC makes it a perfect benchmark for Dreamcast titles. After all, the NGPS is still some way off.

Polygonal modelling of this quality is currently only the preserve of Dreamcast in the home.
COOL BOARDERS: DREAMCAST VERSION

Sixty frames a second, and more authentic locations make this Dreamcast incarnation a smooth operator. But will Sega manage to grab a piece of the action?

The inclusion of a half-pipe course was inevitable. If Cool Boarders DV uses a freeform blueprint similar to CB3's enjoyable half-pipe, it could be excellent.

UEP's basic design blueprint does not differ wildly from previous titles, the realism of its locales is of great importance.

One early stage, for example, sees players travelling through a town. It has narrow streets to negotiate, and the existence of such recognisable onscreen furniture makes a pleasant change from bland snowscapes and rock tunnels. Certain sections of this course allow the player to jump from roof to roof. Such outrageous stunts would be inconceivable in real

| Format: Dreamcast |
| Publisher: Sega |
| Developer: UEP |
| Release: September (Japan) |
| Origin: Japan |

The more stunts players perform, the more precious seconds are rewarded.

There is an irony inherent in the popularity of current snowboarding games. For the excellent 1080°, this perhaps over-subscribed subgenre is often typified by one key inadequacy: a low framerate. UEP's Cool Boarders: Dreamcast Version (a provisional title) will be the first console-based snowboarding game to offer a respectable 60fps update. The significance of this cannot be understated.

With the Dreamcast, UEP finally has the hardware capable of expressing its interpretation of the real-life sport. For many, the success of Cool Boarders on the PlayStation was perhaps disappointing. Technically poor, slow-moving and basic in design, its High Street accomplishment belied its critical reception as a title of middling quality. Its two sequels introduced a degree of aesthetic elegance but, again, still had much to do.

Cool Boarders: Dreamcast Version possesses a degree of visual authenticity that its predecessors could never aspire to. While
There's a bold, crisp feel to Cool Boarders: Dreamcast Version that its contemporary, PlayStation-based peers lack. The onscreen boarder appears genuinely solid, and he (or she) reacts well to the various surfaces and obstacles. Life, yet enrich the gameplay here. While many other snowboarding games purport to simulate, UEP is styling Cool Boarders in true arcade tradition. Thus, its basic one-player mode sees players race downhill against a timer, in an interesting twist, though, you can gain extra time by executing stunts. The choice of whether to go for outlandish trickery or speed can prove combos in order to succeed. Others will feature more physical hazards - from animals and rock falls, to a bridge that crumbles as a player travels over it. It's important, though, that UEP works hard to create a firm, yet fair collision system. A shortcoming common to almost every snowboarding game is that a bump or fall can be accompanied by a frustrating few moments.

While UEP's basic design blueprint does not differ wildly from previous titles, the realism of its locales is of great importance. Important. This greater emphasis on such pad-oriented creativity should be applauded. After all, with basic downhill races, many snowboarding games are little more than inferior racing games with a different visual interface.

UEP has stated that its intention with Cool Boarders: Dreamcast Version is to make its tricks system as intuitive as possible. Like the low-key but playable Saturn stalwart Steep Slope Sliders, stunts can be performed with a simple button press and analogue stick direction. This makes it far more approachable for the beginner - again, heighten the coin-op style of play. Hopefully, such simplicity can be complemented by depths to be discovered by more experienced gamers.

Some tracks will contain sections that demand a player performs specific stunts or attempting to realign a prone boarder. Worse still, moments where the boarder gets 'stuck' behind another - an all-too-common flaw - are infamous for spoiling the flow when there's both a fast time and bags of points to play for. UEP will do well by eliminating those problems.

Although it would be a boon for Sega to acquire such a recognised franchise, the eventual use of the Cool Boarders brand is not assured - a name change is therefore likely. And obviously this could seriously impact its eventual marketability.

Ultimately, Cool Boarders: DV is typical of most games for Sega's new system in that it appears almost effortlessly attractive and smooth. As ever, though, the importance of fluent gameplay to match really cannot be underemphasised.
LEGEND OF MANA

Square proves that 2D is still fashionable and returns to its
glorious RPG past with an update of a brash and colourful fanboy favourite

However much polygon artistry may have advanced, hand-drawn sprites still
allow for greater design flair in the impressive scenery of Mana’s 3D world.

With head-spinning Mode 7 flying
sequences, a simultaneous threeplayer
feature and a huge and colourful quest,
SquareSoft’s Secret of Mana became an instant
classic when it was released on the Super
Nintendo in 1993. As a hack’n’slash action-RPG
its reliance on a fast trigger finger rather than
reams of menus and numbers endeared it to
gamers who had never encountered a Japanese
RPG, while the typically fantastic Square storyline
captured the hearts of its rapidly expanding

The level of detail in the Pratchett-esque world is never less
than astonishing, even if the interactivity seems restricted...

hard-core fan base. Incredibly, at that time it
received an official UK release, and such is the
game’s mythical status that even now Square still
receives petitions demanding a western release
for its superior Japanese-only sequel.

Strangely, apart from the Final Fantasy and
SaGa franchises, Square has never seemed very
interested in merely updating past glories, but, if
nothing else, Legend of Mana certainly seems to
be pandering to the desires of ageing fanboys.

Sporting the company’s brash and confident
return to the world of 2D sprites and scenery,
Mana takes the hand-drawn backdrops of recent
release SaGa Frontier II to its colourful storybook

Much was made of previous Mana games’ use of colour and lighting,
but they certainly can’t compare to the lushness of the new game.

extreme. The level of detail in the Pratchett-esque
world is never less than astonishing, even if the
interactivity seems restricted to only going around
and over the landscape.

Never one to ignore the chance to impress
and show off with its innovative approach to
toolplaying (and to try to draw attention away
from the age-old problem of the Japanese RPG’s
linear limitations), Square’s claim to fame with
Legend of Mana is the Landmake system. Using
this, players literally create the world around
them by finding items (known in the game as
‘artifacts’) hidden within the story, and planting
them on the game’s empty map. The resulting

Format: PlayStation
Publisher: SquareSoft
Developer: In-house
Release: TBA
Origin: Japan
While the high level of detail present in the game's 2D backdrops is without question, their lack of interactivity makes them little more than eye candy.

If you can't find a new location to visit, your time is better spent searching for new artifacts so that you can create one yourself on Mana's map.

Mana's Landmake system allows the player to literally create the world around them.

An energy meter directly below the main HP counter allows any special attacks you have garnered to be unleashed when full.

battle, although it's not yet known if you can control their combat tactics (as in Seikaen 3). The new 'Action Ability' system does, however, make it possible to assign any special attacks or magic you may learn along the way to any button. It all seems very familiar, with battles ending up as something of a free-for-all scrap rather than a considered and planned combat experience.

It may seem like backward logic, but with virtually every game now sporting the latest polygon livery, Legend of Mana's high-end 'retro' look actually makes it look fresher than the original SNES title did nearly seven years ago. Coupled with familiar gameplay and characters it looks set to make some old gamers, and maybe a few new ones, very happy indeed.

area, be it a town, dungeon or other location, sprouts from the ground and is subtly altered depending on its geographical position and its alignment to one of the game's eight elemental spirits (each hauled lock, stock and barrel from the previous games). Square, of course, promises a completely different experience for each gamer, but like in Seikaen Densetsu 3, where different storylines depend on which of the six main characters you played as, Edge suspects that the changes in Legend of Mana's scenarios will be realised only in the order you meet bosses and through varying item placement.

The amount of work lavished on the game's visuals seems far too great if 80 per cent of 'once-only' players were to miss them due to the incorrect placing of a village.

If the Landmake system and the game's presentation show Square reinventing the Seikaen series, the actual game engine seems little changed from Mana's predecessors. As usual, a party consists of up to three members with another player able to join in controlling one of the secondary characters. A single-player game has the CPU controlling your allies' fortunes in
UNREAL TOURNAMENT

Deathmatch is the word when it comes to 3D blasters for the PC nowadays, and with this upcoming release Epic is casting another threatening glance in the direction of the Quake empire.

A weapon in both hands – something Quake never gave you. When playing Saboteur on the Net the game ranks players to compare performance.

Though a graphical and technological masterpiece, Epic's Unreal lacked the immersive feel that id Software crafted in the Quake games, seriously denting its online appeal. With Unreal Tournament, Epic's out to put things right. The North Carolina-based developer is aiming to spoil id's party by releasing the title just before the hotly tipped Quake III: Arena.

Like Arena, Unreal Tournament skimps on plot to focus on multiplayer gaming. "Because we're not constrained by a complex storyline, we're able to create an amazing variety of levels, from a loading dock by a 17th Century sailing ship to an underwater command post," says Epic's vice president Mark Rein.

Part of its appeal will be its graphics – all rendered through the game's improved Unreal engine. The textures dressing in-game characters will be four times more detailed than before, and players with Savage-based graphics cards will be able to enjoy Tournament's gigabyte of high resolution, with 24bit colour textures.

Addressing Unreal's flakiness under deathmatch conditions, Tournament will boast some seriously beefed-up gameplay. Four multiplayer options are included: assault, capture the flag, domination and team deathmatch. The weaponry has been stepped-up, too; the brand-new Ripper fires exploding projectiles and, for melee combat, there's the intriguing Impact Hammer – a compressed-air jackhammer for whacking opponents down. Though there's a deathmatch orientation, it can also be played singleplayer, with AI bots as opponents or team-mates. Their skill levels can be adjusted, and Rein sees this as a way of introducing new players to multiplayer gaming without humiliating whippings. "The bots chatter back and forth, giving the singleplayer game the feeling of the best online games, but you can ease into the game without the lopsided slaughter a new player is undoubtedly going to experience when going online," he enthuses.

Epic has worked hard on the game's interface. There's an ingame server browser so players can find matches to join with no fuss. Now it's game on to see who can produce the best multiplayer blaster yet.

Format: PC/Mac/Linux
(PC version shown)
Publisher: GT Interactive
Developer: Epic MegaGames
Release: June
Origin: US
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Eidos takes another pop at the most abused genre on the PC with this Ninja-influenced beat 'em up. It's one man and his dog against the world.

Saboteur's storyline and graphics draw heavily upon the Ninja aesthetic. In the finished game, the action will occur over 20 levels and the player can test his martial arts skills against more than 30 ingame characters.

Bearing no relationship whatsoever to the ancient Spectrum platform classic by Durell, this new incarnation of Saboteur is the latest in a long line of attempts to convince PC owners to appreciate beat 'em ups. Of course, no simple Tekken clone will do for the PC, so Eidos is beefing up its contender with 3D graphics, NPCs, a storyline and interactive scenery.

Essentially, Saboteur aims to right the wrongs of Fighting Force, Eidos' last foray into thirdperson combat/adventure territory. It has an impressive features set, such as thirdperson combat in a fully 3D environment, that will hopefully sidestep the traditional pitfalls of the genre. In the PC's dark past, such spatial complexities have generally reduced combat to little more than a sequence of random swipes. But Eidos reckons it has the problem licked with a combat system that automatically locks on to the nearest attacker whenever the player's character moves into a new plane. This ensures accuracy at the possible cost of skill, though doubtless you'll be able to toggle such options.

Additionally, there'll be the usual array of moves, plus high/low defensive postures, and a choice of fighting styles allowing the player to display his prowess in the arts of swordplay, hand-to-hand and ballistic weaponry. Most interesting of all, though, is Saboteur's 'wingman' feature in the shape of Shiro the dog. Adding a little extra depth to the 'chin all-comers', players will be able to command Shiro to attack enemies or to help them solve puzzles - by retrieving objects, for example. Shiro's keen feral senses will further act as an early-warning system, alerting you to the approach of hidden danger. Of course, like any dog, Shiro needs looking after, which will add further tactical complexity to the combat as you seek to nurse the mutt through the trickier later levels.

Graphically, there is clearly some way to go - as Saboteur's sparsely detailed environments indicate. There will be more than 20 levels, though, populated by over 90 individual characters, and the deformable scenery has just been implemented. Certainly Eidos is cramming Saboteur with more ideas than any game that has previously represented this underperforming genre, but whether it will be enough remains to be seen.

Format: PlayStation/PC
PC version shown
Publisher: Eidos
Developer: Tigon Software
Release: October
Origin: UK

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RACING LAGOON

The humble RPG, once the cornerstone of so many anti-nerd digs, is diversifying and moving into more fashionable territory. Witness Square's tale of hi-octane warfare...

Because the game is scenario-driven, it's not necessarily a matter of reaching the finishing line before every opponent, merely your super-competitive rival.

RPGs may once have been synonymous with elves, dragons and heroes whose monikers were as unpronounceable as their pumped-up torsos were improbable, but Japanese developers have little regard for convention, and in recent years some have diversified the genre to the point where, rather than playing the part of an aspiring magic-user, gamers can assume the role of a farmer, baseball star, or even an aspiring footballer.

SquareSoft is the latest softco to broaden the genre's horizons with Racing Lagoon, ripping out the clichéd combat sequences of old and slotting high-speed urban road races in their place.

The action takes place in Tokyo's yokohama district, where two rival street-punk gangs, the BLR (Bay Lagoon Racers) and the HNR (Honnoku Nights Racers), tear up the tarmac as they endeavour to hammer out regional supremacy.

Played out via three distinctly different styles of presentation - hand-drawn 2D character interaction sections, overhead 3D map screen and Gran Turismo-esque racing sections - Racing Lagoon captures the moodly feel of Tokyo at night with some aplomb, and events unfold in vivid fashion. Which is not to say that the game ranks among the best-looking PlayStation titles ever created, though. The limited animation of the interaction sequences, which often sees characters offering only a couple of frames of movement as they lay down challenges to other drivers, will be disappointing to those who've witnessed the full-poly models of Final Fantasy VIII, while the 3D racing engine itself isn't as accomplished as that of, say, Gran Turismo.

The racing sections do not offer the scope of Polyphony's game, either, the approach here being skewed more towards an arcade-like feel.

But Racing Lagoon is essentially an RPG after all, and Square's typical attention to detail (you can cruise Yokohama's restaurants, shops, and other locations, for example) will no doubt assure the game's fomented attention in Japan. A western release, though? Here's hoping.

Interaction scenes are high on style (above), while CGI is slick (left).
ICHIGEKI

Bandai's new title offers something more than the outlandish tactics and cartoon-like physics of previous beat 'em ups. Prepare for a painfully realistic fight simulator.

With many beat 'em ups, those who favour a predominately defensive style are berated by purists. With ichigeki, it's intrinsic to the gameplay.

As playable as the Tekken or Virtua Fighter franchises may be, their outlandish attacks and cartoon-like physics owe little to real-life combat disciplines. Bandai's ichigeki, then, is a rare title - a fighting game that purports to provide a simulation-like alternative.

This is not, in itself, a particularly innovative idea (veteran gamers will no doubt remember EA's Budokan, or the purity of Way of the Exploding Fist). Where Bandai's blueprint does differ, though, is in the degree of preparation required to 'raise' a fighter. Rather than rushing into a traditional (and predictable) series of one-on-one bouts, ichigeki requires you to train your onscreen persona. Although its outward appearance is perhaps disappointing, even scruffy, ichigeki has a great deal of depth. Essentially, your remit is to create and train a karate fighter. In this sense, it marks an interesting fusion of a nurturing game with the more immediate attributes of a fighting game. Only through careful training can a fighter hope to win tournaments. Such labours can be undertaken on the PlayStation (note the intriguing gym shots) or on PocketStation, via a range of mini-games.

Ichi geki's aim pretensions are furthered by the need to 'warm up' prior to a tournament bout. This increases a fighter's ability to sustain and survive damage. During actual combat exchanges, you can actively target specific areas of an opponent's body. If this proves to be complemented by convincing AI - for example, if you could target the legs of an opponent who favours a kick-based fighting style - it could offer refreshingly strategic development of fighting game mainstays. In a further nod towards realism, body parts can be broken or damaged.

Ichigeki's appeal is its adherence to real-life physics and combat. Obviously targeted at established gamers willing to invest the time and effort, it marks an obvious progression for a stagnating genre. But, in demanding that players successfully prepare their fighter, Bandai's title could become more work than play. For Ichigeki to succeed, it must carefully balance the desire to simulate with a videogaming requisite - it must be fun.

With plenty of patient training and practice, you can create a powerful fighter.

 Formats: PlayStation
 Publisher: Bandai
 Developer: In-house
 Release: Summer
 Origin: Japan

'The Birdy Song' jibes aside (above), the practicalities of warming up before a bout prove essential.

It may appear low-res when compared with, say, Namco's superb Tekken 3, but Ichigeki's no-frills blueprint is strangely refreshing.
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Already a lengthy time in development, Computer Artworks’ fusion of genetic engineering and tactical thirdperson combat has been dubbed one of 1999’s most anticipated titles. Edge peeks behind the scenes.

the main players
creative director William Latham
(above left)
technical director Mark Atkinson
(above right)
Genetic engineering is hot, and that makes William Latham a very happy man. Dolly the sheep, the Human Genome Project, mutated giant tomatoes—the more the media gets wound up, the happier he becomes. And the reason for this satisfaction? For over a year, his team at Computer Artworks have been working on Evolve, a game whose core feature involves mutating genes to build a team of fearsome warriors called genohunters.

“When we first looked at the concept, genetic engineering was viewed as being weird and wacky,” Latham smiles. “But now all this stuff in the press is just perfect, because it has educated people in those ideas.”

Technical director Mark Atkinson agrees. “It’s a bizarre analogy, but in advertising, you’ve only got 30 seconds to get something across. You can be innovative but you’ve got to be pushing buttons that are already there.”

**Straight up, with a twist**

Evolve, then, seems to balance innovation with traditional gaming staples. It uses a standard third-person perspective, then mixes it up by introducing three extra playable characters. The basic game structure—killing aliens—is nothing new. But then there’s another twist. Instead of the usual power-ups and additional weapons, characters are upgraded genetically: you kill a creature and then absorb its genes to acquire its abilities. Each set of genes control a range of different attributes, from growing enormous claws or spore guns, to more mundane abilities such as night vision or jumping characteristics. The genetic make-up will even change the external appearance and sound of the genohunters. If it works, Evolve could be the Holy Grail that developers seek: a hardcore game that appeals to a massmarket audience.

Because if there’s one thing Computer Artworks does well, it is to push the technology envelope, add originality and surprise people with the result. First bursting into the public eye in 1994, its Organic Art package mixed an easy-to-use interface with high-end graphics. It allowed you to breed shapes, creating twisting entities to be used as screensavers. The media went ballistic, and before long it crossed into the worlds of fashion and club culture—not bad for a project that started out as a vehicle to develop 3D technology for games.

In the years since Organic Art, the company has been quiet. Occasional details surfaced about Evolve, but little of real substance emerged.

“We got our heads down and did some really good work,” says Latham. “There’s always a danger that developers start shouting about stuff before they’ve done...
A basic military unit, the genohunter absorbs the genetic material of the indigenous creatures, evolving to become the ultimate fighting beast.

The first line of defence for the parasite are the crustacean-like guardians (above). The gruesome end-of-level bosses are a very different proposition, however (left).

anything." But Computer Artworks has been hard at work these last two years designing Evolve's code in-house. All of it, from the 3D engine to the physics, AI code and the ingame editor, is modular and is to be reusable for future titles.

As well as Evolve, Latham is also excited that the Organic Art series is being continued. Initially, the upgraded Organic Art Deluxe will be released by the end of the year, while work on Organic Art 2, a completely new title, has started as well. The Learning Company, recently acquired by giant toy maker Mattel, has already picked up both titles and the sales potential looks good.

**Next generation game**

"We have definitely positioned ourselves to be right at the cutting edge, so that we are a desirable developer for people like Sony," confides Latham. "We have an ambitious business plan." And recent rumours suggest that Evolve will in fact be a launch title for the next-generation PlayStation in Europe. "It obviously lends itself to that platform as we have written neat, transferable technology," he remarks somewhat ambiguously. "You can draw your own conclusions."

Unsurprisingly, the game is based in the far future, when mankind has mastered the art of genetic engineering—the result of which is the genohunter. A basic military unit, it is designed to be dropped into alien environments where it then absorbs the genetic material of the indigenous creatures, evolving to become the ultimate fighting beast. As the Evolve—or commander—of four genohunters, you receive a message to deploy to a planet where a parasite has landed, spawning an army of guardians to defend itself. Your job is to wipe them out before the universe is infected with the parasite's offspring.

Starting with one genohunter, additional units are added until the team is four-strong. Each genohunter can be played as the main third-person character, with the views of the remaining three displayed at the bottom of the screen.

"On the first level you just control one genohunter and get into the Heretic style of gameplay," explains producer **Vince Farquharson.** "By level four you've got the Syndicate Wars multiple selection stuff."

Around three-quarters of the game will be played using one genohunter, with the remainder utilising a top-down view...
for the more tactical elements of gameplay. There will be some puzzle-based items that require genohunters to be simultaneously positioned in different locations, for example.

"At one end you’ve got Quake," says Atkinson. "At the other you’ve got Command & Conquer. It was a fundamental decision to go in between and focus on this unexplored area of small-scale tactical play."

**Extra intelligence**

One issue for this type of game is that the genohunters’ AI must be good. Finding the time to build more when half are wiped out isn’t always going to be possible. But it’s not just the genohunters that exhibit intelligent behaviour. All the creatures demonstrate sophisticated levels of AI. The parasite’s guardians are designed to react aggressively, and will attempt to wipe out everything they come across. The planet’s indigenous creatures are more defensive, however, and are likely to run away.

The code behind this is highly complex, with creatures possessing up to 20 innate factors which determine how they react to any given situation. These range from territorial preferences, to health levels and the proximity of friends and enemies. A fuzzy logic controller defines overall behaviour. For example, an aggressive guardian, when close to death, may either go into a death frenzy or turn tail and run away. If, however, it finds another group of guardians, it could become aggressive again. The creatures have basic memory and mapping functions, too. "If you run away, guardians will see where you ran around the corner and as that’s the last point they saw you, they’ll remember that something was there," says Farquharson. "Quite often they will come up and investigate the place they last saw you in." There’s also a messaging system so that they can communicate with each other. It may only be a game, but it will feel as if you are fighting a well-organised and intelligent enemy. In reality, Evolve is nothing more than an attempt to set up an autonomous environment and fill it with a variety of animals which exhibit emergent behaviour. Then comes the crunch: introduce a team of genohunters and wipe everything out. It therefore has the makings of a great game.

"There’s this comment on our Website," reveals Atkinson. "‘Evolve is tipped to be one of the games of 1999.’ It was actually written by us, not copied by lazy journalists and now everyone says it.” And after seeing the game, Edge is confident that the title can live up to the legend.

Although Evolve is a relatively linear game in terms of structure, you will have to hunt down certain types of genes to progress through the levels. The flame gene (above) will prove useful in overcoming icy obstacles.

One of the most important tools developed for Evolve is the ingame editor. It eases the balancing of all the creatures’ attributes.
Metropolis Street Racer

When Sega producer Kats Sato persuaded Bizarre Creations to design a racing game for Dreamcast, he singlehandedly secured one of the most significant titles for the console's European launch line-up.

Sega had little doubt that it wanted to work with Bizarre Creations. After all, the Liverpool-based codeshop had delivered the four-million-selling F1 and F1 '97 titles for Sega's most recent bête noire, the PlayStation. When Sega Europe producer Kats Sato – designer on Outrunners and Clockwork Knight for Sega Japan – first saw F1 at E3 in 1996, no one on the stand would tell him who had developed it. But Sato wasn't about to give up, and sneakily pulled out a power lead, forcing the staff to reboot the game which allowed him to catch a glimpse of the Bizarre Creations logo. From then on, Sega knew exactly what it wanted.

"Sega approached us," says Martin Chudley, who founded Bizarre some 11 years ago and whose credits include The Killing Game Show as well as the aforementioned F1 games. "They said they wanted us to do a racing game for them but we didn't want to do a Saturn game. Then they came to us with Duran [Sega's then-codename for the Dreamcast] and they won us over." At first, Sega wanted Bizarre to do another-
Formula One title but Bizarre was, by this point, fed up with the sport. "Then they came up with this idea of a serious, city-based game with real cars," adds Chudley enthusiastically. "So that's what we did." That's a bit of a humble description for a development process which has yielded what promises to be one of the true thoroughbreds of the racing genre. A few tantalising screenshots have so far only alluded to its potential but now, four months from Dreamcast's European debut, Sega and Bizarre have revealed what could be their most spectacular European launch title.

Living for the city
From the central premise of a city-based racing game, Sega and Bizarre set to work fleshing out the design for Metropolis Street Racer. Being as realistic as possible was something Bizarre wanted to achieve from the outset, as Chudley explains: "We felt that F1 had good attention to detail. There had been a lot of Formula One games out before us but I think we were the first to actually make it real. Monaco was Monaco; it wasn't just a representation of it. And we wanted to extend that forwards into real cities."

For Metropolis Street Racer, then, Bizarre has sought to model nothing less ambitious than three one-and-a-half-mile-square areas in each of three cities. San Francisco, London and Tokyo were chosen (to represent each of Segas key sales territories) and intensive research began. Topographical maps provided basic overviews of each city area, but the detail level required by Bizarre meant that it had to send its artists to survey each city. They ended up shooting 30 hours of videotape and taking over 32,000 photographs of not just every street and building, but every different wall or road surface, and every element of street architecture, too.

These photos were turned into textures, the largest being 256x256, which were then applied to models of each city's buildings they had constructed with rough geometry. The results are breathtaking. The Shibuya district of Tokyo recreates precisely its main station, fishyers and street plan, but more recognisable to western gamers are the spot-on renditions of downtown San Francisco and the heart of tourist London.

Topographical maps provided basic overviews of each city area, but the detail level required by Bizarre meant that it had to send its artists to survey each city.

In the US circuit, players drive past the TransAmerica pyramid en route to Fisherman's Wharf; in the UK, you pass by the cinemas of Leicester Square, across to Eros and the neon of Piccadilly Circus, through Admiralty Arch, over Trafalgar Square and past the church of St Martin in The Fields. Other circuits feature Buckingham Palace and, in San Francisco, the Coit Tower. There's no denying that Metropolis' level of detail is magnificent. From the general layout of the roads, to
A distinct lack of civilian traffic can make the action appear rather spartan at times (main), although Bizarre Creations promises to include other touches to compensate.

The textures applied to the walls surrounding the 'circuit' were originally photographs of the city locations taken by the artists.

The scale and shape of the buildings, right down to the individual shopfronts, everything is recreated to an unrivalled standard of accuracy. Keeping it so real, however, did create problems.

"We initially wanted it to be a little more open than it actually is," admits Chudley. "We wanted to have big gridworks of every single street you could drive down. But we found that it was something like a factor of 16 times more work for us to do every single side street accurately."

So in order to keep things accurate yet manageable, Chudley and the team elected to restrict the racing to particular roads. Drivers can only go down a set circuit of city streets – if they try to go down other roads, glowing chevrons will fade in to show the boundary of the playing area. Try to drive through the chevrons and the car will come to a halt against an invisible barrier. "It keeps the feel of the city but brings it all in. That's the only real compromise that we've had to make," admits Chudley. "The other difficult thing is, because it's real, we can't just stick a mountain in the way and hide pop-up. We've had to deal with it in programming terms."

Working with a new console and an all-new development environment also provide their own share of problems, as Chudley explains: "It was fraught to begin with, as we started off on the very early dev kits, and every time the kit changed, or every time the SDK changed, we'd have to redo engines and things like that.

It got a little bit frustrating, we just wanted to get on and do the game but it was a case of three steps forward and two steps back to put the new technology in. Once the set-5 dev kits came out, however, it's been relatively plain sailing. The development environment is really cool."

Soft top, hard shoulder

Matching the painstaking efforts at recreating a city is the modelling of the cars. Rather than taking the Gran Turismo approach and modelling everything in the What Car? Buyer's Guide, Chudley decided to be selective about what cars featured in Metropolis Street Racer.

"We're a small team, we're not going to compete with Gran Turismo or anything like that on the numbers game. What we thought we'd do is go for a subset of cars with a fairly identifiable upgrade path. So we chose convertibles – they look cool, they're desirable, but they're not out of people's range."

Some 20 cars are represented as standard, with a further eight bonus cars to discover. The full roster includes the Renault Spider, Rover's MG, the Honda NSX, the Fiat Barchetta and the Ford Mustang, along with other motors from Mercedes, TVR, Alfa Romeo, Mazda, Peugeot, Jensen, Toyota and Mitsubishi. Licensing actual cars presented problems to the game design, with certain manufacturers allowing one thing and others refusing. "It's been a bit of a strain because of the legality of it all," concedes Chudley. One consequence of this is the fact that the cars will not be deformable – most manufacturers objected to the concept of their ragtops being smashed up.

To model the cars, Bizarre used performance data supplied by
Topless vehicles from Renault, Ford, Peugeot, Fiat, TVR, Mitsubishi, Honda, Jensen, Alfa Romeo, Mercedes and Rover are represented with incredible attention to detail (when close, models feature 1,000 polys). Sadly, the licensing deal with the manufacturers doesn’t allow the cars to suffer damage.

Manufacturers, as lead coder Matt Birch explains: “Each individual spring moves around with the car and the wheelbase is from manufacturer’s statistics. The width of the tyre is taken into account as to how much rubber is in contact with the tarmac.” Birch can also verify how accurate the car modelling is from personal experience: “The game itself generates torque charts all based on manufacturers’ data. I’ve got a Lotus Elise and I got an identical 0-60 time as the data I put in.”

The dynamics of each car may be real, then, but Birch is conscious that compromises are necessary in a videogame to compensate for the lack of subtleties like peripheral vision or feedback from the steering wheel. “We’re not going to compromise the physics, we’re just compromising the way you interact with it to make it fun,” he states. “For example, the arcade mode will probably have the controls doctoried to make it really back-end happy, but the essence of the game will be a realistic physics model.”

In-game, the cars are modelled at one of four levels of detail, depending on where they appear. The largest use 1,000 polygons, the next 500, then 250, with the smallest using only 125 polys. Bizarre currently estimates that it will be possible to have up to 12 cars onscreen, at various detail levels, at once. Each car also has a separate model for highlights which sits on top of the basic car model. Number plates and lights are separate elements, allowing scope for effects like motion-blurred lights and localised, user-defined number plates. The drivers are separately modelled, too. They react as an extension of the basic physics model, and can be seen leaning into corners and changing gears among other actions.

**Open roads**

While Metropolis may not give you the freedom of the city to explore, it will, Bizarre claims, be much more varied than other circuit racers. “There’s a lot more openness to the racing lines,” claims Birch. “There’s no single perfect racing line. And every type of car behaves differently – certain cars will take certain routes.” For example, the Renault Spider will corner tightly, but lacks really high-straight-line speed so drivers may well take quite a tight route with that particular vehicle. By contrast, a bigger, faster car like the Mercedes will take a much wider line on corners but will eat up the straights.
Perhaps regretfully (depending on your point of view), *Metropolis Street Racer* doesn’t feature civilian traffic – the team felt it would push the machine too far.

Bizarre believes that these contrasts will keep every car competitive and stop any one vehicle being dominant, and will ultimately prevent the gameplay from becoming predictable and repetitive. For this reason, the team avoided top-end cars like Porsches and Ferraris as they felt they would unbalance the game.

Players will be competing against other racers only – commercial traffic or pedestrians innocently going about their business are conspicuous by the absence – but spectators are promised, along with plenty of incidental, moveable scenery, including that car-chase staple, the pile of cardboard boxes.

Like Bizarre’s *F1* titles, *Metropolis Street Racer* will have two basic modes of play. The arcade mode will offer time attack, head to head, single race and championship options. But the team is currently keeping fairly quiet about the ‘gang mode’, which Chudley reveals grew out of the feel of the night-time circuits. “It’s not just a more serious version of the arcade mode,” he reveals. “There’s also a lot more depth to it.” Whatever the intriguing gang mode turns out to be, expect a more open environment with more shortcuts available than in the arcade counterpart.

**Sega’s dream start?**

Sound effects and music have been handled out of Bizarre, by Richard Jacques at Sega Europe in London. He recorded sounds for every car at different revs at a motor industry research centre, the whereabouts of which Sega will not reveal for fear of tipping-off rival developers. Jacques has also used the Dreamcast’s DSP chip to provide slight reverb on effects in tunnels and narrow alleyways.

Jacques’ other contribution is a soundtrack of some 40-plus tunes covering practically every musical genre. Dance (big beat, jungle, garage, European house à la Sashi), R&B and jazz funk (featuring US3 sessions players) are all featured, along with a dosage of 1970s prog rock (“I’m a bit of Genesis man, myself,” confesses Jacques worryingly).

The amount of time and money Sega has lavished on *Metropolis*’s soundtrack – and on the recent preview of the game to European press and TV in Liverpool – shows just how highly Sega thinks of the title, and how much it appreciates the need for a distinguished driving game for its 128bit console. Comparisons with *Gran Turismo* and its forthcoming sequel will be inevitable, if not entirely reliable given the respective ages of the PlayStation and Dreamcast.

In addition to the basic car model, other elements such as number plates, lights, even the animated driver, are separately modelled.
SHOGO 昇剛 Mobile Armor Division

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It launched the PlayStation into European homes with half of all early adopters buying a copy. But four years on, what now for Wipeout?

It feels completely appropriate to be sitting in a Japanese restaurant surrounded by warm sake and plates of sushi. *Edge* is, after all, toasting the success of a game whose pseudo-Japanese style broke out of the game ghetto and exploded into the cultural mainstream.

Wipeout is Psygnosis' most successful in-house developed brand, and following the meltdown of the company's global aspirations, a crucial cog in the reconstruction of its reputation.

Leeds office manager Jonathan Freedman is bullish, both about the next episode in the series – to be known as the fashionably succinct *Wipeout* – and the quality
of his team. "Leeds studio got the project because of the talent base that was here," he states proudly. Yet, of the original Wipeout team, only one person remains. Predictably, for a game whose caché depends as much on its appearance and cool marketing as gameplay, that person is Nicky Westcott, lead artist on all three titles. "We are trying to keep Wipeout as Wipeout and not be influenced by other games," she says. "The strength of Wipeout is that it is brave enough to stand on its own."

**Less is more**

Continuity is important when a new team starts work on a follow-up title. It's too easy to throw out everything the hardcore fans loved about the previous game and fail to win over a new audience. Additional features such as split-level tracks, stages instead of levels, and customisable ships were early casualties in development. The changes are more subtle. In fact, the whole approach to Wipeout could be described as 'less is more'. "We're really trying to push the boundaries of what is acceptable in terms of games," says Westcott. "How low can we go?" And the answer appears to be pretty low. The brash colours that characterised the early versions have been toned down. The front-end is sparse and the game's cover artwork is almost abstract.

Equally, the technical improvements, while crucial, support the gameplay rather than revolutionising it. The hi-res mode ensures the title's graphical strength, while the multi-player options of vertical or horizontal splitscreens gives PlayStation owners something their N64 cousins have already enjoyed for months. The analogue/Dual Shock controller is also utilised for the first time in the series.

In terms of gameplay, little has fundamentally changed, either. The mood of this sequel is evolution, not revolution. There are eight new tracks, all set within one futuristic city. The modelling of the ships has been improved, and three new teams added to the five from Wipeout 2097. Seven new weapons have also been designed, but possibly the biggest change is the addition of a proximity radar. With more of the weapons possessing a rear-firing capability, some indication of targets' position was needed. However, even this is not certain to make it into the final version.

Wipeout has always been about more than just extreme racing, though. It was, after all, one of most important intellectual properties...
in 32bit gaming. But while Eidos demonstrated its commercial acumen with the Tomb Raider production line, Wipeout languished. "In many ways I think it's criminal that the Wipeout brand hasn't been pushed further in the past two years," says Glen O'Connell, Psygnosis' head of PR. "By the time Wipeout 3 launches, it will have been three years since the last adaptation came to market. This delay is widely recognised as unacceptable and has at last been addressed within Psygnosis."

**Crossing the Atlantic**

If WipEout is to be successful it must take on the American market as well as the European. "The US is a huge market, and we have taken continuity is important; it's too easy to throw out everything the hardcore fans loved about the previous game and fail to win over a new audience that into account," says Freedman, a veteran of four years in the US movie industry. The other obvious focus is music. Sasha has been appointed as musical director to the game and will deliver five or so exclusive tracks. Not only is his music appropriate to the brand, but more cynically, he fits the demographic. Well known in Europe and the States, he is strategically balanced between the underground and the mainstream. A joint Sasha-Wipeout-PlayStation club tour is in the process of being organised, and it's common knowledge that 'a big US act' will be involved, as well as some of the artists on the 2097 soundtrack. "We want to firestorm the US market, and Wipeout will do it," predicts Freedman. Who'd bet against it?

Compared to the mishmash of previous locations, all the tracks in WipEout are situated within the same city location. The Designers Republic has, once again, added its stylised Japanese touches to create the characteristic racing environment.
September 1995: Sony Computer Entertainment launches its new console, the PlayStation, into western markets. Already a burgeoning force in its native Japan, the system is part of the next-generation superconsole attack, set to reinvigorate a tired and confused industry in a way not seen since the heyday of Nintendo's revolutionary Famicom.

In a guerrilla marketing assault led by Geoff Gleninning, the PlayStation brand is about to be skillfully entwined with the lives of Britain's youth. During the summer '95 Glastonbury Festival, thousands of perforated 'roach' cards bearing the infamous Edge (misquote, claiming Sony's 32bit wonder to be 'more powerful than God'), are distributed to thousands – a potent and controversial statement of Sony's marketing intent.

By the time of its autumn launch, it soon becomes clear that for the real culture vultures there's only one piece of entertainment technology worth investing in: PlayStation. Right on cue, blasting straight onto the lips of everyone in that key 15-24-year-old market sector comes Wipeout (or Wipeout, as Psygnosis had it, drawing criticism from the media at large over links with a certain illegal substance...).

Fast, furious and as far from the colourful cuteness of the 16bit games of Nintendo and Sega as could be imagined, Psygnosis' new racer was, without a doubt, hip. Backed by a kudos-heavy musical score including dance luminaries such as Orbital and Leftfield, and iced with the ultra-sharp design sensibilities of The Designers Republic, it seemed little had been left to chance – easy work, even. But as DR's Ian Anderson said in the aftermath, "Wipeout strikes such a chord, it seems obvious now that it's all there."

"This was the first videogame to have a third party involved with the core of the game, not just the fancy stuck-on bits"  Nicky Westcott, Psygnosis

The debut of the original Wipeout in Edge 21 was born out of a visit to Psygnosis' Liverpool HQ. The title promised to scotch the firm's notorious 'great graphics, shallow gameplay' reputation.

Edge 31 heralded the rise of nU Game culture – the convergence of dance music, design, and experiences such as Wipeout
Riding the fast track

March 1994: Psygnosis, one-time principal of the Amiga games market, has been under the ownership of Sony Computer Entertainment Europe for about a year. Purchased for the express purpose of generating content for its nascent PS-X (PlayStation’s codename), the creative buzz within Psygnosis’ Liverpool HQ is palpable. Several potential projects are already under consideration.

Back in 1989, Electronic Arts published a well-regarded – but technologically hampered – hovership racing game for the Amiga. Tagged Powerdrome (see p122) and coded by Michael Powell (who went on to co-found Particle Systems and create T-War), the game’s conceptual potential was massive. Considering the possibilities of a 32bit racing game, two of Psygnosis’ in-house development staff – Nick Burcombe and Jim Bowers – decided that the PS-X was a prime candidate for unleashing Powerdrome’s possibilities. Drawing further inspiration from seminal titles such as F-Zero, Super Mario Kart and 3DO’s Crash ’n’ Burn, Bowers created a short SGI sequence that was eventually to feature in the movie ‘Hackers’.

Razor-edged hoverships plummeted down twisting, darkly futuristic tracks. The project’s style and pace was established.

By spring ’95 the game was well underway, with Burcombe and Bowers part of a 13-strong team, guided by the man who was to become Psygnosis’ head of internal development, Dominic Mallinson. Involved in the project’s artistic evolution from early in its cycle, Nicky Westcott has stuck with Wipeout through all its iterations. “A lot of stuff was going on behind closed doors on the early PS-X dev kit,” she recalls, “and I got involved when it emerged from behind those doors, and it became Wipeout.”

It was Westcott who pushed to expand DR’s involvement in the game. “The
marketing people originally wanted DR involved for the packaging, so I said, 'Well, hang on, you can't have a box that doesn't look like what's inside,' so I got them involved in the ingame stuff," she explains. "I think that's what stuck in most people's minds, that this was the first videogame to have a third party involved with the core of the game, not just the fancy stuck-on bits. Other people have since tried to take the formula, but don't seem to understand why it worked in the first place."

"Immediately after the first game launched we had an abundance of music companies almost breaching the door down to talk to us." — Glen O'Connell, Psygnosis

PR manager during the promotion of both Wipeout and its ‘96 sequel, Wipeout 2097. Glen O'Connell remembers the buzz that was generated in those formative months. "The excitement of being one of the first European PlayStation developers ensured that both pressure and adrenaline kept the team working to the limit," he says. "During the development of the original Wipeout, Ridge Racer was the only benchmark the team had to know what was actually achievable on the console itself." Ambitions were high, too. "They all wanted to show the world that UK developers could do anything as good – if not better – than the Japanese giants."

One of Burcombe's other key ambitions was the inclusion of those beatmanic backing tracks, which proved essential in securing Wipeout's position as the stylish marketing missile. "I'd always been into dance music," he explains, "and a dance music soundtrack is the only thing that would have suited an ultra-fast game with attitude."

Working with product marketing manager Sue Campbell, O'Connell and the team eventually found willing participants, in the shape of three remarkably credible acts: Orbital, Leftfield and the Chemical Brothers. "We approached different record companies with an outline concept and most didn't see what value could be added for their artists," O'Connell admits. "At that stage the PlayStation was still a fairly unknown entity, and in some ways they can be forgiven for their caution." For the follow-up, things were a lot easier, netting the Prodigy and Underworld among others. "Immediately after the first game launched we had an abundance of music companies almost breaking the door down to talk to us," he wryly adds.

The race is on

The months leading up to the PlayStation's September '95 European release were tense times, as the Wipeout team worked day and night to complete its game. "At times it looked hopelessly impossible, but we kept going," says Westcott. Six-month sell-through figures
of one copy of Wipeout for every two PlayStations sold in the UK proved that the effort was worthwhile.

"On the day of launch," Westcott relates, "the team went to a local game store to have a look at the launch display. Nick [Burcombe] and I stood outside for a minute and realised we were standing by a massive PlayStation poster advertising the four launch games - with Wipeout up there next to Ridge Racer. We just looked at each other and said, "Blimey, we've done it!"

The sales figures, and those of the PlayStation itself, soon proved that they had captured the attention of exactly the audience intended. "It appealed to a new, older age group - 18-24 year-olds who had previously shunned videogames, leaving them to their younger brothers or sisters to play with," explains O'Connell. "In that sense, Wipeout was definitely the one title that mirrored Sony's own marketing ambitions. It defined a new approach to videogames that showed widespread appeal existed outside of the traditional demographics."

And now, after four million consoles and one million units of the games sold in the UK alone, PlayStation and Wipeout are about to take centre stage once more. It's easy when you know how.

The Designers Republic has contributed to the series' styling from the outset. As well as creating box art, its talents have produced each flight team's corporate identities (above and left). Both versions of this issue's cover were also designed exclusively for Edge by DR.
Painting by numbers

As gaming hardware becomes more complex and eclectic, it’s being suggested that soon only the major development studios will be able to cope with the huge demands of game production. For small- to medium-sized developers, however, there is hope. Taking a modular approach to game development and relying on bought-in technology and artwork could be the way to survive as the era of the next-generation consoles dawns.

Finally, the dust is beginning to settle. It’s a couple of months since Sony announced just how powerful its next-generation PlayStation is going to be, and the euphoria in the game development community is dying down. That initial sense of wonderment and expectation brought on by this awesome new piece of hardware is giving way to one or two more realistic concerns. According to its specs, PlayStation 2 should be able to render realtime scenes close to the quality of ‘Toy Story’, and with a built-in DVD drive it will be able to deliver games containing 4.7Gb of game data. Now, ‘Toy Story’ employed 20 people working for two years on its animations alone (the recent ‘A Bug’s Life’ employed 60 animators), and that was just for a two-hour movie. Today’s game developers commonly rely on teams of 12 or 15 people who spend 18 months to two years doing all the work on a single contemporary game for CD-ROM. Questions are naturally being raised as to how they will cope with producing seven times the amount of data at four or five times the level of detail, packaged into 40 or 50 hours of gameplay, and all within a similar timeframe...

Not unexpectedly, some industry pundits speculate that only the biggest developers and publishers will survive. It’s simple technological determinism, they say. The new console demands huge teams to create its games, so the large companies who want to make money by publishing games for it will assemble big teams. Small developers’ products simply won’t be able to compete with giant studios run by the likes of EA, Eidos, Square, Acclaim et al, and will therefore be bought up or go bust. It’s the continuation of a trend which has seen a move from games written by a single programmer (Sentinels) to titles put together by teams (Doom, Tomb Raider), and on to epics created by massive development studios (Final Fantasy VIII, Zelda, Shenmue).
FEAR AND LOATHING
While such fears have their foundations – there are numerous examples of big publishers snapping up small development houses for a song – they are over-exaggerated. To begin with, worries about how the growing capabilities of hardware will strain and overstretch developers are nothing new. Although the PC isn’t currently able to pump polygons at the same rate as the forthcoming PlayStation 2, as a platform it has used DVD technology for a while and developers are beginning to grapple with ways to fill the enormous space it offers. The same is also true of the Dreamcast, with its high-capacity GD drive.

The latest run of graphics cards on the PC are capable of displaying textures up to an incredible 2,048x2,048 pixels (Quake II’s are 256x256), meaning a real boost in the demand for hi-res artwork. This may leave some game designers spooked, as they’ll no longer be able to get away with splashing the same small selection of textures over background polygons, nor can they rely on filtering or mip-maps to blur over-used textures beyond recognition. To create a true sense of realism, scenes now require original artwork for most of their surfaces – and artwork takes valuable time and a good deal of manpower.

THE ENGINE ROOM
Although game developers are usually reluctant to license blocks of code for their games, 3D engines at least can be bought in with impunity. Recently, there has been a slew of well-executed games for the PC based on the Quake II engine, including Heretic II, S.I.N and the inspiring Half-Life. These are to be followed by titles utilising Epic’s Unreal engine, including Duke Nukem Forever, Wheel of Time and Deus Ex.

Once Epic has sold the Unreal engine to a developer, it’s up to that developer how much it involves Epic in the production of the game, explains vice president Mark Rein. “We don’t get to see our licensees’ work very often,” he says. “In some cases we never see them until the public sees them. We encourage licensees to come over to our offices in Raleigh, North Carolina and trot them by our development team, but it seldom happens, and they’re certainly not required to do so. We’re often more likely to see a licensee’s game on a stand at a trade show than we are to get an in-depth going over.”

While Criterion’s Renderware has been confirmed by Sony to be a 3D renderer for PlayStation 2, the next two big engines for the PC are likely to come from id’s Quake III: Arena and Epic’s Unreal Tournament (see p52).

THE MODULAR APPROACH
For small- to medium-sized developers, the answer to this and many other problems could simply concern more outsourcing. Already, a crop of companies is emerging to support game developers as the hardware they work with brings greater demands, and the expectations of the gaming audience grow. It’s perfectly possible for today’s small game development team to buy in a physics engine, a 3D rendering engine and some AI, license some wireframes and textures, hire a musician to do the tunes, and buy a sample CD for the sound effects. The main tasks of the game-development team would then be to concentrate on getting the disparate technologies and artistic styles to work together, and to produce the gameplay. This modular kind of approach to game development could prove very interesting and exciting, and some in the industry think it may even result in better games.

Probably the best known cases of technology licensing between game developers are seen in the area of 3D engines for PC titles. Raven Software licence the Doom engine from id as the basis for Heretic and Hexen. More recently, the Quake II engine has been used in Sin as well as Half-Life. Epic’s Unreal engine, meanwhile, is set to return in around ten upcoming games from various publishers.

With the number of mediocre Quake clones that have been kicking around, some view the licensing of 3D engines with skepticism. After all, it might stifle originality and lead to cynically produced games, all with the same look and feel. Epic’s vice president Mark Rein, however, is upbeat about the

“Engines are just a set of paints and game developers are painters. It’s what they do with the paint that determines the outcome”

Mark Rein, Epic

Whereas games like Sentinel (top left) were written by a single programmer, Doom (above) and Tomb Raider (left) were put together by teams. The prospect of developing titles for PlayStation 2 is therefore staggering
prospects for companies who license in 3D engines.

"Engines are just a set of paints, and game developers are painters," he explains. "It's what they do with the paint that determines the outcome. You can always copy someone else's look and style, or you can do something original. I'll skip examples of where it's happened and point to Half-Life and Quake II as the shining example of how it can be gloriously overcome. Every 3D game uses pixels and polygons. It's what you do with the pixels and polygons that makes your game unique."

Indeed, the homogeneity of many of the 3D titles based on bought-in engines could be put down to a lack of originality on the part of the licensee rather than a general failure of the concept. The Oxford-based company Mathengine (with offices in Madras, Montreal and Tokyo) is another that sees a big future for modular forms of game development. Having programmed the toolkit for writing advanced physics models, and with no ambition to develop games itself, Mathengine is geared up to supply code and support to game developers who would rather spend months looking at gameplay than writing new physics engines every time they develop a game. It's a market niche shrewdly identified by Mathengine as game designers and players alike often point out the lack of solidity and realistic physical behaviour in the otherwise astounding 3D worlds of today's games.

The company's software development kit has been taken on by Sony as part of the middleware suite for PlayStation 2 developers, making Mathengine's physics model available to anyone wishing to use it for a nominal license fee. PC developers are also being encouraged to try it out, and by the millennium Mathengine's bosses hope to see their company's logo on the boxes of some of the top game releases.

It's a huge ambition, but Mathengine's marketing manager Paul Topping is certain that the company's physics will help improve game development. "Buying in the various elements that make up a product will not only help designers concentrate more on the game, but he is confident it means they'll be able to release titles more quickly. It's a trend he refers to as rapid application development, or RAD."

"You can buy your meshes from Viewpoint Datalabs, you can buy texture CDs, you can buy CDs of explosions, you can buy rendering engines, you can buy AI engines," he enthuses. "Many game developers feel that they can beat the technology of these engines, and many can get close, but they end up concentrating really hard on the technology and not the gameplay."

"It's probably evident in many games at the moment," he continues. "By using external technology you can put the gameplay back. You can concentrate on artwork; how it looks; how it feels; whether it's fun to play. And games can come out faster."

"By using external technology you can put the gameplay back. You can concentrate on artwork; how it feels; whether it's fun to play. And games can come out faster" — Paul Topping, Mathengine

**Physics: Weight and See**

While 3D engines have come on tremendously over the past three or four years, physics is something developers have tended to struggle with, to the irritation of many gamers. Enter Oxford-based Mathengine, a company aiming to sell its physics technology to game developers around the world. Edge was recently shown some startlingly realistic simulations of realworld physics, including wave and wake effects for water-based games; bubbles, balloons and bouncing balls; the tumbling of walls and buildings when struck by wrecking balls; car and aircraft collisions; and centrifugal forces on bike, motorbike and unicycle wheels.

"Almost every type of game can use us as a fundamental part of their dynamics or to provide special effects on top," says marketing manager Paul Topping.

Mathengine's development software has been taken on by Sony to provide PlayStation 2 developers with a powerful basis for the physics in their games.

Mathengine's Paul Topping believes gameplay will improve if developers adopt his company's system for modelling physics

Like Zelda (left), Shenmue (above) is employing a huge team of artists, programmers and designers. With modular methods of game creation this needn't always be the case.
ARTIFICIAL INTELLIGENCE: THINK AGAIN

Thus far there has been little licensing of artificial intelligence technologies between developers. AI is seen as part of the rules in any computer game, and is thus rightly taken to be a core area of expertise in game production — fundamental to the originality of any title. However, can licensed AI be ruled out in the future? Probably not. Animation Science's Rampage technology has already been signed up under Sony's middleware program for the next-generation PlayStation. Though not a general AI system, Rampage can be used to govern the conscious and instinctive behaviour of individual characters when they're in crowds. Depending on how well the 'bots' (AI combat entities) in games like Quake III and Unreal Tournament turn out to be, there is the real prospect that these too may be licensed to other developers. Cyberlife has not ruled out the possibility of selling its neural net-based AI, either. "There are certainly others out there acting as AI consultants with technologies," says Cyberlife's creative director Toby Simpson. "But I'm not aware of anyone licensing a complete AI solution for entertainment software as yet. Part of the problem is that everyone's AI is as different as everyone's engines differ. Finding a common, complete AI solution with so many different approaches would be exceptionally difficult. It is practical, though, to deal in partial solutions such as navigation systems and agent-scripting languages."

Tapped to its logical extreme, it's possible that one day companies will develop AI for individual game characters or creatures to order... Okay, so you want code for some eight-foot-tall, bipedal carnivorous birds with aggressive territorial instincts when near their nests, whose primary aims in life are to kill human beings, tear the flesh from their bodies and then feed it to their chicks? We also have a special offer on swarms of flying lizards which display bat-like behaviour, feed on toadstools and are non-aggressive, unless provoked, except in warm weather or during their mating season.

NOT INVENTED HERE

The reluctance of developers to buy in technologies rather than invent and re-invent them in-house is something the industry will most likely need to overcome if some of the smaller game developers are to survive in the era of the Dreamcast, PlayStation 2, and tomorrow's super-PCs. "Programmers are an arrogant breed," comments Jez San, head of veteran British developer Argonaut. "They like to rewrite stuff even if it doesn't need rewriting. Every new programmer wants to write their own new 3D engine just because they think it's going to go 0.2 per cent faster than someone else's. It's a fact of game development life — programmers like to show off the size of their 3D engines. And, sometimes, they are actually better than the ones they replace."

The same problem is identified by Andy Beveridge of SN Systems, which, like Mathengine, is working on development tools for Sony's middleware program. "One solution is to do what some of the smaller movie production companies do — to buy in facilities that you don't have yourself," he notes. "This is something that the game development community has traditionally been quite afraid of. Most software developers want to use their own code — it's often a matter of pride that a tech-led developer can do a better job of the 3D engine or physics model for their game than to buy it in. This places a lot of focus and value on technology and the result is that everyone wastes time reinventing the wheel and we get games with fancy-looking graphics but poor content. This is starting to change, though — look at games with licensed engines now. Half-Life on the PC is an excellent example."

Beveridge's company, SN Systems, is producing various middleware tools including a DVD-ROM emulator that will enable PlayStation 2 developers to monitor the likely performance of the machine's DVD drive long before they even have working hardware to test their games on. As an insider on the middleware program, he believes Sony's new system will make a broader range of support available to game developers. Though developers may be worried about how they're going to put 20 million polygons onto the screen every second, or how they're going to fill DVD discs, Sony is making moves to encourage the sharing of technologies through the middleware program. "There was always a limited range of tools available for N64 development and Sega Saturn development, both in programmers' tools and artists' tools," says Beveridge. "What is new is that Sony has extended this way beyond the programmers tools by setting up a program to encourage anyone who has a good tool or technology for any part of game development to market it so that the whole PS2 development community can benefit."

DEVELOPMENT DIY

It's not only pride or arrogance that will cause game developers to swerve away from the middleware tools and programming kits produced by the likes of Mathengine. Game developers who can afford it are taking a scientific approach to the problem of increasingly complex hardware. Argonaut is one of a number of companies that runs its own research-and-development department. This,
too, is probably a sign of the maturing of the games industry. Separate R&D is very common in other industries, and has a huge profile on the hardware side as well as in business software. In entertainment software, however, much R&D is part and parcel to the process of actual product development. Many game developers embark upon some R&D before starting a new project, then do the rest as they go along.

At Argonaut, however, technologies are developed that then facilitate product (game) development. San doesn’t think he needs Mathengine’s physics models because his lab has developed their own. Equally, he probably won’t be seeing the need to use Renderware – developed by Criterion and accepted by Sony as the middleware 3D engine for PlayStation 2. Nor is San likely to be going with Microsoft’s Direct3D for Dreamcast or PC titles. He’s pulling no punches. "We have the coolest physics, the most photorealistic renderer, the largest fractal 3D planet compression, and some other R&D going on," he claims.

Argonaut has licensed out its Brender 3D engine to other game developers in the past, and there’s no reason why the company’s physics model shouldn’t give Mathengine some competition. By the same token, San wouldn’t rule out taking on someone else’s technology if it was better than anything Argonaut could produce. However, looking around at some of the bigger game development studios, he is bemused by the lack of initiative on the R&D front: "With the Dreamcast and PlayStation 2, the strategy for most companies, particularly the Japanese publishers announced so far, has been to throw more polygons at the problem. None of them seem to want to try and shift the paradigm. None of them are experimenting with new physics or new rendering technologies. Tekken 4 will just be Tekken 3 with more characters, using more polygons. Final Fantasy X will just be Final Fantasy IX with more polygons. Haven’t these guys got any imagination? Sure you can have 247 artists designing every nook and cranny of Shenmue, but where’s the R&D? Where are you going with this? Are you just throwing more polygons at the problem? It’s time to do something other than just more art!"

**MESH-MASH OF ARTWORK**

3D modelling can be one of the most time-consuming tasks in game development, which is why many 3D artists turn to mesh and texture libraries. The best-known resource in this field has to be Viewpoint Datalabs, and the company must have been rubbing its hands together since the announcement of PlayStation 2.

While Viewpoint is often used by developers to supply wireframe meshes for use in cut-scene animations, the increasing power of PCs and the coming of PS2 could see the models taken on for in-game graphics as well. Viewpoint offers a library of 15,000 pre-built meshes and a new model bank with 1,200 textured models – each at four levels of detail. Specialised services include previsualisation, laser scanning, NURBS modelling, texture mapping and inverse-kinematic skeleton design. "You have to look at what makes a game sell," says Daphne Rowan, Viewpoint’s UK MD. "It is game design and gameplay. Everything else is just fancy decoration. The result: many developers are focusing on gameplay and are consciously avoiding ‘reinventing the wheel’, which creates a market for suppliers of models, textures, music and even pieces of software code. The modular approach you are seeing is just the fact that games companies are focusing on the basics of what makes a game sell and outsourcing all the rest."

**IN-HOUSE, ART HOUSE, OUT-HOUSE**

Ironically, art is something some game developers feel is the least comfortable producing in-house. They might be able to scrape by writing original code for their 3D engines, physics and AI models, but unlike the big Japanese studios they haven’t got the manpower to handle all the artwork. For some it seems that even though they’ll shun modular methods of game development and focus on developing their own technology and gameplay, buying in artwork isn’t nearly such a bitter pill to swallow.

The Wipeout team famously bought in graphics from The Designers Republic when the original PlayStation first appeared (see p56), and on a more mundane
THAT BIG-SCREEN FEEL

While many developers pride themselves on the end-of-mission cut-scenes they produce, the production of broadcast- or cinema-quality animations is an area where small developers can get a lot of external support. Soho is filled with animation and FX houses, many of which are ready to lend their resources to the games industry.

Digital Arts Ltd is one such company, and MD Graham Brown-Martin is adamant that game developers should be looking to companies like his for high-end expertise. "The distinctions in presentation between feature films and gaming will continue to blur and thus the user expectation will increase," he says. "There will always be the need for highly engaging gameplay, which is surely the key skill of any developer, but I believe the market will expect a much higher quality of presentation — on a par with the best of film and TV."

For Brown-Martin, whose company produces animated productions and effects for 'Lost in Space' and 'Contact', the cost of tooling up development houses to produce similar effects for games is silly, particularly when there are dedicated studios ready to do the work. "Small developers are already outsourcing some of their production, particularly graphic design, animation, live action and FX, while keeping the core skills in-house. Those that don't, face a difficult future. What happens if they produce a game that bombs in the market? How do they continue to support a massive investment in equipment and talent until they hopefully get it right next time. I can't say they won't survive, but they may have trouble sleeping at night," he says.

Software's action title Expendable might use some fantastic lighting effects and a 3D engine developed by Rage, but its rendered sequences rely heavily on Viewpoint models, as do the rendered sequences in Civilization: Call to Power.

Pre-rendered cut-scenes may seem superfluous add-ons to many programmers, but the use of Viewpoint models has already moved beyond the fluff and there's widespread use of the wireframes within games such as Microsoft's Combat Flight Sim and EA's impressive range of Jane's air combat titles. GT's Driver will use Viewpoint models, and so will Interstate '82 from Activision. After all, there's hardly any point in employing an artist to model an Apache aircraft or a Lamborghini to perfection when Viewpoint has already done all the hard work.

MORE FOCUS ON GAMEPLAY

But is a modular approach to game development the ideal way forward? Can Sony's middleware program assuage developers' fears about being swalloed by big publishers? Well, if these ideas give the smaller developer a chance to use highly detailed artwork or a cutting-edge 3D engine or physics model without investing too much money or time then it will certainly prove to be a lifeline for many. And, as companies selling various tools, models, development kits and so on are quick to point out, it's an approach that can prevent programmers from being distracted by the need to develop everything separately and from scratch. They are free to focus on what's absolutely crucial when it comes to designing a game: gameplay.

As any developer will tell you, they'd love to be able to do everything in-house, and to have as much time as they want to do it, too. But in an industry more prone than most to bouts of rapid change, a pragmatic approach is called for.

Those with the skill and originality to develop what they have to, and the humility to look for help when they need it, are the ones who'll survive and prosper.

PHOTO: Digital Arts Ltd produced these animations for Future Sound of London (left) and DaClick (right). The company is keen to offer its services to game developers for both ingame and cut-scene animation.

PHOTO: Civilization: Call to Power (top), Expendable (centre) and Driver (above) are three very different titles that each make use of Viewpoint Datalabs' 3D models.

PHOTO: Those with the skill and originality to develop what they have to, and the humility to look for help when they need it, are the ones who'll survive and prosper.
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Videogames have hit the headlines on more than one occasion for condoning ‘excessive’.

Over the following eight pages, Edge considers the various elements that make up so-called
NTAL SORY CONTENT

VIOLENCE, BUT SURELY THE INDUSTRY CAN'T IGNORE THE FACT THAT EVEN GAMERS HAVE TO GROW UP? ADULT GAMES, AND TALKS TO GAMING CREATIVES TO GET THEIR TAKE ON A REVOLUTION IN THE MAKING
elements of this mass market are adults. Problematically, the public perception of videogames has yet to shift to encompass this fact.

From the outside looking in, the multibillion dollar gaming industry must be an intimidating phenomenon. In a relatively short space of time, it has grown from a small, almost hobbyist concern into a behemoth with a revenue to rival that of more established entertainment mediums. For the people who have played games since the days of the ZX Spectrum and C64 - or even before their advent - videogames are an accepted part of life, however.

While games are still regarded in some quarters as the sole preserve of children, any title that aspires to entertain an exclusively mature audience will inevitably court controversy. Carmageddon is, for 'adult gaming' advocates, a title that raises uncomfortable issues. As a game for over-18s, it is at worst gratuitous, and certainly gimmick-oriented. But the very idea of 'killing' people for points is, naturally, very distasteful to some.

From a liberal standpoint, Carmageddon is permissible as stylised escapism, when considered in the context that videogame violence does not create its real-life equivalent. Similarly, David Cronenberg's 'Crash', if argued under similar terms, is not a film that warranted the ban in Westminster that established its infamy. Consider the following, though: the premise behind Cronenberg's movie involves mild (though, contextually, perverse) eroticism and violence in the form of intentional vehicular collisions.

Carmageddon, however, sees players actively encouraged to slaughter pedestrians in their hundreds. Videogames can get away with murder, it seems.

"That's the whole point about escapism, though," says DMA's Gary Penn. "The fact remains that killing someone is probably a very satisfying thing to do. It doesn't make it any less morally reprehensible. It has to be addressed that killing somebody is actually quite fun. I, personally, would not want to take someone else's life - much as I wouldn't like the idea of somebody taking my life. It's probably very good fun doing all the things we're not supposed to do. That's why we have laws."

In a videogame, real-life laws are repealed in favour of the developer's own set of rules. In GoldenEye, progress is restricted by the presence of armed guards who must be dispatched in order to progress. Thus, killing becomes an acceptable means to a desirable end. Rare introduced an important feature, however, by including game mechanics that allow shots to be targeted at certain bodily areas, bringing about different responses; a shot to the groin sees a soldier clutch himself and crumble, and a body shot does not guarantee a kill, but does at the very least lead to visual damage.

Videogames have long aspired to be graphic in their depiction of violent scenes. GoldenEye is not exceptional in this respect. The definition of different bodily 'zones', however, marks a further step towards more lifelike characters. From a

"THE FACT REMAINS THAT KILLING SOMEONE IS PROBABLY A VERY SATISFYING THING TO DO. IT DOESN'T MAKE IT ANY LESS MORALLY REPREHENSIBLE... I, PERSONALLY, WOULD NOT WANT TO TAKE SOMEONE ELSE'S LIFE - MUCH AS I WOULDN'T LIKE THE IDEA OF SOMEONE TAKING MY LIFE"  

GARY PENN, DMA

X-RATED

Over the years, a handful of titles have catered for a mature audience. And while the subject matter ranges from the obscure (KGB) to the obscene (Custer's Revenge), all these games are notable for their divergence into more adult content

BLACK DAHLIA

Dennis Hopper 'slumming it' in an FMV-based adventure designed for a mature market. Surprisingly well received, yet more interactive movie than game.

BLADE RUNNER

Masterful adaptation of the thinking man's SF film. Lacks the movie's atmosphere, but its open-ended approach is tailor-made for mature audiences.

CARMAGEDDON

SCI's amoral take on road rage is not the most subtle game ever conceived. But do wanton killing and gore constitute genuine 'adult' content? The BBFC thinks so.
censor's point of view, this introduces uncomfortable issues. Scenes of torture within films are frowned upon, especially when expressed in a 'frivolous' manner. The controversy that surrounded the infamous ear-slicing scene in 'Reservoir Dogs' is a good example. How many GoldenEye players have not tried to see how many times they can shoot a guard without killing him? Imagine a similar situation in a next-generation PlayStation game, where a more convincingly drawn and animated character's face reflects agony. The act remains the same, yet its visual realisation becomes tangibly more authentic.

"A shooter is a shooter — that's what you do, run around and kill people," says Drew Markham, president of Matrix, which is currently putting the finishing touches to Kingpin. "Of course, things are getting more realistic in terms of graphics, so that will probably be misinterpreted by some people as being more excessive. Violence is better in virtual life. I sure don't need to be shooting anybody out on the street."

Even an attempt to steer away from violence perpetrated on the human form can be difficult, as Lara Croft creator Toby Gard relates: "When we started making Tomb Raider I wanted to make a game where you didn't go around murdering hoards of faceless evil minions, so we chose to use dangerous animals as baddies instead. The problem is that man has pushed all of the dangerous animals we chose close to extinction. Thus, from reasonably good intentions we ended up making a game where you spent most of the time killing endangered species.

"It makes you concerned about what kind of message you're putting out sometimes. I think it's the physical contest that provides the fun, not the actual killing. It's about beating your opponent. It's not a big issue here, but I think everyone on the team agrees that our new game will not suffer in any way by avoiding excessive death. I'm sure that it is possible to do a non-violent action game, but I reckon it would be very hard to make. I'm certainly not saying that Gaileon has no violence in it — in fact, it's quite action-packed, with lots of fighting and suchlike — but the emphasis is on winning that fight rather than pulling your opponent's spine out."

Violence, an arbitrary term at best, does constitute 'adult' content in the eyes of the censor. But excessive violence does not necessarily confer 'adult' status. It's an important distinction.

**SEX (AND, PERCHANCE, LOVE)**

'Is sex dirty? Only if it's done right'

Woody Allen, Everything You Always Wanted To Know About Sex

Remember Eric's chaste kisses with his girlfriend in Back 2 Skool on the ZX Spectrum? Many years after its release, there are few videogame relationships more complex. Tellingly, that interactive romantic tale lasted for seven presses of the 'K' key. Thereafter, tragically, Eric's further amorous advances were met with a swift blow to the face.

It's difficult to envisage how a relationship could be illustrated within the strict confines of an action-oriented game. In fact, it's hard to imagine a situation where it would be appropriate, let alone possible. An adventure game, by contrast, offers the opportunity to develop characters to a necessary extent. SquareSoft's Final Fantasy VII and its sequel are two games that do just that.

Although FFVIIR has yet to be translated for English-speaking audiences, word of a 'will they/won't they' subplot has existed on fan Websites for some time. Apparently,

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**CUSTER'S REVENGE**

An atrocious early attempt at adult gaming was this effort from the early '80s, which saw players having sex with an Indian squaw tethered to a pole.

**DOOM**

The first high-profile outing of the modern first-person shoot 'em up. Regarded as a no-no for kids at the time, yet positively tame in retrospect.

**DUKE NUKEM**

Sexual titillation, violence, bad language... yet all within an (admittedly throwaway) plot premise and married to a solid, enjoyable action game.
Squall and Rinoa – the stars of the much-celebrated ballroom dance scene – are but two parts of a love triangle that also comprises Seifer, Squall's potential nemesis. While the editorial value of this storyline will depend largely on the quality of the western conversion, the effective narration that typifies its predecessor is worth considering.

Final Fantasy VII spins a great yarn. While its script is often basic, it compensates for literary shortcomings by offering a huge quantity of dialogue and preset conversations. To reach the point where Aersis (a lead character) dies, players must pass through approximately 30 hours of game time. Square, an accomplished narrator, establishes a significant link between central figure Cloud and Aersis during that period. No wonder, then, that a small, yet endearingly vocal number of fans – mostly in Japan – admitted to being moved to tears when she meets her grisly death at the hands of the evil Sephiroth.

Can the Final Fantasy titles be compared to mainstream romantic comedies, or a 'love interest' subplot in a Hollywood movie? That’s down to the individual. But how many other games use relationships as an integral element of plot or play? “The problem,” laments Markham, “is that most of the folks who make games lack the kind of sensibilities that would be necessary to pull off something like that, without having it be cheesy. But I’m sure that as this medium matures a bit more, we’ll see it soon enough.”

Sensible Software’s Sex, Drugs ‘n’ Rock ‘n’ Roll, a labour of love for industry stalwart Jon Hare, was originally signed by Time Warner during its abortive first foray into the games market. Following GT’s acquisition of Warner’s videogaming interests and assets, however, the title was considered too risqué for its portfolio. Sensible took the title to around 20 other publishers but, bar one unsatisfactory offer, the game was consistently lauded, yet unsigned.

“The problem with Sex ‘n’ Drugs was that it could be perverse,” offers Hare. “The main character could shag an air hostess in a plane toilet. Now, you could also have a banana for lunch. You could put it up her skirt, and it made squelch noises. You couldn’t see it, but it was there by implication. There was this other bit in a hotel where there’s a porn channel. Viewing from behind the TV, and with the light from it shining on his face, it was made obvious he was masturbating. But when the bloke was on the screen, he would stop.”

Puerile? Very possibly. Offensive, though? Well, that’s subjective. But are those instances any more controversial than the collaborative works of Adrian Edmonson and Rik Mayall, or even the ‘Confessions of...’ movies?

More importantly, was Sex, Drugs ‘n’ Rock ‘n’ Roll’s sexual content any more risqué than that of the Leisure Suit Larry games? Larry’s adventures, scripted to titillate a male audience, involve his attempts to bed female stereotypes. If Sensible’s aborted project promised to be juvenile at times, the Larry games are positively embryonic.

“In older films, they were far more subtle where sexual situations were concerned,” contributes Penn. “Besides, the actual relationship was always the most emotive part. It was all handled far better than it is now – I find such films far more interesting. They’re not much use if you’re looking for a basic ‘wankfest’ [laughs]. Frank Capra’s probably one of the best romantic directors ever, because he tends to pick up on the more trivial, silly, fun sides of relationships.”

So where is the industry’s Frank Capra, this individual who can direct such moving scenes? And, more significantly, could he work within the restrictive confines of established genres? History will surely, in time, relate a happy ending.

**BAD LANGUAGE**

‘In language, the ignorant have prescribed laws to the learned’

Richard Duppa, Maxims

In Britain, movies broadcast on TV are often censored for bad language after the nine o’clock watershed. Interestingly, there are many documented instances of film producers bartering with censors to reach a compromise on obscenities. Such tales appear sketch-show material, yet are firmly grounded in reality: “You can keep the five ‘shits’ if you drop one of the two ‘fucks’,” bargains the censor. “Can I drop the three ‘wankers’ and keep the ‘fucks’?” enquires the producer. “Done,” says the censor.

“With adult content,” opines Penn, “the main issue is whether it’s gratuitous or not. There’s a very fine line between the two. Is the swearing in Kingpin brazen and...
gimmicky, or does it genuinely contribute to the ambience, the feel? I think it does. It's like Half-Life with swearing..."

Penn's point is valid. Tolerance of bad language varies from person to person - and, of course, the context in which it is used. Its validity as a form of casual emphasis is forever a point open to debate, but it's at very least an apt coincidence that such language is often described as 'colourful'. Kingpin aspires to have a gritty, nasty atmosphere.

Would Xatrix believe that Kingpin's language contributes to its 'feel'? "We wanted to create a more realistic world," says Markham, "where characters had certain agendas and were not necessarily immediately hostile towards you. In order to make that world more convincing the characters all needed to be able to speak to you in a generic or scenario fashion."

Would Kingpin work with a more limited vocabulary? "In my opinion, no," states Markham. "Would 'Goodfellas' have been the same movie without the 'taboo' language? Of course not. This is a gritty, realistic world we are trying to portray, and the language is part of that. This is not a game for kids - it's a mature undue sensitive in any territory. But when I was writing the script, I found myself pulling expletives out of dialogue. I didn't want too much swearing. I wanted it to be realistic or for emphasis. A point that many people missed with Sex 'n' Drugs was that it was meant to be very ironic, very tongue in cheek. There was this one bit where some of the characters are in a pub, and one says, 'Oh, have you seen Des lately?' Someone else says, 'Oh, he came round to my house and asked me if I had any gear. I said no, so he said 'Okay then. See you'. Some fucking mate he is'. You know - pub rubbish. Some people only see the crassness of it. They think it's rebellious because there's some bloke smoking a joint, or that the characters swear."

**FREEDOM OF CHOICE**

'You should make a point of trying everything once, except incest and folk dancing'

_Sir Arnold Bax, Farewell My Youth_

"One of the big things with roleplaying games is that you play to your character's alignment," says interplay's senior producer, Diarmid Clarke. "If you want to be an 'evil' character in Baldur's Gate, you can. There are penalties for being that way, but it balances out. There's one character who is an absolutely great Cleric. She's as black-hearted as they come. She's not going to join with a Paladin (a predominately 'good' character). It gives it an interesting twist, a real D&D feel, rather than just offering 'vanilla' characters to collect."

_Baldur's Gate_ is an interesting adventure in many respects. Five CDs in size and surprisingly open-ended in its approach, it is regarded by fans as one of the best D&D-style games ever created. Part of its appeal is its stance on moral choices. If you play as a Ranger, for example, you're expected to be lawful. Kill innocents indiscriminately and it will significantly alter your character, for better or worse - abilities indigenous to a particular class can be lost, but the damage to your reputation as a 'good' person may endanger you to less savoury individuals later on.

Without laws and social rules, society becomes anarchy. Thus, antisocial acts, from violent behaviour to the culturally unacceptable, are revered. Within a virtual environment, such concepts can be judged in terms of good taste alone. An adult who commits murder within the confines of a videogame is not a murderer. And what is

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**"WOULD 'GOODFELLA'S' HAVE BEEN THE SAME MOVIE WITHOUT THE 'TABOO' LANGUAGE? OF COURSE NOT. THIS IS A GRITTY, REALISTIC WORLD WE ARE TRYING TO PORTRAY, AND THE LANGUAGE IS PART OF THAT, THIS IS NOT"**

- **A GAME FOR KIDS — IT'S A MATURE TITLE AIMED AT ADULTS**
- **MATRIX**
- **DREW MARKHAM ON KINGPIN**

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**KGB**

Obscure Cryo point-and-click adventure with movie-like plot. If it existed as a film, Michael Caine would no doubt play a typically inappropriate protagonist.

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**LEISURE SUIT LARRY**

One of the oldest gaming franchises. Essentially a sex comedy targeted at a firmly male audience, LSL revels in juvenile humour. You love it or hate it.

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**MORTAL KOMBAT**

Not rated for arcades, yet given a 15 certificate on home release. Despite its edict of gore, _MK_ pales next to the greater poise of the _Street Fighter_ series.
Sexual swearwords, explicit violence... *Kingpin*’s release will certainly court a good deal of controversy, and the Virgin/Interplay coffers will bulge to reflect that fact. Xatrix’s desire to create an adult game is intriguing, though, and they remain unharmed. Furthermore, the game ‘rules’ do not address the attempts.

“You’ve set up a situation, a virtual environment for people to piss around in,” offers Penn, “and you completely damage the consistency by not allowing them to do things. If you’re going to put fucking guns and kids together, it’s inevitable that people are going to try and put the two together, isn’t it? That’s the whole point of interaction, and experimenting as a player.”

That doesn’t mean that people should, or even would derive any pleasure from shooting children within a videogame. The point is that, from a purely clinical perspective, it’s a fracture in the reality of the *Turco 2* world. “This is the problem with realism taking a hold at the moment,” continues Penn. “But you could add something bizarre if you shoot the kids, something spiritual — ‘The Hand Of God’. That’s it! If you shoot the kids, God smacks you down and says: ‘That’s Evil!’ [Laughter]”

Should mature games, if the principle fits the blueprint in question, also offer ‘good’ choices to complement the ‘bad’? Would a firstperson shoot ‘em up be enhanced by the addition of, say, a tranquiliser gun?

“I’m not sure that it’s our job to make the modern-day equivalent of Aesop’s Fables,” says Gard, “or to tack on syrupy moral statements in an American soap kind of way. I think games are not about making personal statements in the same way that maybe films and novels are. Games are about letting someone have some fun in a little world you’ve provided for them. I think it would be wrong for us to treat that as an opportunity to try to enforce our own moral attitudes on people too much. Our audience is much more mature now than it ever has been before and

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**POSTAL**

Is the sight of a badly animated stick figure slaughtering similarly looking ‘innocent’ disturbingly symbolic? Probably not. An awful game.

**REDNECK RAMPAGE**

Long before *Kingpin*, this Xatrix effort invited controversy with twisted humour, violence and language. Successful, but the build engine shows its age.

**SYNDICATE**

Bullfrog’s bleak vision of the future lies somewhere between *1984* and *Blade Runner*. Looks dated, but it’s surprisingly ‘adult’ by the events and scenes it implies.
I don’t think they would appreciate being preached to. Just like with films there must be room for all types of game, from the excessively adult to the equivalent of ‘Sesame Street’.

Penn offers his take: “If I had a tranquilliser gun in a game like that, I’d go around knocking the guards out and then do horrible things while they were out. No, the scary thing is, someone has to cater for every choice. With a more passive medium, like a book or a play or a film, the outcome is already defined. With a game, you have to cater for different possibilities – which means you’ve thought about it, you’ve actually thought about being sadistic. That has far more unpleasant undertones as far as I can see, and causes far more problems when people are looking from the outside in.”

Arcade frequenters of the past ten years will recall the ‘Winners Don’t Use Drugs’ message that adorned the front-
new elements to an adventure game: ‘What happens if I snort the coke? What happens if I don’t?’ Sometimes you could do that, and your performance was completely ruined, and you could lose the game. In other places, it could open options to you that weren’t necessarily there before. The reality, as anyone who has taken drugs knows, is that it’s like throwing dice: it can be good or bad. That’s what we wanted to reflect in the game. But we did understand that we needed to offer a route through the game where you didn’t take drugs…”

CREATIVE CONSIDERATIONS
‘Taste is the enemy of creativeness’
Pablo Picasso

“I think that if you want to be unpleasant, to introduce ‘adult’ content, it’s better to
assailants in order to progress. So how, for example, could such a game – despite
countless, desensitising confrontations – hope to establish that a particular act of
violence is bad?

“Think about the ear-cutting scene in ‘Reservoir Dogs,’” offers Penn. “It’s not
particularly graphic, you don’t actually see anything, but it’s very powerful. In
a videogame, it would be hard to make that anything else than graphic. It’s a lot
easier in the cinema, because shit’s happening outside of your view. If the
same occurs in a videogame, it’s depriving a player. Unless, of course, it’s not an
interactive scene… in which case, it’s not a game any more.”

It’s no mystery that the FMV sequence
remains the plot-advancing device of
choice for most developers. But, as Penn
states, this is not ‘gameplay’. It’s a passive
side, a cinematic ‘update’ divorced from
the game proper.

“I’M NOT SURE THAT IT’S OUR JOB TO MAKE THE MODERN-DAY EQUIVALENT OF AESOP’S FABLES, OR TO TACK ON SYRUPY MORAL
STATEMENTS IN AN AMERICAN SOAP KIND OF WAY… GAMES ARE ABOUT LETTING SOMEONE HAVE
HAVE SOME FUN IN A LITTLE WORLD YOU’VE PROVIDED FOR THEM”
Toby Gard, Confounding Factor

end of many a game. Some will also recall
MARC, a loud shout ‘em up that saw the
player slaughter syringe-toting addicts on
horizontally scrolling streets. Drugs are
forever celebrated and courted in popular
culture, from movies to music. Is it
excessively wrong for a game to feature
similar references?

“Sex ‘n’ Drugs was probably too
subversive,” offers Hare. “You’ve got bits
with people smoking pot, taking drugs and
hallucinating. There’s no smack or
anything like that. They’re just snorting
lines of coke, smoking, drinking – nothing
you wouldn’t see in a movie. It didn’t
particularly glorify it. But it introduced
be subtle about it,” says Penn. “People
are less likely to moan. This is the
great thing about censorship and the
Hayes code in the 1930s, where they
imposed all these fucking restrictions on
movies. It was a great thing in many
ways, because it encouraged people to
be far more inventive.”

In the absence of sexual or risqué
cultural content, most games are
gratuitous in one respect alone: the
depiction of violent acts. A shoot ‘em up
offers a milieu in which a player offs

The death of Aeris in Final Fantasy VII
is depicted in an FMV sequence. Acts of
violence within FFVII’s combat sequences
are light, cartoon-like events. Sephiroth’s
act of murder, though, is expressed in a
far more graphic manner, his sword
passing through Aeris’s body.

“The thing about the death of Aeris is
that it’s the one act where you realise that
Sephiroth is beyond saving,” enthuses
Clarke. “He is the bad guy – and he’s so
cool. For me, you want him to be a good
guy. You want him to turn at the last

SOUTH PARK
From adult cartoon to tedious Quikie
variant. Nintendo’s telling advocacy is
far more interesting than any deathmatch
swearing session this might offer.

Half-Life’s as-it-happens story is, in many senses, no more sophisticated than that
of most action movies, but its dialogue and scripted events are surprisingly subtle

EDGE 75
'Killing and Sadistic Violence' - EA's corporate line on its decision to bin *Thrill Kill*

**Edge:** What is EA's policy regarding games with adult content?

**EA:** Electronic Arts doesn't publish games with an Adult Only (AO) rating.

**Edge:** Videogaming's 'coming of age' has meant that some developers have seen fit to address adults in a rather basic manner. This has often meant resorting to three main areas of stimulation - sex, violence, and bad language. How does EA regard these staples of the so-called adult game?

**EA:** The vast majority of our games are rated 'E' or 'M'. However, we have published some games that are rated 'T' or 'M' that may contain mild or realistic animated violence, mild or strong language and/or suggestive themes.

**Edge:** As new technology becomes more capable of relaying realistic imagery, where do we draw the line? Do we allow more graphically explicit representations of violence, or must we suppress them because, after all, 'it is only a game'?

**EA:** While the capabilities of the new hardware platforms will provide the opportunity to have more realistic imagery in the games, publishers must accept individual responsibility for the content they publish and make available to the market. More realistic imagery doesn't necessarily translate into more violence. It can also mean more realistic football players, facial expressions on hockey players and exciting flight sims as well. Again, individual publishers have to make decisions about the kind of content they want to be associated with.

**Edge:** Why did EA choose to discontinue the *Thrill Kill* project?

**EA:** Electronic Arts' acquisition of Virgin Interactive Entertainment's Westwood and Irvine studios gave us the rights to more than 20 titles, one of which was *Thrill Kill*. In the course of evaluating the titles acquired, we decided that EA would not publish *Thrill Kill*. We felt that the product doesn't meet our standards for subject matter and appropriate content.

**Edge:** So EA's decision was due to the game's content rather than substandard gameplay or coding?

**EA:** EA's decision was content based. The fourplayer fighting engine is revolutionary, and we're exploring ways to use it.

**Edge:** Did EA see the announcement of *Thrill Kill's* cancellation as an opportunity to appease pressure groups and concerned parents?

**EA:** No. We simply didn't view a game based almost entirely on killing and sadistic violence as appropriate for the market.

**Edge:** Is there anything else Electronic Arts would like to add regarding the topic of adult games?

**EA:** The ESRB game rating system has proven to be highly effective in giving consumers notice of possibly objectionable content. We urge parents to be involved in the entertainment choices of their children, be it the books they read, movies they see, friends they spend time with or the computer and videogames they play.

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Kingpin. Having the ability to create realistic facial expressions on the fly would only enhance the process and product."

Technology is not the sole issue, however. "To an extent, games are decades away from delivering the kind of subtleties that good films deliver," argues Gard. "We are struggling to recreate the scenarios of simple formula action movies, or the emotional content of Disney films. I'm not entirely convinced that story-based games should ever try to tread the same space as say, art-house films. By their nature games are about puzzles and action, and these considerations are much more important than the story."

"I don't think they will ever be able to deliver a straight story as well as non-interactive mediums do. Often, for a story to work, the main character has to be doing things that you would not do or would not enjoy doing in their place, so if you're playing as that character then the story can't happen. The stories in games are driven by the gameplay content that we want to put in, so our stories are necessarily straightforward, and often a bit contrived. If there is a way to bridge the gap to films further, I can't see it."

Are games, handicapped by their interactive remit, condemned to appear frivolous when compared to great works of fiction or film? Could there be, for example, an 'Apocalypse Now' on a console? "It would be very different, purely because games, or digital toysets, are about doing, not viewing," says Penn. "In terms of eliciting response, stimulating emotion, it's going to be different. A lot of

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minute, to 'move away from the dark side.' And he doesn't. When you realise that he is the guy that you have to kill, it's almost a shame. You want him to be. They build that very well from the beginning.""

"Final Fantasy VII" bored me rigid, I'm afraid," says Penn. "It doesn't interest me at all. *Half-Life* works far better as a story. It has a lot of subtleties, a lot of underlying suggestion. The best stories suggest more than they actually say. *Half-Life* has, for example, an excellent setting in the research laboratory - where anything can happen. It's a great location for shit to happen - a really tight, contained environment."

Could a character like Sephiroth be created by means of play events alone? *Half-Life* and *Kingpin* suggest so. By offering almost subtle, as-it-happens narrative, they effectively place a player inside plot events. As gaining hardware improves, the believability of the inhabitants of virtual environments will also increase. Sony is certainly betting on the development of this type of content with its Emotion Engine.

"The majority of our communication as humans comes from the combination of words and facial expression," contributes Markham. "Having that extra side of the palette working will open up tremendous new possibilities for designers. The opinion might be that this won't be significant in action games, but I think that - given the opportunity - *Xatrix* would certainly love to continue on the kind of game that we've started with

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GTA's 'Gouranga' bonus, gained by mowing down a queue of Hari Krishnas: sick? Theoretically, no. Most papers missed out on this detail. What price Christians in GTA2?
skills need to come from other industries into this one, it would be foolish for people in this industry to assume they have a good handle on developing characters and plot. You’re not developing passive characters — they’re active. They don’t just have to look nice, and sound nice — they have to be fun to play with as well.”

THE FUTURE OF ADULT GAMES

‘Is it progress if a cannibal uses a knife and fork?’ Stanislaw Lec, Unkempt Thoughts

Did Katrion intend from the outset to make Kingpin an envelope-pushing title?

‘Absolutely,’ states Markham. ‘A lot of us have grown up with the videogame culture, but it hasn’t grown up with us. Our tastes in movies and music have changed, but we felt that game content in general has remained in a rather stagnant “safe” mode. It was time to try to change that.”

Clarke is of a similar mind. “For many developers, it used to be doing things bigger, better, faster — that was enough,” he says. “Now, the market’s different. You’re not just selling games to 15-year-old boys on the consoles any more. Me,

GOING UNDERGROUND

‘Money is coined liberty’ Fyodor Dostoevsky, House of the Dead

The videogame industry has reason to be proud of its remarkable ‘underground’ fraternities (effectively the primordial soup from whence it came — but that’s another story). From public-domain demos to shareware games, enthusiasts worldwide create works of code with little hope of financial or personal recognition. While such efforts should not be belittled, independently produced, low-budget games can no longer — realistically — hope to compete with their commercial counterparts.

“Back in the days of the ST, Amiga, C64 and Spectrum,” says Jon Hare, “there was more freedom of movement with the publishing world. And games were cheaper to make. A couple of guys could knock out a great game in a year. It’s virtually impossible for a developer to finance himself now. He has to go to a publisher — that great big devil in the sky. The publisher agrees, but on the condition that the game, obviously, reaches the market in a ‘decent’ state. That’s fine, but it can lead to crippling creative compromises.”

In the film and music industries, talent and worthy material are drawn from ‘underground’ scenes. Videogame publishers and developers can certainly employ demo groups and shareware authors, but there is a huge disparity in quality between amateur and professional projects. From The Beatles to once-controversial cult favourite ‘Bad Taste’, and from the uncompromising ‘Rommel Stomper’ to off-the-wall ‘reality’ TV shows like ‘The Bachelor’, music and film markets. Videogames, though, lend truth to the adage that genius is one per cent inspiration and 99 per cent perspiration.

A budding director can, as ‘The Faculty’ director Robert Rodriguez has related, shoot a film for a few thousand pounds. The majority of such productions will remain forever low-key. However, the important distinction between film and videogame is that — as the saying goes, but with a slightly different emphasis — the whole world is a stage. Creating a videogame requires a team (or, most likely, an individual) to create an environment from scratch. The film-maker, if handicapped by a lack of funds, does not. Borrowing a friend’s flat for a scene in a risqué, yet realistic, piece of social commentary is one thing. Borrowing a PC to write the next ‘Half-Life’ is quite another.

Or is it? Within the next ten years, the videogame industry could, potentially, happen upon the means by which it can support an ‘underground’ with genuine commercial potential. From Hoxen’s tweaked ‘Doom’ engine to ‘Half-Life’s inspired use of modified ‘Quake’ source, using another company’s game code is hardly an innovation. As the industry — and the machines it supports — continues to grow, many smaller development houses will struggle to both create a game environment and the tools to make it work. A thriving market for off-the-peg game engines, then, is a realistic possibility.

Such an eventuality could be beneficial to an industry ruled, as it were, by a contracting number of publishing superpowers. While these behemoths produce mainstream titles, wannabe creatives in the background could, potentially, create the mainstream titles of tomorrow. It’s no flight of fancy to speculate that games for mature audiences could flourish under such circumstances.

This month’s ‘Painting By Numbers feature (p46) explores the type of game production cited here in more detail.

“MANY PEOPLE, ESPECIALLY ADULTS, FIND IT EASIER TO RELATE TO SCENARIOS THAT MIMIC THE REAL WORLD, BUT IT ISN’T THE ONLY WAY. THERE ARE DIFFERENT TYPES OF REALISM. ASSUMING THE GAME HAS AN INTERNAL LOGIC STRUCTURE THAT ISN’T COUNTER-INTELLIGENT, I THINK PEOPLE CAN DEAL WITH NON-REALISTIC CONTENT”

TOBY GARD

personally, I get more into games if there’s some kind of story.”

Technology will always remain an issue of development, yet it is inclination on the part of publishers and developers that dictates the shape and form of game content. Slowly, but surely, the industry is acknowledging the existence of adult games.

But sex, violence and bad language do not an ‘adult’ game make. There is much more to the process than that. “Many people, especially adults, find it easier to relate to scenarios that mimic the real world,” says Gard. “But it isn’t the only way. There are different types of realism. Assuming the game has an internal logic structure that isn’t counter-intuitive, I think people can deal with non-realistic content.”

What I mean by that is, certain types of ‘realism’, like greater attention to detail in computer-controlled characters, and physics simulation, are generally good things, but it should not stop us making games of a fantasy nature.”

When reduced to its constituent elements, the basic engine behind a game can often be expressed in remarkably simple terms. Imagine a 2D, wireframe road with a crude image of a car placed upon it. Now apply Colin McRae Rally’s physics, map layout and joystick controls to this simple graphical interface. The button presses required from the player are identical. Success, in physical terms, is achieved by the same means. The game, however, is a pale shadow of its former self. This exercise can be applied to many action titles. For an indication of how little games have changed in terms of physical interaction, it serves its purpose.

Highlighting the importance of visual styling and design, though, it presents a far more interesting argument.

“It’s all down to how you express something,” offers Penn. “If you take GTA out of its real-world context, it becomes Pac-Man. The people are the dots, the cars you are stealing are actually the yellow androgynous blob. But you can do really unpleasant things with symbolic graphics. You could have, for the sake of argument, a pink blob. And if it’s made very clear that the pink blob is a pregnant woman, and the next collection of pixels is you with a gun... there are different resolutions you can apply to that.”

And ‘resolution’ is, indeed, the issue. For years, developers have merely applied layers of technological gloss to established genres. More recently, however, the ‘adult’ gamer is beginning to draw the attention of publishers and programmers alike, and his or her needs are being emphatically addressed. Will this lead to more cancellations à la Thrill Kill and Sex ‘n’ Drugs? Possibly. But such games are expensive lessons which others have no doubt learned from. What’s certainly clear is that, as gameplay makers have grown up, so too have game makers.

Going on the evidence gleaned through this feature, the dream project of adult-game producers would perhaps be the videogame equivalent of ‘Pulp Fiction’ — something whose narrative is as engaging as its graphical content is provocative. That dream may be some way off, and if the journey there is littered with some ill-conceived stepping stones, it will prove a fascinating one nevertheless.
The definitive monthly assessment of the world's latest videogames

Worth the wait

Well, praise the lord for Dreamcast. Had Sega's 128bit box not been around, this month's Testscreen section would be significantly slimmer (not to mention dominated by one format).

This month has witnessed a shocking lack of must-buy software. Sure, Get Bass is surprisingly enjoyable, and most of the other titles featured in the following 13 pages also offer no small amount of entertainment, but there's nothing here to knock your head off.

You'll notice that there's no Nintendo 64 software reviewed this month. And other than the entertaining but technically challenged Syphon Filter, there's no decent PlayStation fodder either. Now, before you all write in stating the obvious, yes, several PlayStation games and a trolley of N64 titles have shipped in the last 30 days, but, as clarified in this section three months ago, you won't find them here because by and large they're simply not worth bothering with.

But this isn't what was supposed to happen. As this issue was being planned, the Nintendo 64 version of Quake II was due, as were Driver and Soul Reaver for the PlayStation. The PC also had a hugely promising game scheduled to appear in the form of Homeworld. Frustratingly, however, they've all slipped. And with the exception of Quake II (with apparently no one prepared to commit to a new date), review code for all the others is promised in time for next month's issue.

Past experience has taught Edge not to hold its breath; but it's worth outlining the consequences of continually delayed titles. Yes, it's hugely irritating to have to wait even longer for something that may already have taken the best part of two years to arrive, but rest assured that publishers are not in the habit of holding a game back unless it's absolutely necessary. Consider GT, for example. The US giant has recently announced that it expects to post a staggering $55 million (£35m) loss for the fourth quarter, to be followed by the loss of 650 jobs at its HQ. This, would you believe, is being largely attributed to delays affecting its planned releases, namely Total Annihilation: Kingdoms, Unreal Tournament (see p32) and the Reflections-developed Driver.

Few publishers are in the privileged position of the likes of Rare or Nintendo, which both enforce 'release when ready' policies. Fortunately, though, as the market becomes increasingly competitive, publishers are more wary of releasing unfinished product (unless it comes with a big licence attached, of course), aware that quality software always ends up generating more long-term revenue. Although it may not make them happy, this does of course theoretically mean that the gamer on the street ends up being the main beneficiary.

The promising Homeworld (left) fails to materialise. Eidos' Soul Reaver (centre) has yet to achieve reviewable status, and GT doesn't seem bothered to supply Edge with a copy of Driver

Videogames on the Edge

This month's power plays

Team Fortress
(PC) Havas
Despite everyone wanting to be the heavy weapons guy, real sneakerides will be striking a pose as the spy. The multiplayer gaming experience of the year.

OmegaBoost
(PS) SCE
Coming from the creator of Gran Turismo, this was never going to fail to make an impact. It may be rather shallow, but it's so polished you can see your face in it.

Anna Kournikova's Smash Court Tennis
(PS) Namco
Essentially a low-on-frills update of the established classic (with a rather odd-looking SD Kournikova), this remains sterling stuff.

House of the Dead 2
(DC) Sega
Deadline blues have been alleviated this month with two-player sessions on Sega's gloriously swish lightgun actioner. A victory for no-trainer gaming.

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GET BASS

Playing Get Bass with a standard joystick proves perfectly adequate, but for true arcade-in-the-home recreation you'll need to get hold of Sega's official Dreamcast fishing rod controllers, which even offers mild vibration effects.

As odd an activity as fishing is, it's perhaps odder still that someone would want to replicate it within the format of a videogame. Yet, spared of its dreary aspects (the endless waiting around while fish decide whether to take the bait or gobble up an equally alluring decoy amid the countless others discarded along the lake bed) the whole exercise becomes rather compulsive. Worryingly so, in fact.

True, playing the accurately converted arcade mode without titanium-strength willpower should see you discover the end credits within a few minutes, courtesy of a limitless supply of continues. Fear not, though, for there is a lot more to Get Bass than a quarter-of-an-hour's entertainment. Like Sega Rally 2, another of the company's arcade conversions, Sega has added a 'consumer' mode to keep digital anglers entertained for hours. Taking the format of competitions (further subdivided into five seasons), you must battle for bass fishing supremacy against a selection of CPU fishing fanatics. As in real-life fishing competitions, the angler who has caught the largest cumulative weight after three fishing sorties (within a strictly imposed time limit) goes home with the trophy. But don't expect to be doing too much champagne spraying too soon - not because this is an activity usually reserved for motorsports, but because winning competitions in Get Bass is very hard work. You'll have to develop an understanding of the different lures as well as when (and how) to use them, depending on the fishing conditions. And while tones on fish behaviour are unlikely to become compulsory reading, an awareness of how the atmospheric elements affect the creatures will prove crucial in outweighing the competition.

The more, and hopefully bigger, fish you catch, the wider the choice of lures, which are awarded depending on your performance. In truth, you can probably stick to three or four types, but as everyone seems to be doing.
Visually, it's difficult to differentiate between this and the coin-op original to stick to an individual selection, it's good to have the freedom of choice. This preference also extends to the differing techniques used by individuals. While a lure's design and colour (the latter of which can be alternated) usually dictates a certain methodology for its successful application, it's inevitable that everyone eventually develops their own technique, usually with varying degrees of success.

Ultimately, there's very little about Get Bass that falls within the boundaries of a videogame. At least, not in the traditional sense of the word. After all, its gaming elements are stupefyingly simple; essentially, all you're doing is casting out a lure and reeling it back in, hopefully with a fish in tow, before repeating the sequence, which is hardly revolutionary gameplay. Nevertheless, the fact that more time has been spent playing Sega's fishing game by the Edge team than most other games in the last two months (with the obvious exception of Team Fortress) perhaps serves as a stern indication of the state of gameplay values in today's games rather than Edge's possibly hyperactivity-driven desire for something laid-back.

But then, when examined objectively, most activities can be made to look surprisingly trivial. Get Bass' appeal lies in the constant presence of a random element affecting its proceedings - there's no way of predicting the size of the next fish or how many you'll catch, if any. The possibility of landing a record-sized bass with your next cast always proves too tempting an opportunity, resulting in a thoroughly refreshing, enjoyable and compulsively addictive experience.

Edge rating: Seven out of ten
The aim of Machines is nothing less than the risky synthesis of the firstperson action and realtime strategy genres. If the results are a touch uneven, they are at least compellingly different. With its use of mechanoid warriors, builders, and scouts, Machines initially appears to be little more than a regular point-and-clicker with a stylistic debt to Mechwarrior. And in the early stages, at least, that feeling remains.

The primary viewpoint is a lofty thirdperson one, albeit with zoom and rotate controls making use of the polygon-based visuals, while both the method for controlling units and building bases is standard strategy fare. There are mines to harvest the raw material, research bases that require technicians, military and civilian buildings, and various defence turrets. But that's one way of watching the action unfold.

Two other viewpoints have been included, one providing a ground-level thirdperson perspective similar to that of the forthcoming Star Trek: New Worlds. It's not a wholly practical one for general construction, but provides a far better vantage point when the inevitable conflicts (disappointingly against sides distinguishable only by the colour of their mechanoids) begin.

And then there's the firstperson view, where the usual point-and-click interface is replaced by direct control of movement, aiming and firing. Obviously, the possibilities this opens up are fantastic: players can direct a whole army of machines against an enemy base, then drop right down into the fray, making a crucial difference to the outcome of the battle. And, because Machines provides so many different kinds of units – including flying bombers, hover grunts, huge mobile gun batteries, and humanoid leviathans – each player will find favourites, either taking control of the best units, or opting for a weaker machine, safe in the knowledge that the tougher troops can look after themselves. It's

A traditional, though zoomable, thirdperson view is the most effective one available. Unfortunately, this perspective is also the least spectacular.
Players can **direct a whole army** of machines against an enemy base, then **drop right down into the fray**, making a **crucial difference** to the outcome of the battle.

The unit types have a wide range of assault machines as well as more subtle creations, such as this transporter salvaging scrap from a destroyed mechanoid.

surprising to discover that extended periods can be spent in first-person mode without having to worry about the strategic side of the game too much. And it's rare that an attack has to be abandoned because the computer-controlled units aren't doing their job properly. But then, this kind of automation has always been at the heart of realtime wargaming, making it possible to take control of units spread out over traditional top-down maps. Because *Machines* is so flexible with its viewpoints, and makes it so easy to flip between them, there's none of the awkwardness that often occurs when two genres are welded together.

And yet *Machines* never capitalises on its split personality as much as expected. It's not the switching between game styles that creates the problems so much as the compromise induced by using the same game engine throughout.

Getting visuals to work effectively in both views is obviously not easy, with the result that visuals which look great viewed at a distance tend to blur when viewed up close, and vice versa. Similarly, the *Machines* never impress as much when seen from the remote third-person camera as at troop-level. And, crucially, there's the complete lack of any subtlety or speed when directly controlling a unit — the *Mechwarrior* games have nothing to worry about here.

*Machines* gets so many things right, introducing imaginative skirmish modes to compliment the campaign system, adding countless touches like the day and night cycles, and utilising a superb collection of unit types. But while that shoot 'em up element only forms part of the formula, it ought to have the depth to stand up on its own. Sadly that's just not the case, which leaves the game in the position of being worthy of attention for its genre blending, yet most enjoyable when played in a thoroughly traditional way. How ironic.

**Edge rating:** Seven out of ten
While the design is familiar, the visuals are never less than amazing, sporting shadows, mist layers, reflections and environment mapping.

British developer Rage has something of a knack for 3D wizardry: following the visually explosive incoming, this new offering tends even more lavish visuals.

The design is familiar enough, using a formula that stretches all the way back to Berserk and Robotron, although looking more akin to coin-ops such as Ikari Warriors and Smash TV. One or two soldiers must battle through the mostly linear levels, destroying waves of attackers, collecting power-ups (mostly oversized weapons), and occasionally saving hostages. The back of a stamp would be too spacious for writing down this formula.

But as costly well-worn as that concept is, it works fairly convincingly, unlike incoming, which used effects to hide design deficiencies. Expendable sets up a simple, solid stall from the outset. By keeping things so basic, Rage has been able to imbue the control system and the blasting with a decent degree of precision. There's never a moment when an obscured viewpoint leads to the loss of a life, or when an aim is hard to judge.

Consequently, it's possible to work hard to master the controls, learning to move, and rotate independently, in order to run in one direction while firing in another.

That Expendable looks so great also obviously helps. The camerawork is exceptional, and the textures used are near works of art, aided by coloured lighting, true shadows and ubiquitous explosions. It's also wonderfully free of the slowdown that so often plagues this kind of title. This is, in fact, one of the most dynamic looking games ever to hit the PC, and it bears coin-op quality in places. The catch is that, like so many coin-ops, longevity isn't one of its selling points.

While some may find it curious to expend so much energy pushing technological boundaries on a piece of software that displays such a brazen disregard for gameplay innovation, Edge must applaud Rage's treatment. PC gamers have too often suffered at the hands of over-fussy designs, or glitchy, sub-console coding. Expendable knows exactly what kind of populist entertainment it wants to be, and it goes some way towards reaching its aims.

However, it's difficult not to look at Rage's points of reference and wonder just how much more would have been achieved had it considered other examples of full-on, balls-out shoot 'em up action. Top-viewed shooters are notorious for their lack of breadth — you need only look at something like Konami's SNES classic Super Contra by comparison to, say, Capcom's Commando (which Expendable more closely apes) to see how much more potential lies in presenting pure, arcade-style action from a side-on perspective.

Expendable may have visuals to die for, but it doesn't push them in the best directions. A case of what might have been, then.

Edge rating: Five out of ten
TANKTICS

In Tanktics, the teacup and ear trumpet combo (right) is the part-o-matic for producing tank parts, while the pterodactyl with magnet (above) is the cursor.

MA is highly regarded as a gameplay pioneer in an industry which — surprisingly, for an apparently creative media — so often prefers imitation to innovation, and Tanktics is its typically skewed rewrite of the realtime strategy formula. Introducing players to a new control mechanism and a unique method of resource management, the action takes place in a frivolous cartoon reality with its own set of sheep-driven physical laws. The stage is set, then, for another seminal gaming moment, one that may rank alongside such turning points as Lemmings and Grand Theft Auto.

This time, however, DMA has lost its way. Tanktics is a victim of its own originality; the vitality of its approach buried under needless layers of complexity and frustration. Take, for example, the crane. This is the cursor by any other name and appears in the early levels as a happy pterodactyl. Like any cursor, the crane enables you to interact with the game world. But in Tanktics the cursor is magnetic.

This is the key principle that both underpins and undermines the whole game, because every other object in the world is also magnetic — from tank parts, to boulders, to sheep. So, instead of just clicking on objects to activate them, you must click to magnetise the crane and then pick an object up. Then fly to another location, click to demagnetise, and deposit in the desired place. As an operation, this is no more laborious than using any old cursor, except that any old cursor isn’t a finicky magnetic crane that rips the turrets off your tanks if you don’t position its navigational shadow in exactly the right place, or remember the direction of your polarity at all times. And, whereas every other RTS game provides a wealth of labour-saving devices to let you get on with the fighting while the AI deals with the menial, Tanktics, obsessed with the wonder of magnets, makes you perform every last chore yourself. Need some tanks? Then you’ve got to build them piece by piece with the flying magnet. Need tank parts? Then you’ve got to drop the resources into your factory (or part-o-matic as it’s known) by magnetic courier. Need power for your factory? Even that must be hand-delivered via your magnetic tool.

Ultimately, it’s tiresome. In between fighting a tank battle, clearing the map and manipulating objects, there’s just too much for you to do. The sheer effort required to carry out even the simplest of tasks is out of all proportion to the onscreen reward, robbing you of any real incentive to continue. Perseverance may be a virtue, but after three years in development, Tanktics’ designers have turned it into a vice.

Edge rating: Four out of ten

The whimsical cartoon aesthetic finally proves that graphics don’t really affect the gameplay. Tanktics fails, but not because of its aged looks
REQUIEM

Format: PC
Publisher: UbiSoft
Developer: Cyclone
Price: £35
Release: Out now

A Trinity shotgun is little use against the four-armed Geryon (above)

Angels are commonly viewed as goodly and godly, so it's something of a surprise to discover that Requiem's chief protagonist is one of those white-winged creatures. Except that, in this instance, avenging angel Malachi is one of the rare kick-ass variety.

Starting in a tortured spirit world called Chaos, Malachi is on a mission from the Lord to stop the Fallen. Led by arch-demon Lilith, the Fallen have broken into the realm of Creation and are preparing to bring about the apocalypse. Basing its vision on Milton's epic poem 'Paradise Lost', developer Cyclone has obviously approached the first-person genre in an imaginative manner. It has attempted to create a game driven by a concept rather than convention, for the one thing that stands out about

Requiem is the way the angelic theme is integrated throughout. You may spend the early levels slaughtering 'grunts', but you can use spiritual powers instead of an assault rifle. And it is these special powers that make it interesting. Some are nothing new, but are merely well implemented - the sequence of turning enemies into pillars of salt is neatly animated, for example. Possession, on the other hand, generates an out-of-body experience, enabling you to briefly check what's around the corner or to possess the body of an enemy. More strikingly, the resurrection command means you can reanimate dead bodies to fight on your side.

The spiritual aspect of the game also speeds the somewhat leaden, mission-specific plot. As demon bosses exist on a different plane, their introduction adds a surprise element rather than being found at the end of a level. And, in contrast to the weakness of human enemies, they are hard to destroy and relatively invulnerable to projectile weapons.

Yet, the main frustration with Requiem is that its clever features can't be used to anything like their potential. As you don't need spiritual weapons to complete most of the levels, most players won't use them. Equally, the weakness of the enemy AI doesn't allow your resurrected army to do much except get in the way. Maybe if Cyclone had removed the guns and worked on pushing some of the indirect spiritual powers, it could have been the start of something radical. As it is, Requiem sits in the purgatory between the hell of Hexen and the heaven of Half-Life. It's good, but the earth doesn't move.

Edge rating: Six out of ten
OFFICIAL FORMULA 1 RACING

As its name may suggest, this is a Formula One racing title. The latest to boast the prestigious (and extortionate) FIA licence, allowing all of the tracks, all of the teams, and every driver (except for Canadian Jacques Villeneuve, who licenses independently from the FIA) to be included, along with last season's genuine names, sponsor-fuelled liveries and helmet designs.

The problem with F1 games, though, is the sheer number of them. They all have very similar features, which means it becomes difficult to tell them apart, unless one of them should do something conspicuously different. Which, by including the essence of the sport to a level usually associated with a full-blown simulation, yet adopting a handling model more in tune with an arcade racer, is exactly what Official Formula 1 Racing does. The result, even with all of the driving aids switched off, is an instantly accessible while reasonably authentic F1 game.

As a good thing, too, as its rather simplistic visuals were never going to win the polygonal race. The cars and tracks have been faithfully recreated, but a lack of refinement rankles, particularly in the spray, sparks and storm effects.

A little more attention to detail would have prevented other ruffling inconsistencies. Wheels wobbling after impact and tyres bursting are a pleasing (and much overlooked) addition, but why don't the tyres blister after locking up the brakes? And why does the pit sequence always show a car in pristine condition stopping at its place regardless of whether a wheel or a wing has been misplaced as a result of an on-track collision? And it's odd to enter a grand prix and be offered the possibility to maximise track time (free practice, qualifying, even the pre-race warm-up practice), but only get three qualifying laps instead of the legitimate 12 real drivers are allowed.

More importantly, all of the CPU racers drive exactly the same way—and seem to do very little overtaking or abandoning of races (either through mechanical failure or driver error). Now, you could arguably reason that the first two accusations are perfect illustrations of the status of today's F1, but the same can't be said of the latter. In fact, Edge can't recall the last time a grand prix was completed without a single incident or retirement, something that doesn't appear to affect the ritual of racing in Official Formula 1 Racing.

Still, this isn't a bad game by any means, it just could have been a lot better. While Grand Prix (and GP Legends) aficionados will run away screaming from its painless approachability, casual racing fans looking for an easy route into the world of digital F1 should savour this opportunity.

Edge rating: Six out of ten
SUPER SPEED RACING

Initial impressions of Sega's first IndyCar-based racer are good. Very good, in fact. Despite its official CART (Championship Auto Racing Teams) licence, rather than travelling down the simulation route, Super Speed Racing veers off in the opposite direction, offering an incredibly accessible arcade-style experience. The polygonal world is colourful and detailed, faithfully recreating the world of IndyCar racing. And everything moves along with a sensation of speed rarely matched by other driving games.

Despite its arcade-like handling, all of the 27 drivers are real, from IndyCar wonderkid Alex Zanardi (now in F1) to veterans Carl Haas and AI Unser Jr, not forgetting of course ex-F1 failures such as JJ Lehto, Mauricio Gugelmin and Mark Blundell. The circuits, too, are authentic and although mostly based in the US, singular visits are paid to Brazil, Canada, Australia and Japan. It may surprise some to learn that only eight of the 19 tracks available can be categorised as the dull ovalus usually associated with the NASCAR series, with the remaining 11 motor racing venues displaying a succession of corners more akin to European circuit design (although with their relentless series of 90-degree turns, the traditional street circuits of Houston and Detroit are probably taking things a little too far).

The existence of arcade and championship modes is unlikely to stop you in your tracks, and the same could be said of the latter's optional setup options, available before practice, qualifying and racing. Once on-track, though, the sense of speed is exhilarating, particularly when using the marvellous in-car perspective, complete with dirt build-up on the "visor". Having another 26 cars racing against you is another welcome advantage over other racing titles.

Sadly, after an all-too-short running-in period, some fatal design flaws emerge. Crucially, the AI is some of the worst to grace a racing game. Stop on the track and watch in disbelief as every other opponent lines up behind you, seemingly unaware that a few twitches of the wheel would have seen their car circumnavigate your own. Furthermore, don't dare let one of your tyres wander onto a grassed area, as you will suffer from a ridiculous (and near-instantaneous) loss of speed.

And while Edge is even prepared to overlook the fact that it is apparently impossible to spin your car, it does mean races can be won by simply working your way up to first place, knocking every opponent out of the way - which shouldn't trouble unscrupulous players.

There is much enjoyment to be had from playing SSR. But you simply can't ignore its few, but catastrophic, deficiencies.

Edge rating: Four out of ten
So Sega's latest machine can display sprites with aplomb. If confirmation were needed, *Marvel Vs Capcom* is a high-animated bitmaps corroborate the versatility of the hardware. It’s ironic, then, that the visual excesses of Capcom’s latest act is an aesthetic ball-and-chain to its combat engine.

Retaining the tag-team system of its forebear, *Marvel Vs Capcom* is typified by its frenetic and unpredictable gameplay. The ability to switch between two fighters should, in principle, confer a degree of strategic depth to each bout. In practice, though, this proves arbitrary to all but the most practised devotee. Furthermore, the addition of a ‘companion’ fighter who contributes special moves on command – and

The sheer range of special attacks available beggars belief. But, unfortunately, such excess is an impediment to balanced gameplay

Perhaps in an attempt to appease those who might ask for a greater number of fighters, Capcom has introduced the ‘guest’ attack. Its cast list is prodigious

True to form, Capcom’s artwork is crystal clear and crunchy crisp

appreciably colourful in a screenshot, it’s only during play that *Marvel Vs Capcom*’s crowning visual glory – its 60fps framerate – is discernable

selected at random before a round begins – merely contributes additional, potentially confusing screen furniture.

*Marvel Vs Capcom* favours reaction-based play. Quintessential chaotic, and favouring the most nimble fingers, it’s a far cry from the measured, balanced *Street Fighter Alpha 3*, which is both good and bad. It’s not hard to deduce that Capcom is preening to the converted. For example, different characters may change ‘states’ during bouts. Ryu, for instance, addresses the omission of both Ken and Akuma by being able to change his style of fighting – with requisite joystick sequence – to mimic either. But who, except the enthusiast, will appreciate such subtleties?

Where the game excels, however, is in the introduction of a four-player mode. Capcom’s 2D fighting games are consistently better as multiplayer fare, and the tag-team system provides an obvious progression. Although much of a bout will be spent with only one fighter onscreen, special team-up attacks enable both players to fight in tandem. It’s unfortunate, though, that Sega’s Dreamcast joystick is woefully unsuited to the rigours of Capcom’s six-button control system. The analogue L and R triggers lack the digital precision that *Marvel Vs Capcom* demands and, naturally, are badly positioned. The D-pad, too, feels inadequate. Without the additional purchase of Sega’s joystick peripheral – two, at least, for vs matches – *Edge* would recommend gamers think hard before contacting their favoured import store.

As a coin-op conversion, *Marvel Vs Capcom* has few peers. As a beat ‘em up, it owes more to old-school ‘twitch’ gameplay than it does to, say, the original *Street Fighter II* design brief. In feel, it almost owes more to the shoot ‘em up genre than it does to, say, *Tekken*, and that, ultimately, is why it will appeal mostly to real hardcore gamers – it’s not a title that will beguile the mainstream market come its western release later this year.

**Edge** rating: Seven out of ten
PSYCHIC FORCE 2012

Format: Dreamcast
Publisher: Taito
Developer: In-house
Price: ¥5,800 (£30)
Release: Out now (Japan)

In close-up, Taito's conversion looks fine. But such moments are rare – most battles take place at a distance.

The blueprint behind Psychic Force 2012 is refreshingly old-school in design. It has a trace of beat 'em up in that close-quarters exchanges allow simple punch or kick combos, while its combatants float within the confines of a cube, and the vast majority of its assaults are projectile-based. It can only be accurately pigeon-holed by using a common term in a context that has largely fallen into disuse: it is an 'arcade' game.

Although popular in Japan, western success has eluded the budding Psychic Force series. (Acclaim published a PlayStation conversion of the original 1995 arcade machine here, to an indifferent response). 2012, as a facsimile of its coin-op counterpart, reveals just why: its presentational style is that of almost every Japanese beat 'em up ever created. Yet, in play, it is an initially confusing, mystifying experience.

Within a perimeter defined by the large transparent cube, two protagonists float freely. Movement, via the D-pad, sees fighters move up, down, left or right. Psychic Force 2012 is, inherently, 2D in design. Stripped of its three-dimensional veneer, its basic gameplay would survive a transition to a sprite-based engine. 2012 uses three buttons – guard, light attack and strong attack – which can be combined to access a variety of attacks or actions. From a distance, these take the form of projectile attacks or blocking manoeuvres. Up close, punch or kick attacks can be accessed, although these are scarcely more complex than those of, for example, Final Fight.

As premises go, Psychic Force rivals retrogaming favourites in terms of elementary design. Its nod towards complexity and depth takes the form of outlandish attacks indigenous to certain characters, and an interesting power bar system. The latter introduces a strategic element to each bout. Each fighter has a 'Psy' gauge, but use of the strong attack button and many specials depletes this meter. Once exhausted, such assaults are effectively removed from a fighter's repertoire. It is possible to replenish Psy, but only while stationary (and, therefore, vulnerable to attack). In a neat, balancing twist, the upper limit for Psy is increased in direct proportion to energy loss. Such an appreciation for the underdog is, in a sense, an appropriate show of solidarity by Psychic Force 2012.

Languishing in the shadow of Capcom's outlandish Power Stone, 2012 appears at best a poor cousin; at worst, a malignantly, distant relative. A reasonably skilled gamer can experience virtually all it has to offer in a few hours. Simplicity can be the key to success, but shallowness is an entirely different matter.

Edge rating: Five out of ten
MONACO GRAND PRIX RACING SIMULATION 2

Monaco (above) is the only officially licensed track in Ubisoft's F1 simulation, although all of the other circuits available are also perfectly represented.

There are many similarities between the original PC version of Monaco Grand Prix (see E65, 7/10) and this Dreamcast interpretation. The most obvious is that they both lack an FIA licence, and nowadays, with seemingly every other F1 game publisher boasting one, this is an aspect that perhaps shouldn't be overlooked. It could mean the difference between being picked up from the shelf or left struggling for attention in the bargain bin.

Thankfully, like its PC brother, there is an editing option available, enabling you to alter the team and driver names so that it Bonifascio can become Brazilian Rubens Barichello, racing for Stewart instead of "Team 11", for example. And, like the PC version, there is an arcade mode, a retro option featuring vehicles from the '50s, and the all-important simulation offering an impressive amount of realism relating to contemporary F1 racing. The ten 'scenario' options present in the PC game have seemingly failed to make the transition, however. It wasn't a crucial element, by any means, but its omission is nevertheless regrettable.

And, while the attention to detail and most options seen in the PC incarnation have happily been included, so, too, have its shortcomings. Cars therefore appear to float above the track, they all sound the same, and the cockpit view is still armless. Furthermore, in Dreamcast form the graphics fail to impress, with some simplistic skies and weather effects being the most obvious culprits. There is a satisfyingly solid feel to the proceedings, with scenery build-up rarely noticeable, but they look slightly out of place on what Sega is marketing as a next-generation console.

This is still a proficient, playable F1 simulation title with a respectable set of handling dynamics. It's just that things have moved on a little since its original appearance on the PC six months ago, and this version is therefore unable to match its predecessor's impact. Some genuine enhancements – rather than a seemingly straightforward port – would have been welcome.

Edge rating:  
Six out of ten

Grass and gravel stick to tyres of the well-modelled cars after an off-track trip, and gradually disperse after a few seconds of hard driving.

The retro mode's poor braking and low grip level (left) should test your driving skills to the max, while the twoplayer option (right) is competent.
SYPHON FILTER

Format: PlayStation
Publisher: 989 Studios
Developer: Eidetic
Price: $35 (£22)
Release: Out now (US); TBA (UK)

It's by no means an infallible rule, but it's often possible to gauge the quality of a production by the quality of its FMV. And Syphon Filter's is, well, dodgy, to say the least.

The plot sees you incarnating super-stealth agent Gabe Logan, on a mission to infiltrate and halt a terrorist operation under the command of baddie Erich Rhoemer, who is threatening to deploy a biological weapon capable of wiping out millions of US citizens. In short, it's the usual 'only you can help, yadda, yadda, yadda' routine.

So far, nothing special, then. And accepting your mission doesn't appear to improve things, either. But persevere past the poor, clichéd cut-scenes, the uncommonly blocky nature of the graphics, the clumsy control system, the unrefined movement of the protagonists onscreen, and unsuitable use of Dual Shock's vibration, and you'll find a surprisingly engaging experience.

You begin each of the 20 missions with a set of objectives, but, interestingly, these alter as you progress through the level, so that although you may only start off with two primary instructions, successfully clearing the level may require you to carry out a further four goals, which are communicated to you via an agency operator. It's not the first time this has been implemented in a game but it does add a fine sense of pace to the proceedings, as well as furthering your interest in the rather simplistic plot. A further nice touch is the diversity of your tasks: you could be setting up C4 explosive charges or providing cover for fellow agency members one minute, and chasing deranged terrorists down active tube lines and squaring up to a pyromaniac in bullet-proof armour wielding a flamethrower the next. To label

The intrepid Gabe can run, climb, jump, crouch, roll, target, snipe and even see in the dark (courtesy of a night vision-equipped sniper rifle)

*Syphon Filter as an inferior GoldenEye/Metal Gear Solid clone is unfair. Yes, there are elements that may have been 'borrowed' from the aforementioned duo, and the execution could have been better accomplished, but Eidetic has introduced a few ideas of its own, and these go a long way towards providing the game with its own identity. There are very few games out there that can claim the same.

Edge rating: Six out of ten
I WANNA HAVE SEX ON THE BEACH!
(but would probably settle for being bigger down under)
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Game Developer's Conference '99: 3D in perspective

One of the more obvious trends evident during March's Game Developer's Conference in San Jose was that the games sector is very much the driving force behind 3D development again. After a couple of years spent assiduously courting the film and post-production market, competition for the gaming dollar is becoming increasingly fevered as a slowdown in the film/post sector starts to bite and companies jockey to be in prime position for the expected increase in seats brought about by PS2 development.

Certainly, the scale of the price-cuts the industry has seen so far this year have been unprecedented, with slashes of 50 per cent commonplace. The result is that the entry-level Softimage 3D 3.8 now currently sells for £3,100, around the same price as Kinetix' 3D Studio Max - long the champion of the budget user. Alias|Wavefront hasn't been left behind either, its own entry-level Maya Complete dropping from £16,000 to £5,950. Top-end prices have fallen as well, with Softimage 3D Extreme now retailing for £7,800 and Maya Unlimited for a mere £13,950.

On the battlefront

Whatever the price point, though, the main thing to emerge from examining the new products on offer at the GDC is that the feature wars are largely over, and improving workflow is the new battlefront. Certainly Kinetix's 3DS Max R3 is making great strides in this area, with a completely overhaul graphical user interface. All views, menus and toolbars in R3 are completely customisable, specific screen layouts can be saved, the list of keyboard shortcuts has been significantly expanded, and users can assign Macros to a single button. A clumsy GUI has been a bit of an Achilles' heel with Max, especially given the advances Alias' Maya has made in that area, so this is all welcome stuff for users.

Texture unwrap has also been improved, NURBS have been overhaul, and a new subdivisional surface NURMS (Non Uniform Rational Mesh Smooths) has been added to the package's attributes. Rendering has not only been completely reworked, but a recent deal with German company Mental Images essentially means that Max users will get access to the same mental ray rendering technology that Softimage clients have enjoyed for years. Most popular of all with those that have seen it, though, is the addition of the CAD-industry standard External Referencing. Using X-Refs, artists can create objects and scenes that can be used in any number of other Max files, changes to these objects cascading through all the files that contain them. The latest texture or objects can therefore always be accessed without any of the tedious logging, checking and re-checking of changes usually required.

Test of character

Also unveiled at the GDC were new details of Alias|Wavefront's forthcoming Maya 2. The original Maya release was skewed heavily towards character animation, and

While the GDC saw a remarkable drop in prices for 3D dev packages – in some cases of more than 50 per cent – Alias|Wavefront launched Maya 2 to an appreciative assembly a significant number of developers have so far stuck with the company's Power Animator rather than migrate over. Maya 2 redresses the balance, the chief highlight being that Alias has managed to further develop its powerful NURBS-based Artisan tools and get them working within the polygonal workflow. Based on what the company refers to as a paintbrush metaphor, Artisan allows users to model as if they were sculpting in clay, as well as quickly accomplish repetitive tasks such as assigning colour-by-vertex values by simply 'painting' them onto a surface. Numerous workflow enhancements, particularly in texture mapping, have also been made to the package – there's a more opened API, and the same level of blind-data tagging that helped make Power Animator so strong in the game-development field has finally been ported over.

Tools for the job

Completing the triumvirate of new products on show was Nichimen Graphics' Mira, the next-generation version of the company's N-World suite of realtime content creation tools. Well regarded for its modellers, the realtime specialist, headed up by Nichimen and Multigen Paradigm's Creator, is starting to make a serious impact on the established market as delivery platform capabilities increase. Mira features an exceedingly impressive toolset and again has made significant strides on the workflow front, featuring dynamically linked 2D and 3D editors that will allow artists to work on multiple objects in multiple windows simultaneously. It also has a brand-new channel-based non-linear animation system that has drawn favourable comparison with Side Effects' extremely powerful Houdini package.

For all the current activity, rising development teams away from their current software remains a difficult task. Economic costs, including training, start at around £13k per seat, and time penalties are largely incalculable. However, the growing feeling in the industry is that PS2 development could force many companies to step back and take a long look at their established setups. The potential sales are therefore massive, and while software choice, as always, comes down to balancing budget, functionality, support, productivity and creative edge, it looks like those sales are going to be chased harder than ever over the next couple of years.
The trials of a start-up developer: part ten

After co-founding Lionhead Studios with Peter Molyneux, Demis Hassabis set up his own development house, Elixir Studios. This month he rubs shoulders with the industry's brightest lights in Cannes...

Let the good times roll

"Not so long ago, if you told people you played computer games you'd get a response that went something along the lines of 'beard,' 'nerd' or 'no mates.' I suffered years of merciless ribbing at school and college about it, two of my friends found out about live roleplaying (nothing to do with me, mind) and thought the concept so hilarious they'd leap around hitting each other on the head with imaginary latex swords while shouting, 'Plus one! Plus two!' The inference was clear. I was irredeemably sad.

In the last two years the games industry in the UK has doubled in value and is now worth more than a billion pounds. In terms of value, that puts it well above cinema and not far off the music and video industries. Inspired marketing by Sony and the huge success of the PlayStation have given the industry a makeover worthy of Richard and Judy. How times have changed.

Back in February I was invited to talk at the Milia show in Cannes.

"I was suddenly struck by how fast everything has changed. The glitz and the fast cars - where did this all come from?"

These are triumphant times for the industry, and nowhere was this more apparent than at Milia. One morning, there I was suddenly struck by how fast everything's changed. The glitz and the fast cars - where did all this come from? More importantly, where's it heading? Alongside me on the panel at the show were Alex Garden (Relic), Ignacio Perez Dolset (Pyro) and Gavin Rummery (Core). Between them they've made Homeworld, Commandos and Tomb Raider II. To say I was nervous is an understatement. I needn't have worried, though, as you couldn't meet three more down-to-earth people. Despite huge critical and commercial success, none of them appear to have lost the plot. Best of all, at heart they're still all fellow gamers. Forget the fast cars and fit women; the real talk was about Zelda.

Alex Garden is hugely likeable and his story is a cool one. When he was 15 he was working in a yoghurt shop. Dom Mattick, now vice president of EA, turned up in a black Lamborghini. Alex basically said to him, "Whatever you're doing, take me with you." As a result, he got his first break in the industry as a tester. These days, still only aged 24, he has his own company (Relic) and is currently sitting on one of the hottest games of 1999 (Homeworld). We struck up a friendship, and when he came to London recently went out for some beers at the Sports Café.

Ignacio Perez Dolset is also very likeable, and I think his story is very unusual. Before setting up Pyro he ran a distribution company. As he tells it, having set up Pyro with his brother, one day they realised they needed a designer, so he decided to try

his hand. The thing I found very interesting was that they made a boardgame version of Commandos to help in the design of the game. It's a cool idea and it really focuses in on the gameplay at an early stage. It's also a relatively rare example of something that I'm always going on about, which is the need to look towards other types of games for inspiration. I think boardgames and traditional RPGs in particular are underrated by a lot of people in the industry. I think this approach can pay big dividends (particularly with regard to multiplayer) and this is apparent in the way Commandos plays. I love squad-based tactical games and I've done so since first playing Rebel Star on the Spectrum and then Laser Squad on my old Amiga.

The last member of the panel was Gavin Rummery, who made Tomb Raider II. Despite having a PhD from Cambridge, Gavin decided that academia wasn't for him and opted for games instead. I think his experience is reflective of a pattern I've noticed more and more over the last couple of years. Where once they would have been swallowed up by the City to work on databases, increasingly the best academic programmers are coming to work in the games industry.

And as the physics, AI and graphics in games become more sophisticated, academic training will become increasingly important. In fact, in many areas the games industry is actually leading academia. Unfortunately, I think the days of being able to hack something up in your bedroom with a few mates I've noticed drawing to a close.

We've really had our noses to the grindstone over the last two months. At various points throughout the development cycle a developer has deadlines that are set by the publisher. If you fail to meet these satisfactorily you run the risk of defaulting on your publishing deal. Our first deadline was at the end of March and we wanted to not only hit it, but to do so well. Much of the relationship between a publisher and a developer is based on trust and so it meant a lot to us to get off to a good start with Eidos. In the event, I think they were pleased with what we showed them. I did face one unexpected hurdle, though, when Ian Livingstone discovered our new table football game and challenged me to a match. Ian's no mean player - he is rumoured to have been Hull University's doubles champion with Steve Jackson - but what a terrible situation to put me in. Good business sense should have prevailed here; a battling defeat at the hands of Eidos' chairman (in the face of the superior table-footballing skills) would have been just the ticket. You've got to draw the line somewhere, though - a game is a game, after all. I won 6-3..."
The Entertainment Industry’s 1st Choice

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£E132

PSX 2 LEAD PROGRAMMER North £Neg
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£E1118

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GRAPHIC DESIGNER Midlands £Neg
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£E2159

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Experience de la programmation d'animation de personnages en 3D. Experience et intérêt pour un des sujets suivants: Cinémateque inverse, adaptation d'animations à des personnages de coréographies différentes, animation comportementale.

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Experience de la programmation d'interface utilisateur. Experience de la programmation de modélisation 3D. Experience et intérêt pour un des sujets suivants: Surface d'ordre supérieur (patches) operations booléennes 3D. Modélisations de paysages.

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Scottish developer seeks Artists with skills in 3D Studio Max for the creation of environments and 3D worlds. 3DS Max used in conjunction with Photoshop for textures is essential. Ref EDM106

CONSOLE ARTISTS £UP TO 30K
Experiences Artists required to join this world famous developer and publisher. A thorough understanding of the limits of consoles in the creation of 3D graphics is essential, hence games experience is preferred. Ref EDM107

MOTION CAPTURE ARTISTS £NEG
Dedicated motion capture studio working with games developers, film and TV production companies seek 3D Artists with at least 2 years' commercial experience using Alias and/or Maya. This company is known for setting the highest standards. Ref EDM108

3D ARTISTS £28-30K
Scottish developer seeks character animator with skills in 3D Studio Max and Photoshop. Industry experience is not essential but a demo reel will be required. Ref EDM109

ANIMATORS £NEG
3D Character Animators required to join developer working on PC, PlayStation, N64, Dreamcast and eventually PlayStation 2. Experience in the creation and animation of characters in games is essential. Ref EDA110

LEAD LIGHTWAVE ARTIST £20K
Leading a team of highly accomplished artists, you will be able to bring the broadcast quality graphics of Lightwave to the gaming industry. Games industry experience is essential. Ref EDA111

SPECIALISTS

PLAYSTATION 2 PROGRAMMERS £NEG
Most of our clients have now made a formal commitment to develop for this revolutionary console. As a result, we are looking for Programmers who are ready for the challenge. A track record in games development is essential. Ref EDM001

GENETIC ALGORITHM PROGRAMMER £35K
Games developer working on a title to bring together the banking world in the best in real time 3D graphics. Of utmost importance are strong C++ skills and a working knowledge of the very latest developments in C++. Ref EDM002

LEAD ENGINEER £50K
Major toy developer has launched a new range of children's robots. We require an engineer with a strong background in either robotics or programming to develop software for this new range. Travel to Europe may form a part of this role. Ref EDM032

AUDIO PROGRAMMER £30K
This company are not only a successful games developer but have also recently signed to develop tools for the PlayStation 2. You will be experienced in coding audio and MIDI data, preferably from within a games environment. This is not a position for compositors or Audio Engineers. Ref EDM034

PRODUCERS/DESIGNERS

PRODUCER £30K
Developer of on line games has now moved into PC and console development with some lucrative licensing agreements. We are looking for a Producer who can lead two teams and oversee the addition of a further three in the next 6-8 months. Ref EDM035

PROJECT DIRECTOR £35K
Company with a long standing track record now have two teams working on arcade style titles. They require a Project Director with experience of scheduling and management to ensure that deadlines are met and that quality is high. Ref EDM036

GAME DESIGNER £20K
For an original title starting soon. Must have some industry experience, lots of creativity and be able to write well with good attention to detail. Ref EDM037

PRODUCER £25-25K
Experienced Producer required to lead team developing cartoon style 3D platform game featuring world famous, licensed character. You will have worked on a similar style game and be looking for a new and exciting challenge. Ref EDM038

LEVEL DESIGNER £16K
Experience of level design is required by this well known developer currently working on a real time 3D strategy title which is forecast to be a major success. You must have designed levels for a successful developer in the past. Ref EDM039

LEVEL DESIGNER £16K
Ideally with published product or experience in level design. Good knowledge of general game design will be an advantage. Demos will be required. Ref EDM040

MANAGEMENT

HEAD OF STUDIO LONDON
One of, if not THE most successful developer of console entertainment are looking for an experienced individual to head up their London studio. You will be able to show at least five years' management experience and be looking for a new challenge. Ref EDM041

HEAD OF STUDIO LIVERPOOL
Games developer with studios worldwide are looking for someone to oversee software development in their main offices. This position will suit someone who feels ready to take on the most challenging role of their career. Ref EDM042

TECHNICAL DIRECTOR SOUTH
Developer of triple A titles across all major platforms is looking for a technical director to oversee a number of teams. Whilst knowledge of the very latest programming techniques is essential, this position is much more about managing than it is about programming. Ref EDM043

DEVELOPMENT DIRECTOR MIDLANDS
Directing the development effort of an elite team, you will have demonstrated a consistent ability in the scheduling and timely delivery of top titles. Ref EDM044

QA MANAGER MIDLANDS
You will have experience of QA, customer liaison and dealing with Sony submissions as a third party developer. This would suit an experienced producer looking for new responsibilities within the games industry. Ref EDM045

INTERNATIONAL

FRANCE Highly successful games company are forming a second studio to continue their success. Programmers and Artists with industry experience required, as well as Producer to report to the Development Manager. Ref IN101

CALIFORNIA Developer and publisher with a licensed character are looking to add to their team. Programmers and Character animators with at least three titles to their credit required. Ref IN103

TEXAS World renowned developer and publisher are expanding their organisation and need industry experienced people to form their newest team. Ref IN105

SEATTLE A Developer of software in entertainment, tools and reference, we are looking for programmers who are at the peak of their profession. Ref IN110

AMSTERDAM Developing technology that will change the way we use the internet, we are looking for programmers and artists to develop on content, the likes of which have not been seen before. Skills in traditional web development tools or art packages will be required. Ref IN111

All applications are treated with the utmost discretion.

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Salaries are negotiable depending on talent and experience, send CV's care of Lincoln Beasley PR, Windrush House, 22 London Road, Chipping Norton, Oxfordshire, England, OX7 5AX. Lost Toys is based in Guildford.

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1999. In a whole range of ways, it stands to be the biggest year of Rare's career so far. From our brand new HQ in the heart of the country, a development heaven custom-built over the last two years, we're hoping to deliver a steady stream of games that prove well up to the expectations raised by such recent Rare alumni as *GoldenEye 007*, *Diddy Kong Racing* and *Banjo-Kazooie*.

And with the keen buzz of anticipation surrounding our future titles, we've certainly got our work cut out as we shimmy towards the turn of the millennium and the utter collapse of civilisation as we know it, apparently. There'll be trigger-happy 3D space adventure in *Jet Force Gemini*, epic first-person future shocks in *Perfect Dark*, sprawling sequel action in *Banjo-Tooie*, long-awaited squirrel escapades in *Twelve Tales: Conker 64* and its hand-held sibling *Conker's Pocket Tales*, and of course Kremling-bashing antics aplenty in the 64-bit incarnation of videogaming's prime primate, *Donkey Kong*. All this and much more is on its way, and Rare has huge long-term prospects to offer (putting aside the end of the world for a moment) if you're skilful and dedicated enough to join us in raising the bar even higher...

Please submit CVs and work examples to:

Personnel Dept., Rare Ltd., Manor Park
Twycross, Warwickshire CV9 3QN.
SOFTWARE ENGINEERS: To code cutting-edge software using high-end Silicon Graphics workstations. Applicants must be fluent in C or Assembler. Enthusiasm for games a definite advantage.

3D ARTISTS: With good all-round abilities in modelling, animating and designing characters and their environments. Successful applicants will use Alias and GameGen software on Silicon Graphics hardware. Previous experience with 3D packages useful but not essential.

MUSICIANS: Needing the ability to write excellent tunes in a variety of styles, coupled with a good technical knowledge of audio equipment and MIDI. Familiarity with Cubase and interest in games an advantage.

SYSTEM TOOLS ENGINEERS: To create in-house development tools and editors for use in new and ongoing projects. Knowledge of C and C++ vital.

GAME BOY COLOR ENGINEERS: For development of new titles as part of our dedicated Game Boy team. Must be fluent in Assembler. Previous Game Boy experience a benefit but not essential.
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We're looking for people who want to put their closest friendships to the test.

**Games Development Manager**

A proven games professional, you'll bring new games to market on time and on budget through the adept management of our internal production teams. We'll expect you to juggle a diverse range of projects whilst keeping a keen eye on the budget, so you'll need to demonstrate a management approach that's both firm and flexible.

**QA Manager**

Planning, co-ordinating and leading all activities in the QA department, you'll ensure that all games are tested on schedule and to our demanding standards. You will have at least 3 years' management experience (ideally in a QA environment or as a successful producer), we're looking for strong commercial nous, flexibility and outstanding communication skills. Foreign languages and specialist technical knowledge of games production and design, although not essential, would prove advantageous.

**Programmer**

Designing and implementing code modules alongside other members of our high-calibre project according to agreed schedules and to the highest standard, you'll be industry experienced or a graduate in a relevant discipline, with excellent C programming skills, a creative approach, the ability to work in a team and high levels of self-motivation. Experience of C++, DirectX and PlayStation programming would all be beneficial.

**Artist**

We're looking for creative flair, self-motivation and a recognised qualification in an art related discipline, alongside a good knowledge of 2D computer packages, 3D studio Max/Softimage, low polygon modelling and texturing skills using Photoshop.

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Artists

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Junior C++ Programmer Superb opportunity for academically gifted graduates. Exciting games technology applied to enhance learning and education. Expertly awaited highly innovative product in pre-orders worldwide. £17-19k (Oxon)
Graphics Programmer C and 3D skills needed. R&D team developing graphics accelerators. Well respected company. £25-30k (Surrey)
PC Programmer 3D action product. 3D maths, animations and character control interface experience advantageous. Stable group £25-35k + royalties + bonus (Midlands)
PC Programmers (x2) PSX to PC conversion of well known game. Friendly small team environment. Funding by major interactive publisher £20-32k + bonus (Chester)
Senior Tools Programmer New role heading up department for prestigious developer maintaining and enhancing engine and environment libraries for AI and physics. Good understanding of modern software development maintenance and 3D issues required. £30-35k + bonus + royalties (London)
Home Based Contract PlayStation Programmers (3 options: 2 in the South, 1 in the North)
Programmer Progressive organisation with highly innovative product. Require high quality experienced programmer. £20-30k. C++, AI, Win32 and 3D. Neural Networks and Artificial Life System is advantageous. Creative company with leading edge technology.
£25-35k (London)
£18-22k + "large company benefits" (South)
£16-30k (South West)
PlayStation Programmers Established industry player. Varied and interesting work in progress includes combat licences, a major project for a Danish toy company and motion capture, and a new racing game.
£High (Midlands)
PC/PlayStation Programmers (x2) Established secure developer. Diverse genres. Drive and construct strategy, sports management, character action. Varied experience suitable for PSX roles. Prestigious new offices opening in greenery. Well organised yet relaxed environment.
£18-28k + benefits (London)

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Formed in 1989, Aardvark Swift is the longest established games agency in the UK with many well known companies now using our services exclusively.
The bottom line is... if we don't have your details on file, you simply can't be considered for these opportunities - many of which are only advertised via ourselves. Don't miss out!

Artists
Alias Animators Prestigious international company in beautiful location. Paper art background beneficial. Other high end 3D software also favourably considered.
£22-26k (South East)
Character Animators Good all rounder with 3DS Max and textured studio software for special effects. Large, successful UK owned development house.
£22-25k + bonus (London)
Animator Interactive adventure product for PC based on well known mystical character. Small team environment. 3D skills preferred. Well established organisation.
To £24k + bonus (West Midlands)
Softimage Animator Minimum 2 years experience required for character based Softimage game. Additional background advantageous. Trendy city centre location.
£20-25k + bonuses (Yorkshire)
Texture Artist Sports and racing products. Competent use of colour in small palettes required by leading company.
To £20k + profit share (London)

3D Graphics Artists High quality CG film production work. Exceptional candidates wanted for exceptional opportunities. Detailed profiles include experience with the following: Nurdles, Polygonal modeling, effects object and camera animation, shading and real world lighting techniques and rendering optimisation. Very fast paced, very pressured.
£25-30k (South East)
Graphic Artists (x2) Good all rounders needed by development house with a 2 year history. Sports and construction products being developed for PC and PlayStation.
£20k (including monthly bonus) + royalty deal (Yorkshire)
3DS Max Artists (x3) Two London developers required for cutting edge engine technology. Requires minimum 2 years experience and character design for first action adventure product. Motivated team in non competitive environment.
£High + bonuses + royalty (London)
Softimage Artists Fancy being in the movie business? Prestigious studio currently seeks creative skills for special effects and compositing for the latest in action, or box office blockbuster.
£30-30k + profit share (London)
Graphic Artist Action sports product. 3DSO Studio Max modeling and some animation work. Rotoclipper product. Small creative division of multi national giant. £25k + bonuses (London)

Video/Tv, Post Production Established studio seek 3DS Studio, Softimage, Wavefront skills. Urgent requirements. Immediate start. Company showed under with graphics work and titles.
£Neg (North West)

Management
Assistant Producer Scheduling, tracking liaison and coordination duties. Proactive individual needed, preferably with console experience. Expanding company with multiple publishing contracts. £18-22k Basic (Yorkshire)
Producers Newly created positions due to imminent opening of new UK office. Highly successful European company. Major player in market. All levels (London)
Senior Producer USA owned group company. Previous licensing experience highly advantageous. £30-40k (South East)
Senior Producer Experienced hands on manager needed to lead team of nine. Action strategy product. Reporting directly to MD. £35k + bonuses (London)
Technical Director Provide game design and maintain quality, consistency and organisational integrity of programming department. Good leadership and programming skills mandatory. Well established, high profile company. £Neg + bonuses etc (London)
External Producer Manage two high profile AAA projects, in association with junior producer. Well known and respected publisher. £28-30k + bonuses + car (South)

Soccer Designer Experienced designer with long track record in industry. Required for market leader. Familiarity with workflow, file formats, logic scoring and mix ups advantageous. Well respected long established company with strong brand awareness.
£Neg + bonus (North)
Games Designer Successful independent developer require proven designer/lead in flight sim arena. Allied winning previous product portfolio. Well run and managed company. £23-28k + bonuses (South)
£25-32k (North)

Overseas
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least one PlayStation title to your name.
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Software Engineer
Lancashire; £Neg
Designers of coin-operated games machines. These are becoming more
visual and games oriented. For fruitful fellows this is the perfect
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Ref: 870

Artists & Animators

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Softimage, good texture skills (Photoshop/Dpaint) ideally with an idea
of PSX requirements and limitations. Also a good idea of character
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Management, & other positions

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Contact Justin Hill (programmers) or Paul Wilkes (artists and other)

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EDGE
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an audience with... FREE rADICAL
While the emergence of yet another break-off development group is yesterday's news, these five individuals have split from console commando Rare in order to pursue their own creative agenda on the next-generation PlayStation. Edge fires the questions
Earlier this year, five members of the Perfect Dark team (four of whom worked on GoldenEye) left Rare and started up their own development studio. The new venture, Free Radical Design, plans to develop software for the next-generation PlayStation.

A deal has been signed with Eidos Interactive, which ensures FRD's first two titles will be published by the UK giant, with the first game expected in 2001.

After getting hopelessly lost in Nottingham's simple road system (and a huge amount of apologising), Edge finally tracked down the team to chat about their aspirations, the challenge ahead, and life after Rare...

Edge: Why did you leave Rare?
David Doak: It was a difficult decision to leave. I'm particularly sad about not seeing Perfect Dark through to completion, but I know that the game has been left in very capable hands. When I started there it was a dream come true to work for the people making what I always thought were the best games, and also to work on the development of the game that became a classic. But then you start looking for what you're going to be doing longer term and Rare is now quite a big place... and if you come in and you're not one of the people that are actually starting it up, then you're never going to be involved in that part of the business, in the making of the decisions and directing games in the future — you're always an employee. After realising that you can actually make games, you think, Well, I'd like to be completely responsible for it and have more freedom with what's happening.

Karl Hilton: I think Dave's right, it's the responsibility of doing something for yourself. It's harder to get that within the structure of a much bigger company.

DD: I think you always feel a little bit sort of nannied.

Edge: Is a system as complex as the NGPS, with all the possibilities it offers, a scary proposition to develop on?
KH: I think we'd be reckless if we were blasé about it, but it doesn't scare us — it's definitely exciting.

Stephen Ellis: The thing is, even with PlayStation 2, you've got all this extra power but you're still going to have to use as much of it as you can. You're still going to have to push that little bit extra because if you don't you're just going to end up with a really average-looking game.

DD: I think also it comes down to you. For us, working on GoldenEye was the first time we'd ever been involved in a videogame, so it's just a matter of finding the right people. I think it's really important that they fit into the team and that everyone can sort of laugh together and get along.

Lee Ray: [jokingly] It's actually a comedy workshop, it's not a games developer at all.

Edge: How difficult has it been setting up the company?
SE: We've learned a lot. There are hundreds of little things that you have to do, and you don't know about them until you come up against them.

DD: It is fun, in a way. It's a new experience, and it's something that has always been a bit of a black box before — if you're working somewhere large then you don't see that part of it, and you also take it for granted. What information you get is likely to be, 'Well, this is how we do things, this is the way the company works,' and you kind of say, 'Well, no, I wouldn't do it that way,' but now we can. One of the things I find amusing is that there are a lot of start-ups, it's almost become an almost expected thing now that you see start-ups coming out of big videogame companies after one or two successful products.

But it takes a long time. It took months, and the funny thing about it is that one day you have to sit down and start phoning people and say, 'You don't know me,' or 'I hope you know me,' and 'I'm thinking of doing this, are you interested?' That's just really funny, because sometimes you do it and you get completely blanked. But other companies and other publishers take you very seriously, and I think we were very fortunate to get in touch with Eidos at the time we did. They were very different to everyone else — it was really surprising.

Edge: Do you think it's coming to the point where technology is overshadowing gameplay?
SE: Yeah. You talk to people about games and things and the first question is 'Does it have lighting, does it have shadows, does it have curves? It's like, 'What makes a good game?' And you're going down some sort of checklist, ticking things off.
KH: I think we were slightly disappointed in some of the publishers we talked to who seemed totally focused on that side of it, and they were far less interested in what the actual game was going to be than what new, fabulous shiny things we would be producing for it.

SE: But half the time they just slow the game down; they don't make it better.

Edge: So what do you think is the most important aspect in designing a game?
Lee Ray: [points individually to each team member, laughing] Programming, designing, graphics...
KH: Personally, from an artist's point of view, obviously you look around and you see what else is out there that really impresses you and you want to beat it. So, I want to get as much flashy new stuff in there that really convinces people they're in the environments that we tell them they're in. Because part of any game is the suspension of disbelief.

There's the stage when kids see it in the shop and that's down to graphics, but once you actually get into the game, there's the stage where you actually have to sit down and play the thing. We've all been disappointed by games which look great but play badly. It's a delicate mix.

DD: I think that's something we probably graduated from Rare with, because that's what they always say, and I think they're completely right. If you're not engaged and motivate interest in you're never going to play it. It just becomes a technology demo. But, on the other hand, as a development team you have to have people looking out for those two things and, as Steve was saying, there is almost a direct trade-off between them. It's like, 'Can we have these guys with these high-polygon-count animated models doing this?' and then he says, 'Well, yeah, you can do it but you can only have three guys on-screen,' so that completely limits the gameplay. Whereas you might say, 'Let's have 20 of them' and he'll say 'Yeah, that'll look great but...'

SE: ...It will be a still picture.

KH: I think we've got a fairly interesting mix of people on this team in terms of what we play. Lee plays a lot of flight simulator games, Dan plays a lot of first person and strategy games, and I like a lot of strategy games, but I also like going back to all the old stuff. I mean, I've been playing a lot of the new Asteroids that's out on the PlayStation. It's fantastic.

DD: I think we all love Metal Gear Solid, although I only played it once, and I think that's probably the case for a lot of people. The most impressive thing about Half-Life is that it's really just the old Doom story, which isn't really a story at all. But, by creating a style and atmosphere, they've managed to make something where everyone says, 'Ah, it's really interesting, we want to know what happens next.' Well, what happens next is the same as what happens at the start. It's the same that happens all the way through to the end. It's an interesting paradox: firstperson games are primarily about shooting games, and the repetitive shooting part of it is really important because that's what works really well in that kind of game. However, it's really strange because it only happens in action films. People don't just go out and go, 'I'm going to go to the shops, I'm going to have to shoot everyone once I meet on the way there and then there's going to be a whole load of other guys I'm going to have to shoot to get back.' [Laughter]

I think the whole reason firstperson games are stuck at that stage at the moment is because it probably takes quite a lot of work to create something a bit more interesting. I'd like to think we're going to create something where people will be thinking, Maybe all this shooting isn't such a good thing, because if I go on shooting everyone, people are going to think that I'm a very bad person.

SE: It's got to be quite moral.

LR: Actually, we're going to get Mary Whitehouse endorsing it. [Laughter]

KH: I think it's important if people are going to get aggressive in a game to really get them thinking about the actions they're taking and why they're taking them, not just automatically I'm going to run down here and kill people at the end.

LR: And never leave your bedroom.
[Laughter]

KH: Times have moved on, people play games in their living rooms now. Lee. [Laugh]

LR: Speak for yourself.

DD: Sometimes the girlfriends watch.

LR: Really?

Edge: Is too much realism a bad thing, then?

KH: No game is realistic in the sense that people play videogames because they get a chance to escape. That's the whole point -- you can provide a realistic environment for them in which to do things they wouldn't do in real life. The thing is, if you want a totally realistic experience in a firstperson shooting game then go out and play paintball. There has to be a level at which you should say, 'No, this is a videogame. You sit in a chair and you play.'

DD: I think Metal Gear Solid is a very good example that is at once very realistic in some ways, and incredibly abstract in others. You go through it and it's a realistic environment, then you go out and come back and these guys have reappeared again because it's a throwback to old-style games and the way things worked. The pursuit of realism becomes very expensive in terms of development time, as well. You have to say, 'This is as far as we're going to go.'

KH: You get a lot of PC games where
they boast about the physics engine as being incredibly realistic and the lighting and all the other stuff that's going on. Half the time it seems pointless because the overall effect you get at the end is what you see every day anyway. Just going for realism for realism's sake often doesn't get the effects you need to generate the excitement you want in a game.

Edge: So what do you think of the new machines from Sega and Sony?

KH: I wasn't impressed by Dreamcast.
SE: It's worrying when you go around talking to publishers who are not really interested in Dreamcast so much. It seems like it's probably failed already.
KH: Personally, we didn't find a lot of support out there for it.
SE: It might take a couple of years before the public realise that.
KH: Or perhaps it will take off and then publishers will jump onboard. There's always that phase at the start when people are uncertain and some take the dive and some don't. It stands and falls on software, as everything else does, and if the software comes out and it's good then it will take off. At the moment, the software that I've seen on it hasn't been as good as some top-end PC stuff and that's worrying from a console point of view. The console has to try to make that jump ahead.
SE: If you look at the specs, it sort of looks like an outdated PC already. If we were talking about starting developing a game for it now, what's a PC going to be like in two years' time? Moore's Law -- everything doubles every 18 months. If it's out of date when you start working on it, you're wasting your time. But we're all really excited by PlayStation 2. We've yet to see anything official, but if every software you read is true then it sounds really good. I would have liked to see the processor a bit faster...
KH: I think for us it's exciting just to be working on cutting-edge stuff. It's what we did with GoldenEye. We started it before the N64 was launched and we knew then that we were on the very best that was available at the time. Now we hope we're in that situation again, when we're back working on the best that's available. That's the challenge, because you've then got a whole new set of goals.

Edge: Would you ever consider developing for the PC market?

KH: It's not our natural home. We've all come from Rare, who are huge console and game people.
SE: It's a moving target. [Laughts]
KH: That too, yeah. I think we like the fact that a console is a more fixed machine, and you know what you're working to. And if you can do something clever on a console, then everyone can see it. With a PC, it's just a question of plugging in the next graphics card that comes along and then suddenly what you did isn't clever any more.
SE: Also, as a general rule, we try to avoid Microsoft software wherever possible. We were really happy when we heard that the PlayStation 2 development system would run under Linux.
Edge: The audio element has evolved too, of course...

Graeme Norgate: I'm looking forward to it. On the Nintendo some of the size restraints were just unbelievable -- I spent years and years getting used to cramming music into a very tiny space. For years, everyone's been saying games are just like film scores now, but they haven't really been quite there. Hopefully, this time we've hit the nail on the head.

KH: And these days more and more people have got much more sophisticated sound systems in their homes, particularly on their televisions, and you can really get the full effect if you can get that into a game. Certainly, something we're hoping to do with the new games is to really make use of the sound in a very integral way.

Edge: For years everyone's been unhealthy focused on poly counts. What's the next obsession?

DD: I don't think anyone is going to make any massive [technological] leaps. Now there's a general proficiency. You look at games and you don't see the sort of incompetence that you saw in the early polygonal rendering -- tears and stuff. People try to keep things tidy now and they're beginning to get to grips with 3D animation and stuff like that. Games are always going to be following behind the high-end stuff, the computer-generated film stuff now, and I think we'll come to a stage where the limiting factor won't be the power of the machine, it'll be the amount of time it takes to make a game and the number of people you need.

KH: Something I think GoldenEye was a big contributing factor for is multiplayer gaming, because then you really are fighting against other people, and it's a great experience. As that spreads wider it has greater implications for singleplayer games, because then the intelligence of computer characters has to be better and people start to notice more because they've played more real people.
SE: You can't just have guards running around shouting things at random -- they have to fool people that they're intelligent.

DD: But I don't think there's some big technology waiting around the corner. People aren't going to go, 'Oh, let's do 4D games now because that would be much better.' It's come of age, and there will be refinement and improvement.

Edge: Sony has had a good stab at conquering the mass market with the PlayStation, which is something it will obviously attempt to conclude with NGPS. Should such a thing occur? Do you think we'll ever get the equivalent of an art-house film within the games world?

KH: I'm sure that's going to happen in the next ten years because people like us, who grew up with the 8bits, become adults and keep on playing games, but the games you want to play change.

I think any new entertainment thing starts off being attractive to the younger people and then it matures and is attractive to older people. They say that about all the major entertainment things that have come in this century and I think with videogames it goes the same way. It started off being a kids' thing and it's growing into an adult thing. There'll always be a market for young children's games and teenage games, but there's also a growing market for more adult-oriented product because they're often the people with the largest disposable income and the time to play them.

Edge: But a lot of adult games tend to simply be more violent versions of current genres. Would you be looking at incorporating more intelligent content in your games?

KH: Definitely. Violence, gore, shock is the easy way to do it. Or you can put sex in, but I don't think the rendering is good enough for that. [Laughts]
SE: I think we're very conscious about our responsibility in terms of violence and stuff like that. It is a very easy road to go down and I don't think it does you any favours in the long term. There are other things that interest adults other than wiping each other out in videogames and most of that hasn't been explored yet.

DD: But again, the difficulty is in integrating it into something that is a bit abstract by its very nature. However, I think with the right degree of realism, the right story and the right amount of interaction, then people would start to care [about the characters]. I think it's a challenge to try and meet, because that would be something truly innovative.

Edge: Do you think there's anything fundamentally wrong with today's massmarket gamers?

KH: It's frustrating when you read about certain things. On the Nintendo [64] there was FIFA soccer and the Konami one [ES5 64], I always thought the Konami one was far better, but you read the sales figures and you find out that FIFA sold four times as many. Is it down to a licence or is it down to a lot of kids who haven't had a lot of experience of football games thinking it's the better product? Everyone

"It's worrying when you go around talking to publishers who are not really interested in Dreamcast." -- Stephen Ellis
seen that? You just want to watch people playing it because that's an amazing use of technology. It's like fishing, except it's interesting. But somebody in Japan said, 'I've got a great idea for a game, it's a fishing game,' and someone else said, 'That's a great concept, go ahead and do it — here's all the money!' It's a testament to the fact that something somewhere in Sega is going well when they produce something like that.

KH: It's analogous to the car industry in many ways. [Others burst out laughing]

DD: This is going to be good...

KH: Stay with me on this one: Companies will produce their bread-and-butter models. You know, their bogstandard saloons and hatchbacks. But every now and then they'll be given a bit of freedom to get something exciting out. You know, they'll produce their little coupé or their little Vauxhall Tigra, or they'll do their stripped-out Peugeot 106 Rallye. So, if a big game company can produce its stablemates and things that sell in large numbers then perhaps it can finance the more exciting stuff like Get Boss.

Edge: It's early days yet, but what about your first project?

DD: I think we want to build on what we've done before. You can't spend that amount of time thinking about a particular genre of game without identifying the things that you'd want to ideally change in it. Although in the future I can see we'll be involved in entirely different things.

SE: We've got plenty of ideas.

KH: We've managed to impress the publisher enough for them to back us so hopefully the concepts and the ideas that we have are sound. We think they are. We have a track record that says we managed to do it before. I'd like to think that every game Free Radical does has some sort of innovation in it.

DD: I think for us, obviously, we want to promote the company and what we're doing now, but you don't want to stay in that sort of limelight all the time because it's not useful. We have to go and make a game now, and I hope that in a year or 18 months' time, whenever it is that we have something that's going to impress, then we can start to show it. Because what's the point of coming in and saying: 'Okay, at the moment we've got these great concepts, and here they are for everyone at the back taking notes?' So I can tell you where we are starting from, which is: we are ready. But I can't tell you exactly where we want to go.

KH: But when the time is right, Edge will get the exclusive.
AIRLINE PILOTS

SEGA LAUNCHES A THREE-SCREEN EXPERIENCE

Developer: Sega AM1/JAL
Release: Out now (Japan)
Origin: Japan

Airline Pilots is one of the trickiest coin-ops ever conceived. As with a serious PC flight sim, you must really respect the sensitivity of the controls.

One of the most extravagant coin-ops in recent years, Airline Pilots is the embodiment of the directive which Sega's arcade divisions work towards — that is: create experiences that are not possible in the home.

The game's cabinet represents the gulf that still exists between arcade and home gaming: the three-screen, surround-view monitor setup is complemented by two pedals, gear and flap switches, thrust lever and a central control stick, making this possibly the most complex coin-op ever produced for the mass market.

As you'd expect with such a setup, the game itself is hardly geared towards immediacy. In fact, using the practice mode before entering the game proper will be essential if any progress is to be made whatsoever.

The training mode is broken down into five separate scenarios — take-off, landing, 180-degree turn, engine trouble, and bad weather conditions — in order to bring players up to scratch, and 70 points must be accrued in each before another becomes available.

The full flight mode is reminiscent of PilotWings, presenting coloured rings which must be negotiated to extend playing time before a successful landing is attempted.

While Airline Pilots uses Naomi hardware at its core, the complexity of its control system makes a Dreamcast conversion unlikely. Fans of games such as train simulator Denso de Go! will simply have to lap up Pilots' multi-layered charms at their local arcade pit.
BURIKI ONE IN TOKYO

SNK GRAPPLING WITH THE FIGHT OF THE CENTURY

Developer: SNK
Release: TBA
Origin: Japan

As inconceivable as it may seem, SNK's latest beat 'em up isn't a continuation of its ever-durable Samurai Spirits, Fatal Fury or King of Fighters series. Instead, the company has opted to put its Hyper Neo Geo 64 hardware to use on a tellingly ambitious fighting title offering a never-before-seen range of styles.

The premise, such as it is, concerns a fictitious fighting championship of the century set in the Neo-Tokyo Grapple Dome in spring 1999. Fighters from across the globe have gathered to take part, bringing martial arts such as karate, wrestling, boxing and judo to the mix, along with lesser-known disciplines such as Tai Chi, Muay Tai and Tae-kwon-do. A vast number of moves from these styles can be pulled off, and players are even allowed to fight dirty for success.

Unlike so many SNK fighting games, Buriki allows players to negotiate full 3D environments and seems to place as much emphasis on grappling, throws and immobilisation techniques as it does more traditional strikes. It does this by introducing a number of innovative touches, the first being the Power Balance Gauge, which allows players to take advantage of their opponent's centre of gravity (the shorter the gauge, the more susceptible the fighter is to a throw). The second is the Lock Gauge, whose appearance is directly related to immobilising attacks.

Such embellishments are to be expected of a fighting-game veteran such as SNK, which is promising great things of Buriki.

Grappling (above) is a major gameplay element, and is obviously suited to the characters whose background is professional wrestling. Throws (right) are similarly consequential.
POWERMOR

It may have been a choppy, 16-colour experience with primitive polys, but if developer Michael Powell had not tested the capabilities of the Amiga and ST in the late '80s, Psygnosis might not later have shot for the stars in the 32bit era.

The original Wipeout may have been a catalyst in giving videogames appeal outside of their restrictive, time-honoured confines, yet for a title that was once lauded for its innovation, it owes an enormous debt to a 1989 title crafted for the Amiga and ST.

Singlehandedly coded by Michael Powell, who later went on to work on the Super FX-assisted SNES title Vortex and more recently Particle Systems' accomplished space shooter i-War (see E52), Powerdrome was perhaps a product born more of ambition than it was technology. Because, despite generating what may now seem like a ridiculously timid engine — replete with enormous, flat polys and 16 colours onscreen at once — Powerdrome attempted to push the 16bit computer systems of Commodore and Atari to strenuous levels. The result was, of course, a cripplingly choppy experience which, despite some fundamentally sound physics, proves more or less unplayable today.

However, there's no question whatsoever that Powerdrome laid the foundations for what was to be, in many respects, Psygnosis' biggest ever hit. Slap a few extra polys and textures in here and there and the template is pretty much in place.

Powerdrome's tracks (above) were as fiendish as anything the Wipeout series has managed. Power-ups and mods could improve craft performance, but not that of your ST/Amiga...
The videogame world never stands still, riding the breaking wave of advancing technology. In this regular column **Edge** puts the industry's progress in perspective with a look at yesteryear's headlines: five years ago this month.

**EDGE VIEW**

When could never be termed anything less than a bold stance, **Edge** issue nine hurl its full weight behind Toos, a proposed new operating system with the potential to eliminate platform discrepancies. The new OS is the brainchild of Chris Hinsley, creator of Spectrum classic Everyone's a Wally – a sadly prophetic title, as Toos is soon to sink without trace. Jokes aside, the conceptual promise of a parallel processing, multitasking, game-friendly system is one which proves too much for the industry to buy into. But hey, there's always Windows...

Elsewhere, 1994's ECTS proves a disappointing experience, as the Islington Design Centre is littered with gameplay-lite titles. However, an off-the-record Psygnosis video of a PS-X demo which goes by the name of 'Wipeout' stokes the furnace of hype beneath Sony's forthcoming console.

US coder John Carmack discusses the next leap beyond a PC shareware title named Doom, while a new game called Theme Park, developed by Populous creator Bullfrog, is previewed. In the credits programmer and **Edge** darost Demis Hessab is acknowledged.

**Did they really say that?**

**id Software's John Carmack** on the Jaguar: 'I honestly think it's the best designed videogame hardware around...I wish I could get it on a PC!'

**Did Edge really say that?**

Commenting on the PS-X's rise: 'Could Sony oust Nintendo from its longterm dominance of the industry? Some industry pundits seem to think it's going to happen.'

**Testscreens (and ratings)**

- **Pagan: Ultima VIII** (PC; 9/10), **The Horde** (3DO; 8/10), **Rat Furry 2** (PC Engine; 8/10), **Art of Fighting 2** (Neo Geo; 5/10), **Super Metroid** (SNES; 8/10)

Clockwise from top left: Sega's 32bit console was finally shown in mock-up form; Rare began a concerted N64 recruitment drive which is still going on today; Toos creator Chris Hinsley; Sensible's Jon Hare

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**PIXEL PERFECT**

**Every gamer has occasional moments of sparkling excitement, be it the first time Speedball booted up, or completing Sabrewulf**. Here, Iguana Entertainment's **Dave Diensthiber** remembers his 'first outright addiction to a single videogame'.

When I was young, one of the coolest places to hang out in Omaha Nebraska (insert your 'South Park'-influenced Nebraska slander here, you heathens!) was a place called W.C. Franks. It had a restaurant in one half and a large arcade in the other. After school dozens of kids would converge there, and on weekends it was filled with families. It was in W.C Franks that I fell victim to my first outright addiction to a single videogame. Until that fateful day, I openly admit that I was addicted to videogames in general, but none in particular. I'd survived Asteroids, Pac-Man, Robotron and a host of others and came away much poorer, but otherwise fine. The first time I played Tempest, however, I was hooked. By the time I had finished that first game, I was reduced to a glassy-eyed, drooling dweeb. Each time I played, I was overwhelmed by the game's simplicity and balance. I was also intrigued by its abstractness. Why would a little ship be stuck on a variety of differently shaped 'tracks' floating in space? Why would the tracks be floating there in the first place? Who made them? Who thinks up this stuff and what are they smoking? How can I get some? What the hell was this little ship of mine supposed to be anyway? It bends and moves as I steer it left and right, is it alive? I don't understand. What do I know is that Tempest still stands out to me as one of the best gaming experiences I've ever had for all the right reasons, the most important one being that it's just damn fun to play.'

Playing Atari's classic made Dave Diensthiber, creative director of Iguana Entertainment US, consider abstract gaming

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**EDGE** 127
Nakamichi SoundSpace 8 Stereo Music System

Way back in the mists of time, Nakamichi was the purveyor of the finest tape decks on planet earth. Then, without warning, some four years ago, it mysteriously vanished. Thankfully, though, the boys from Japan have returned and their time away hasn't been wasted if the SoundSpace 8 is anything to go by.

Surely the sexiest hi-fi system to grace anyone's lounge, the tiny SoundSpace is made up of a five-disc CD autochanger and a 30-station preset AM-FM tuner. What's striking is that the discs are loaded vertically. Too diddy for an internal amp, the system's power is supplied by an external amplifier built into the stylish subwoofer which also supplies the juice for the two incredibly dinky satellites. Combined, the system provides the kind of sound that proves the SoundSpace is much more than a pretty face, helped along by a DSP mode that gives the bass and treble a delicate boost when playing at low volumes.

Jamo Extreme X3M 10 speakers

Wander around any hi-fi exhibition and you'll become aware of one thing: according to the bearded, saddle-wearing devotees of hi-fidelity, there are only two forms of music that deserve to be blasted from high-end speakers - the classics or jazz. Now, while there's nothing wrong with these forms of expression, other more bass-heavy genres are often ignored by speaker manufacturers.

Thank heavens, then, that in celebration of its 30th anniversary, Jamo has designed a set of speakers that cater for those who love jungle as well as the classical-minded. Looking fantastic in their silver-and-black livery, with or without the optional banana-yellow handles, the 280-watt X3M 10 will make the foundations of your house shake with throbbing bass, yet miraculously deliver exquisite treble and mid-range.

Gripes? Well, the mid-range is sometimes in danger of getting lost in tracks that are hyper-bass heavy, and the fact that the ten-inch woofer cones' built into the side of the speakers can make positioning them a tad tricky.
Pioneer NS-DV1 DVD Surround System
£1,500 Contact: 01753 789789

If you like your home the way it is, you should generally avoid home cinema like the plague. Before you know it, your beloved lounge gets invaded by a horde of ugly speakers and cables threaten to trip you up at every turn – all so you can listen to Godzilla destroying Manhattan in Dolby Digital glory.

Everything changes with Pioneer's new lifestyle home cinema outfit. Comprising a DVD player, built-in Dolby Digital pre-amplifier, AM/FM tuner, subwoofer and some of the tiniest speakers ever to come out of the land of the rising sun, the NS-DV1's a welcome sight for sore eyes. A breeze to set up, the kit also includes an LCD remote that can be taught how to control other pieces of kit. And, as you would expect from Pioneer, the picture quality is pristine. The only disappointment comes at times with sound quality. While its delivery of soundtracks is largely a dream, full of rich detail, whack the volume up too high and occasionally the speakers sound as weedy as they look.

Sharp Mobilon Tripad Handheld PC
Not available in UK Contact: 0800 262958

Those damn yanks have all the luck. The Phantom Menace one month early, breakfasts the size of Wales, and now, the Sharp Tripad. At present there are no plans to release this bizarre little computer in the UK, and believe us, that's a crying shame. Thanks to some pretty nifty design work, the Tripad's adjustable screen can be used as a traditional laptop or as a tablet PC making use of its touchscreen. With another flip of the screen it even becomes a presentation tool with the display angled away from the user. How cool is that?

Power-wise, the Tripad runs off the NEC MIPS VR4111 RISC processor and is helped along by 32Mb of EDO RAM and 24Mb of ROM. There's also the standard RS-232 serial port, PC card slot and space for flash memory. The built-in modem has the obvious problem of currently only coming with a US connector, but until Sharp gets its act together and releases the Tripad in this green and pleasant land, the only chance you have to get your hands on this flexible friend is popping over to visit Uncle Sam. Start compiling petitions now.
That's your money they're counting

**UK:** According to The Sunday Times, the leading lights of Britain's videogame industry are moving up the ladder of the UK's 1,000 richest folk. While not exactly nesting up against Bill Gates' $100 billion Microsoft stock options, compared to the average gamerplayer's income Britain's dominant developers are doing pretty nicely, thank you very much.

Carried with the April 11 edition of *The Sunday Times*, the annual Rich List placed Rare's controlling family, the Stamper, at the top of videogaming's glitterati with a cool £100 million. Trailing by some distance are Codemasters' Darling brothers, David and Richard, scraping by with only £40 million between them, although 31-year-old David is one of the youngest billionaires in the UK. Also hitting the £40 million mark is Fergus McGovern, who founded Probe Software back in 1984, eventually selling out to Acclaim in '95. *But Edge* does wonder about some absenteeees from the notoriously capricious list – Eidos' Ian Livingstone, Lionhead's Peter Molyneux and Argonaut's Jon San must all be worth a few bob.

Desperate to prove its credentials, on the same day The Observer profiled millionaires under 30. Just scraping in was Edge's Dermis Hassabis, allegedly worth £2 million at just 22 years old.

However, Edge's advice to those wishing to make a very fast buck is to either: a) start an Internet providing firm, or b) sell mobile phones. The entrepreneurial spirits who have haunted those markets are among the fastest eamers of the last few years. Journalists rank absolutely nowhere, funnily enough...

**Europeans gather for Shogo showdown**

**UK:** On April 8, 1999, The Playing Fields, London's neuroscience-and-network-games emporium on Whitfield Street, hosted the European Shogo MAD multiplier finals. Hailing from locations as disparate as Paris and Welwyn Garden City, the six contestants sported online tags such as 'Sentinel' and 'Duka' – demonstrating, if nothing else, that PC gamers can be pretty sad, wherever they hail from.

However, the playing skills on display were decidedly top notch, with an *Edge* representative getting comprehensively pounded 25-5. A series of heats resulted in 'Wad' and 'Velcro' clashing in a tense final, with the former (real name Anthony Wedsworth, from Lancashire) eventually walking away with the £100,000 prize (actually £50,000, but Shogo developer Microids wanted to stay true to the game's Japanese overtones). *Edge* settled for the free Holsten Pils and a game of table football. Ah, the simple pleasures in life.

Shogo finalists arrived from all over Europe in the hope of winning the multiplayer title and a suitcase full of yen. While the competition was fast and furious, *Edge* bowed out to give the excitable Euros a chance (ahem). Lancashire won the day.
Home help

Japan: Looking like a Furry crossed with a Tamagotchi comes the latest application of interactive technology, only this time it’s not for kids. Worried by the increasing numbers of OAP's living alone, Matsushita has developed a cure of sorts: cute robotic pets. The designers hope that the furry friends will provide the elderly with the same level of stimulation that a normal pet would, but with added safety advantages, and without needing food and walkies.

Built-in sensors allow the pet to respond to both physical contact and voice activation. By way of reply, it can move its ears, head and limbs in a feline fashion and answer back. Fifty phrases are stored in its memory, and local news and other information can be mixed into conversation. And, as it has an internal realtime clock, it can be set up as a sophisticated alarm clock as well when it wakes up it gives a cheery ‘Good morning’. Facial expressions can be displayed on the liquid-crystal-display ‘eyes’ too.

More importantly for concerned Japanese families, the robotic pets function as remote sensors. The little creatures store the level of interactivity with their owner, and this can be externally monitored to check on the OAP’s well-being without the inconvenience of visiting.

Videogaming shows off

Switzerland: An ambitious new exhibition dedicated to celebrating the rise of the videogame has opened at the Zurich Museum of Design. Entitled Game Over, the event, which runs until July 4, has been put together by a team of experts from the fields of new media, architecture, film, communications design, and Internet art.

The inspiration for Game Over came in part from its organisers' realisation that, despite their enormous impact on modern culture, videogames have rarely been recognised in this form, their significance still largely perceived to be marginal by social commentators.

Game Over is divided into three zones: Interaction, Virtual Architecture, and Information. The first is perhaps the most obvious, offering visitors access to a continually updated selection of games, while the second is perhaps the most unusual – the exhibition's organisers say it is 'shaped by dynamic elements of space, projections and light... this space is directly controlled by a database which tracks and processes user interactions and changes the space on location'. The third zone, meanwhile, proposes to project game footage on to 'information skin'.

Perhaps the most ambitious event of its kind (but then it doesn't have much competition), Game Over is a stylish foray into the world of interactive entertainment. 'Information skin' is used to relay footage from classic games via projection units. More info at www.gameover.org
Brits meet for retro expo

UK: Retro freaks will get the opportunity to meet up with like-minded nuts at Britmeet 2, a gathering of old-school gamers at the National Hockey Stadium in Milton Keynes on June 5.

Essentially a collectors' fair, the event will see visitors poring over rare imports and prototypes, occasionally breaking away to take part in tournament-style bouts on games as diverse as VCS classic Warlords, LucasArts' seminal future-sports game Ballblazer, and HudsonSoft's extraordinary tenplayer version of Bomberman.

Classic systems such as the Vectrex and ColecoVision will be on show, and the prospect of an all-day bar ensures that some of the more crumbly members of the Edge team will endeavour to make it along to the event. Visit users.powernet.co.uk/wibble/britmeet2.htm for more info.

DataStream

Number of online players supported by Everquest: 18,000
Number of high-end PC servers needed to support Everquest: 144
Cost of millennium compatibility for all computers, as predicted by Apple: $600 billion
Cost of global millennium compatibility of Macs, as predicted by Apple: $50
Number of PCs predicted to be in use worldwide by the end of 2000: 300m
Number of gamers attending the Tokyo Game Show over two days: 163,448
Percentage decrease in per-person spending in Japanese arcades during 1998: 41%
Number of times the demo version of Street Fighter (the PlayStation emulator for the PC) was downloaded in a month: 500,000
Ratio of Final Fantasy VII players who have bought a strategy guide for the game: 1-in-3
Percentage of US consumers aware of next-generation PlayStation: 44%
Percentage of US consumers aware of Dreamcast: 10%
Number of online trades for shares in the US per day: 450,000
Percentage of tickets for the Commodities tour sold over the Internet: 100%
Number of Webspages in existence: 400m
Number of pieces of first-class mail sent in 1997: 190 billion
Number of emails sent in 1997: 190 billion
Number of Lifesavers Gummi Siers' sweet packages that will carry advertising for Cord: 6.5m
Percentage increase in paracetamol suicide attempts after one featured in the TV programme 'Casualty': 17%
Ranking of IBM (the highest-placed computer company) in Fortune 500 list: 6
Ranking of Microsoft in same list: 109
Ranking of Apple: 273
Ranking of AOL: 535

GTA's Mod squad hits London

UK: Most publishers bring foreign journalists over and show them their latest creation in a room as bleak as your local GP's waiting area. But this is not how 3rd Rail does business. Commissioned by Take 2, the PR agency made sure that 15 German jourmos would get a product preview they wouldn't forget in a hurry.

After dressing up in Mod Parka jackets, bowling shoes and 'beatle-esque wigs, and parading down King's Road in a fleet of minis, the group was shown the game in Soho's Mod shop, the Face. They then rode off in the Mad Modz and Englishmen scooter gang to the Abbey Road Studios before clubbing at the Scala. Edge wasn't German enough to be invited, sadly.

Expect Parka jackets to invade German fashion circles within weeks. According to 3rd Rail, Camden Street shoppers offered 'hundreds of pounds' for one of the limited GTA London-branded editions.
ELSPA raids pirate shipments

UK: The European Leisure Software Publishers Association (ELSPA) believes that over £3bn is lost every year by the UK games industry by pirates – but it is hitting back on an increasingly frequent basis.

Recent busts have highlighted just how far-reaching large-scale piracy has become. A recent incident in Sunderland involved an 11-year-old private-school boy who had produced around 200 illegal copies, the estimated commercial value for which was believed to be £10,000. The boy’s parents were reportedly ‘amazed and horrified’. In Derbyshire, meanwhile, a police officer who halted a speeding motorist discovered that the perpetrator was in fact a pirate with a £10,000 operation.

ELSPA has recently doubled its commitment to fighting piracy. Are we finally about to witness the death of a time-honoured crime?

Catch of the day

Japan: While game ads on British television have improved in recent years, they still pale against many from the far east. Here’s Edge’s latest favourite.

Two girls sit at a café table, watching the world go by.

Espying a top catch, one whips out a fishing-rod controller...

...and proceeds to nab him, much to his evident surprise.

Cut to footage from addictive Dreamcast fishing sim, Get Bass.

...and the screen goes all wonky.

The girl’s companion readies her landing net in preparation...

Or is it? This particular fishy doesn’t seem too keen.

Now it’s simply a case of reeling in the unsuspecting fellow.

‘Aaaieee!’ Something’s wrong.

We see the tension meter, threatening a ‘line break’.

The expression hammers home the just-one-more-try message.

End: a successful catch overlaid with the game logo. Inspired

Over-the-counterfeits

China: On a recent trip to Hong Kong, Edge correspondents were surprised to witness a games industry in a state of utter disarray – at least in terms of piracy.

Sitting on the shelves of High Street videogame outlets could be found brazenly counterfeit versions of every leading PlayStation title (even multi-disc products such as Final Fantasy VIII), plus various N64- and PC games (often with spurious CD labels and game cases), and even game music CDs featuring popular scores ripped-off and repackaged as mp3 collections.

The situation in Hong Kong rather puts the UK’s dilemma (left) into perspective. Expect a more comprehensive report next month.

UltraHLE with Super Mario 64 and a Final Fantasy VIII game soundtrack in mp3 format – illegal but tolerated in China.
(out there) REPORTAGE

Half-Life consumes real life

UK: Silencing even GoldenEye's most ardent supporters with a few well-aimed crossbow bolts, Valve's Half-Life representing one of 1998's finest gaming moments. Well, several of them, in fact.

Edge's offices have been ricocheting with the sounds of multiplayer Half-Life for a while now, but the appearance on the Web of a new official patch (try ftp.barrysworld.com for a speedy download), innocuously tagged 1008009.exe, has obliterated the magazine's production schedule like a well-aimed grenade. Once installed, the .exe gives you access to Team Fortress Classic for Half-Life, and threatens to call a halt to your real life.

Created by the same gathering of Australian coders responsible for Quake's original Team Fortress patch, the group was actually shipped to Valve's Californian HQ to develop Classic. But enough history.

TFC is a lot more than simply a multiplayer Half-Life (otherwise you wouldn't be reading about it in these pages). Instead of pitching you into battle as a single entity, the game presents a variety of scenarios for two armies to battle their way through. In addition to the traditional Capture the Flag option, there are also departures from the theme, such as multiple flag points to hold – played on several custom maps. And all of these are up to the usual Half-Life mark.

Far more interesting are the 'Hunted' and 'The Rock' scenarios. The former has one player cast as an intellectual bureaucrat, with one team tasked to defend him and the other equipped with sniper rifles to pick him off. The latter setup pitches the battle within a prison-like complex, wherein each team must attempt to retrieve the other's control card and use it to activate a nerve-gas system which will annihilate their opponents. Add to the mix the ability to play out a number of roles, from scout to medic, and the likelihood of many game-filled lunchbreaks heads skyward.

However, Team Fortress Classic is actually a stop-gap product, with the full Team Fortress 2 currently in development. Promising real-world scenarios (including none less than the Omaha beach landing, à la "Saving Private Ryan"). Edge's production schedule seems set to be hampered further. Bloody videogames, huh?

Plane crazy

UK: Software obviously arrives in the Edge office on a daily basis, and keeping up with the contents of several voluminous game cupboards can be hard work. Occasionally, though, a tidying-up session can reveal some strange things, which is exactly what happened this month as more and more add-on packs for Microsoft's Flight Simulator 98 emerged during a routine clearout. Their final number – ten – is odd enough in itself (can the market actually be big enough to support such a selection? This isn't Quake, after all), but the promises they offer are the really baffling part: who, for example, might yearn for the '15 brand new cloud types' offered by the FS Clouds 98 module? Actually, if that is you, read the caption below...

 Rather than discarding this pack of Flight Simulator 98 modules, Edge is offering them to the reader who can complete the following sentence (in 15 words or less) in the most convincing fashion: 'Weather add-ons are great because...': Usual rules apply. Comp closes June 24
TO ROCCO ROT
The Amateur View
(City Slang)
While Germany is championed as 'the new France' in some electronica circles, it's hard to see a band such as 'T Rocco Rot' doing an air. For one, their music is instrumental. It's also too progressive for the mass market, don't expect cartoon antics from these boys. Which is a shame, as 'The Amateur View' could be a sleeper hit. The quiet naturalness at the heart of the music works beneath the quality noises and rhythmic patterns that litter the foreground. Just one more reason mainland Europe is so groovy.

THE HERBALISER
Very Mercenary
(Ninja Tune)
British hip hop has never had an easy time of it. Not hard or glamorous enough to compete with the mean streets of Compton, it's remained in a niche. Enter The Herbaliser crew. They're not out to take over the world, just do their stuff. All the usual elements are used - old movie samples, guest vocalists, dark millenial angst, jazzy interludes - and it all works so well together. It's not sensationalist, or out to shock. Just a great record.

MOBY
Play
(Mute)
He's always been threatening it, so after doing house, metal and classical, Moby has finally made his gospel album. Not that there haven't been spiritual elements to his music before. He is the original vegan-Christian propellerhead. But 'Play' is different. It's his most personal record to date, and his least preachy. Driven by a light groove, the instrumentation is stripped bare. Piano washes mix with acoustic guitars, bells and lazy handclaps. 'Who knows my trouble but God?' is the unswerved lyrical refrain. The path to heaven starts here.

DISCO BLOODBATH
It was the perfect post-media crime. Everyone in New York knew that Michael Alig, the outrageous queen of the club kids, had murdered small-time drug-dealer Angel. How? Well, he kept telling people. They knew that his friend Freeze hit Angel with a hammer and then Michael poured drain cleaner down his throat. Later he chopped the legs off and threw the remains into the Hudson. Everyone knew, but no one really believed it. Michael was such a tease. Then things got serious.

Articles ran in many of the city's newspapers and magazines. The Village Voice carried the story as a cover. The only problem was that there was no crime in the absence of a body. Then the police found a legless corpse.

New York clubber James St James watched when the club kids swept away the old guard. Heroin and K were in. E was out. James was still around, just when the same cycle killed off the kids, literally. His account is full of bitty gossip, and while he does not attempt authoritative journalism, the atmosphere of those hedonistic nights and one murderous evening is brilliantly evoked.

RULES FOR REVOLUTIONARIES
If you want to get a revolutionary to buy your book, make them laugh is the rule - that is the underlying message of Guy Kawasaki’s latest guide to business. Chapters are snappily titled - ‘Eat like a bird, poop like an elephant’ and ‘Don’t worry, be crappy’ being two good examples. Kawasaki also sprinkles his text with exercises for the reader to attempt. Some are rhetorical, such as ‘load yourself, spouse, kids, grandparents etc into a station wagon’. Others cut to the quick, with ‘access your Web site via a 28.8k modem – extra points are awarded for using AOL, being a real killer’. Of course, how relevant this is to actually running a real company is unclear. It seems certain to keep his publisher happy, though.

Yet, behind the frivolity there is a serious point. The brave new world of the nu-media company works as much by unsubstantiated hype as it does by economic models. A neat catchphrase is worth as much as a good idea. Kawasaki’s own pedigree demonstrates this confusion. After years as an evangelist for Apple, he became that most nefarious of creatures: a consultant. So canny was he that he turned down a chance to be the CEO of a small start-up called Yahoo. Instead, he invested $110,000 into a database company. Everyone loved the beta, and the company folded some months later without shipping product. But as the man himself says, ‘Don’t let bozotry grind you down.’ Write a good book instead.
n your PlayStation 2 story (E70) you make the point that the forthcoming machine will be so powerful that developers may have difficulties in realising its potential. It occurred to me that if consoles and PCs continue to improve at their current rate, photorealistic 3D environments will become the norm and developers may find them hard to improve upon. This could lead to a situation where some notion of 'style' becomes more important than realism. Just as photography pushed art towards impressionism, better graphical capabilities may force a renaissance of the simple polygon. For example, the original Archimedes game Zarch (aka Virus on 16bit formats) is much more aesthetically pleasing than Psynosis' latest title Lander, Virtua Racer and the two washing-machine roadies in Dire Straits' 'Money For Nothing' video are other cases of the pleasing nature of simple 3D that accentuates certain aspects of reality.

Graphical style is not just about how games look. By representing the world with priorities other than realism, new and original gameplay elements may be explored – which can only be a good thing.

Oliver Pawley,
via email

An interesting opinion. But you're neglecting something important: the current climate, at least in the west, is super-commercial, and this will hamper experimentation in favour of exploitation. In five to ten years' time, though, who knows?

I purchased my first Sega machine, a Saturn, two years ago, at a time when Sega was still losing but had a glimmering hope of winning – in its eyes – with the introduction of three power games, VF2, Virtua Cop and Sega Rally. Being the big Sega arcade fan that I am, I quickly went out and bought the system and those games and, I must admit, my friends and I were over the moon about my purchase. But then Sony kicked back and I arcade games! If Sega wants the Dreamcast to succeed, it should take time out and work on all of its conversions itself. Great, we've seen an excellent conversion of Sega Rally 2, but what about the future? Will some foreign company be handed the rights to convert atc arcade titles? I certainly hope not.

'Arcade conversions like Sega Touring Car, Maxx TT, and more recently The House of the Dead all sucked, and believe me, I was more than disappointed. Sega became the laughing stock of the game market'

The new European Sega CEO [Jean-François Cecillon, see E68] sounds like a great find – his attitude and opinions toward his company and the market sound very realistic. Honesty is something

Sega handed conversion duties to an external team (Genki) for its premier Dreamcast title, Virtua Fighter 3tb, and the results were impressive, so it would appear to be more a case of being selective with its partners rather than ruling such potentially valuable resources out of the picture altogether.

I am writing in reply to Deke Roberts [Viewpoint, E70], who believes that those quick to criticise games piracy are being hypocritical when recording TV and radio broadcasts. He has ignored several key issues.

When a television channel broadcasts a film, it will have received all possible profits even before the movie has aired. This profit is generated from license fees or the advertisement slots during the film as they are expected to receive high viewing figures. Many people will inevitably record the film on to tape and watch it again, but the channel will lose no money at all, whether they show the same film every year or never again. Ownership of the original film in real terms is that of the viewer. Even the film's original distributor will not lose out, as the channel will have paid them a huge amount to air the film. Besides, it will have been the distributor's choice to give the channel the rights to broadcast it.

In economic terms, then, where public broadcasts are public goods, videogames are very much private goods. The development and publishing costs have come not from the public, but from that firm (even if many bought the firm's previous title(s)) as purchasing the previous title does not constitute ownership of its newer brother. The

Are flat-shaded polygons the way forward for videogaming? Oliver Pawley reckons so.
simple outcome is that where a consumer buys a pirated game, the manufacturers lose out on a sale which they deserve to reap the rewards for. The effects of this on the games industry are obvious. The same principle applies to the controversial issue of emulation, in particular of the Nintendo 64 with UltraHLE — the authors will have been fully aware of the implication for illegal N64 ROM downloads.

The primary concern is probably not of legality, but of morality. A law is not necessarily just by nature, and when remembering that the relevant Acts were passed long before such issues arose, they cannot wholly be applied.

Companies such as Nintendo and Sony are losing out on millions they rightfully deserve because of piracy. The BBC and ITV have never suffered through the home recording of 'EastEnders' or 'Fatal Attraction'. No one can use the excuse that piracy is the result of street prices being set too high - you have no divine right to own these games and you must pay their prices if you decide you want them. Quite simply, if you own or produce pirated games, you are a thief by definition - whether the law says so or not.

Lee Hyde
Upminster, Essex

With the imminent arrival of new consoles, I'm curious as to what measures the big three manufacturers will take against imported titles. Their current machines can all be 'persuaded' to run import titles. Dedicated gamers want to play the latest games first, at full screen, full speed etc, and they will. Just look at the PlayStation owners willing to invalidate their warranties by having them chipped. Which begs the question: why do the big three bother? The attitude shown by Konami and Sega recently is baffling. Can't buy a genuine import copy? Never mind, I'll buy a pirate copy instead - and it's cheaper. The pirates must be rubbing their hands with glee when they hear news like this - I heard that pirated Metal Gears went up in price because of it. Instead of this shortsightedness Sega et al. should concentrate efforts and lawyers on genuine piracy. That way at least only a pirate will need to sell a converter or a chip to make identification easier.

R daSilva
via email

Perhaps I am a neo-Luddite, but I fear technology is moving too fast for its own good. The obvious examples here are PC CPUs and graphics cards. My family bought a 486 SX/2 running at 33MHz with a 1Mb graphics card and 4Mb RAM in 1995, and at the time it was a middle-of-the-range setup - I could run cutting-edge games like TIE Fighter without any problems. Now, looking at the specs of new games, my PC's hard disk would melt even before its CPU if I brought home the likes of Half-Life.

Later in 1995 I acquired a Sound Blaster 16 and my friends were amazed at the dialogue they heard in TIE Fighter. Now people want PCs that can produce graphics I once never thought possible, but because we do not have enough money for a new PC - things like cars and renovating the house have a higher priority - I have made do with this one because I had a Mega Drive to play action games, and I can still play great games like UFO: Enemy Unknown and Civ II (almost).

Surely there cannot be enough P200s out there for even a title like X-Wing Alliance to sell as much as games like Gran Turismo. I think it would be better for the industry to stop producing incremental upgrades for systems and bring out genuinely new components every couple of years. I know this would not stop the march of technology (a good thing in itself) - and it has already happened with motherboards - but at least PCs would not date so quickly; people would see real benefits in upgrading, and new adopters would not be confused by several different types of processor of the same generation and variations of the same Voodoo and PowerVR theme.

John Ferguson
Ballymena, Co. Antrim

Try wishing for world peace. It's more likely to happen.

Following the boneheaded remarks made in E70's Viewpoint (Stephen Mackintosh debating Sonic Adventure's 8/10 score), is it time for a resurrection of the old 'review scores' debate?

Sooner or later some brave print publication has to take the plunge and ditch the troublesome, misleading system of points and percentages in reviews. I'd love to see it happen in the next five years, but there seems to be a huge amount of resistance to the idea. Perhaps, given the sub-GCSE writing ability of many game journos, the thought of having work assessed on the basis of written word alone is a tad threatening? Or perhaps the masses really aren't ready for such a radical concept? Whatever the case, I suspect Edge's staff have a few GCSEs between them, and your readership to anything but 'the masses'. Go on, give it a try.

Nick Ferguson
via email

Actually, how about a silver scratch-off panel, so that you have the option to read the score or not?

Regarding The Truth Is Out There [E70], both Mario Bike and F-Zero 2 are made by Nintendo, and could be played only via the Japan-only BS Satellite add-on for the Super Famicom.

That kind of sloppy research isn't something I associate Edge with, and I hope I won't see it again in the future. I suggest you give the responsible journalist an appropriate punishment.

Thomas Ertesvåg
via email

When faced with your letter, the writer in question responded: "I didn't say the games weren't available via Satelliteview, only that Nintendo wouldn't tell me about them, which was perfectly true." We still took him outside and repeatedly beat him with a length of garden hose, though.
563,000 square feet, 400 exhibitors, nearly 2,600 titles

Next month: the biggest interactive entertainment show in the world – Edge reports directly from Los Angeles

ISSUE SEVENTY-THREE
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