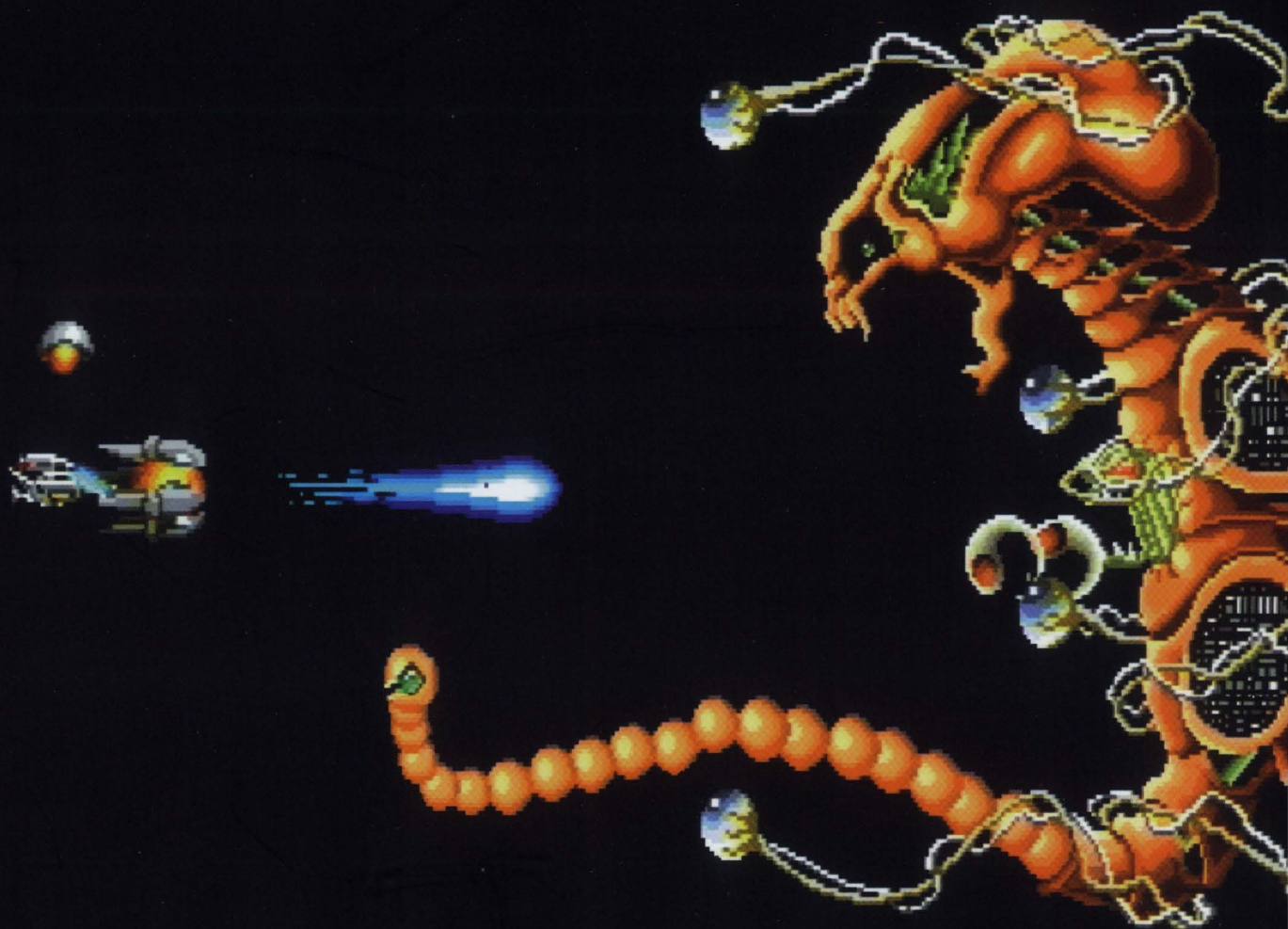


The future of interactive entertainment

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EDGE

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RETRO-TYPES

PIXELATED BLUEPRINTS FOR THE POLYGON ERA

REVIVAL OF THE FITTEST:
TEN VIDEOGAMING CLASSICS
REMIXED FOR THE NU-SKOOL

R-TYPE: THE GREATEST
BLASTER OF ALL TIME
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04



RETRO • TYPES

It's not often that **Edge** puts a venerable ten-year-old coin-op on its cover. But in some respects *R-Type* epitomises an 'Edge game' – certainly more so than the legions of vacuous 3D eye-candy offerings that arrive in the office each month. Irem's classic shoot 'em up may be a relic from a dated genre (with an inherently simple game structure to boot) but it pioneered graphic and game design blueprints that set incredibly high standards – standards that were so far ahead of their time, they still impress today. It's difficult to think of a game that so vividly exemplifies a developer having strived for perfection in every vital area of a game's creation.

This theme of seeking excellence in gaming's past continues with the Revival of the Fittest feature, where **Edge** selects ten outstanding examples of game design. Instead of simply showcasing videogaming's most famous creations across seven pages, **Edge** has endeavoured to select titles that, while in some cases fall short of classic status, still embody such strong ideas that remaking them seems like a logical step.

Retro-types shouldn't just be retrogames with a new lick of paint. They should be titles that capitalise on excellent concepts which were first realised in retro titles – concepts possibly underexploited the first time round. The prototypes already exist – all that's needed now is some intelligent reinterpretation. **Edge** awaits possible developments with interest...



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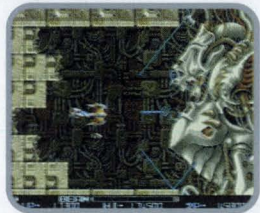
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R•TYPES



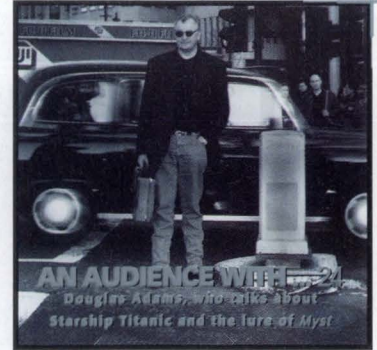
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VIEWPOINT

EXPRESS YOURSELF IN **EDGE** – WRITE TO: LETTERS, **EDGE**, 30 MONMOUTH STREET, BATH, BA1 2BW (email: edge@futurenet.co.uk)

Edge 56 was fascinating. In the game over section you were rather snuffy about PC Zone publishing images of animals being cut up. Yet at the same time you thought another picture of a mutilated body was so tasty it was suitable for use as a cover illustration. It showed a young woman with a rib bone sticking out of a large bloody cavity in her chest.

Why do you consider it acceptable to show pictures of a mutilated woman but not animals? For the record I found your illustration much more distasteful. **Edge's** hypocrisy on this matter is breathtaking.

F Bannon,
via email

It wasn't Zone's use of mutilated animals that was found unpleasant, more the clear depiction of young children enacting shocking, gory scenes of violence. Clearly intended as some skewed attempt at 'humour', the feeling was that Zone had overstepped the mark. Moreover, where **Edge's** use of 'distasteful' imagery was to illustrate a feature about, and review of *Resident Evil 2*, a deliberately violent adult title, the Zone piece bore no relevance to the magazine's content. **Edge** can only wonder at the effort put into such a poor 'joke'.

After reading your review of Sega's excellent *Winter Heat* in E55 I was wondering whether you were reviewing the same edition that I purchased. The final version is a four- rather than a two-player game as you stated, with 11 events – including snowboarding. The final three events were Saturn exclusive. Although you gave the game a very respectable eight out of ten, perhaps you could write an up-to-date review for the sake of Saturn owners and Sega alike.

Christian Meyer,
via email

Sega supplied **Edge** with a copy of *Winter Heat* for review and it was

understood to be the finished game. The magazine then contacted Sega as it was felt that the exclusion of snowboarding from the title was unlikely. Sega then reassured **Edge** that the version of the game in its possession was indeed complete, and that the review should go ahead. The fault lies squarely at the company's door, although after playing the 'final' version, **Edge** still stands by its respectable score of eight, regardless.

I am intrigued by your idea of a review with no mark. This would be a large and, I believe, positive step. After all, games are currently marked like homework; this is right, this is wrong... Changing the style to a critical approach would radically alter how games are perceived. Would we give the 'Mona Lisa' a mark or percentage? Many of today's titles are stories that engage the player's emotions, as well as their fingers. The number of times I've jumped playing *Resident Evil 2* is embarrassing to admit! Reviewers have to appreciate this. After all, marks have so many disadvantages. They can go rapidly out of date – is *Turok* still worth nine out of ten after *GoldenEye*? Also, can a graphically poor game such as *PlayStation GTA* that plays well, be compared to a 3Dfx-enhanced title that plays terribly? A no-mark solution neatly sidesteps this. The main drawback could be that you would inevitably receive letters asking which game is preferred.

Guessing what kind of mark **Edge** would give a game is not harmful, but if two good games are reviewed in one issue, how would a reader choose? The use of marks is so ingrained, would it be too radical for people to accept? Indeed, **Edge** had *RE2* before the review was published and was guessing what score it would receive because of its similarity to the first game. You can't drop the scores yet, because I have a tanner which says you give *Zelda* ten out of ten.

Simon Wilmer,
via email

Issue 56 suggested that it's time to stop giving games scores altogether. I couldn't agree more – a score out of ten just does not do justice to your point of view. Let your excellently written reviews speak for themselves. **Edge** should take the lead on this issue, as I can't see any other magazine doing so.

David McIntosh,
via email

The amount of feedback received on a passing comment has both surprised and pleased **Edge**, clearly the removal of marks from testscreens would indeed be a radical step. Internally, the magazine is very much in favour of the move, but whether the wider readership would both accept and benefit from the change is less definite. Part of the difficulty is the mental adjustment required from the public to see games as pieces of art, rather than 'for kids'. Having said that, **Edge** cannot imagine marking 'Monopoly', 'Risk' or 'Jenga' out of ten. Perhaps the greatest plus point would be that games PR staff would have less reasons to fall out with the magazine...

This is the first time I've ever written to a games magazine, but for God's sake how many more of those awful **Edge** logo posters do we have to deal with? The fact that you had access to such stunning *Resident Evil 2* artwork, yet you produced another utterly dull poster makes me sick! The imagery on the back of the issue was gorgeous – couldn't you have used that? Is **Edge** really so full of itself that it thinks anyone wants to see more of these unimaginative posters?

Brian Flanagan,
Core Design Ltd

You have merely illustrated the variance in people's taste. **Edge** has received other feedback from readers who have appreciated the art. **Edge** likes to do things differently and that includes producing posters that aren't the kind you'd find on the wall of a

spotty teenager. You'll be pleased to note that the current series of posters has run its course anyway (but that won't stop **Edge** from condemning all of Core's future releases to a maximum testscreen score of six).

Although you have received many letters regarding *Gran Turismo's* ten out of ten score, I feel your critics have missed the point. While *Mario 64* was, and remains, the greatest platform game ever made, you cannot deny that within 12 months a game superior to GT in both graphics and playability will be released – it may even be *GT 2*. Now, by giving Sony's effort a perfect mark, you will be forced to do the same when it is bettered.

A ten scoring game must be so original, playable, genre-breaking, mind-blowing and fun that it will be timelessly brilliant and almost impossible to better. From **Edge's** screen shots, *GT* appears to be an evolution of the *Ridge Racer* and *Daytona* genre and not ground breaking at all. The only racing game to come close to perfection was the SNES classic, *Mario Kart*, which was simply pure playability and fun.

Joe Blair,
via email

Edge would like to finally clarify its position regarding *Gran Turismo*. Primarily and most seriously, a ten out of ten testscreen score from **Edge** does not, in any way, infer perfection on the part of the recipient. This is not in any way a weakening of the magazine's stance, merely a statement of fact, and one that **Edge** would hope its readers understood.

As others have pointed out, the review of *GT* indicated minor deficiencies in game, but these were not enough to detract from what is simply the greatest racing title ever made. All of the qualities you list above are exactly the reasons why **Edge** was so enamoured with the title, and *GT*

is an evolution of Sega and Namco's games – on a vast scale.

As for the game's sequel, which is thought to be in development, it is unlikely it would be awarded a ten, as *Gran Turismo* has now made the quantum leap for racing titles. Adding cars, tracks, weather and opponents would be welcome developments, but in reality the standard has already been set.

Lastly, please could you print my letter, or at least part of it, as it has always been my ambition to have my name appear in **Edge**.

**Paul Powell,
Mid Glamorgan**

Your wish is **Edge's** command.

After reading that Electronic Arts has achieved higher profit margins than expected and is now the world's largest videogames publisher, it brought home to me the fear that large corporations are most definitely controlling the software market. This situation is crippling the cultivation of quality products – it is well known that EA has extremely strict product deadlines, which has resulted in disappointing, shoddy and half-finished products from the pressure of completing on time.

Though the industry has matured, I feel the majority of the buying public are still naive in what they buy. Many games are bought under the influence of hype and flashy advertising, which leaves many quality titles in the cold. For example, *FIFA* topped the charts over the Christmas period, whereas the un-hyped *Diddy Kong Racing* didn't achieve the kind of sales a product of such quality should.

Over the past few years companies like Bullfrog and Rare have really stood out from the crowd as purveyors of unmatched quality, due to their production process which allows the time to cultivate a product until it is ready for release.

I wish these companies were the rule, rather than the exception

to it, then the games market would be a brighter place for all.

**Leon Cory,
Berkshire**

Although in the past **Edge** would have been more than happy to join you in criticising several of the larger publishers for their output, the situation has improved of late. While by no means perfect, there is a definite upturn in the quality of certain corporate groups, including EA's latest version of *FIFA*. Of the others, Acclaim is perhaps most notable, with recent and forthcoming releases showing commendable attention to detail. Additionally, both Bullfrog and Rare's existence is made secure by the sheltering umbrella of larger firms, allowing them the freedom to experiment with their ideas. However, there are undoubtedly factions within the industry that do exploit the ignorance of newcomers to gaming. Sadly, the short-termist approach that typifies such companies has a negative impact upon all involved in videogames development. **Edge** will gladly continue to seek out the offenders

I have a UK PlayStation with a modification chip fitted that enables import software to be used. Connection to a modern NTSC-compatible television via an RGB SCART lead runs American and Japanese releases full-screen, full-speed. To get the same result on older TV sets, I use an NTSC to PAL convertor which cost me around £20. Other than a few exceptional companies who make the effort to convert their titles to PAL, import software is superior to official releases in every way – and is often available months earlier.

With the above points in mind, and taking into account the money it must cost companies that do make a proper conversion of their games, surely it would be far simpler if the console manufacturers simply shipped NTSC machines and software in PAL territories, equipped with an

NTSC to PAL convertor? This would reduce the market for import hardware and software, which I believe is what Sony and Nintendo want. Although they'd lose their control over territorial protection, surely this would make everyone happier – including me, as import games are costing me a fortune!

**Steve House,
via email**

Sadly, while what you say makes a great deal of sense, the loss of territorial zoning would perhaps prove too much for the console manufacturers to bear. The reasons for its existence are purely financial, and to remove protection from the equation would require a sea of change in the operation of Nintendo and its contemporaries that, frankly, seems unlikely.

Edge also suspects that certain parties believe Europe's televisual infrastructure to be capable of little more than black and white.

Would **Edge's** recent critics please refer to its front cover where it clearly states 'PlayStation, Nintendo 64, PC, Saturn, Arcade, Net, nuMedia'. Do they really expect the magazine to print exactly the same amount of information each month, giving in their eyes 'equal' coverage on each? More to the point, do they really believe that is what **Edge** is about? Being printed monthly, it therefore covers the news, games and information for that period.

There is never an equal amount of information released for all platforms each month. **Edge's** job is to give feedback on what is most important at that time – not to blow up news stories to fill an equal amount of space for each. The magazine is about 'The future of interactive entertainment', and that's what you get.

**Matthew Sital-Singh,
London**

As you state, **Edge** is not in the business of appearing partisan... your cheque is in the post.

With regard to Jack Griffin's letter in E55, I would like to say that I feel that he has missed the one important factor. Unlike programming or graphics, there isn't a college course that specialises in computer game design. This means that when approaching companies for the position of games designer, they have no way of grading how good you are at the task.

In my opinion, the way to get to this sort of position is to join a company as an animator or programmer and gradually work your way up to a design position. Either that, or concentrate on creating game proposals and send them off to various development houses and see what response you get. However, a multi-skilled employee is surely more use than someone who can only do a single job, and learning C would definitely be of great help.

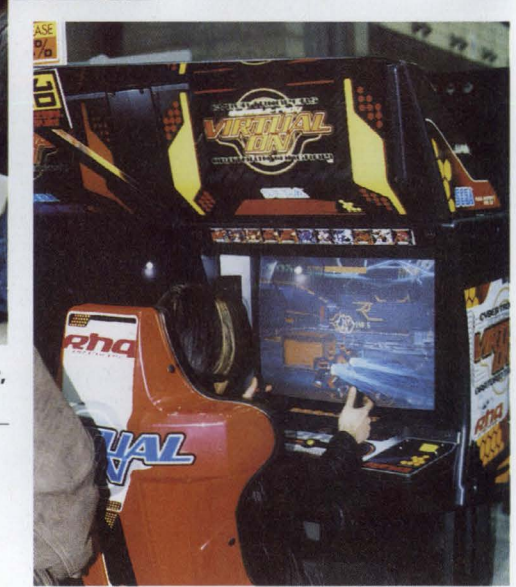
Game design is not really a job for one person, as there are going to be thousands of people playing your creation, each with their own individual tastes. That must mean that a game designed with input from several people is likely to appeal to a wider audience. For output you need input, so the better the input, the better the output.

**Peter Gosling,
via email**

While some of what you say is true at the moment, there are indeed a number of game design courses springing up in the UK and elsewhere – the Japanese have been able to enrol in degrees of that nature for some time. There is much to be said for paying one's dues, but it cannot be the best training available. Next issue **Edge** will be casting its steely gaze around Britain's more aware campuses and reporting on the state of play. As for your 'many hands making light work' approach to game design, **Edge** is perhaps more inclined towards the 'too many cooks spoil the broth' train of thought. The lowest common denominator is all too easy to appease.

Cutting Edge

The latest news from the world of interactive entertainment



Industrial espionage has always been rife in the coin-op industry (above). Other than *Sega Rally 2*, another sequel, *Virtual-On Ontario* (right), attracted the biggest number of AOU attendees



Konami's *Battle Tryst* utilises a new widescreen plasma display

AOU '98 SHOWCASE

February's AOU show took place in Tokyo's Makuhari Messe in the Narita Airport suburb, as in previous years, with all of Japan's influential coin-op manufacturers attending the significant annual event.

In similar fashion to the recent London ATEI exhibition, Sega reinforced its supremacy with most of its latest titles balancing technological progress with tried and tested gameplay. However, with the vast majority of its stand being occupied by sequels, originality was lacking. *Sega Rally 2*, itself incorporating a second version of the Model 3 board, attracted huge crowds, but Mizuguchi's creation had to share the limelight with *Virtual-On Ontario*. The follow-up to AM3's popular combat game offers impressive visuals and surprising fluidity. The concept and control structure remains, but Sega has improved the targeting and tracking systems and it boasts closer combat and more interaction with the backgrounds.

The rest of Sega's line-up, *Get Bass* (in new mini cabinet guise), *Harley-Davidson & LA Riders*, *Fighting Vipers 2* and *Ski Champ* were also shown, with the former two attracting a lot of deserved attention. Sega was also host to Treasure's ST-V board-based *Radiant Silver Gun*, a two-player vertical shoot 'em up incorporating an RPG-influenced powering-up system.

Namco's failure to reveal its System 33 board meant no technological revelations at the show. However, completed versions of *Ehrgeiz* and *Time Crisis 2* (see arcadeview) were showcased, and both found plenty of admirers. *Panic Park* continued the company's venture into innovative lightgun titles and proved as enjoyable as its predecessors. Namco's



From left: Sega's *Fighting Vipers 2*, *Virtual-On Ontario*, Treasure's ST-V board-powered *Radiant Silver Gun* and Konami's helicopter shooter, *Teraburst*



Show-goers got to grips with the Konami's *Skier's High* (main), while others remained traditionalist in their choice

other original offering was *Techno Drive*, involving a variety of driving-based games testing a player's reflexes and ability. *Downhill Racers* completed the line-up.

While Konami's stand wasn't littered with sequels and revamped titles, it wasn't awash with original products either. In addition to *Racing Jam* and *Fighting Wushu 2nd* (a debugged version of the company's fighting offering), *Skier's High*, although unable to match *Ski Champ*'s impressive visuals, did have some interesting features such as the ability to jump. *Bass Anglers* is going up against *Get Bass* and Konami hopes the system's use of a low-cost PCB (¥238,000 [£1,250]) will ensure its success over Sega's pricey alternative.

Konami's only new outing was *Battle Tryst*, an M2-powered fighting title which currently looks reminiscent of Namco's *Tekken 2*. The resemblance is more than visual, as elements from the combat system are also borrowed from the supreme fighter. The game's most innovative aspect lies in its use of a cabinet incorporating a 16:9 widescreen plasma display, which is suited to this type of linear beat 'em up.

Surprisingly, Capcom offered even less originality than Konami. Two new titles, *Marvel vs Capcom* and *Plasma Sword* were introduced. The former pits the super heroes against an assortment of Capcom characters such as Strider and Megaman while the latter now offers 22 fighters and silk-like 60fps action. Ironically, the most impressive game on Capcom's stand was the Arika-developed *Street Fighter EX 2*. The camera system is now more dynamic, the graphics are

gorgeous, the animation is fluid and some of the characters display a variety of original special moves such as the ability to break the camera's lens with an opponent's head.

The big attraction at Taito's stand was neither *Puzzle Bobble 4* nor a near-completed version of *Psychic Force 2012*, but rather *Densha de Go 2*. Taito's staff (suitably dressed in rail uniforms), demonstrated the game to an attentive crowd.

SNK persisted with its Neo Geo 64 line-up, although both *Samurai Spirits 64* and *Road's Edge* failed to grab the public. *Metal Slug 2*, with high quality visuals, humorous animation and different vehicles, had more success.

Other than Taito's 3Dfx Voodoo-running *Psychic Force 2012*, PC technology has failed to grab Japanese developers. Conversely, Sega's Model 2 board licensing strategy has resulted in the smaller arcade outfits such as Tecmo, Data East and Jaleco, developing a technologically-accomplished title. One such company is Psiky, a Japanese 2D shoot 'em up specialist. In *Zero Gunner*, players choose one of three helicopters and fight their way through four courses featuring several stages. It's impressive and highly playable, too.

In terms of hardware, Sega's Model 3 board has further distanced itself from its competitors. Namco's System 33 was disappointingly absent and Konami's *Cobra* failed to live up to expectations. More worrying though, is the lack of ingenuity displayed by the majority of the arcade community. With consoles catching up rapidly, coin-ops will need more than hydraulic interfaces to keep players interested.



Peripherals are now common, as used in *Teraburst* (top). Beat 'em ups remain popular, though



From left: Konami's *Tekken*-like *Battle Tryst*, Taito's *Psychic Force 2012*, the visually-stunning *Sega Rally 2*, and Taito's inexplicably popular *Densha de Go 2*

VM LABS COURTS GLOBAL DEVELOPERS

After a couple of months' silence, VM Labs has revealed more details about the evolution of Project X, its new gaming platform. 'Right now our primary focus is supporting developers and publishers. Bill Rehbock [vice-president of third-party development] has just returned from another world tour, and we are very pleased with the support we received,' CEO **Richard Miller** told **Edge**.

Miller says VM Labs is building Project X development systems (codenamed OZ) at the rate of 25 a month. From April, the company expects to be deploying some 50 units every month. Developers in Japan and Europe are all on board, although **Edge** hasn't yet heard of any concrete game projects. For now, developers are presumably getting to grips with the machine's unusual technology.

'The development system is very flexible in that it allows development systems to be shared amongst various programmers in a group easily,' **Bill Rehbock** explains. 'No special cards are required in the PC and it avoids IRQ and I/O address conflicts.'

In what could be taken as a swipe at Sony's development tools, Rehbock also adds: 'The idea is to provide development teams with as much flexibility as possible so that they can concentrate once again on differentiating their products from others in the market.'

'We are doing everything to ensure that the 'staple goods' get covered as quickly as possible, shooters, racing games, fighters, platforms...'

While the involvement of Jeff Minter (the eccentric Llamasoft coder) and Project X's offbeat graphics hardware demonstrate VM Labs' commitment to offering something different, the company is well aware of the need to cater for the broad market, too. 'We are doing everything possible to ensure that as much of the 'staple goods' get covered as quickly as possible,' says Rehbock. 'I'm referring to racing games, shooters, fighters, platforms, adventures and so on. We are also working with publishers to ensure a solid sports line-up within the first year.'



The VM Labs team in confident mood, including Richard Miller (centre), Bill Rehbock (front right) and Jeff Minter (far right). One of Jeff Minter's projects has been to create an updated demo for *Tempest 2000* (below right)

After Nintendo's struggle to get a first-class fighting game, RPG and even a realistic racing game on to the N64, such pragmatism is heartening. VM Labs still needs to go some way to shake off its Atari legacy though. If one thing killed the Jaguar, it was the dearth of good games on the system – most obviously the complete lack of Japanese developer support. Miller plays down the Atari heritage when asked how many of its development community are involved with Project X, saying 'Not that many to be honest...'

VM Labs has also combated

suggestions that Project X will be weak at handling polygonal environments. 'We provide excellent support for polygons,' says Miller. 'It's just I think gamers are a little bored with 'yet another polygon game'.'

Rehbock echoes these sentiments. 'I've heard numerous times, 'Ah! We've got a game that's perfect for this hardware, but we haven't been able to give it any consideration, because all the hardware that's out there is the same old thing'. We provide solid, high-performance support for polygons; we also wanted to make sure that developers could take it further'.

Miller says there are no plans for PC compatibility, 'We don't see the PC as a mainstream entertainment platform, and for the time being we are



avoiding that space altogether.'

VM Labs is saving its announcements for May's E3 show in Atlanta. With Sega said to be holding back *Katana* news from the Tokyo game show (possibly saving it for E3) and Nintendo almost certain to reveal its 64DD plans at Atlanta, May will be a big month in nearly everyone's diaries. Only Sony is saying nothing, though it is expected to continue supporting the PlayStation until at least the year 2000. The new console wars are shaping into a long-running campaign. **E**

Cutting Edge Cuttings

Colour coded

After years of speculation, Nintendo has finally announced a 56-colour LCD-sporting Game Boy. The new hardware units will be compatible with all existing Game Boy titles and displays these in a series of selectable hues, similar to the SNES Super Game Boy. Battery life is said to exceed ten hours and the units come out later this year.

Katana misses show

Sega's new hardware will not make its debut at the forthcoming Tokyo Game Show as originally planned, with the company preferring to hold its own event when the system is ready. According to VideoLogic, who is manufacturing the *Katana*'s PowerVR-based chipset, it is currently in the final stages of production and should be ready in May.

Tekken the lead

Namco has joined forces with Sony and Polygon Pictures to produce a \$60,000 budgeted CGI version of *Tekken*. The production will employ more than 200 animation artists using *Alias Wavefront Maya* technology and is said to rival projects from Square and other developers. Currently, only a Japanese release is planned.

SONY BABY TO FIGHT NINTENDO'S GAME BOY



Sony hopes to knock the Nintendo Game Boy off its stride

Sony has created a miniature Personal Data Assistant (PDA) for the PlayStation, which works as an extension of the machine's memory card. It will go on sale in Japan this winter and appears to be a direct response to Nintendo's Pocket Monster franchise.

The Sony PDA is a fairly low-spec unit. At the heart of the tiny unit is a 32bit RISC processor, teamed with 2Kb of SRAM. Once inserted into the PlayStation's memory card slot, new applications can be downloaded to the PDA, or, conversely, data can be uploaded from the PDA to the console. Software will be distributed by CD-ROM, and then transferred into the PDA's 128Kb of Flash RAM (rewritable memory which retains information without a power supply). The weakest part of the device would appear to be the LCD screen, which offers just a 32x32 dot monochrome display. There's also a tiny built-in speaker, a clock and six control buttons.

The really original feature of the PDA is its bi-directional infra-red communication. This enables data to be exchanged between two PDAs without the console acting as a bridge. Theoretically, it could also be used to communicate with other infra-red equipped devices, such as printers, cameras and PDAs – like Psion's range. Data swapping in Japanese playground seems a more realistic possibility in the short term.

Sony has said nothing yet about a European release and there's no confirmed price in Japan. **Edge** can't imagine it being released for more than ¥15,000 (£25), though. Whether the PDA gives any clues about PlayStation 2, perhaps suggesting it would include a direct infra-red link, is also unclear.

Unsurprisingly, Sony says the PDA will be aimed at the leisure market rather than the office. No software has been confirmed, but Sony suggests personal scheduling software, calendars and games are all likely (the specifications have only just been released to the third-party developers who will create software for the system).

Although it seems certain that Sony has created the PDA to tap into the huge market exposed by Nintendo's evergreen Game Boy and Bandai's Tamagotchi, it's not clear exactly where the Sony PDA will fit in. Nintendo's Pocket Monsters enables players to train monsters on their Game Boys then set them against either computer-controlled monsters or against other gamers' Monsters via a link-up cable. It's been a huge success – some have claimed this is all that's kept Nintendo profitable in Japan.

The Sony PDA's display is no rival for the Game Boy, but its ability to plug directly into the PlayStation and its direct infra-red link could make up for this deficit. Nintendo has already revealed the 64Gb Pak (covered in **E54**) which will allow the transfer of data between the N64 and a Game Boy. Japan's legion of Pocket Monster addicts will then be able to see their monsters fighting in *Pocket Monster Stadium* on the N64. Sony can't hope to destroy Nintendo's runaway beast, but it might at least aim to get some of the action for itself.

Interestingly enough, Nintendo has chosen this moment to announce an upgraded Game Boy with a 56-colour screen, from a palette of 36,000. The ten-hour battery life shouldn't present any problems either. The mileage Nintendo has got out of its ten year-old handheld is extraordinary. If Sony can even begin to lay the foundations for a credible rival, it might be success enough.



Specifications

CPU
ARM7T 32-bit RISC Processor
Memory
SRAM 2Kb, Flash RAM 128Kb
Graphics
32x32 dot monochrome LCD
Sound
Piezoelectric speaker (4-bit PCM)
Switches
5 input buttons 1 reset button
Other
Bi-directional infra-red communication, LED, Calendar function, identification number, Battery



Japanese magazines like 'Famitsu' (left) are agog at news of the Sony PDA (above)

Return of the King



This lone screen shot from NCL's follow-up to perhaps the greatest videogame of all time was leaked exclusively to **Edge** as it went to press. Of the little information gleaned from its source, **Edge** can reveal *Super Mario DD* is essentially an add-on to the original game and will feature simultaneous, interactive two-player action. Quite how the system will operate is unclear at this stage, although as the above in-game shot shows, the screen is to be split vertically between the two characters, Mario and Luigi.

As its name implies, the title is to be published for the 64DD only, as an incentive for eager gamers to purchase the device – a move that may finally give Nintendo's disk drive the killer app it so badly needs for its launch.



Lara saves Larry

Combined sales of *Tomb Raider 2*, *Fighting Force* and *Championship Manager* have contributed significantly in raising Eidos' revenue by 150 per cent. The company's 1997 fourth quarter figures exceeded the \$130 million (£81,250,000) mark, nearly triple the equivalent figure of the previous year. Roll on *Tomb Raider 3*.

Another trick from Dattel

Accessory manufacturer Dattel has announced a Game Boy emulator for the N64. The £40 cart plugs into the 64bit machine's game slot and allows any GB title to be played on a TV screen. Like the Super Game Boy before it, a selectable colour palette system makes the monochrome games more aesthetically-acceptable.

Gauntlet returns

Atari has confirmed that development of an arcade version of the classic multiplayer game. *Gauntlet* is currently underway and is to be followed by an N64 conversion later in the year. Little is yet known but it is believed the action will take place in 3D environments whilst still maintaining the familiar top-down perspective.

Ultimate dispute

Five *Ultima Online* players have filed a lawsuit against EA and Origin, alleging that both made 'false and fraudulent representations to the Plaintiffs about *Ultima Online*'. The players claim that difficulties with the game's environment have resulted in non-delivery of promised features such as 24-hour gameplay and realtime gaming.

GAME ON FOR GOD

GoD'S Ten Developers Commandments (AS INTERPRETED BY EDGE)

'Information your publisher doesn't want you to know' - Scott Miller, Gathering of Developers

1. Retain your Intellectual Property Rights like names, characters, logos and sequels.
2. Royalties should be based on the game's wholesale price. Use 'escalating royalties', so you get a bigger percentage if you create a blockbuster.
3. Don't give your publisher the right to make movies or toys based on your game unless they plan to exploit them. If they do, you should get at least 50 per cent of what the publisher makes.
4. Established developers can request extra advance money for handing over the rights to console conversions.
5. Get the game's minimum marketing budget in writing.
6. Get your company's name in lights! People are fans of talent. No one cares who the game is distributed by.
7. If a publisher fails to publish your game then you should get all rights back.
8. Have the publisher pay for a third-party company to test the near-final copy of the game, and for technical support for your finished game.
9. You should only be held liable for the actual content you create.
10. Get an attorney who knows software contracts and intellectual property law!

The Gathering of Developers (GoD) publishing cooperative is off the ground. Initial software partners have been confirmed, and the company has extolled its anti-establishment message in a provocative document entitled the 'Ten Commandments'.

As reported in E55, Mike Wilson - the former id Software and Ion Storm marketing man - has set up GoD to give more power to games developers. Rather than pushing its own brandname, GoD will let its members promote themselves.

Wilson's line has quickly won converts. GoD founding members include big names 3D Realms (*Duke Nukem*, *Prey*) and Epic Megagames (*Jazz Jackrabbit*, *Unreal*) as well as the respected studios Ritual Entertainment (*SIN*), Terminal Velocity (*Monster Truck Madness*, *Terminal Velocity*) and PopTop Software (*Heroes of Might and Magic I and II*). Wilson says 12 titles are already in the pipeline, and include everything from children's games and flight sims to RPGs.

No existing contracts have been broken. In particular, Epic's *Duke Nukem Forever* and *Prey* are still slated to be published by GT Interactive, and Ritual's *SIN* by Activision.

Each company becomes an equity owner in GoD, and will share in both the development process and the profit. Two other developers are said to be aligning themselves with GoD, but they have so far declined to go public.

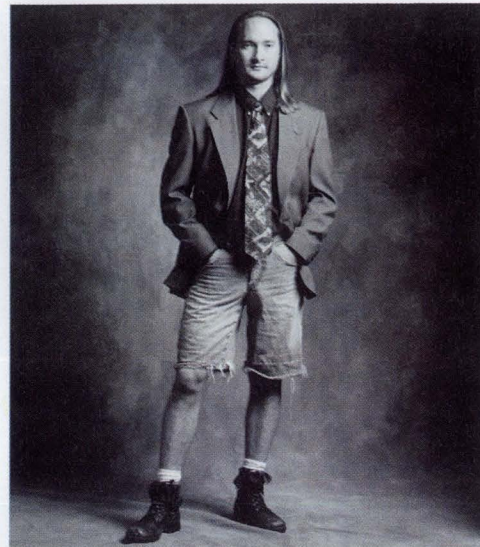
'My personal motivation is to create something truly meaningful for my side of this industry... the business side,' Wilson told **Edge**. 'I can't do much in the way of code or art, but I can hopefully help to change the single biggest problem for developers today.... The sorry state of game publishing.'

GoD's central message is that the talent behind a game is most important to gamers. 'We can recognize developers as independent artists and entertainers,' says Wilson.

While **Edge** has always championed developers over publishers (and put games before developers...) it's not clear that the mass market feels the same way. Aside from truly big names like Peter Molyneux and the *Myst* Miller brothers, the average game buyer seems to follow brands like Electronic Arts and Microsoft. Of course, GoD could argue this is simply because most developers haven't yet sold themselves properly.

Wilson claims that the reaction to GoD has been almost universally positive, and says developers, gamers, the financial community and retailers are all backing GoD. 'The only enemies we have are those that know what we signal is the imminent demise of their way of doing business,' he says.

More astute publishers have already realised things are changing, says Wilson. 'They have known for a while now that the free agency of hitmaker developers is here to stay.'



Gathering of Developers founder Mike Wilson: 'I can't do much in the way of code or art'. Or fashion...

'Some other publishers are still clinging to the belief that they don't have to pay top dollar for top talent and that one can't predict who will make future hits in this business. So, they stick with the shotgun approach of starting twice as many titles as they intend to finish, hoping to find a diamond in the rough to pay for all the other shite they shove into boxes.'

Wilson vehemently rejects suggestions that GoD will become just like these publishers once a couple of GoD games fall by the wayside. 'We're not expecting to have 100 per cent hits... we do, however, believe that the eyes of experienced developers evaluating products for us will do a better job of selecting titles than the aforementioned shotgun approach.'

In some respects, GoD might have arrived a little too late. There are already signs that some publishers have woken up to the perils of pushing out rushed games. 3D Realms' *Unreal*, for instance, has slipped off release schedules for nearly a year. The cynical might also recall that 3DO's Trip Hawkins built himself a multi-million dollar publisher with a similar slant back in the early 80s. The company? EA. **E**



GoD has convinced a number of big-name developers to join the cooperative with its philosophy for hitmaking and giving power back to the developers

Saving grace

Sony has re-introduced a code previously only found in the first Japanese release machines. It enables players to recuperate deleted saved games. Simultaneously press the PlayStation joystick's shoulder buttons after erasing data from the memory management screen, and the data is restored to its original position on the memory card.

It's in the game

A recent 44.5 per cent rise in teenage violent crime has seen the Japanese government looking at possible causes. In addition to over-indulgent parenting and the rigid educational system, the blame is being attributed to videogames. The accusation has won the backing of members of the Tokyo University psychology department.

Out of the closet one last time

In a final marketing promotion, Sega of Japan is releasing a limited see-through casing edition of its 32bit machine. The 'Skeleton Saturn' will retail domestically for ¥19,000 (£100) and will not be released internationally as Sega does not expect to dramatically increase current sales, concentrating its marketing efforts on Katana, instead.

Acclaim's arcade business...

Acclaim has closed its arcade division to focus on the more profitable development of consoles. Although *Armageddon* is still slated for a May release the division's equipment, proprietary technology and staff will be dispersed throughout the existing company. The company's past titles include *NBA Jam Extreme* and *Batman Forever*.

MILIA '98



F-22: Air Dominance Fighter (top) was judged best overall game of 1997. Some exhibitors favoured technical advancements (above)

For the struggling multimedia industry, this year's trek to the annual Milia festival at Cannes was both invigorating and depressing. While the mere survival of the festival afforded some cause for celebration, the need to tempt the gaming industries' wallets must have surely upset many artists' egos.

They had little to fear though. Compared to stalwart gaming trade shows like ECTS and E3, Milia remains a venue for industry deal-makers rather than bikini-clad models on motorbikes. Indeed, despite Milia's publicity, for the most part actual games were noticeably absent. Sony and Infogrames were the only companies with any sizeable floor presence – the former showing *Gran Turismo* far from the crowds, the latter erecting a huge *V-Rally* screen over the main entrance and showing *Outcast* and *I-War* in a room above.

Behind the scenes though, some big industry fish could be spotted swimming at Cannes. Sony's Chris Deering, Infogrames' Bruno Bonnell, Acclaim's Rod Cousins, Ocean's owner David Ward and Mindscape's proprietaries Geoff Heath all made shadowy appearances. Cannes proved to be very much a festival for the video gaming jet-set.

This changed somewhat on the designated games day, when a gang of impressive developers emerged from the throng to delight the crowds.

Peter Molyneux's Games Day keynote address was definitely a highlight of the festival. Ever upbeat, Molyneux expressed surprise at the size that the industry has grown to and trepidation when considering its further potential. He stressed that the games industry was going to become even more competitive (and expensive) in the future, and cited attracting new kinds of development talent as one of the most difficult challenges.

Molyneux also turned up for the portentously titled 'Legends of Gaming: Becoming a Cyber-Celebrity' debate. He was joined on stage by Firaxis' Sid Mier, Ion Storm's John Romero and Ensemble Studio's Bruce Shelley. The panel (who have all founded their development studios in the past two years) believed that their successes were inevitable – if only because they couldn't conceive of the alternatives. While Shelley (co-creator of *Civilisation* and the brains behind *Age of Empires*) could just about imagine life as a writer, Molyneux claimed he'd be a tramp and Romero pointed out that because he's been designing games since 13 years-old, he's uniquely unqualified to do anything else.

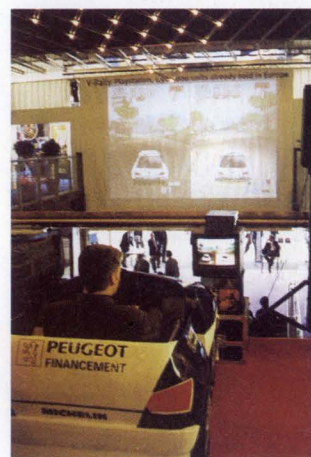
Where, asked one attendee, would an ambitious gamer best begin to replicate the panels ascent to the industry's peaks? Work experience, the panel replied, with Romero pointing out that many of Ion Storm's employees were originally games testers. The panel all agreed that game ideas were neither enough on their own, nor in short supply – a view which current release schedules would seem to contradict.

But perhaps the event's most surprising comment came from the normally mild-mannered Sid Meier. 'Technology-smechnology', he said, when one attendee questioned whether it's just new hardware that drives gaming forward.

Anyone who'd still not tired of Molyneux could also find him at the awards ceremony on the last night of the festival. As President of the five-strong International Games Jury (which included a representative from **Edge**), his participation lent the awards some credibility within the gaming fraternity.

For instance, the triumph of SquareSoft's *Final Fantasy VII* over Red Orb's *Riven* in the adventure category will surprise few **Edge** readers, but it prompted vicious baring of teeth from the genteel attendees.

The other winners were Psygnosis' *G-Police* for Best Action Game; Electronic Arts' *NHL 98* for Best Sports Game; DID's *F-22: Air Dominance Fighter* for Best Simulation; id Software's *Quake 2* for best Online Game and Bullfrog's *Dungeon Keeper* for Best Strategy Game. *F-22* was further judged the best overall game of 1997.



Infogrames provided decent entertainment with V-Rally

...gone to Opus Entertainment

Croydon-based Opus Entertainment has been specifically created to further the progress already made with the Acclaim ArcadePC concept launched at the recent ATEI show in London. The move follows Acclaim's decision to liquidate its arcade division and currently has a prospective May launch date along with the first titles.

3Dfx gets the bumps

Developers at a recent 3Dfx-held conference witnessed a Voodoo 2 technical demo which showed the card achieving bump-mapping, a feature previously unannounced. The original Voodoo card could do this but required a double pass render to do so, Voodoo 2's dual texture processors allow this feature in a single pass.

Crash cashes in

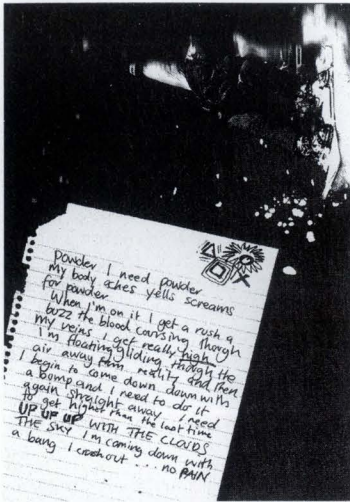
Sony has seen *Crash Bandicoot* units sold internationally sail past the five million mark. The original game sold 1.5 million copies in the US alone, with its indistinguishable sequel bringing in another million. Both games are responsible for amassing a further combined 3.4 million sales in the Japanese and European markets.

Sony competition winners

Edge can announce the winners of the E56 Sony merchandise competition. The correct answer was *Motor Toon GP*, with the successful entries randomly picked from a hat. Congratulations due, then, to **Jamie Brooks** of Cambridgeshire (1st prize), **Yeoman Smith** of Edinburgh (2nd prize) and **Tony Bush** of Gilwern (3rd).

(out there)

REPORTAGE FROM THE PERIPHERY OF THE VIDEOGAMES INDUSTRY



Sony comes clean

No sooner does **Edge** commend Sony's 'guerilla' marketing techniques (see out there **E56**), than the company launches a new campaign that reiterates past targeting – to poor effect.

Readers of lifestyle magazines such as 'The Face' were confronted by the blunt 'Powder' advert for *Cool Boarders 2*, shown here. Focused advertising is fine in its right place, but the company was asking for trouble when the general public had to contend with an enlarged version adorning bus-shelters nationwide. However, given past assaults on the 'yoo' market (notably the perforated, PlayStation postcards distributed at past Glastonbury festivals), this latest approach should come as no surprise.

Overall, **Edge** was left cold by Sony's attempts to endear its snowboarding title to the sniffing classes, and even more so by its claim that, 'We now believe some people perceive it contains a reference to drugs.' Enough members of the public were gifted with such powers of 'perception' for the ad to be pulled within days.

Pippin pips it

In what initially seems a shockingly realistic appraisal of its Tamagotchi, Bandai is to dissolve its Digital Entertainment group. Sadly, the bleeping monstrosity in fact belongs to the toy division. What the news does spell the end for, though, is Bandai's Pippin console, which it produced in conjunction

with troubled firm, Apple (which, coincidentally, has also just axed its Newton handheld). The ill-fated, and ill-titled Pippin (see **E35**) was supposed to enable the masses to play multimedia CD-ROMs and access the Internet via their Trinitrons. Sadly, only 42,000 like-minded people in Japan and the United States agreed it was a good idea.

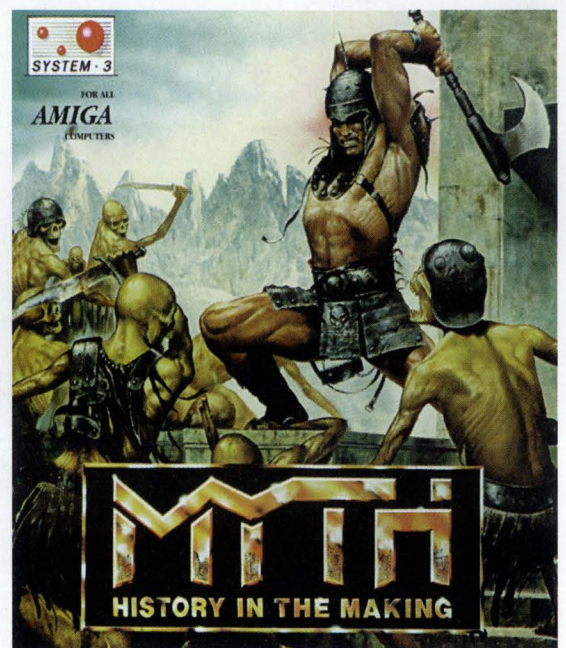


What's in a name?

Litigation is an uncomfortable word, conjuring up images of courtroom dramas, and the interactive entertainment industry has been remarkably free from such matters of late. However, the publishing by Eidos of the Bungie title *Myth: The Fallen Lords* (seven out of ten, **E53**), has triggered System 3 Arcade Software to call in its legal eagles for the alleged infringement of its ownership of the name *Myth* as a piece of computer software.

Ploughing through a copy of the writ reveals that other than the expected cease and desist legal-speak, System 3 founder Mark Cale is seeking extensive damages from Eidos, thought to be in the region of £2 million. The figure seems slightly excessive, given that System 3's last iteration of *Myth* was released in 1992. However, the company is working on an update of the game (see prescreen alphas), the existence of which Eidos is alleged to have known about since early 1997.

Even if this dispute is settled, there could be more problems yet to come, with Eidos set to publish Core Design's *Ninja* (also prescreened this issue), which unfortunately bears something of a resemblance to System 3's seminal *Last Ninja* series.





A first look at the models and sets from the upcoming *Wing Commander* movie



Widescreen *Wing Commander*

Chris Roberts' *Wing Commander* games are known for excellent dog-fighting and tedious FMV. In the light of this, his latest venture seems ill-advised. For while Roberts might ace his aptitude tests as a prospective Red Arrows choreographer or a fighter pilot, he has elected instead to expand his cinematic portfolio. Yes, 'Wing Commander the movie' is on its way.

Far be it for **Edge** to immediately make a reservation at its local straight-to-videostore. After all, Roberts has some \$27 million to spend and he's recruited a gaggle of Hollywood mini-starlets, including Freddie Prinze Jr., Matthew Lillard and Saffron Burrows, who've already cut their teeth in competent teen flicks like 'Scream' and 'I Know what You Did Last Summer'. And it's to be produced in Luxembourg, which seems so bizarre it can only be a good sign. Yet with a cast barely old enough to remember *Tron* and an audience still recovering from Bob Hoskins as Mario, Roberts is treading into difficult waters.

Upfront advertising

Those who thought videogame advertising was crawling out of the sleazy gutter it collapsed into a couple of years ago, had better think again. In 1996, Joanne Guest had a copy of *Battlecruiser 3000* wedged between her legs; in 1998 Microprose has recruited page three 'stunna' Vicky Lee to pose in a forthcoming ad campaign for *Ultimate Race Pro*. Quite what relevance she has to a car racing sim is not entirely clear. It must be comforting for Kalisto to note that its game is being sold, not on the efforts of the creative team, but on the principle that men will buy anything if a girl in a bikini is holding it in an advert.

Microprose is not alone in supporting this theory. A recent lifestyle mag advert for *Bloody Roar* showed just five tiny screenshots of Hudson's fine 3D beat 'em up. Pride of place on the double page spread went to a woman in a bikini – beneath her the line, 'This picture is brought to you by *Bloody Roar*. The game that turns men into crazed, slobbering animals'.



EDGE SINGLES OUT THE WINNERS AND LOSERS IN THE INTERMINABLE BATTLE FOR VIDEOGAME CRED

(game on)

The current **handheld fishing games craze** (complete with plastic rod) sweeping Japan which has seen countless tube commuters busily fishing for virtual bass after a hard day's work.

The **US *Ultima Online* players** for having the courage to file a lawsuit against EA and Origin on the grounds of unfulfilled promises (see cuttings). If only people would do the same for bad games...

Mame 64, which is stalling work at certain developers. As its name suggests, this version of the *Multi Arcade Machine Emulator* brings classic coin-ops to the N64 dev kit. ***Gauntlet 64***, anyone?

Millia, for recruiting international game experts to pick the best games of 1997, instead of handing a dozen multimedia developers 200 games three days before the awards ceremony...

R-Type, for being ten years old and still the king of shoot 'em ups.

R-Type, for providing an all too sobering reminder that so depressingly few videogames attain perfection these days.

The **gold disks of *Tekken 3*** that were reportedly selling in the UK a month before the game's Japanese end of March release. Another indication that the piracy situation is getting worse.

According to the latest figures from US retailers, the **Genesis is outselling the Saturn**. It's all **Edge's** fault, apparently...

The **DVD version of *Dragon's Lair*** is complete and threatening an appearance. Now gamers everywhere can 'play' the game in all of its original, arcade glory. Someone, somewhere, should sue.

The **Lara Croft action figure advert** on the Net which tries to tempt viewers into buying the lump of plastic with the sad slogan: 'Her eyes. Her lips. Her big... guns. Get your hands on all of it'

(game over)

NUMEDIA

A MEETING POINT FOR MEDIA CAPITALISING ON THE DIGITAL ENTERTAINMENT REVOLUTION

GADGETS

Panasonic DVD-L10

While much of the world is still trying to get to grips with the idea of DVD as a physical reality rather than a flight of fancy, Panasonic has already moved the technology on one step further. Premiered at this January's Consumer Electronics Show and weighing in at just 2lbs, the L10 is a portable DVD player equipped with a 5.8in LCD screen, and built-in stereo speakers. Interestingly, the screen is capable of displaying

widescreen images in the 16:9 aspect ratio, but also has normal, full and zoom display options for other formats.

Complete with a nickel metal hydride two hour rechargeable battery and boasting full home theatre compatibility as well as Virtual Surround sound support, the L10 is the sort of stunningly desirable piece of kit that has specialist gadget mags sniffing for superlatives, like pigs for truffles.



\$1,300
Panasonic tel:
0500 404041
Out Autumn



E50-60
Loral group
www.loral.com
UK release: TBA

Loral Wireless Speakers

Playing a videogame while wearing headphones can be an annoying – even painful – experience. If the user keeps his or her head about two feet from the monitor and doesn't move, then things are OK, but the moment the onscreen character dies and the player throws back their head in frustration, the phones come flying off, almost taking your ears with them.

But not anymore. The Loral Group, a North American firm specialising in computer entertainment accessories, is about to release its NHP-W60 infrared headphones in the UK. These Nintendo-

endorsed contraptions come with a base unit which plugs into the headphone socket of any TV, monitor or audio unit, and then beams a crystal clear signal to the 'phones themselves which can be anything up to 25 feet away. Not only is this more convenient and comfortable, but the sound quality is unaffected by interference from computers or mobile phones, so there is no crackling or humming in the background. You may look stupid, but at least you can get thoroughly involved in a game without worrying about strangling yourself with a headphone wire.

MUSIC



Ray of Light
Madonna
Maverick

If it wasn't for the involvement of ambient guru William Orbit, then **Edge** would probably pass over this release – Madonna's first album in four years. However, his undercurrent of unusual electronic melodies turn the heat up on what would have been a fairly predictable release.

Ray of Light starts well with the melancholy vocals of 'Substitute For Love' juxtaposed with Orbit's trademark melodic trance-lite sound on the title track to great effect. There are some strong (and weak) songs on here, backed with exquisite breakbeats and some fresh ideas – so it's a shame it drifts into bland ballad territory later on.



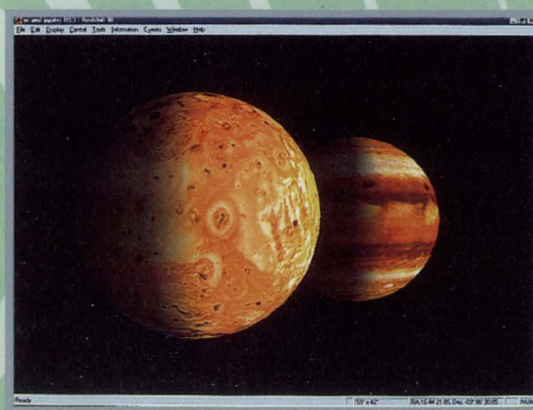
Resident Evil
Capcom
Pioneer

There is no question that *Resident Evil's* dark, forboding soundtrack was instrumental in chilling the life out of gamers everywhere. Those discordant orchestral stabs, those rumbling organ dirges – many of the game's greatest moments were completed by this aural element. Now, Pioneer has released the music by itself, and listening to it is a curious experience – much like listening to the soundtrack of a movie: you know it works brilliantly in context, but alone it's a curiously disappointing experience. The titles of the tracks don't help. 'Fatal Bite', 'Queer Structure' and 'Treat To Awful Fright' anyone?

IN ASSOCIATION WITH



Red Shift 3



Although a current TV advert promises that everyone will be able to visit the moon in 30 days time (neglecting to point out, of course, that the trip will cost tens of thousands of pounds and be hopelessly over-subscribed for decades), those who want to do it now had better join the airforce quickly and start reading up on astrophysics. Alternatively, they could consult the latest version of the excellent Maris CD ROM, Red Shift 3.

The original title in this intriguing series, released in 1994, was essentially an interactive guide to the physical universe. Users could locate stars, analyse constellations, and generally trundle about the universe, using the onboard reference tools and multimedia

elements to make reasonably detailed studies into astronomy and cosmology. The current version takes everything featured in the last two titles, updates the information and visual quality and adds a whole host of new options. For example, users can now access around 50 new Astronomy Tours – essentially AVI movies which tackle subjects like the birth of the universe and the search for extraterrestrial intelligence in simple terms, yet with a decent amount of depth. There is also a massively expanded photo-gallery, featuring incredible new pictures of Earth, the solar system and beyond. Even shots from the recent Mars Pathfinder Mission have been included.

Most importantly though, Red Shift 3 works on a number of different levels. Those with a fleeting interest in astronomy can just poke about via a user-friendly (if initially bewildering) collection of menus, looking at the pictures and finding out about the hottest stars, windiest planets and smallest moons in the Record Breakers section. However, students and more intellectually inclined viewers can make short movies tracking the movement of stars and moons, peruse the entire Penguin dictionary of Astronomy, and consult the Sky Diary to find out what aerial phenomena they can expect to see over the next few thousand years: simply specify a period and Red Shift 3 produces

the list. Click on anything in the list, and the product explains what the event is and how it happens. And, of course, everything is cross-referenced, and regularly updated via a link to the internet.

Although there were occasionally some framerate jitters on Edge's PC, and the visuals could have been slicker in places, this is a truly fascinating and worthwhile product. For anyone who has started asking themselves questions like, 'Are we alone?', 'where is the universe going?', or 'just what the hell is an anti-quark?' Red Shift 3 will at least point them in the right direction.

Developer: Maris Multimedia / Publisher: Doms Kindersley / Price: £30 / Release: April



Selected Works
Wax Doctor
(R&S)

In absence of a full album of fresh material from the Doc, esteemed techno label R&S has gathered together the best of the rest to demonstrate what the fuss is all about. Taking a jazzy approach to drum n' bass isn't anything new, but there's a filmic edge to 'Atmospheric Funk' that demonstrates a better grasp of moods and, well, atmospherics than most jazz-jungle swingers. Similarly, the cascading synth lines, lush strings and dubby vibe of 'All I Need' and 'Spectrum' prove wonderfully involving. Wax Doctor can stir emotions as well as sequence the ever-complex rhythms; a rare combination in the world of drum n' bass.



Soul Sleeping
Sunkings
Blue Room Released

While Blue Room spends most of its time cultivating artists in the psychedelic trance and techno underground, it isn't adverse to some lighter, if rather self-indulgent, musical detours.

Oddly missing the great recent single 'Starbuck', The Sunkings' second album weaves a fabric of lush, trancey instrumentation and ethnic-style vocals – which sadly doesn't save it. 'Eden reprised' uses a seductive Kate Bush-style vocal and works well, as does 'Talisman', the final track with its sampled choir boy vocals. But ultimately, Soul Sleeping spends far too much of its time in tranced-out, wailing hippy state. Enya on acid, perhaps?

LASER DISC

The Frighteners

Although much overlooked by the cinema going crowd, Peter Jackson's black comedy horror is a delightfully refined film that merits an audition.

Using his psychic skills and the assistance of three spirits who have failed to make the journey to the other side, Michael J Fox makes his living by exorcising houses once his spiritual trio have finished haunting them. What starts off as a gentle, amusing tale soon takes a very sudden, very dark turn, in typical Jackson style, as the spirit of a former serial killer returns to prey on the living one more time, with some surprising results.

This is the sort of feature that allows Laserdisc to show off its superiority effortlessly over the ageing VHS format. The 2.35:1 widescreen ratio houses a laudable fine image with very strong and stable colour definition as well as consistent high sharpness level throughout. This only serves to enhance the already impressive CGI sequences, particularly those featuring the Grim Reaper-like serial spirit. The sonics impress too, and accompany the on-screen action commendably, with a wide and dynamic Pro-Logic soundfield and good bass extension. Rear effects are used extensively and contribute immensely to the film's atmosphere, providing their fair share of surprises – the whole thing simply wouldn't be as frightening in straight stereo playback. The Frighteners is also heavily chaptered and the silver platter is encased in a stylish, matt sleeve.



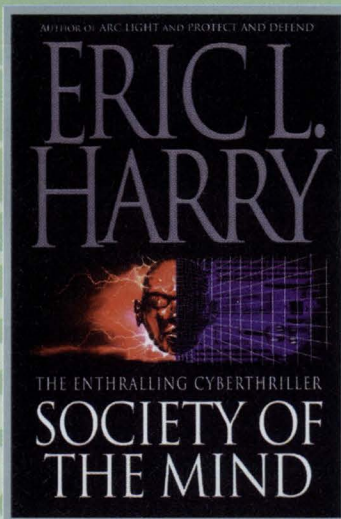
Directed by Peter Jackson

Pioneer

£25

Out Now

BOOKS



Society of the Mind

Cyberthrillers come and go, but very few leave a lasting impression – most getting too bogged down in the wonders of science to remember the wonders of a good plot. 'Society of the Mind' however, manages to cover both with equal skill, the author obviously understanding the value of what used to be called a ripping good yarn.

Set in that fertile area known as 'the not too distant future', 'Society' follows a week in the life of psychologist Dr Laura Aldridge who has been hired by computer genius and industrialist, Joseph Gray, to psychoanalyse his computer. The machine seems to have developed a series of alarming faults, but as Aldridge probes deeper into the consciousness of this digital marvel, she begins to realise that, more than just an artificial intelligence, it is part of Gray himself.

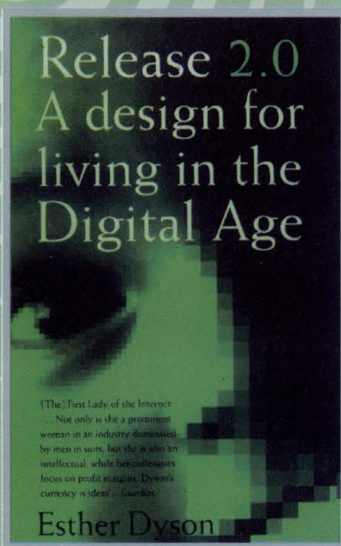
The theme of superhuman computers has been handled before of course, most notably in Arthur C. Clarke's '2001'. However, Harry handles the high technology with a deft hand and never allows it to overshadow the human characters. There are shades of Asimov's Robot stories in here too, but that is no bad thing. The interaction between human and machine – something which fascinated Asimov – is explored here in an extraordinarily detailed narrative which is a credit to its influences. If one cyber thriller deserves to reach a mainstream audience this year, this has to be it.

Eric L. Harry

Hodder & Stoughton

£17

ISBN 0-340-45723-5



Release 2.0: A design for living in the digital age

It seems that, like ex-members of the SAS, the gurus of the online revolution can't help revealing the intricacies of their strange lives in print. David Shenk, Michael Dertouzos and Melanie McGrath have all published their own slants on internet technology, and now it's the turn of yet another cyberphile to lay out a manifesto.

Esther Dyson may well rub shoulders with the 'digerati' of the information age, but here – in her first book – she offers few insights into this clandestine universe. Admittedly, it is easy to see what she is trying to do; by covering everything from work, education and community, to anonymity and security, she wants to show us how life could be lived; via the internet – free from the pressures of the physical world. But Release 2.0 still fails to convince.

The main problem, perhaps, is her brief, anecdotal prose style. It is clear Dyson feels everyone has the power to use new technology, get online and expand their personalities, but where readers expect further insight, provocation and even dissent, Dyson continuously fails to commit to any one line of argument, preferring instead to remain in the middle ground. Ultimately, the reader comes away from the work feeling as though they've read all this before, in countless other internet tomes. Which of course they probably have.

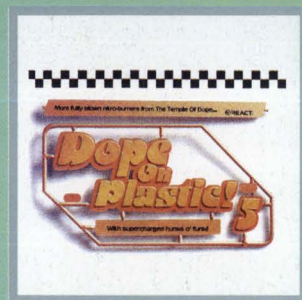
Esther Dyson

Viking

£16

ISBN 0-670-87600-3

MUSIC



Various
Dope On Plastic 5
(REACT)

It's business as usual on John Stapleton's latest big beat shindig, with familiar purveyors of hip hop-derived sounds mixing it up with the lesser known but equally keen to push drum loops to the fore. Firm favourites Bassbin Twins weigh in with Magic Sponge, and even Way Out West turn up with samplers in hand, re-inventing Van Halen on the old school grooves of King Of The Funk. And yet Dope 5 doesn't quite hit the spot as well as its predecessors, going for a more inventive but ultimately less palatable selection of tracks. There are some inspired sounds, and seriously danceable grooves, but not quite as many bone fide tunes as on previous outings. While still superior to so many compilations, let's hope the Dope series is reaching an end.

Cereal Killers

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NovaWorld takes off

Megaplayer gaming has a new frontline. *NovaWorld*, from PC flight-sim specialists NovaLogic, brings the well regarded *F-22: Raptor* to a crowded and brutal airspace, where literally hundreds of elite pilots battle for supremacy.

'Massive multiplayer is not a simple feat,' says John Butrovich, NovaLogic's technical manager. 'Few services provide massive multiplayer – and nearly all of them charge. Our service is free!'

There are two modes of play supported on *NovaWorld*. Standard deathmatch is an every-F22-for-himself battle, while RAW (Raptor

Air Wars) combines elements of co-operative and deathmatch play.

RAW is the more exciting development. This sees players combine to form squadrons, which must protect their own base, while simultaneously attacking the airfields of others – a sort of *Quake* team fortress for the skies. To play effectively, the F22 pilots must divide themselves into fighters and bombers, then select the appropriate payloads, bringing partnership to the game.

NovaWorld makes the usual claims about low-latency, which are made more credible for UK gamers by the establishment of a European server in Germany. What's perhaps more interesting, is whether *NovaWorld* can live up to its name. After all, NovaLogic's other recent products include the helicopter sim *Comanche 3* and the tank game *Armoured Fist 2*. These could combine to be the ingredients for an all-out war.

'The unified battlefield has been talked about for years, but has yet to be seen,' a cagey Butrovich told **EDGE**. 'The Internet inherently places restrictions on the game at a technical



For Raptor Air Wars, players must divide into teams comprising of fighters and bombers



Deathmatch play on NovaWorld might not be strictly accurate, but it's nonetheless enjoyable

level, which requires, typically, game specific solutions. To mix and match a fast moving fix-wing game with a much slower paced game or a different style of play, is a daunting problem.

It's a problem which **Edge** expects to see solved soon. Others working on the virtual battlefield include the Air Warriors at Interactive Magic and Ocean's DID division.

Only *F-22: Raptor* is currently supported on *NovaWorld*. To play, a copy of the game is required together with a modem connection to <http://www.novaworld.com>. There is no extra charge to play, apart from telephone call charges.

A European Community for online gamers?



At GamesZone, titles can be selected by game or channel. *Descent* is the top offering

No sooner does one online games company go to the wall than another takes its place. Created by the huge IT company ICL, GamesZone is a European game service which aims to offer a broad range of titles designed to appeal to everyone – except perhaps, gamers. Of the 20-strong list of games on offer, *Descent* appears as a veritable technological showcase.

Cheap and cheerful isn't necessarily a bad thing, but GamesZone isn't particularly cheap either. Although the game clients are free, and

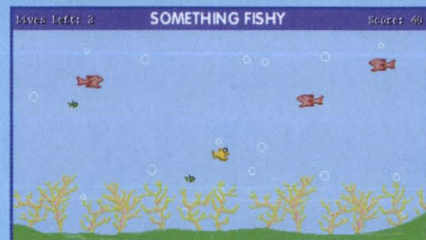
are distributed on a CD to minimise download costs, the playing charges of up to nearly £2 an hour (on top of phone bills) will soon add up. **Edge** hopes GamesZone can add a bunch of newer titles to its repertoire in the near future.

To investigate GamesZone, head over to <http://www.gameszone.net>. The range of pricing options includes £1.80 per hour, 24-hour tickets at £6 and weekend passes for £10.

Shockwave Flash makes waves on the Web

It might not be much to look at, but *Something Fishy* demonstrates a couple of interesting points for online entertainment. First, it shows that Internet gaming doesn't have to be about facing off against other human opponents. Here the competition exists in beating previous winners, making the Website something akin to popular arcade games of old.

Second, it's written in *Shockwave Flash*. This animation language from Macromedia is revolutionising graphics on the Internet. Images are in vector format rather than bitmap, which means they can be instantly scaled to size. They also take less time to load. As *Something Fishy* shows, it's a versatile method, but don't expect a *Shockwave Flash* version of *Quake* anytime soon.



Something Fishy is more fun than an average Web graphic, and it downloads just as quickly

To investigate the future of online aquatics, head over to <http://www.clevermedia.com/arcade/fish.html>

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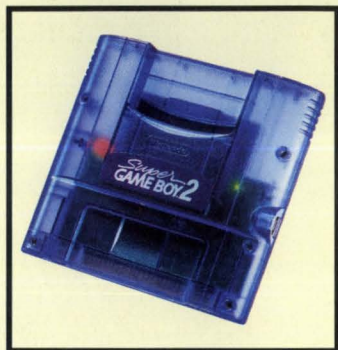
エッジ

[BIG IN JAPAN]

Is that a camera in your pocket?

In a move that will no doubt see thousands of David Bailey hopefuls roaming Japan's streets in search of inspiration, Nintendo released its Pocket Camera attachment for the Game Boy on February 21, for a very reasonable ¥5,500 (£28). The latest in a seemingly endless series of Game-Boy-related peripherals, this takes the concept of digital cameras and turns it into a potentially fun and (mostly) clean activity.

Couple the device with its matching-colour Game Boy, turn the power on and an adult-sized Mario appears on the screen, wiggling in a rather provocative, if predominantly disconcerting, way. (Pressing a button terminates this near-traumatic episode.) Operation of the device is typically Nintendo-friendly: it's simply a question of pointing the peripheral's 180-degree-turning lens at the desired object for photographic capture. On pressing the A button, the screen's monochrome image freezes and a set of new instructions appear. Saved snaps can be manipulated with a series of lens tricks, such as mirrors, zoom and stretch options. They can also be edited together, allowing budding 'alien spaceship' photographic hoaxers to practice their future source of income by piecing together bits of several images into one final creation, which



The ¥5,800 (£30) Super Game Boy 2 displays Pocket pics on a TV via a SNES



Refusing to die, the Game Boy's future looks stronger by the day. The Pocket Camera and Printer are the latest fun gadgets to emerge out of Nintendo's creative offices

can then be immortalised by the ¥5,800 (£30) Pocket Printer and its four shades of grey sticker painting.

Being a Nintendo product, it would be unnatural for it to not include some form of game-related feature, and sure enough, the Pocket Camera has three titles taking a Game & Watch approach. The first *Space Invaders* derivative allows access to the other two. Depending on which invading ship is shot, either a DJ sonic composition game or a simple juggling title follows; both amusingly allow the character's face to be replaced by any picture.

Pocket Camera fever has already swept Japan, with the little devices rapidly selling out all over the Akihabara district. Their widespread use may even prevent crime levels rising, with every shoplifter in the country discouraged from criminal activity for fear of being snapped in the act by a vigilant Pocket Camera-toting brat. Somehow the latter seems more deterring than countless CCTV cameras.

Digital intimacy

Developed by Hudson and introduced at the last Space World expo, the curiously-named Game Boy Kiss Link allows players to connect their portable Nintendo machine to a PC and download game-related data from the Internet. By visiting Hudson's homepage, for example, Kiss Link owners can obtain new maps and data for *Nectaris GB*, the first Game Boy Kiss Link compatible title, released at the end of February.

Now, if only Hudson's device would allow players to engage in *Quake II* on the Game Boy's miniature monochrome screen...



Welcome to the Net with the GB Kiss Link (seen here in prototype form)



THIS MONTH...

POCKET CAMERA MAYHEM

KISS THE GB LINK

OTAKU OBSESSION

Bizarre sights at Tokyo's AOU show...



Dressing as your favourite videogame character in Japan might be a hobby for some, but Tokyo's gaming events probably started the craze. At the recent AOU it was Capcom that outdressed its rivals with its beat 'em up characters clawing for attention. Kids love Bub and Bob (top right)



New games, please

The Association of Retailers of Television Game Software in Japan recently published an advert to protest against the Computer Entertainment Software Association's decision to deem the sale of second-hand software illegal, as well as Sony's recent attempts at bullying shops into ceasing their sales of pre-owned PlayStation titles by blocking the supply of future releases.

The advert's slogan, 'Game Over: you cannot play anymore', comes after CESA's inauguration of its Campaign

Against Illegal Software Resale on January 14.

Under copyright law, games are considered cinematic productions, and the unauthorised sale of pre-owned material is therefore strictly illegal, as well as being subject to laws governing distribution rights, including the rights to transfer or rent creative products.

Japan's second-hand market is huge, with 48 million units of pre-used software exchanging hands in 1996 – equivalent to earnings of ¥313 billion (£1.7m) for the game industry



The advert includes a pie chart showing that 61% of players want second-hand shops



Advert alert

Japan's toilet obsession is common knowledge, but even the most eastern culture-soaked individual will find the Japanese *Tomb Raider 2* advert and its bizarre homage to *Mission: Impossible* dubious. Meanwhile, Square continues to exploit its rich *Final Fantasy* franchise with a more traditional, yet striking, ad announcing *FFV's* port to the PlayStation.



THIS MONTH...

POCKET CAMERA MAYHEM

KISS THE GB LINK

CESA SAYS CEASE

an audience with...

douglas adams

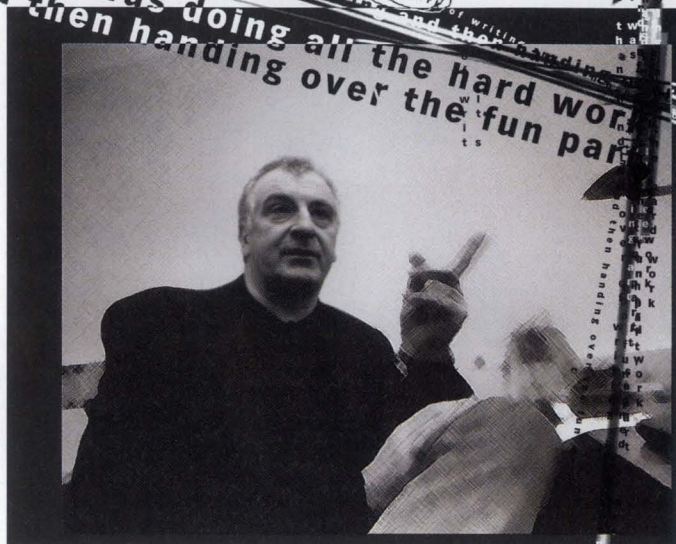
After writing a trilogy in four parts and an holistic detective story, what is there left to do but design a videogame? **Edge** talks to Douglas Adams about *Starship Titanic* and the future of adventure gaming technology...





Photography: Jude Edgington

It seemed I was doing all the hard work of writing and then handing over the fun part to someone else to do.



Douglas Adams shot to fame in the 1980s on the back of his 'Hitch-hiker's Guide to the Galaxy' series of books. In these tomes Arthur Dent, a thoroughly ordinary Brit, found himself hitch-hiking around the galaxy armed with nothing more substantial than a beach towel. Eventually, he saves the Earth from obliteration to make way for an intergalactic ring road, and finds the meaning of life along the way. While the books were turned into a TV series (a film is also due later this year), Adams kept busy by reinventing himself as a technology guru, whose adoration of his Macintosh is legendary.

Although he's the undisputed heavyweight champion of the humorous paradox, Adams took the

logical step and set up a development house called The Digital Village in London's Covent Garden. Here he set to work on developing a game, *Starship Titanic*, to be published by Zblac Entertainment. It's a hi-tech point-and-click adventure for the PC (and, soon, the Mac) with several twists – including the ability to converse with its characters using plain English. *Starship Titanic* is set to reach the shops imminently.



Starship Titanic's graphics far surpass Myst – Adams' first inspiration

Edge: What prompted you to move from writing books into making computer games?

Douglas Adams: Various things. Back in the 1980s, I worked with Infocom to make a game based on the 'Hitch-hiker's Guide' series, and enjoyed this. But it seemed like I was doing it the wrong way round – doing all the hard work of the writing and then handing over the fun part of turning it into a game for someone else to do.



◀ **Edge:** So why didn't you make this switch earlier?

DA: The 'Hitch-hiker's Guide' game was text-only, and graphical games seemed crude, slow, clunky and ugly. I looked at the technology and thought 'I don't think games are very interesting any more,' and sat on the bench for a bit. But I had it in mind that I'd like to get back into making

other end of the scale, and ended up thinking that the baby had been thrown out with the bath water.

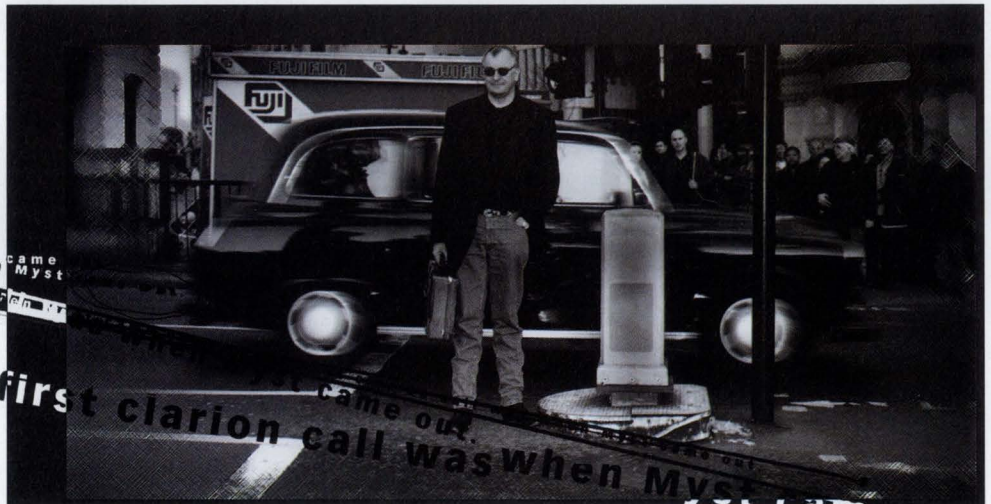
Edge: What sort of gameplay would you have liked to have seen?

DA: I wanted to see if I could push the idea of conversation forward. Companies were making games in which you could go up to characters

advent of the Internet and so on, we're a post-post-literate society and people are typing again. For the output, I favoured text-to-speech, which gives you the maximum ability to construct replies on-the-fly. But when we tried this, all *Starship Titanic's* characters sounded like semi-concussed Scandinavians, so it wasn't such a good idea. For that reason we opted for pre-recorded speech output from the characters in *Starship Titanic*.

Edge: What did that entail?

DA: It means that you have to try to foresee everything. In the end, my writing partners, Michael Bywater ['Daily Telegraph' and 'Independent on Sunday' columnist] and Neil Richards ended up writing reams. There's over 16 hours of dialogue on the game discs. Every few weeks, we'd go down to the recording studio, so it got richer and deeper.



The very first clarion call was when Myst came out.



The player must get to grips with four robots in order to get into first-class

games. The very first clarion call – tempting me off the bench – was when *Myst* came out. It did certain things very well, such as creating a new graphics standard, and was very imaginative and atmospheric. I liked the way it was developed in *HyperCard*; it was brilliant how it was able to parlay the slowness of *HyperCard* with a sense of a longer mystery. But then nothing much happened in the game. I thought: here's a new benchmark for how good graphics could be. Let's do something with it; populate its environment. But then I thought back to the experience with Infocom, which was right at the

and select pull-down conversation menus. But this was very primitive. So I thought: let's come up with a system in which you could say whatever you liked to a game's characters and they would answer.

There are three stages involved in conversations: the input, output and what comes in between. In a couple of years hence, I might be tempted to do on-line speech recognition. But now, with the

We were genuinely surprised when we started getting answers appropriate to what we'd typed in.

Edge: Is there artificial intelligence at the heart of this system?

DA: With language, AI is an intractably deep problem. On the other hand, you can make a pretty good stab at a certain level of AI. The middle of the system – between

the input and output – is where the system's smarts are. We haven't used conventional AI, but all sorts of methods. I think the route to artificial intelligence lies through the terrain of artificial life – you may as well take the same route as the natural world. Our engine, which does all the work, is something one could continually develop, it's a never-ending problem.

Edge: You'll continue to develop it?

DA: I hope so, because I would love to do something like what you see in *Starship Titanic* on the Web. The interesting thing is that it develops iteratively. Every time we test it, someone says: 'It doesn't do this very well,' and there's no end to what you can do. The Web can deal with the third stage of conversations better, because pre-recorded speech has limitations. But you won't see any more development of text-to-speech technology in the foreseeable future. I had a conversation about a year ago with Dave Nagel, who's now the head of AT&T's West Coast Labs, and he said his problem was that he was developing text-to-speech technology, but nobody could find

an application for it. Soon, these sorts of technologies will begin migrating to the Web. Speech recognition, which is essentially easier than handwriting recognition, is not far off. All these things are difficult, deep problems, but if you can solve 60 per cent of them and then later 61 per cent, they'll always, at least, be getting better. At some date, we'll be able to talk to characters onscreen and they will

There are several methods of traversing the enormous *Starship Titanic*, including taking a trip on this gondolier



I favoured text-to-speech, but when we tried this the characters sounded like semi-concussed Scandinavians

respond. But by then, all the work will be done on servers.

Edge: Did you have to leave anything out of *Starship Titanic*?

DA: One whole major idea didn't make it into the final game. At first we were thinking that we'd love photo-realistic graphics and full navigability, but the two are still mutually incompatible when you're dealing with current technology. There's nothing that can do realtime rendering of those sorts of environments. We decided that the best way to get the best of both worlds was to *have* both worlds. So we came up with a story notion in which you can see the ship as you

would see it in real life – we call this the 'matter' side, and it's a pre-rendered environment. Then you could enter in the ship's information system – we called this the 'data' side, and it was a full realtime, flyable environment. It enabled you to track the way information flows through the ship; if you like, a VR of the ship. This turned out to be a bridge too far, so we dropped it, but there are still a few minor artefacts from it around, such as the sculpture chamber, which is a sculpture of a giant SCSI cable. Entry to the data side is now an unexplained phenomenon. We're thinking of building the data side on the Web and then putting hooks between them – we'd publish a

I favoured text-to-speech, but when we tried this the characters sounded like semi-concussed Scandinavians

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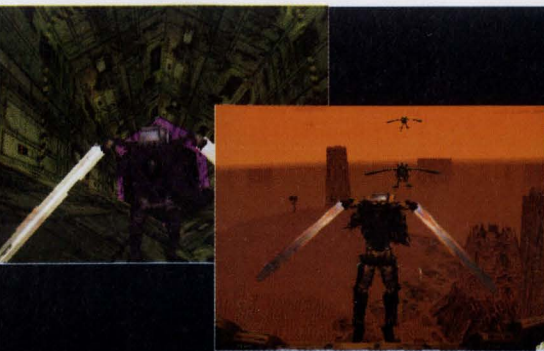
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P R E S C R E E N

A roll call of the newest arrivals in the world of videogaming

A case of mistaken identity?

Discussing the popular perception of the N64 as a kid's toy

Nintendo games are made for kids. From *Super Mario 64* to *Diddy Kong Racing*, the story remains the same. Bright, colourful graphics depict cute (or 'weird', as some would have it), cartoon characters running around in bizarre locations, doing bizarre things. Even Nintendo's own 'serious' titles such as *Wave Race 64* and *Pilotwings 64* have to carry the same burden of colourful visuals and cheery vocals. Or at least that's the common perception.

Part of the problem Nintendo faces is that its name has become synonymous with children's videogames in the public's mind. Indeed, to some factions the ultraviolence of *GoldenEye* and *Turok* seems never to have taken place. **Edge** suspects that there is an element of sour grapes in the accusations of childishness (which is perhaps justified after witnessing Rare's game trample uncerimoniously on its contemporaries). However, the discounting of other N64 titles which do have a child-like quality to them is disturbing to those who love games for being just that; games. As DMA's **Brian Baglow** commented in last month's prescreen of *Space Station Silicon Valley*, the game could be (wrongly) overlooked by potential

players merely because, 'it doesn't have a rocket launcher and heads bouncing off walls.' For a lover of games such as **Edge**, relating to those who cannot look below the surface of a title and enjoy the game within, is a constant effort.

Of the new Nintendo 64 titles prescreened this issue, two will serve to perpetuate the situation. Both to be published by Ubisoft, *Tonic Trouble* and *Buck Bumble* have exactly the kind of cartoon graphics that fail to endear 'mature' gamers. Sadly, no matter what gameplay innovations are offered by either, certain sections of the public will stay away. Presumably the same punters have avoided *Super Mario 64*, which surely leaves their gaming lives impoverished.

However, this month's brace of heavyweight prescreen alphas are Konami's *Castlevania 64* and Acclaim's *Turok 2*. Both titles are notable for similar qualities: Their proven publishers, their high status among hardened gamers, and the massive expectations **Edge** has for them. Most importantly, it's games such as these, and NCL's own *1080° Snowboarding*, that will go much of the way toward finally silencing the misguided critics of Nintendo's 'kiddy' console.



While titles such as DMA's *Silicon Valley* and Ubi Soft's *Tonic Trouble* unashamedly adhere to the Nintendo stereotype, others like *Castlevania 64* prove the rule is not set in stone

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Edge's most wanted

The videogames making waves before their arrival



Legend of Zelda 64

(N64) Nintendo

With NCL's game on the cusp of an appearance, **Edge** is correspondingly on the cusp of its seat. But can *Zelda* scale the mountain of expectation?



Radiant Silver Gun

(ST-V) Treasure

Gunstar Heroes creator, Treasure, makes its debut in the arcade with this classy vertical scroller. Its Saturn horsepower makes it ideal for conversion.



Starcraft

(PC) Blizzard

Almost two years late, Blizzard has finally burnt its gold master CD. Can *Starcraft* balance three competing races, and will that even be enough?



Turok 2

(N64) Iguana US

The N64's original bad boy is on his way back, hopefully bigger and bolder than ever. Just how much of a step forward will this be?



Forsaken

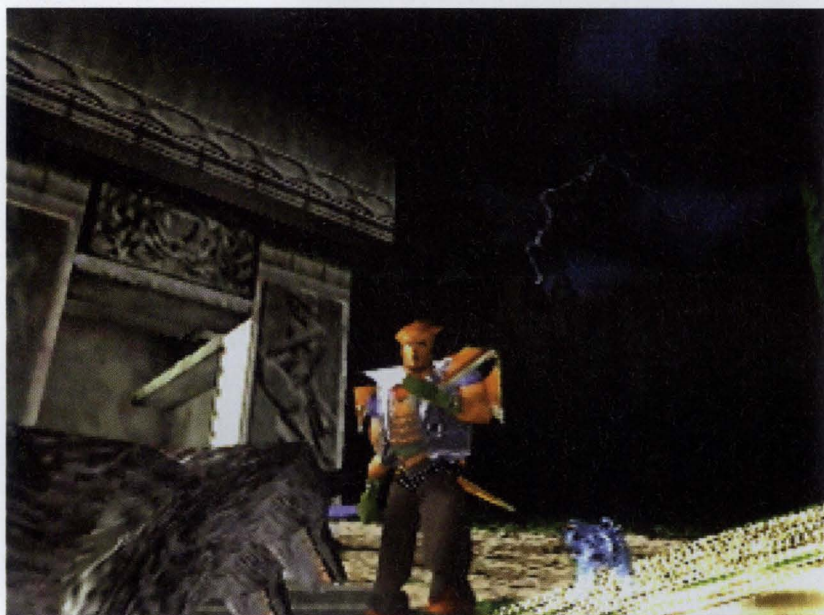
(PS) Probe

A playable PlayStation version has arrived, complete with silky smooth 50fps visuals. The 3Dfx version is something else, though

PRESCREEN ALPHAS

Splashing down with new N64 titles from Konami, Argonaut and Acclaim, plus the best arcade games at AOU

CASTLEVANIA 64

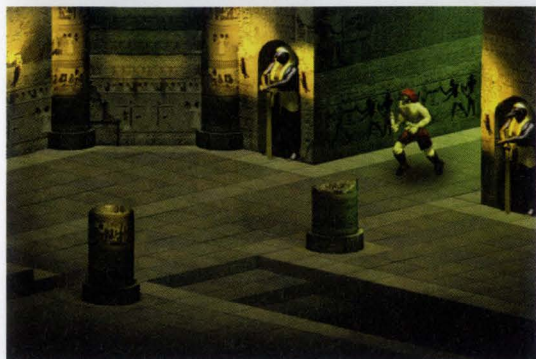


With the PlayStation version of *Castlevania* sinking its teeth into *Edge* at moment, these new shots of the hugely anticipated N64 iteration are welcome arrivals. The amount of graphic detail contained in this '20% complete' version is promising, with the game carrying through the dark, moody style of its precursors.

Players will be able to select one of four characters; a member of the Belmont clan that has always featured in the series, a 12-year-old girl with mystical powers, a fist-fighting warrior with the ability to mutate into a wolf, and a brutish, chain-wielding individual named Kola.

Castlevania 64's other main feature is the tying of game time to the play system, with hordes of vampires attacking as darkness falls

MYTH



Currently the subject of much controversy (see p14), System 3's update of its *Myth* series appears to share at least a passing resemblance with the company's other update *Last Ninja*. The new *Myth* is an arcade adventure blessed with some beautifully realised locations

VENDETTA

Although the original *Colony Wars* was not particularly well received (six out of ten, E52), Psygnosis is working hard to amend the situation with its sequel *Vendetta*, also for Sony's console. With four initially selectable craft, a host of new weapons, and a plot that's thought to be deeper and better defined, the game may answer previous criticisms



COMMAND AND CONQUER 2: TIBERIAN SUN



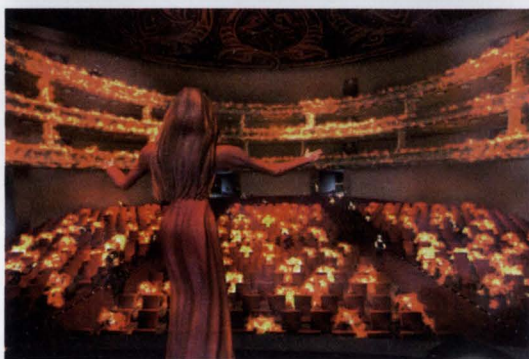
While Cavedog has already redefined realtime strategy gaming with *Total Annihilation*, Westwood seems set on its innovative own path for *Command and Conquer 2: Tiberian Sun*. Graphically, it's not a huge leap forward, although it does boast 3D terrain and rich lighting effects, but the gameplay holds plenty of surprises. Veteran units, guerrilla warfare (including hacking and covert sabotage), and toys like the hunter-seeker drones are sure to thrill the Westwood faithful. Even more intriguing is talk of a dynamic ecosystem and destructible terrain

GEK: ENTER THE GECKO

Nearing testscreen status, Crystal Dynamics' first venture into 3D for the street-wise reptile is looking promising. The novel idea of sticking to some of the walls in the three dimensional environments is refreshing and with 125 moves and 3,400 frames of animation, the action is fluid. PlayStation owners will be the first to tackle the green-skinned being, but PC and N64 versions are expected later in the year



PARASITE EVE



Narrowly missing Edge's deadline, *Parasite Eve* should just be seeing the light of day in Japan. With key members of the *Final Fantasy VII* team involved, *Eve* is a PlayStation RPG of SquareSoft's usual scale, and has an evolution of *FF VII*'s battle system. Based in New York, the player must save humanity from possession by the alien 'mitochondria' virus



TEKKEN 3



Namco's *Tekken 3* is scheduled for a Japanese release on March 26 and speculation is already rife over how well it will compare to the System 12 original. The PlayStation version will include not only the wide range of secret modes and characters that previous conversions have boasted, but also a side-scrolling action section known as the *Tekken Force Mode*, and possibly similar to *Final Fight*. Players will be able to take on more than one character

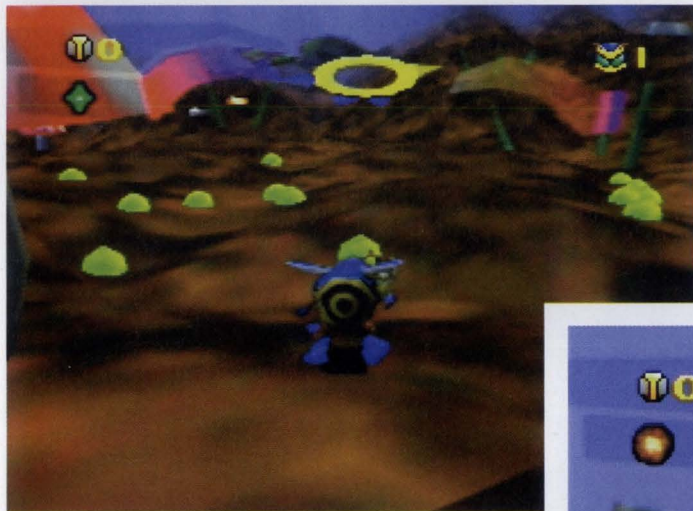


AGE OF EMPIRES 2



By combining *Civilisation* and *Warcraft 2*, Bruce Shelley created a sleeping blockbuster in *Age of Empires*. The sequel will include more from Shelley's wish-list, including much greater variation between cultures and, in contrast to the angry rabbles of the first game, proper military formations

BUCK BUMBLE



Created by Argonaut, developers of SNES *Star Fox*, *Buck Bumble* is a free-roaming, 3D shoot 'em up for the N64. To be published in the UK by Ubi Soft, the game features Buck the Super Bee and his quest to defeat the 'insectoid' invaders - alien, robotic insects. Although *Bumble* initially looks to be something of a children's title, beneath the surface are several different mission types, six hidden levels, plus the unquestionable pedigree of its developer

THREE LIONS

In the run up to the World Cup, there is an inevitable glut of football titles on the release schedules. While not the most technically impressive, *Three Lions* has the useful credential of being the official England team game. Developed by Z-Axis, *Lions* features over 50 international teams, including the successful 1966 England team, and is due to be published by BMG in April on PC and PlayStation



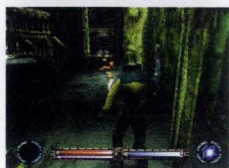
CONTRA

Little is known about the PlayStation renaissance of Konami's seminal *Contra* series, with even the game's project name cited only as 'C'. Hopefully this latest effort will emerge a more worthy successor to the excellent SNES title *Contra III*



ESCAPE... OR DIE TRYING

ODT is Psygnosis' other new announcement this month. Targeted at fans of *Tomb Raider*, the player controls the surviving members of a crash-landed team. The game combines third-person-action with various RPG elements like magic spells, but transposed into a future world setting



REQUIEM



From the plot resume, Cyclone Studios' *Requiem* looks like a different kind of first person shooter. Inspired by Milton's poem 'Paradise Lost', the player is an angel fighting his fallen brethren. Make that 'riddling his brethren with bullets' and the novelty is less obvious. But *Requiem's* graphics and *Jedi Knight*-style interaction still leave **Edge** curious



XENOCRACY

With *Colony Wars 2* some way from completion, Grolier Interactive's own PC space combat title *Xenocracy* looks to have hit a convenient window of opportunity. Featuring both arcade and simulation modes, the game places the player in the role of a member of an intergalactic peace force, dedicated to maintaining the balance of power between four planets



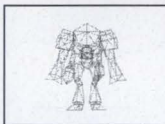
ZELDA: OCARINA OF TIME



With every discerning gamer anxiously awaiting NCL's latest, these new screenshots illustrate the stunning village scenes and the game's battle system. By pressing and holding the Z-trigger, Link locks onto his foes, with repeated clicks causing him to circle around them during the attack



TUROK 2



After becoming rather overshadowed since *GoldenEye*, Acclaim's *Turok: Dinosaur Hunter* is back on the agenda with the release of these fresh hi-res N64 workstation images from its sequel. Hotly-tipped to include some form of multi-player game, *Turok 2* will, as first revealed in **E47**, have a vastly improved graphic engine. Additionally, the first title's hub-based level structure is to be greatly expanded upon to increase complexity and game life

THE STORY STARTING WITH T



After a period of subdued activity, Jaleco has returned to the fray with *The Story Starting with T*, a *Zelda*-esque 3D adventure for the PlayStation. With a realtime battle system that doesn't interrupt the gameplay, *T* follows a young boy named Takuto on his travels. Expect a Japanese release in June.



PLASMA SWORD



This latest beat 'em up from Capcom was part of the company's rather subdued appearance at the recent AOU show in Japan (see p8). Nevertheless, this game's wildly colourful 60fps visuals (possibly generated by a System 12-style board) are backed-up by solid animation and gorgeous special move effects. Players can use a plasma sword creating a 'plasma field' which drags opponents towards the attacker and leaves them open to a possible attack



MARVEL VS CAPCOM



The latest in an interminable series of super heroes-related fighting titles, this allows players to select one or two characters from the Marvel comics and Capcom's own back catalogue and pit them against each other in a multitude of over-zealous special moves and multi-hit combinations

DOWNHILL BIKERS



Based on a concept similar to Namco's recent *Prop-Cycle*, this extreme cycling-based game sees players pedalling maniacally in order to reach the finish line ahead of the pack, while attempting as many different tricks as possible. Up to four cabinets can be linked for multiplayer action

STREET FIGHTER EX2



Developed by Arika, a team composed of ex-Capcom staff, this sequel to one of the best beat 'em ups of last year proves as playable as its predecessor. The camera action is now more dynamic, offering a better view of the combat as the fighters battle for supremacy. Given its low-end, PlayStation-style graphics, a conversion is likely, albeit with some visual restrictions

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FIGHTING VIPERS 2

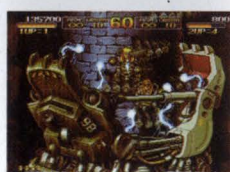


Building on the success of the original *Fighting Vipers*, this sequel boasts Model 3 enhanced graphics and new gameplay features. The 'Super KO' feature allows a player to defeat their opponent in one monstrous special attack, winning two battles and clearing the round. The timing of such a move is particularly difficult and can only be achieved at specific times



METAL SLUG 2

The success of the original ensured an improved, better designed sequel would eventually appear in the arcades. SNK has done just that, continuing the series' humorous content - while players are frantically shooting enemies, in the background a pupil might be having his work marked by his schoolteacher, for example. The number of stages has also increased



RADIANT SILVER GUN

Running on the ST-V board (meaning an easy translation onto the Saturn), Treasure's arcade vertical shooter employs a skill-up system taken out of an RPG and a variety of firing options for one or two players to master in order to finish successfully complete the game's five stages. Power is gained by destroying enemy ships and reaching the end of the stage



SKIERS HIGH



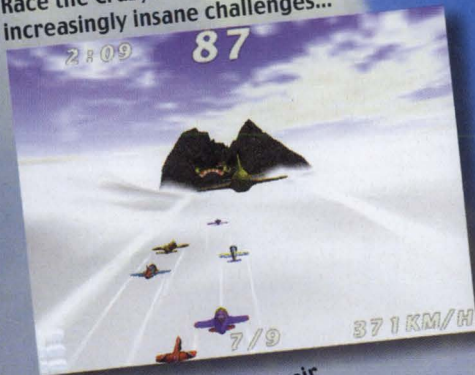
By using the 'active slide system', Konami's coin-op is believed to have the most realistic interface of the current arcade skiing titles. By having special switches underneath a player's heels, it's possible to jump in order to collect time bonuses in the point attack option or just play normally

Plane Crazy is simple to pick up, but really hard to master - PC Zone

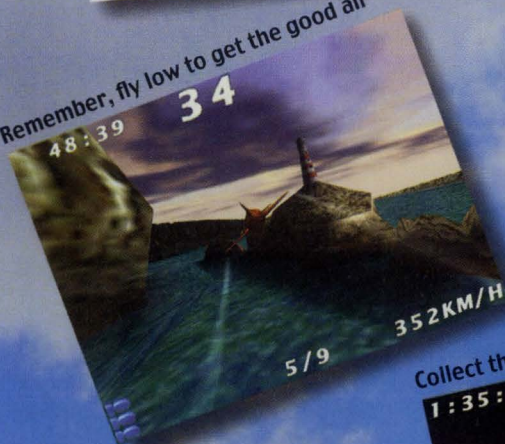
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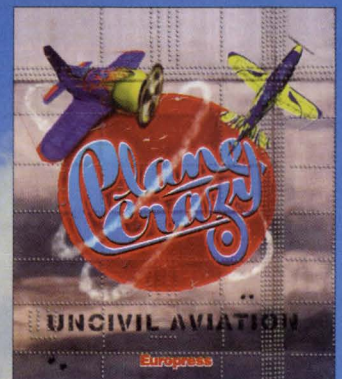


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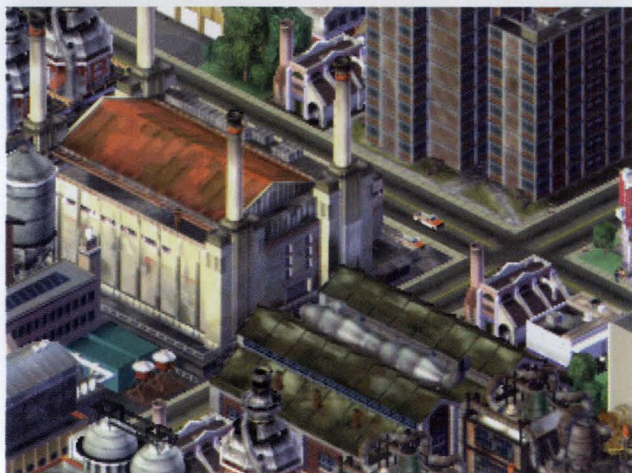
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SIM CITY 3000

One of the most eagerly awaited games of the '90s has just had its guts ripped out. Can the team of civic planners at Maxis rebuild their *SimCity*?



Industry has never looked so pretty. Like previous *SimCity* games, the growth of the city is managed through the allocation of economic zones

40-storey skyscrapers dwarf the tiny trees below. It was the need to get across such scale and beauty that led to the abandonment of 3D visuals

Maxis has scrapped its ambitious plans for *SimCity 3000*. Four years into development, the company has given up its dream of creating a fully navigable 3D metropolis. Instead, it's working on what looks more like a refinement of *SimCity 2000*.

'While 3D navigation sounded good on paper, the technology currently available in the typical *SimCity* player's home PC doesn't yet have the power to provide the richness of graphical detail our customers have come to expect,' says **Luc Barthelet**, general manager at Maxis. 'So last year the team went back to the drawing board.'

SimCity 3000 had always looked ambitious. The original brief was to create a real-time, true 3D city, complete with polygonal pedestrians and cars. To enable the player to quickly move above and around the city, 'iterative' rendering was mooted. This increases the level of detail in a scene if the camera remains fixed for a while, but drops to some minimum level while the player scrolls about. Even a fairly radical compromise like this wouldn't have solved every problem though. For example, early

Format:	PC
Publisher:	Electronic Arts
Developer:	Maxis
Release:	Summer 98
Origin:	US



Even in its revised form, *SimCity 3000* features quite detailed graphics. Tiny pedestrians and cars can be seen making their way through the city

shots of *SimCity 3000* showed fairly complex 3D cars. How could enough cars have been displayed to represent a traffic jam?

In contrast, the only surprising thing about the revised *SimCity 3000* is how similar it seems to the *2000* version. True, it's apparent that the graphics are improved. Skyscrapers are taller and buildings show more variety. 'Your cities will come to life,' promises Barthelet, 'with richly detailed 3D rendered buildings, pedestrians walking through town, vehicles driving down your city streets and, of course, realistic disasters wreaking havoc.'

But overall, the visual changes aren't even as radical as the move to an isometric perspective for *SimCity 2000*. In a PC market obsessed with graphics, Maxis will have to work hard to convince gamers that *SimCity 3000* still represents a substantial improvement over its predecessors.

What will *City 3000* offer then? Firstly, it's much bigger. The map size has quadrupled, and there are a much wider variety of structures. *SimCity 3000* players will also be able to go into the workings of their city in greater depth than ever before.



'The simulation is the heart of *SimCity*,' says Barthelet, 'we're adding new zones and data layers so you'll be able to influence a wider range of city conditions.'

The micro-simulators are the backbone of this increased sophistication. They enable the player to manage the city right down to the individual shops or emergency services. While other enhancements include a wider range of disasters, more intelligent advisors, secret Easter eggs and special events.

SimCity 3000 will also be expandable. New shops, residential blocks and other buildings will be distributed via the Internet, although Maxis has yet to confirm that these will be more than graphical variations. *SimCity* remains the bedrock of Maxis' business, and supporting and extending the game like this could be more fruitful than working on disappointing *Sim*-branded games like *Simisle* and *SimAnt*. Cavedog's *Total Annihilation* Website has proved the popularity of add-in components. It remains to be seen if gamers will pay for piecemeal downloads, though.

Even *SimCity 2000* admirers admitted it was a flawed masterpiece. Bugs apart, the most troubling of these was that once a city had been completed, the only option was to either start again or level the city and replace it with arcologies – enormous self-contained apartment blocks that were surely the antithesis of managing an intricate, thriving *SimCity*. If the latest version can improve these core gameplay issues, it could prove more worthwhile than any amount of graphical revision.



Plush residential areas (left) need to be some distance from the factories (above)

NINJA

So long in the making, its characters have all progressed to the tenth dan, Core Design's martial arts adventure is now nearing completion. **Edge** enters its second round...



Core's team has included a huge range of foes to face the eponymous *Ninja's* selection of swords, spears, throwing knives and staffs

Having slipped past its original summer '97 release date (and a couple of others), Core Design's *Ninja* is now confirmed for release this September. First prescreened back in **E43**, the game has gained a few essentials – including a plot – in the interim, making it due for a second scanning by **Edge's** eagle eye. Remarkably, for a title so long in the making, the development team of Jerr O'Carroll, Brian Tomczyk, Joby Wood, Martin Jensen, Dan Scott and Derek Leigh-Gilchrist has remained the same.

As videogame storylines go, *Ninja's* is notably solid. The young warrior Kurosawa returns from his travels to find his homeland



ravaged by evil demons, summoned after Katasaki, one of two warlords fighting for total control of Japan, sold his soul to the demon lord Batanaka. As is the way with such deals, the pact backfired on him, resulting in the decimation of his own lands and people. The player must guide Kurosawa through the lands to save his country, using his ninja skills to defeat many foes.

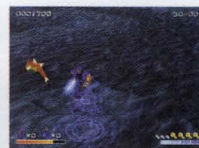
Kurosawa's gun-toting girlfriend Lara Croft (Core's most famous creation) is obviously casting a long shadow over the game's release, as this parallel team within Core acknowledges. 'What the *Tomb Raider* guys achieved will live in videogame history. But we felt that rather than follow suit and try to cash in on their formula, we wanted to go in a different direction which will appeal to those who played that game and those who wanted more of an arcade adventure.'

The team lists *Ghosts and Goblins* and *Ikari Warriors* as its inspiration, giving a clear picture of what to expect. 'We've rekindled the classic arcade feel, which we feel is sadly lacking from so many 3D action games,' they



Ninja contains a wide variety of level-end bosses to challenge the gamer

Format:	PlayStation
Publisher:	Eidos
Developer:	Core Design
Release:	September
Origin:	UK



Ninja's emphasis is heavily on combat, eshewing its stablemate Tomb Raider's puzzling platforms in a well-advised search for a separate identity



With 13 distinct stages to be explored, game life should be correspondingly long. Levels will be scattered with hidden traps to foil the player's efforts

claim. *Ninja's* emphasis is on making the player engage in as much combat as possible. By including a wide variety of foes, the team has tried to keep the action from becoming repetitious, yet all the enemies have been designed to present a credible challenge, rather than being one-hit wonders.

Set-piece battles are placed throughout the game. One example involves Kurosawa encountering a group of peasants roasting a rabbit on a spit. The peasants' subsequent attacks will differ according to the player's point of approach, with some hanging back as others rush into combat. A gang of woodmen encountered later again react in alternate ways on successive attempts. More generally, levels will be peppered with a variety of foes to be dispensed through any available means.

Because of the game's extensive 3D environment, the Core team has found it impossible to implement a range of attacks to match true fighting games, but *Ninja* amply compensates with a wide selection of weapons. 'The ninja has the use of swords, staffs, throwing knives, axes and so on, each of which can be powered up. We did have some nice nunchukas in the game, but the powers-that-be deemed the weapon too offensive, and so, along with shurikens, they've been dropped,' complains the team. The player will also occasionally be able to utilise magic spells, which act as the game's smart bombs.

Ninja's development has been something of a rollercoaster experience. Core was once a Sega stalwart, as the team explains: 'The



Players will be able to activate several magic spells (such as the one pictured above), which act as smart bombs, laying waste to all in range

programming leading on the Saturn was the main objective, but with the apparent impending death of the Saturn, it was felt a change to the PlayStation was a wise commercial move. However, the Saturn and PlayStation are different machines, and various problems have since arisen. Fortunately these have all been resolved, and now we have the added advantage of the special effects which would be hard to produce on a Saturn.'

On top of that, none of the *Tomb Raider* code could be utilised for *Ninja*, which required an entirely new 3D engine. With this autumn's release now definite, however, the *Ninja* team will finally be able to focus its undoubted skills on new targets.



ALPHA CENTAURI

The second game from Sid Meier's start-up Firaxis is his long-awaited 'Civilisation 3' in all but name. For a sci-fi strategy game set on a faraway planet, it's surprisingly down to Earth...



Alpha Centauri isn't exactly graphically lush, but the terrain undulates nicely (main). As in *Civilisation*, advisers are on hand to give advice (left)

The recent trend for superstar developers to start new independent studios appears to be driven by varying impulses. For Peter Molyneux, leaving Bullfrog to found Lionhead meant leaving the restrictions of life with Electronic Arts to make totally new games. For one Sid Meier, leaving Microprose to found Firaxis seems to have meant joining EA to continue making the same games.

Of course, when those games include the latest incarnation of *Civilisation*, excuses can be made. Back when consoles easily outpaced the PC gaming scene, *Civilisation* and its sequel were shining examples of games that only the PC could offer. It quickly obtained classic status, and sales to match.

For *Civilisation* fanatics though, space really was the final frontier. The culmination of any successful *Civilisation* strategy resulted in a spaceship taking off into the heavens and the game ending. So space is where *Alpha Centauri* takes up the story. 'We wanted to wait until we had some new ideas,' says Meier, by way of an excuse. 'We didn't want to take an old game of ours and just move it into space.'

At first glance, *Alpha Centauri* looks just like a sci-fi *Civilisation*. For a start, the action takes place not in space but on a planet orbiting Alpha Centauri. And, despite the futuristic interface (Meier calls it 'Windows 2095'), the basics are unchanged. Colonists aboard a pioneering spaceship have divided into factions, based on their beliefs. These technologists, environmentalists, warriors and others are spread across the planet and so act like the various competing cultures of the original *Civilisation*.

Format:	PP
Publisher:	Electronic Arts
Developer:	Firaxis
Release:	Late spring
Origin:	US



Fog of war remains a problem in the future

Moreover, in spite of flirting with realtime in *Gettysberg*, Meier remains a fan of turn-based games. He believes that *Alpha Centauri* couldn't be anything like as involving if it were implemented in real-time. There's a technology tree too, although in contrast to *Civilisation*, most of the inventions are obviously fantasy.

'This is not a wild, far out science fiction game. All the beings involved are humans from Earth,' explains Meier. 'The planet is alien but it's not totally weird - it has rivers and hills and hot and cold climates. There's also this native fungus that gets in your way. If you learn to live in harmony with the planet, you're better off than if you try to fight it.'

Meier's intention is that experienced players will be able to quickly get up to speed in *Alpha Centauri*, and get to grips with the fresh features at their own pace. One of the best of these, is that the player can now affect the planet through terraforming. On the simplest level, growing food changes the red Mars-like surface into fields of green. But the terrain can also be raised and lowered, so the planet is fundamentally altered.

Due to the global weather system, raising new mountain ranges encourages more rainfall and so increases agricultural productivity. What's more, the clouds the



At the start of each game, the planet is a reddish-mauve colour and home to an odd fungus (above). Agriculture can slowly turn it green

new mountains snag might just have been headed towards an enemies' crops. Weather becomes a weapon of war.

Another big change for *Alpha Centauri* comes in the way the units are built. Partly because all the science is hypothetical anyway, *Alpha Centauri* enables you to build units to your exact specifications. 'You can pick a certain kind of propulsion for a fast unit or a slow unit, then you can put a laser or a different kind of weapon on it,' says Meier. 'You can build a big army of cheap but not so great units, or you can build an army from a few really cool units.'

The system is very flexible. Rather than static defenses, for instance, a heavily-armed unit could be built, and resources saved by not including an engine. This enables players to both get used to *Alpha Centauri*'s gadgets and pseudo-sciences (most of which Meier admits are plundered from the movies), and to enjoy exploring the possibilities.

Some of the changes in *Alpha Centauri* reflect comments that have come from the *Civilisation*'s legion of admirers. Many felt it became too unwieldy when the population increased. In *Alpha Centauri* the terraforming machines can be used to automate many tasks, such as building roads between cities, or creating fields. Also partly by request, diplomacy is more involved. As well as the usual choice between war or peace, the cultures can also divide up the planet amongst themselves and combine their armies. Other tweaks include displaying a unit's intended path before it moves, and more involved combat, which now includes the concept of morale and damage.

Meier's resistance to superfluous change is probably a sensible one. He jokes he'll have 'the father of *Civilisation*' written on his grave. To take *Civilisation* into the space age will be no lesser achievement. **E**



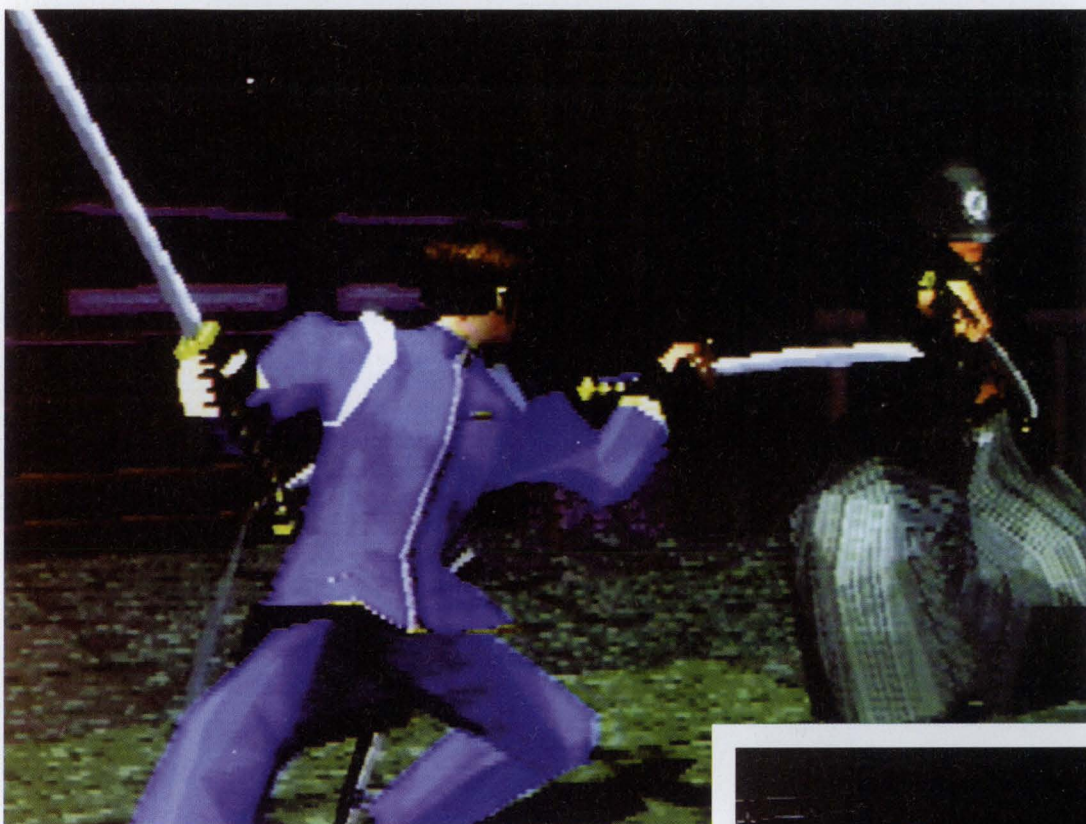
The terraformers make new land habitable



A data scanner and a live information ticker lend a suitable space age feeling

BUSHIDO BLADE 2

After a tentative first bout, Square Soft's *Bushido Blade* series has returned from the wilderness, blades honed and bared. But is this revision more than a makeover?



Square's artists have imbued its game with a traditional Japanese feel, characters are detailed and solid, while locations are remarkably vast



Sharp-slicing gamers will doubtless find their needs sated by *Bushido Blade 2*'s wide selection of razor-edged fighting sticks and swords

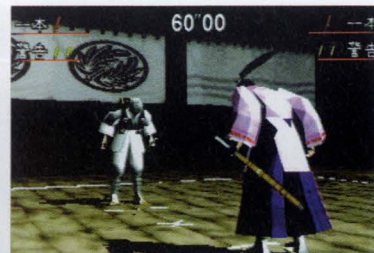
The art of creating a fighting game often mirrors its real-life counterpart sports for mystery and ancient traditions. Outsiders to the world of videogaming must look on in bemusement as the *Tekken* and *Street Fighter* black belts deploy their combos, juggles, throws and special moves. However, there has been a new kid on the block of late, introducing fresh ideas that have shaken the foundations of the great Capcom and Namco dojos – Square Soft.

The first of the company's beat 'em ups, *Tobal No. 1*, featured grapple-oriented combat. The second was *Bushido Blade*. While there had been previous titles that included swordplay (most notably *Soul Edge*), *Blade* focused on ultra-realistic combat where a single strike could – and often did – finish the fight. Now, just as *Tobal* received a sequel, so has *Bushido Blade*. The original game failed to sell in the kind of quantities that Square Soft is used to, partially due to the company's decision to distribute it solely

through its 'Digicube' convenience store network in Japan. *Blade 2*'s chances of reaching its audience won't fare as badly, and potential punters should now be familiar with the brand.

In terms of structure, players will be offered a selection of six fighters, with more becoming available as progress is made through successive bouts. While this does not

Format: PlayStation
 Publisher: Square Soft
 Developer: In-house
 Release: March
 Origin: Japan



One strike and it's all over. *Bushido Blade 2's* combat system – even after the first game – still requires a sizeable mental adjustment before play



Trousers don't come much more baggy than this, although some skaters may disagree

sound like a particularly high number, each character will have a selection of six different weapons to master, from the traditional Japanese Katana sword to fighting spears. Quick multiplication takes the count of initial playable character options to 36, with the extra protagonists yet to come. Interestingly, to keep the 'support' characters on the options screen next time the game is loaded, players will have to use that individual to complete the game.

Blade 2 also features several 'hidden' weapons which (as with the added characters) are revealed later in the game. Another welcome feature is the player's ability to operate two swords simultaneously, again adding variety to the familiar formula.

The characters are chosen from the two warring clans that give *Blade 2* its storyline; Shainto and Narukagami Shintoryu. While some will be familiar to players of the first *Bushido* game, many will be new additions. Square has also included a group battle mode that will feature up to five fighters, although it's not clear at this stage how many of these can be controlled by human players.

Depending on which faction is selected, *Blade 2* offers a different range of fighting implements, which retain the earlier game's novel battle system. Rather than depleting the traditional beat em up's energy bar, successful hits placed in *Blade 2* result in either outright fatality, or a character's limb is rendered inoperable. However, the control system has been simplified, with the defence button removed. In true martial art style, attack is now the best defence.

Other attractive aspects from the first game have been retained in the sequel, including the large open combat arenas that brought with them a new approach to fighting. Injured characters can retreat to far corners in order to compose themselves before returning to the fray, although such practices often result in the opponent merely moving in for the kill.

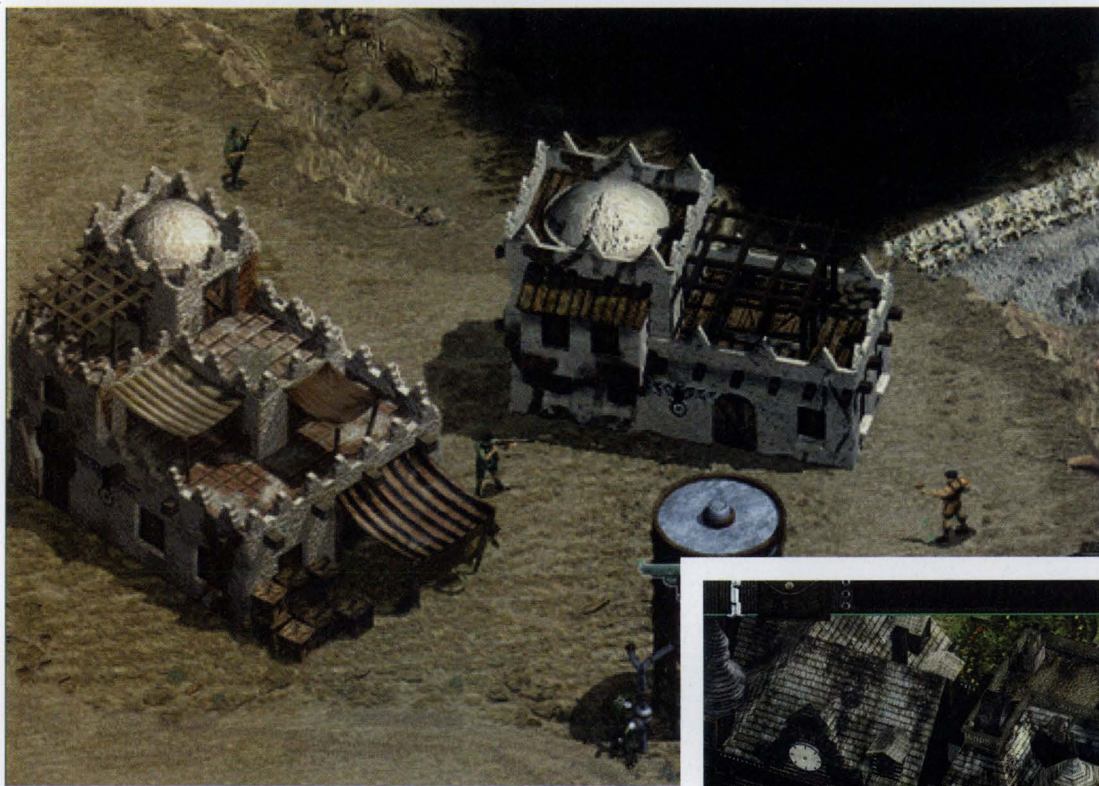
With the original *Bushido Blade* only recently released in the UK, it may be some time before its follow-up sees the rising sun in the West. Interested parties (including **Edge**) will have to resort to purchasing the import version at the end of March. **E**



One of the game's neatest graphic tricks is the fading out of foreground scenery when it starts to interfere with the on-going action (above)

COMMANDOS: BEHIND ENEMY LINES

After the disappointing *Myth*, Eidos has teamed up with Spanish developer Pyro Studios to return to the realtime strategy battlefield in a homage to classic World War II movies



Commandos is far more graphically detailed than previous strategy games, with terrain and buildings changing for each scenario. Nice touches shown here include grounded airplanes and a huge dam



Every soldier has his own window (above). Impressively, several scrolling windows can be displayed at once

There's a new style of game appearing on the PC, fusing *Cannon Fodder* with more mature, realistic graphics and heavy militaristic trappings. The games – of which Pyro's *Commandos: Behind Enemy Lines* is a prime example – seem to be taking a closer look at the skirmishes of real-time strategy games like *Red Alert*, with interesting results.

'It's what we call real-time tactics,' says **Ignacio Pirez Dolset**, managing director at the Spanish developer Pyro Studios. 'It's a combination of action and strategy. Clever thinking is necessary, but there's also the fun of real-time action.'

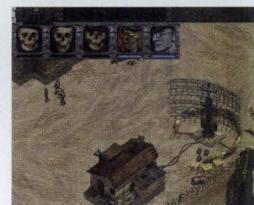
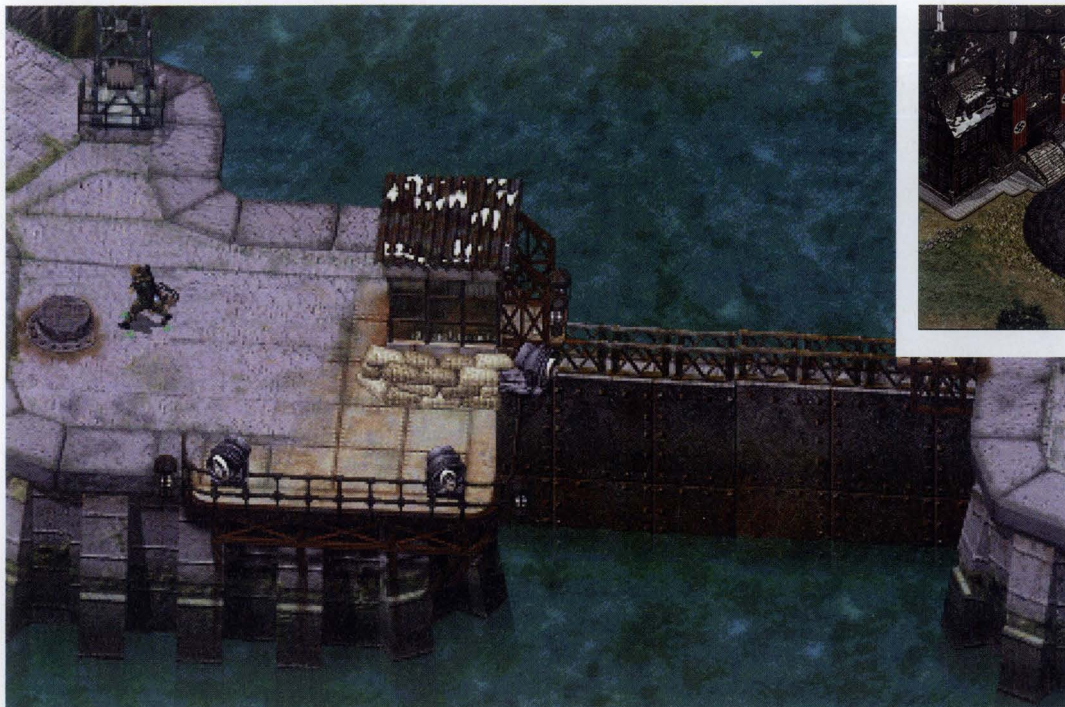
Commandos focuses on the exploits of a small, highly trained unit. Despite its origins in Spain, the title actually follows the exploits of World War II commandos from the British army, and has been heavily influenced by seminal films like *The Guns of Navarone*, *The Dirty Dozen* and *Devil's Brigade*.

The player takes control of six men in the now-traditional point-and-click style. Each commando brings his own specialized skills

to the ensemble. Samuel Brooklyn, for instance, is an American mechanic who can fix and drive any vehicle, while Frenchman René Duchamp is an expert saboteur. The unit is led by Sir Francis Woolridge, alias 'The Duke', an expert marksman who's typically aloof with his troops. The unit's rounded out by an Australian, an Irishman and another Brit. The differences between the men are more than a matter of accent, though. Each commando profile is so specialized that Pyro has included a tutorial on how to use the skills and weapons of each one.

Once the player understands his team, an assault on the game's 20 missions can begin. Each of the four locations (the north of Africa, the Norwegian fjords, Normandy and the

Format:	PC
Publisher:	Eidos
Developer:	Pyro Studios
Release:	Summer 98
Origin:	Spain



The varied locations are more redolent of an adventure game than a wargame. Fighting around a marina (above) promises to be markedly different to assaulting a Nazi mansion (top right) or tackling a remote outpost (bottom right)

Rhineland) promises its own distinct flavour; even details like the soldiers' uniforms change. Designs were drawn from authentic World War II photos, documents and films.

Graphics aren't all that changes across the war theatres: each campaign, referring to real World War II events, will offer a markedly different challenge, says Dolset, with some campaigns unfolding across a play area of eight screens by eight. 'Commandos is definitely a "think before you act" game. A deep analysis of the scenario, and the right use of your men will be key issues.'

Adding to the complexity are the game's 20-plus vehicles. The heavy tank is required when tackling emplacements or vehicles, while light tanks are best deployed against infantry. The motorbike, the game's fastest vehicle, is the escape vehicle of choice. Dolset's suggestion that armored vehicles might also be tactically deployed as blockades or to provide cover, illustrates the depth *Commandos* promises. In fact, Dolset claims there are many ways to finish each mission. 'Certain tactics will make it easier, but the only thing we can guarantee is that the player will not finish any mission with a full-on frontal attack.'

Dolset also cites the game's AI as a key innovation. 'What makes it revolutionary is the fact that it's not only more advanced than in previous games, but that it is designed differently. Each unit will only be able to react to what they see and hear - there will be no "underground" behavior like in most games.'

For example, a commando armed with a silent weapon can sneak into a camp and take out the opposition without being seen or heard. Slain soldiers can even be dragged away and hidden to prevent enemies raising the alarm. All this happens because of the AI, says Dolset, not through pre-scripting techniques or other programming tricks.

If *Commandos* really is to be as open-ended as Dolset promises, such fluid AI will be just one of several vital achievements. Marrying the game's highly detailed environments with a gameplay style that promises the player real tactical freedom will be quite some challenge. **E**



Sometimes a gunfight is inevitable. Combining exciting combat with intricate mission planning will not be an easy task for the developers

TONIC TROUBLE

The creator of the best-selling (but flawed) 2D platformer *Rayman* is making the precarious and inevitable switch to three-dimensions for his first Nintendo 64 project



Ed, the player's character, has a range of friends and foes, including guards who fly with the aid of helium (top right) and vikings (right). Get a few together and *Tonic Trouble* looks more cartoon-like than *Mario 64*



Only now, nearly two years on, are the true *Super Mario 64* clones arriving. Whereas Argonaut's *Croc*, for example, represents a quick shortcut to creating a 3D platform, upcoming titles like Konami's *Holy Magic Century* and Ubi Soft's *Tonic Trouble* would be inconceivable without Nintendo's pioneering effort.

Not that Ubi Soft seems intent on plagiarism. Powering the development of *Tonic Trouble* is a new £2.5 million 3D-integration tool, which the company says

will enable it to drive the genre onwards. 'It puts creative control in the hands of game designers rather than the programming team,' explains project manager **Gregoire Gobbi**. 'The result is more complex characters and graphical environments.'

Tonic Trouble's hero, Ed, is an alien incompetent desperate to make amends. Like Nintendo's Mario, Ed's certainly got personality. But more interesting is the pseudo-emotional depth of the game's other protagonists. 'In *Mario 64*, the characters



Chatting to other characters is a big part of the proceedings in *Tonic Trouble* (above and bottom right). Occasional racing sections, à la *Mario 64*, also feature (top right)

Format:	PC, PS
Publisher:	Ubi Soft
Developer:	In-house
Release:	June
Origin:	France



The idiosyncratic denizens of *Tonic Trouble* certainly carry themselves with uniquely unusual grace, right down to their oddly limbless bodies. Ed (above right), is just one of the personalities in the game who add a little humour (top right)

other than Mario are one-dimensional. In *Tonic Trouble*, all of the characters react differently at different times', says Gobbi.

This makes for lively and animated characters. Instead of cycling through some pre-scripted routine, the game's 30-odd personalities will actively interact with Ed, perhaps pulling faces and running away, depending on the player's input. Gobbi claims the computer-controlled characters wander around the game's ten 3D worlds and pop up depending on the player's actions. This complexity is made possible by the AI built into the 3D-integration system.

Beating *Tonic Trouble* will therefore entail mastery of the plot as well as the joystick. The game's dynamic personalities provide vital clues and much of the challenge will come in wheedling out the facts. How exactly this interaction will work in practice is unclear, but Ubi Soft is adamant that *Tonic Trouble* will be an adventure as much as an action game.

Tonic Trouble is being created by Michel Ancel, the designer behind the PlayStation hit *Rayman*, and it shares some similarities. Like *Rayman*, *Tonic Trouble*'s Ed starts life as an untalented weakling. As the game proceeds, he acquires new objects and powers, radically transforming his capabilities. It's a neat trick (somewhat like *Mario 64*'s hat system) since it rewards players while

simultaneously presenting new skills to master. Ancel says other lessons came from his work on a cartoon version of *Rayman*. 'You can achieve the same sensation of fear, suspense and excitement without having to watch 'em bleed,' says Ancel.

Like many French designers, Ancel finds inspiration in eclectic places. *Tonic Trouble* was inspired by the storyline to LucasArts' seminal adventure *Day of the Tentacle* and the otherworldly feel of *Zelda* on the SNES – a briefing in videogame genetics. Suggestions that the plot is driven by two central concepts – a blameworthy hero and the idea that a haphazard accident can invert everyday notions of normality – is more surprising. Yet these ideas are evident in the gameplay. Ed is a blundering idiot when he sets foot in *Tonic*'s worlds, where vegetables happily feast on animals. Whether these ideas have inspired a cohesive alternate environment or merely a token surreal one remains to be seen.

Graphically, the game is dazzling. Both the 3D-accelerated PC and N64 versions are gorgeous (although the latter will suffer a reduction in graphic detail). The challenge lies in marrying meaningful character interaction to a game style based primarily on the mechanics of 3D exploration. Overcoming these difficulties will doubtless move the genre on nicely.



Ed has all the skills a good 3D platform hero needs, including the ability to swim both underwater and across the surface



VIGILANTE 8

While many will criticise the disappearance of the plot-led environments of *Interstate '76*, Activision's PlayStation version eschews them for some frantic arcade-style scenarios



The twoplayer split-screen mode (top) should further extend the game's longevity



Pleasingly, the vehicles in *Vigilante 8* display several levels of realtime damage as a direct result of serious firepower (above). While the action takes place in a variety of environments, some of them prove surprisingly unorthodox (top right)



After its excursion onto the PC, *Interstate '76* had been scheduled to make an identical appearance on Sony's grey machine, but after a series of delays and name changes, the project was finally cancelled. Its replacement *Vigilante 8* may carry some of the elements originally seen in Activision's alternative Seventies fest, such as the cars and the setting, but the overall difference is significant. Rather than a plot-driven adventure, the game is firmly focused on the car-based combat aspects of its predecessor.

The player is again thrust into the American southwest, where two gangs equipped with fully armed, V8 supercharged vehicles battle it out for supremacy. As a member of either the Coyotes or Vigilantes, players choose one of the 12 vehicles on offer then fight their way through an equal number of arenas. These differ greatly from each other, not just in their setting but also in size. A player may find himself trapped within the claustrophobic feel of a southwestern powerplant, for example, only to progress to the airiness of a ski slope (complete with

slalom gates still in place) or the vast extravagant expanse of the Hoover Dam.

However, the scenery is not just present for aesthetic purposes. Much of it can also be destroyed, and therefore used against the enemy's vehicles. Shoot a tower, for example, and it will come crashing to the ground, severely damaging anything or anyone foolish enough to remain motionless beneath it. Destroying the buildings and objects scattered around sometimes releases health pickups or a series of weapons which make a rather worthy addition to the relatively weak default machine gun. Another satisfying touch is the realtime progressive damage that occurs to the cars themselves: body panels dent significantly, windows shatter and exhaust pipes trail on the ground, before one more hit permanently disconnects them from the chassis.

From the latest playable demo **Edge** has seen, *Vigilante 8* offers a deeper experience, with better and faster gameplay, than any of its (admittedly few) competitors, and should therefore have little trouble in surpassing their efforts on release.

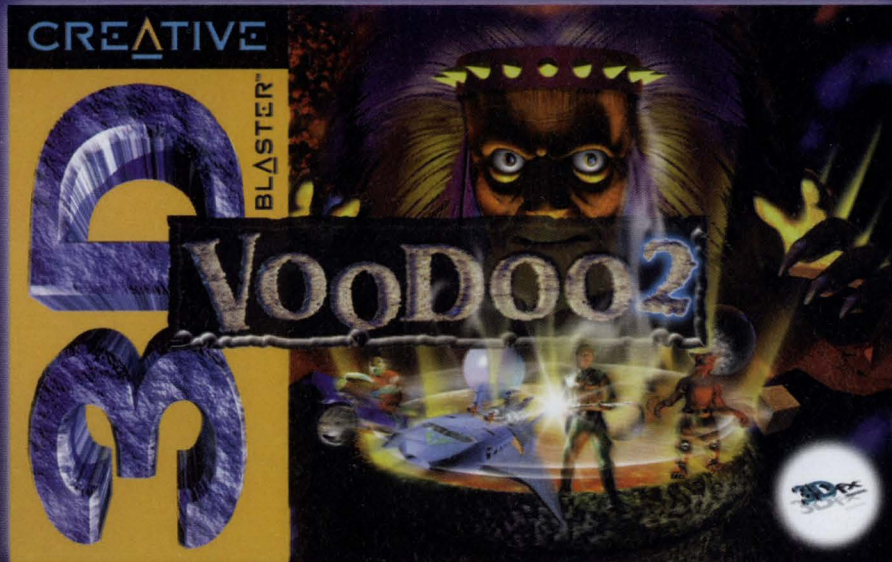


One of the game's strengths is the sheer size of some of its arenas; a little exploration can reveal unexpected elements

Format:	PlayStation
Publisher:	Activision
Developer:	In-house
Release:	May '98
Origin:	US



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As the PC market readies itself for the next phase of 3D acceleration, one of Britain's emerging exponents of the technology is launching a spectacular arcade-style assault. **Edge** roads it to Rage...

Technology enables. That's been the overriding theme of the 20th century, and nowhere is it more evident than in the computer industry. And one of the key trends of the games development community has been, by design or simple luck, being in the right place at the right time. Rage Software, with offices in Liverpool, Birmingham, Newcastle and London, looks to be in just such a position right now, preparing to ride the next wave of PC graphics acceleration all the way to the beach.

The company's spectacular action/strategy title *Incoming*, previewed in E55, will be the first of its products to be unleashed. **Edge** reached northward to Liverpool in a bid to discover more about the game and its stablemates, and to question Rage founder **Paul Finnegan** on the company's move into self-publishing.

'It's happened a little bit faster than we all thought, actually,' he begins, 'The first title we were going to publish had to be a bit special. When we saw the early code and initial graphics [for *Incoming*] we knew straight away that it had to be this product.' With Compaq already licensing a heavily cut-down 'OEM' version of *Incoming*, and massive interest from all the major players in the market, including Intel and 3Dfx, Rage's decision looks to have been correct. There are also rumours that Sega has been knocking with its

next-generation hardware, although when asked, Paul is – unsurprisingly – circumspect about this. 'We only want to publish on PC at this stage, we're very nervous about getting involved in the console business, because of the cost of goods and potential inventory problems. We might dip our toe into the PlayStation market, but it's a big might.'

Moving out from under the wings of previous publishers EA (*Darklight Conflict*) and Codemasters (*Jonah Lomu Rugby*), is presenting a whole set of fresh challenges for Rage. 'It is a risk,' Paul begins, 'there's no getting away from that. The big change now is that we've gone from being funded over the period of development to paying for it ourselves. So obviously it's been a big transition and it's cost quite a lot of money.' And the benefits? 'When you're developing for someone else, you effectively hand over the gold master and it's all left to the publisher. We're making decisions



Rage founder **Paul Finnegan** remains the company's guiding light

now - everything's in our control.' Before moving on to look at Rage's new titles, **Edge** couldn't resist finding out whether Paul's admission that, 'We concentrate on the arcade side, we're not big on the strategy element,' comes from a man who still plays games. 'I have of late, particularly *Incoming* and the new one from our Newcastle office – *Expendable*. It's only early days, but I can't put that one down. The guys use me as a sort of test bed, when they want to see how a ten-year-old would play. My reactions went some years ago...'



The Liverpool-based development team is now at full-tilt, cramming as much into *Incoming* as time will allow, from new stages to fine tuning the game's strategy elements

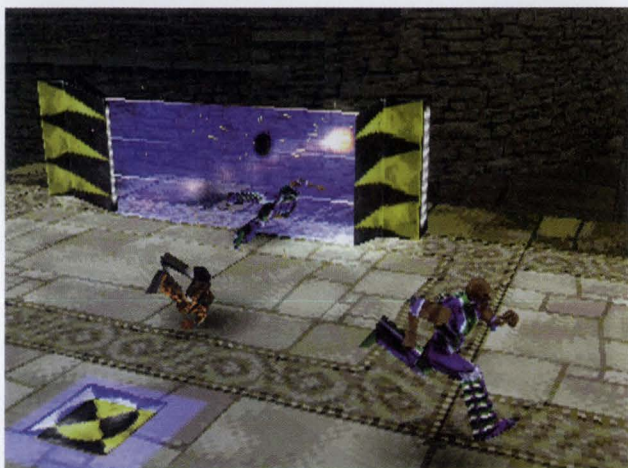


Incoming's Kristian Ramsey-Jones, Stephen Lord, Ian Moran, Roy Bannon, Karen Davies-Downey, Charles Davies, Scott Johnson and Alan Webb

Rage Deputy MD Trevor Williams runs the Birmingham office with a hands-on approach



DEADBALL ZONE



Fast, frantic and fun, *Deadball Zone* is packed with playability

When the Rage team heard that the Bitmap Brothers had no plans to update its fondly remembered *Speedball* series for the current generation of consoles, the temptation proved too much to resist. Rage deputy MD Trevor Williams is open about this, but adds: 'Lots of games are inspired by stuff that's been done in the past. I don't think anybody has done anything close to *Speedball*.'

And so *Deadball Zone*, set to be published by GT Interactive in May, is Rage's interpretation of the future sports theme. As expected, *DBZ*'s graphics engine is now 3D, rather than employing *Speedball*'s top-down viewpoint, but Williams says it maintains a similarly rapid pace. 'It's got that feeling where you run up the pitch, whack it into the goal and shout "Yes!" – and that's really important for a sports game.'



Pressed to explain what players can expect from the game, Williams elaborates. '*DBZ*'s best feature is scoring goals, and that's what the most effort has gone into. You have to feel like you've beaten the keeper, that it hasn't just let you score. It's quite easy to get the players to move around and do things, but you have to feel convinced you've beaten the computer team.' As in all sports games, the importance of good AI routines is paramount to achieving the right feel. 'Our main AI programmer Tony McCabe is working on *Ruud Gullit Striker*, but he's sat down with Chris (DBZ's lead



programmer) at various stages through the development of *Deadball Zone*, and suggested things that have helped. The teams cross-fertilise all the time, which is great.'

Also found in the best sports games is the sort of instant accessibility Rage has installed in *DBZ*, as William explains. 'We learnt that from making *Lomu*. We tried to make rugby very simple, so we had a system where you could play with just the X button, but if someone knew how to do all the other things they'd hammer you. We've built on that for *Deadball Zone*.'

Over time, players will be able to assimilate a full repertoire of

attacking moves, much as in a good fighting title such as *Tekken*, while still being able to compete in the somewhat violent matches. Injuries, blood and even vomit are all sideline attractions to the game, although the final level of violence is yet to be agreed with GT. The overall feel, however, is more Hanna Barbera than Tarantino.

As for *Deadball Zone*'s actual relationship to the Bitmap Brothers' games, the bloodline is dry. 'We tried hard not to play *Speedball* during development,' Williams points out. 'We only got it out about two weeks ago, but we realised how much things have moved on. It just felt so sluggish.'

Having recently resuscitated its old Amiga version of the game, **Edge** finds it hard to agree. Rage has a tough old-timer to beat.



Visually *DBZ* is a match for the better PlayStation titles



Deadball Zone staff, left to right: lead programmer Chris Southgate and graphic artists Andy Taylor, Dan Cook and Jon Curtis

eXpENdable



Two-player action is of the old school, blast-heavy variety

Despite having been somewhat neglected of late, the top-down shooting genre has hosted some of gaming's most influential titles. Games such as *Gauntlet*, *Gunsmoke* and *Ikari Warriors* offered tight, challenging, frantic action, and in doing so etched themselves into the memories of gamers across the globe. Yet there have been very few attempts at recreating such seminal titles for the current level of technology. In timely fashion then, Rage's Newcastle office has launched its own assault on the



While early shots imply a *Tomb Raider*-style viewpoint, the version played by Edge resembled the top-down classic *Ikari Warriors*

genre with *Expendable* for the PC and the PlayStation.

Although the project is only three months into its development cycle, the game's visuals are already impressive, again displaying Rage's adept use of 3D acceleration. Searing explosions can be ignited at almost every turn, with weaponry such as the napalm ring more than living up to its name. Other devices are still being finalised, and will most likely be collected by the characters as power-up objects.

Project manager **Peter Johnson** is adamant that *Expendable* will be more than vacuous eye-candy. 'It's good for the PC to be back on the leading edge for a while, but all the graphic touches we are including are there to support the game and to help build a believable and immersive game environment – not just to look pretty.'



Expendable's range of weaponry is eye-catchingly destructive

Hedley is intent on hitting the metal in the time-critical sections of code, to wring every last drop of performance out of it. But we won't compromise the PC version to accommodate the PlayStation. If something needs to be done differently on the two platforms, it will be, playing to each platform's strengths and weaknesses.'

The 3D engine that programmers Phil Scott and Kevin Franklin have created is enabling level editor Duncan Hall to create a fantastic blend of environments, from tunnels and underground bases to ruined cities. The AI will also add variety to the game, according to Johnson. 'Enemies will not always react predictably. You may be running down a gulch to find the enemies abseiling in from above, springing upon you from the ground below like trapdoor spiders, or leaping out from behind an abandoned vehicle. Expect the unexpected!'

Although PC cards allow an undoubted degree of graphical muscle, **Edge** can't help feeling that *Expendable* would fare better as a console title. Luckily, Rage is also working on a PlayStation-specific version. 'Our PSX programmer Mick

Between now and the game's projected release around the end of the year, the group will be working hard to include as many features as possible. Currently implemented are two-player and deathmatch modes, while more specific details, such as the ability to use various vehicles scattered around the landscape, are still subject to debate. If *Expendable* can live up to the standard set by the games that built its genre, then PC gaming is in for an adrenaline injection this Christmas.



Lighting effects, facilitated by 3Dfx, cry out for attention

RAGE

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Hostile Waters staff, left to right: programmer **Tim Austin** and graphic artist **Jon Court** with Birmingham graphics manager **Dave Percival**



HOSTILE WATERS

'definitely an influence', it's clear that Rage has ambitious plans to move the concept on. Again following the Rage house style of exploiting the raw power of PC acceleration, *Hostile Waters* is already mightily impressive, showing a commendable difference in visual style from former creation *Incoming*. In fact, the two games use different graphics engines (the *Incoming* team is based in Liverpool, while *Waters* is being coded in Birmingham), although Williams feels that if *Incoming* hadn't existed then neither would *Waters*. He also claims both titles are at the forefront of their genre. 'Sometimes they seem like R&D projects, pushing the edge – which means everybody wants to work on them!'

The 3D action/strategy genre is evolving rapidly to take advantage of modern technology, with new entries, including Rage's own *Incoming*, confirmed every week. In such a frantic climate, it's easy to forget that *Carrier Command*, the grand-daddy of such games, actually appeared on the Atari ST and Amiga back in the '80s. Featuring drone craft directed into battle from a central aircraft carrier, *Carrier Command* (created by Realtime Games) was itself essentially a massive evolution of Atari's original 3D wireframe wargame *Battlezone*. Currently six months into development, Rage's promising *Hostile Waters* is an inspired update of Realtime's game.

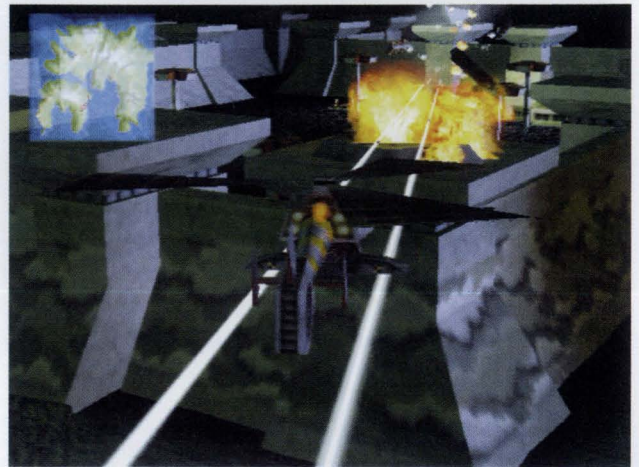
Although **Trevor Williams** will admit that *Carrier Command* was



Physics plays a major role in *Waters*, including destruction



***Hostile Waters* features an impressive volume of scenery. These screen grabs fail to convey the fantastic ebb and flow of the ocean**



As with *Incoming*, the explosive effects are superbly realised

Hostile Waters' biggest innovation is the integration of different personalities into the tanks, planes and other vehicles available for deployment. Rather than being mindless drones, attack craft may be aggressive, circumspect, even cowardly in their approach to combat, and can be heard talking to each other over the in-game radio. It's reminiscent of the comic 2000 AD's 'Rogue Trooper' and his weapons, which carried his dead comrades' minds on chips. Also of note are the



reactive physics models, which can result in successful missile strikes flipping enemy tanks over the edges of cliffs. Furthermore, all the terrain in *Hostile Waters* will be deformable with weaponry, although it hasn't been decided how this will affect the overall gameplay.

Overall, Williams says the team are trying to maintain Rage's commitment to arcade-style gaming. 'You're the trigger puller. But you need the strategy element, you need some depth there. It's great actually getting in the tank, but it's nice to have put the tank there in the first place. He explains: 'that's what *Command & Conquer* was, really: it wasn't a strategy game, it was an action game. If you weren't dextrous enough, you'd get your ass kicked.'

Striker staff, left to right; graphic artist Steve Johnson, programmer Paul Kerby, audio technician John O'Dowd, development support manager Julian Widdows, head of development Andy Williams, graphic artist Gordon Theobald and programmer Antonio Argentieri

RUUD GULLIT STRIKER



Animation is being controlled by artists rather than coders

Rage's founder Paul Finnegan was also behind its first product, the multi-format, million-selling football title *Striker*. But while the project is obviously close to his heart (he still plays football when he gets the chance), his input on its update is fairly limited. 'I've left that to the Birmingham site, because they programmed the original game on the PlayStation. They do ask me to test it, particularly the AI. If I can help, I will.'

After originally dubbing the forthcoming release *Striker '98*,

Rage has now enlisted ex-Chelsea manager Ruud Gullit to give the title a name licence. The general feeling around the company is that Gullit's name will outlive his current troubles after his recent unexpected departure. *Ruud Gullit Striker* will feature all European international teams, along with the top two divisions from each of the major nations. Obligatory commentary is provided by Channel 5's Jonathon Pearce, backed up by both Ron Atkinson and Trevor Brooking.

As in *Deadball Zone*, the attention paid to the sporting AI has been all-important, says Trevor Williams. 'I think this is probably our sixth or seventh-generation AI engine, and the techniques we use are what has helped. You build on things, take it to the next stage. It's all about experience, you learn by your mistakes.'



Both PC and PlayStation versions of *Ruud Gullit Striker* feature well-simulated lighting effects. The floodlights are particularly nice

WAR OF THE WORLDS

Developed by Rage's London office, *War of the Worlds* is a strategy title for the PC, based around HG Wells's groundbreaking sci-fi tale of Martian occupation. The game's actual conception was the work of Jeff Wayne, creator of the 1970's album of the same name, and is similar in execution to *Command & Conquer*. Music from Wayne's album will feature in the game,



Martian invaders of the classic variety make a welcome change

along with a few, as yet unconfirmed, dance music artists.

The game commences with the Martian attackers descending from Scotland and the human forces centralised around London. With the play area divided into 30 sectors, there's a certain resemblance to the board game *Risk*, also witnessed in the ongoing (rather than mission-based) combat.

Rage's London artists have based the various battle craft on the technology available at the time of the book's writing, which has resulted in World War One-style tanks, (although the Martian apparatus is classic B-movie stuff). With the 100th anniversary of Wells's novel taking place this year, Rage's title should benefit from a concurrent publicity wave, a major boon given the crowded nature of the PC strategy market.

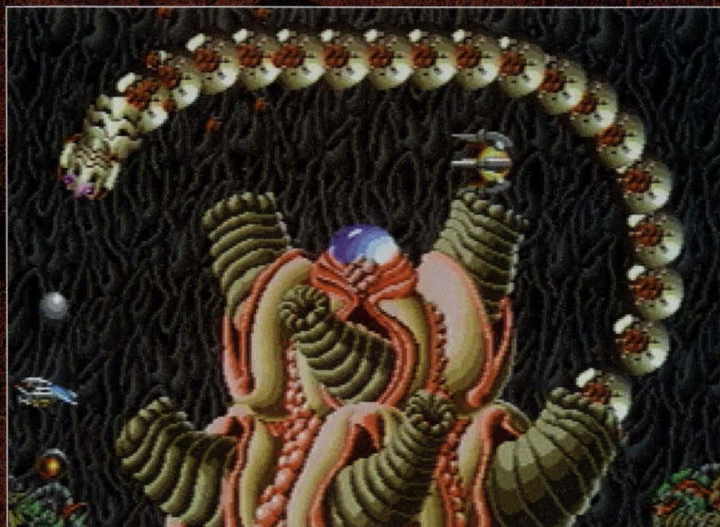


War of the Worlds stakes its claim on the action side of the fence. The use of sprites allows for detailed and characterful visuals

R•TYPES



Fact: Irem's R-Type is unquestionably the greatest shoot 'em up ever created. But how can a 2D game over a decade old still cut it in an age obsessed with sophisticated 3D? Easily, and an immaculate PlayStation conversion is the proof. Edge studies a textbook model of shoot 'em up perfection



R-Type's dazzlingly imaginative, semi-organic creations betray the influence of HR Giger – but Irem had other sources of inspiration, too (above). Its graphics, however, were only one of a series of breathtaking innovations



While *R-Type* (top) and its 1989 follow-up (centre) are included on *R-Types*, the final coin-op, *R-Type Leo* (above), is omitted

In recent years the re-release of so-called classics from the annals of coin-op gaming history has, more often than not, been a desperately sobering experience. Many games once revered as distinguished examples of a genre, simply can't cut in today's polygon-obsessed games market. A common problem is that simplistic and dated visuals can now undermine the desire to progress through a game's levels – the goalposts have been shifted and a whole new set of expectations are in place. Ultimately though, the intervening years have seen a progression in certain types of arcade-style gameplay and nostalgia is often the only motivation left in retrogaming.

R-Type is a thoroughly overqualified exception to this trend. Released in the autumn of 1987, Irem's blaster was one of the early breed of games to utilise 16bit coin-op technology – something immediately borne out by the sheer quality of its graphics. But its visual sophistication was underpinned by some ideas that would change the shoot 'em up for years to come, despite the fact that few coin-op designers mimicked its innovations with any degree of success. *R-Type* had done everything perfectly, and the hordes of inferior, rival clones that appeared later, merely reinforced this. A cult was born.

A perfectionist's dream? Ten examples of how Irem's designers seemingly stopped at nothing...



1. The stylish, understated nature of the title screen. Coin-ops were *never* understated...
2. The magnificent design of the R9 itself - beautifully realised and impossibly detailed.
3. The light-sourced, semi-organic scenery created by some intelligent use of colour (in a similar fashion to the Bitmaps' *Xenon 2*).
4. The tractor beam that sucks energy into the nose of the R9 while holding down fire.
5. The hollowed-out explosions which became an industry blueprint. *R-Type* is where they started.
6. The huge range of catchy and usual sound effects (such as twinkly, bleepy enemy explosions) that denote player rewards superbly.
7. Subtle animations such as the way the R9's shields flatten out when the player accelerates.
8. The realistic stream of bubbles that trails behind the submerged R9 in *R-Type II* (level 2).
9. *R-Type's* rotating ring of enemies on level one that the R9 enters and duly detonates (far left).
10. The different coloured canopies on the fleet of R9s in the first game's end sequence.

R-Type



All these screens are taken from the PlayStation version of *R-Types* which delivers pixel-perfect replicas of the original games. With the possible exception of the final stage, every level in *R-Type* is an event, each containing some subtly different gameplay characteristics

- ◀ *R-Type*'s success in the arcades meant that conversion to various home computers and consoles was a given, and it was NEC's diminutive but potent PC Engine console that first played host. Fortunately for NEC (and thanks to the skillful conversion team at Hudson Soft), PC-E *R-Type* was virtually arcade-perfect and was released on two separate 'HuCards' – each containing four of the game's eight levels. Despite this, the leap in performance over the most popular consoles of the day, such as the NES, was all too apparent and *R-Type* was the killer app NEC needed to transform its machine into a gamers' dream. PC Engines flew off the shelves and many even made it over to the UK, kickstarting the grey import market in the process.



Some rough footage of the forthcoming polygon-based *R-Type Delta* is included on *R-Types*...

That was 1988. A coin-op sequel arrived a year later in the form of *R-Type II* (a title that was later translated into the lacklustre SNES title *Super R-Type*), while the final coin-op in the series, *R-Type Leo*, appeared a few years later to a decidedly lukewarm reception. Consequently, Irem pulled the plug on its coin-op development – ultimately squeezed out by the growing market for high-end dedicated coin-ops like *Daytona USA* and *Ridge Racer*, and the gradual slump in the PCB market. A withdrawal from the console arena followed shortly afterwards.

The release of *R-Types* for the PlayStation in Japan marks the company's return to software publishing – as Irem Software Engineering – and perhaps more pertinently, is yet another boost for the PlayStation's profile in the eyes of the hardcore gamer who the series is targeted at. 'We were inundated with requests from fans of the game so it seemed like a logical step for us to convert the games to the PlayStation,' revealed Irem's **Keith Masuda**. 'It was a difficult task despite the fact that the PlayStation hardware is better than the arcade board. We had to recode the games specifically for the machine [rather than running them under emulation like Namco's *Museum* series] but it's been worth it – the games have been transplanted perfectly.'

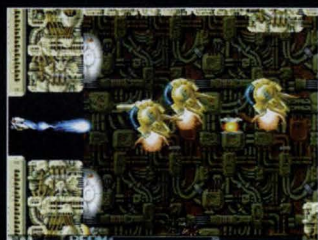
As a testament to its enduring appeal, it's extremely difficult to find fault with any aspect of Irem's original design in *R-Type*. It's one of those rare games that was virtually perfect from the outset, setting standards of excellence that no developer could hope to match. The graphics are sublime and still amazingly detailed even by today's standards, and the sound punchy and atmospheric. But it was its gameplay, packed with so many innovative ideas, that made it such a timeless concept – and one that has little in common with contemporary design sensibilities.

The imaginative power-ups and stock weapons are perhaps *R-Type*'s most obvious strength. A perfectly balanced firing system allows either a stream of bullets or – after holding and releasing fire – a powerful blue beam to be unleashed, but not both simultaneously. The detachable shield (which can be powered up itself several times) is the game's crowning glory, though, with many of its subtler features only becoming obvious after considerable play.



... as well as some additional gallery-style sections packed with extra info (in Japanese)

R-Type II



R-Type II entered arcades in 1989 and made amends for the weak interpretations endured by the ST, Amiga and SNES. Perhaps less-well-rounded than the original, Irem's sequel is still a truly memorable blaster with some stunning visuals and exceptionally tough gameplay



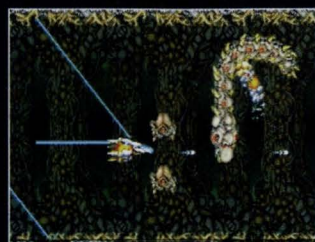
The pace is stepped up during the final four stages where progression is inextricably linked to accruing power-ups. Things really start to get tricky during the navigation of level six's hi-tech maze (second from left) and the penultimate level – a punishing test of joystick dexterity

This can be attached to either the front or back of the R9 ship – certain sections requiring the player to switch it around quickly – and can also be fired off as an independent satellite with its own firepower. It was an ingenious creation.

Unlike a seemingly randomly generated old-skool blaster like *Asteroids* or *Defender*, *R-Type*'s appeal was always firmly lodged in its pre-determined paths of enemy attacks. While this might appear contrived, it was a design that enabled players to get to grips with an immensely challenging game. '*R-Type* isn't so much a shoot 'em up as a memory test,' concedes self-confessed addict **Fred Williams**, lead programmer at Corrosive Software. 'But somehow it never got too samey. There are three heavy-alien-onslaught levels, three long corridor levels, and two odd ones – the alien mothership and the maze – and you have to memorise, really really well, two safe routes through all eight. One for when you're fully powered up, and another much harder one for when you lose all your weapons. As a result *R-Type* was one of only two arcade machines I've put considerably more than a couple of quid into...'

Julian Eggebrecht, head of Factor 5, the team responsible for the Amiga conversion, offers some final thoughts: 'I vividly remember the first time I played *R-Type*. It was a new kind of shoot 'em up with almost intellectual depth. I liked everything about it. I was also shocked by the amount of innovation and gameplay possibilities with the shield that I died a hundred times in the first level just trying out different ways to play it. Also, graphically it was unusual because it was one of the first games to use pastel colours at a time when everyone was using harsh reds and greens. It still holds up fantastically well compared to other shooters today.' Too well, perhaps... **E**

R-Types is currently only available for the PlayStation in Japan, but **Edge** has already been contacted by UK publishers interested in picking it up for a PAL release. A new 3D interpretation, *R-Type Delta*, is expected in the summer.



Visually, the last two levels of *R-Type II* bear the hallmarks of a rush-job when compared to earlier stages. They're uncompromising, too

Heart-stopping moments

Both *R-Type I & II* contain some of the most glorious moments in shoot 'em up history. Moments when the R9 has probably just lost all of its weapons due to an untimely collision with a wall. Moments when blind panic seems like the only option...



R-Type, level 3

While dodging an onslaught of enemy fire the player has to navigate the R9 around a gigantic alien mothership before swooping down and blasting its vulnerable core. This stage is one of the game's most celebrated set-pieces.



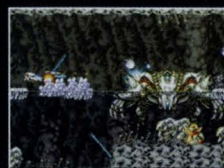
R-Type, level 4

Halfway through the maze of green blobs a pack of aliens suddenly crawl on from the back of the screen. The only hope is to get the shield onto the rear of the ship (if you can find enough room) and watch the front carefully....



R-Type, level 7

A space station where enemies pour onto the screen and sections of the walls explode. Why does that ominously passive red enemy vessel cruise on from the rear of the screen? Simply because Irem knows it will bewilder the player.



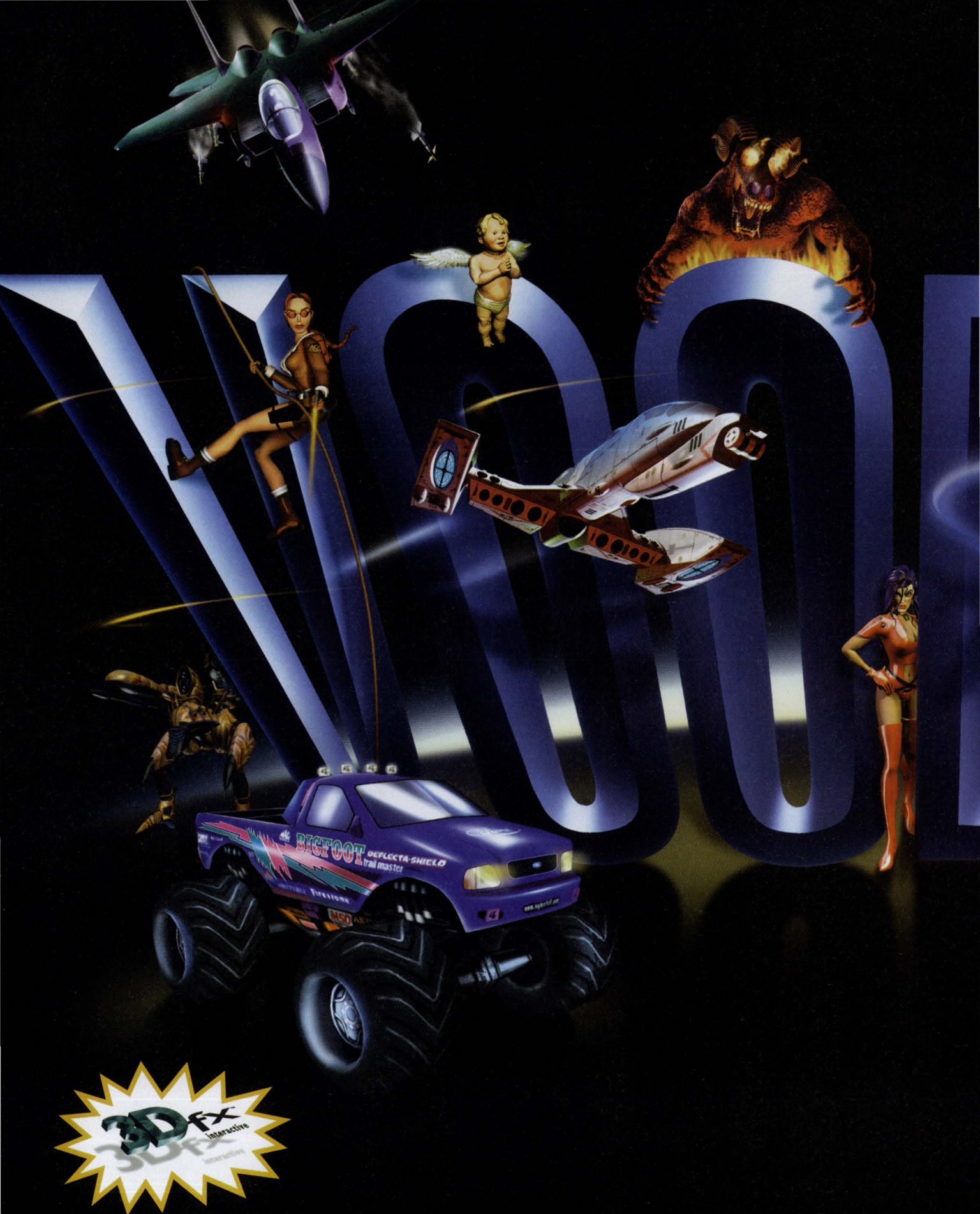
R-Type II, level 2

The R9 is submerged in water for much of this stage but it isn't until a crab-like mid-level boss appears that panic sets in. Icebergs form on the water's surface, the screen fills with aliens and a mad few moments ensue...

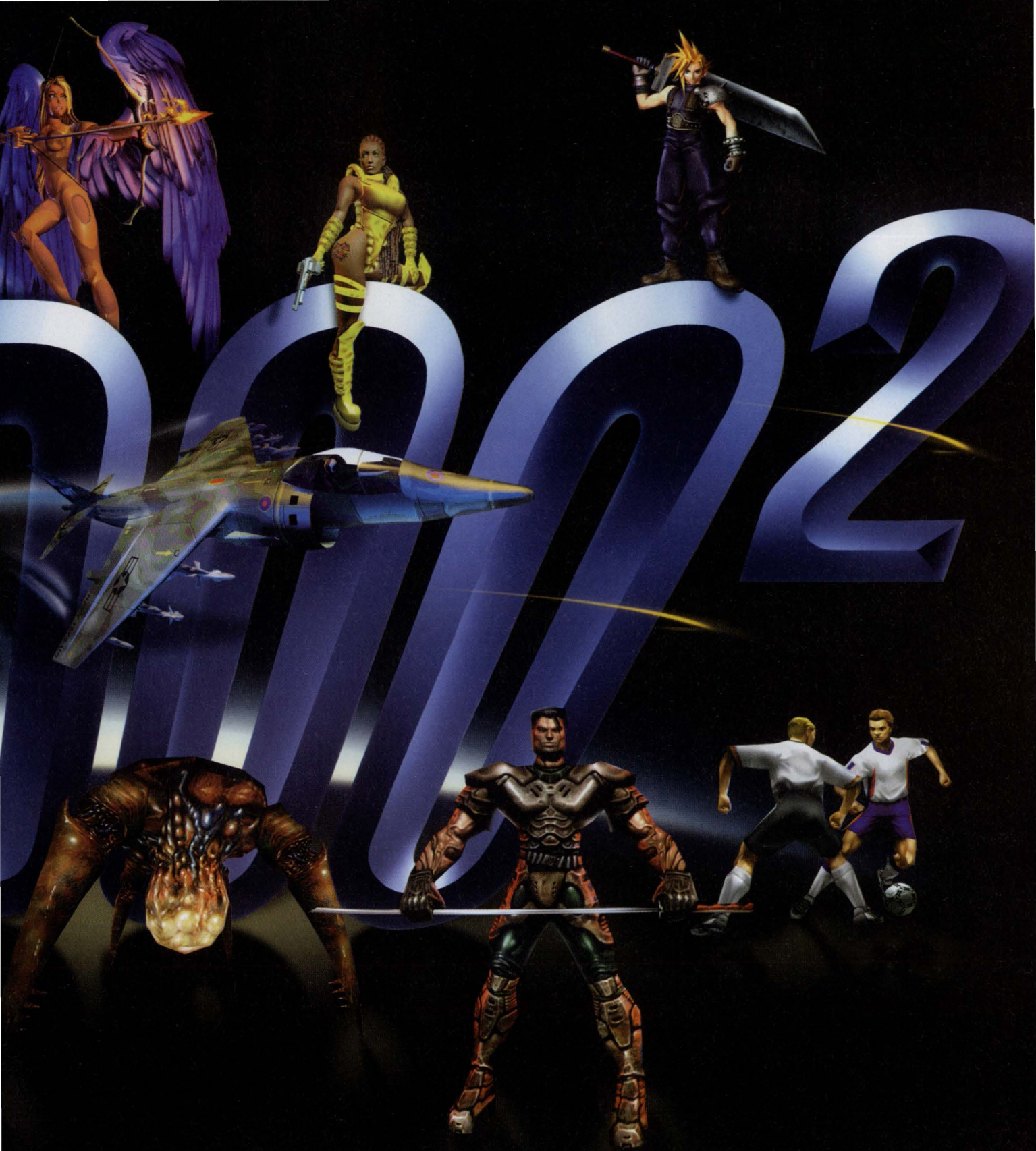


R-Type II, level 3

Follows in the footsteps of *R-Type*'s third level a bit too closely, perhaps, but includes two onscreen motherships and yet more frantic squeezing of the R9 through impossibly tight gaps. A huge and horribly tough final boss, too.



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REVIVAL OF THE

'The past is a foreign country: they do things differently there'

LP Hartley, 'The Go-Between'



FITTEST

Classic videogame designs reanimated by Edge

One thing last year's retro gaming craze taught veteran players, is that memory can be a cruel deceiver. How many children of the 8bit age must have excitedly accessed emulation Websites and downloaded fondly-remembered titles like *Beach Head*, *IK+* and *Uridium*, only to stand back in abject horror when presented with an ugly barrage of blocky pixels and simple chipset sound?

Of course, videogames aren't all about great visuals and symphonic music. These will always be subordinate to gameplay, and all of the genres people play today boast a long dynasty with gameplay as its lifeblood. There is, for example, a long, cogent line which connects *Way of the Exploding Fist* to *Tekken 3*, just as there are clear

links between *Pole Position* and *F1 '97*. Indeed, when people complain that there are so few genres now, they are forgetting that they really only have themselves to blame. In its short life to date, the videogame industry has undergone a Darwinian process of natural selection, with only the most popular game styles surviving to seed the successive generations. If there are dozens of beat 'em ups, racing games and sports sims around, it is because players picked these genres to survive.

That's not to say the genres we have now represent all the good ideas the videogame community has ever produced. Brilliant aberrations like *Sentinel* and *Mercenary* were just as important and successful as the likes of *Kick Off* and *Yie Ar Kung*

Fu, but they were so original, that imitations simply weren't possible. They stood, and died, alone.

Recently, the industry began rediscovering the value of these rogue ideas. Nintendo has been raiding its store of 8- and 16bit innovations for the last three years, with titles like *Pilot Wings 64*, *Star Fox 64* and *Mario Kart 64* still among the N64's finest moments. Similarly, *Sentinel Returns*, *Virus 2000* and *Sim City 3000* are all in the pipeline.

With this in mind, **Edge** has produced its own list of the key games boasting invigorating, individual ideas that could easily be transferred to today's market. Not all are classics, but each added something singular and experimental to game design history. How many *Quake* clones and football titles can claim that? ▶

Updating a classic

Jeremy Smith, Eidos



'The classic game I would update is *Rick Dangerous*, because it had all the qualities of a good platform and puzzle game. I would make it 3D, but keep the cartoon feel and humour of the title – too many games take themselves too seriously these days. Gamers today want titles that really play well rather than those that look good but offer little else.'

SUPER METROID

IT WAS... The sequel to NES platformer *Metroid*, reviving the original's lead character Samus as she travels to the planet Zebes to locate and destroy an evil larva and its many minions. **Edge** originally described it as 'a futuristic side-on, scrolling adventure with *Zelda*-esque overtones'.

WHAT WAS ALL THE FUSS ABOUT? Dodgy story aside, what captivated players were the challenging level designs, the sprawling play space and the wealth of secret areas and weapons. There were also dozens of interesting collateral features, such as an electronic rope which could be used to swing across chasms, and the morphing ball, which transformed the player into a tiny sphere capable of

accessing tiny gaps in the scenery. A fine arsenal of weapons and the ability to access computer terminals to gain important level information were the finishing touches to an imaginative and addictive ensemble.

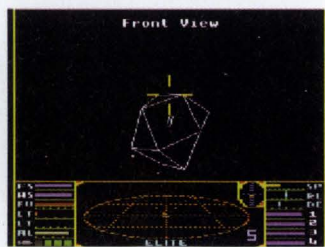
HOW COULD IT WORK TODAY? If ever there was a project to put Lara Croft in her place, it would be an all-new *Metroid*, with Samus asserting her place as the original female adventurer. Perhaps the game's best facet was the opening up of added areas as new abilities were gained; it's this that **Edge** would like to see revived.

WHO COULD PULL IT OFF? Nintendo, of course; *Super Metroid 64* is a mouth-watering proposition.



Publisher: Nintendo Developer: In-house Format: SNES Release: 1994

ELITE



Publisher: Firebird
Developer: David Braben & Ian Bell
Format: C64, NES, Spectrum, Amstrad,
BBC Micro, Amiga, Atari ST
Release: 1984

IT WAS... Perhaps the only classic videogame to premiere on the BBC. *Elite* was a singular combination of space flight sim, trading game and shoot 'em up. The player began the game with 100 credits and a Viper craft (the spaceflight equivalent of a Skoda), and had to progress by destroying other ships and getting rich. Along the way, government bodies would offer the player various missions with cash rewards, so the ship could be fitted with better weapons, shields and, crucially, a docking computer.

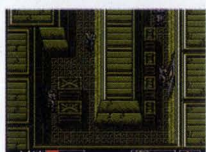
WHAT WAS ALL THE FUSS ABOUT? Although the vector-based graphics were simplistic in the extreme, *Elite* evoked an incredibly realistic atmosphere, perhaps due to the utterly open-ended nature of the game design. Players could simply orbit one planet, destroying trade ships and stealing their cargo, or they could lead a peaceful life jumping around the galaxy, trading in various goods and services. To add a little spice to proceedings, it was also possible to get involved in narcotics, arms and

slave smuggling – hugely profitable, but likely to attract the deadly attentions of police craft in law-abiding systems. Few space trading games have matched the sheer depth and compulsion offered by this 8bit classic.

HOW COULD IT WORK TODAY? Obviously texture-mapped spacecraft would be a huge step forward, as would a greater diversity amongst the cultures on different planets. More than anything else, however, *Elite* would benefit from becoming a totally online event, rather like *Meridian 59*. Players could form alliances with other pilots via an in-game email system or simply become nomadic pirates picking fights or planet colonisers. Importantly, the gameplay would remain totally open-ended, allowing users to create their own totally individual adventures.

WHO COULD PULL IT OFF? Psygnosis has proved its visual space adventure competence with *Colony Wars*, although Origin/EA got closer to the spirit of *Elite* with *The Darkening*.

UNDER RECONSTRUCTION



METAL GEAR SOLID (KONAMI)
One of the key titles on Sharp's long-defunct MSX open computer format from Japan, *Metal Gear* (1987) was a top-down shooter where vigilance and stealth were more important than all-out shooting. The game brings the same interesting concept into beautifully designed 3D and adds a huge variety of new weapons and gadgets. There are also dozens of allied hostages to communicate with, and a well-developed storyline. Still from the Konami stable, the update is set to appear on the PlayStation. The game of '87 Could be.



R-TYPES (IREM)
Arguably the finest sideways-scrolling shoot 'em up ever created, Irem's 1987 blaster combined brilliantly complex, balanced gameplay with imaginative 2D graphics and a hugely inventive range of power-ups. Not only has Irem already released both *R-Type* and its sequel on the PlayStation in Japan (see p62), but the company is also working on the brand-new *R-Type Delta*, again for the PlayStation. Controversially, the company is abandoning 2D sprites in favour of polygon ships and backgrounds.



SENTINEL RETURNS (HOOKSTONE)
The original *Sentinel* (1987) was a singular C64 oddity in which the player had to sneak around a 3D terrain attempting to reach and finally absorb the supreme being watching from a pedestal in the centre of the level. The update, set to appear in the UK through PlayStation cornerstone publisher Psygnosis, retains the original's paranoia-inducing gameplay, but broadens out the learning curve and smoothes the animation. Will it all prove too slow for today's framerate junkies despite its engrossing gameplay?



MARBLE MADNESS



Publisher: Atari
Developer: In-house
Format: Arcade, C64, Spectrum, NES, Amiga, Atari ST
Release: 1984

IT WAS... A classic Atari coin-op in which the player had to guide a ball around a series of devilishly complex mazes within a strict time limit. The game inspired a number of clones, most notably Electric Dreams' *SpinDizzy* and The Edge's *Gyroscope*. Few of these, however, opted to support anything like the original's trackball interface.

WHAT WAS ALL THE FUSS ABOUT? The complex, multi-layered maze design was simply exceptional, combining slopes, chutes and steps with impossibly narrow walkways and bottomless chasms to create a fiendishly difficult but addictive experience. Best of all, the open layout of each level meant there were often several ways to reach the exit, with many requiring huge amounts of imagination, skill and flare from the player. Due to the realistic physics, control over momentum and velocity had to be mastered to make progress. There's great humorous detail, too.

HOW COULD IT WORK TODAY? A true 3D landscape and dynamic camera would give players a greater interactive

involvement with the world, and allow more complex routes to be attempted. A few new tricks and traps, and perhaps a more varied selection of surfaces to affect the ball's grip, would make welcome additions. A gyroscope or even a larger marble would force the player to complete each maze in a different way, adding to the longevity. The flexibility of analogue control would be a bonus.

WHO COULD PULL IT OFF? Shiny Entertainment titles like *Earthworm Jim* possess the quirkiness to make an updated *Marble Madness* work, and it's demonstrated a flair for 3D with its under-rated *MDK*.



HEAD OVER HEELS

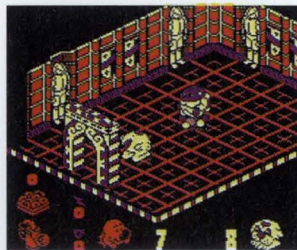
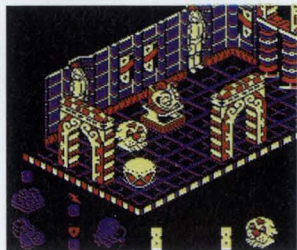
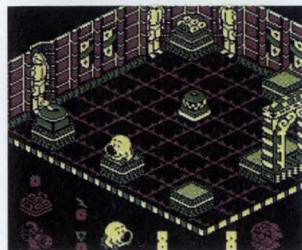
IT WAS... King of the 8bit isometric platform adventure games. Created by the Jon Ritman/Bernie Drummond collaboration that engendered *Matchday 1 and 2*, *Head over Heels* featured the pair of eponymous heroes in their sprawling quest to defeat an evil queen. While others had beaten the path before (notably *Knightlore*), Head and Heel's detailed and absorbing adventure excelled.

WHAT WAS ALL THE FUSS ABOUT? The game's best feature was the interaction between the two protagonists, despite their initial separation. Head could jump high and shoot the bad guys but moved slowly, while Heels was a

swift mover with a short leap and the ability to carry objects. Reuniting the two, after much playing, resulted in a symbiotic pairing that combined their abilities.

HOW COULD IT WORK TODAY? The character interaction could be enhanced, with a four-way N64 version offering fantastic multiplayer possibilities. Whether a polygon-based environment would be for the best is debatable, given most platformers' failure to survive the switch.

WHO COULD PULL IT OFF? Having fathered the aforementioned *Knightlore* in a previous life, Rare would be more than qualified to dabble in the genre once more.



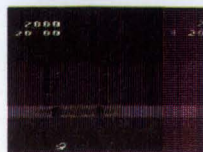
Publisher: Ocean **Developer:** Jon Ritman & Bernie Drummond **Format:** C64, Spectrum, Amstrad, Amiga **Release:** 1986

Updating a classic

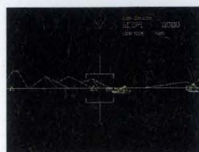
Jon Ritman, *Cranberry Sauce*



'Geoff Crammond's *Sentinel* was originally seen on most of the 8bit platforms and introduces a style of gameplay that had not been seen before or since. The graphics were in filled 3D, and there is plenty of opportunity to make them far more atmospheric on a modern machine. I would be interested to see a multiplayer version, along with a few more variations in level design and objects on the landscape.'



PITFALL 3D (ACTIVISION)
 Originally released on the legendary Atari VCS, *Pitfall* was a sideways scroller featuring an Indiana Jones predecessor leaping over crocodiles and swinging on vines to avoid traps. Activision's update keeps the same gameplay elements, but predictably transfers the action to third-person 3D, and beefs up the scenic diversity with a range of contrasting regions. Unfortunately, decent, intuitive 3D interfaces are tough to perfect (as *Croc* proved); much of the game's immediacy may have been lost in a promising endeavour.

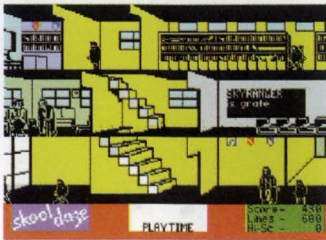


BATTLE ZONE (ACTIVISION)
 Limited and not pretty to look at, Atari's 1980 tank combat coin-op attracted a huge following nevertheless, perhaps due to its imaginative cabinet and clean vector graphics. Building on its *MechWarrior* experience for the follow-up, Activision has added a huge amount of scenic variety to the battlescapes and, more importantly, added much to the strategy side of the game, putting players in command of legions of different vehicles. Strong narrative, interesting weapons and an intuitive interface combine to create a modern classic.



VIRUS 2000 (FRONTIER)
 Released in 1988 on the Acorn Archimedes (under its original moniker of *Zarch*) and then converted to other 16bit formats, *Virus* was an incredibly idiosyncratic polygon-based flight shoot 'em up with a challenging 'hover and boost' interface. In the PC- and PlayStation-bound sequel, the player still has to prevent the spread of an alien virus, but now organic insect-like enemies replace the robots of old, and there is a human population to protect. Hugely promising...

SKOOL DAZE



Publisher: Microsphere
 Developer: In-house
 Format: C64, Spectrum, Amstrad
 Release: 1985

IT WAS... Difficult to categorise – even now. *Skool Daze* was a platform puzzler set entirely in a school building that occupied just a screen and a half. The player took on the role of idle student Eric, whose mission was to steal his report card from the headmaster's room and avoid a sound reprimand from his parents. To do this, it was necessary to discover the head's safe combination, a complex process which involved assaulting many of the school teachers with a catapult.

WHAT WAS ALL THE FUSS ABOUT? Not only was *Skool Daze* a genre unto itself, but the game also exuded an anarchic slapstick humour which proved more compelling than actually trying to complete the set mission (GTA, anyone). Players could bully other pupils, write obscenities on blackboards, skip lessons (the game featured a rigidly enforced school timetable), and generally behave in ways

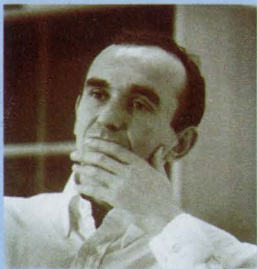
they dare not in real life. Fantastically good 8bit fun.

HOW COULD IT WORK TODAY? The most memorable elements of the game were its humour, its revelry in casual violence and the fact that there were so many activities which had absolutely no effect on the main thrust of the plot. A third-person *GoldenEye*-style 3D perspective and a larger game map would be useful additions: players would then be able to shoot at teachers in the playground from a first floor window, or explore the kitchens, cellars and staffroom missing from the original. A wider selection of schoolyard weapons to deploy would also make things more interesting.

WHO COULD PULL IT OFF? Bullfrog is one company well versed in making supremely marketable games out of off-beat material – witness the success of *Theme Hospital*. Perhaps a more strategy-inspired game would result.

Updating a classic

Peter Molyneux, Bullfrog



'Interplay's *Wasteland* was an old-style C64 graphic adventure game, and is the most atmospheric game I have ever played. When you had encounters, you had real weapons; my favourite was turning bunny rabbits into blood sausages. The plotline seemed to allow you to do anything you wanted, although in reality it was linear. It would be perfect as a first-person adventure using current 3D technology.'

S O S

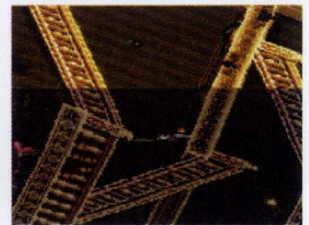
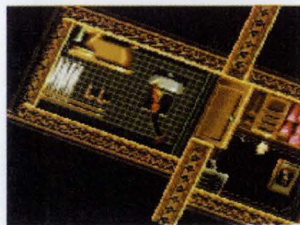
IT WAS... A 2D platformer set aboard a luxurious cruise ship which has been struck by a tidal wave and is sinking fast. In true disaster movie style, the player must rescue trapped passengers, guiding them to safety through dozens of rooms and passageways. *SOS* enjoyed the portentous title of *Septentrion* in Japan.

WHAT WAS ALL THE FUSS ABOUT? Not only were the Mode-7-enhanced visuals detailed and evocative, but the ship rolled over throughout the game, which meant the player's route to the surface was constantly changing. The game also took ideas and themes from various genres: the leaping and swinging brought *Prince of Persia* to mind, while the rescue of non-player characters seemed inspired by DMA's *Lemmings*. There was also a compelling

atmosphere of human tragedy, brought to life by the haunting soundtrack and an involving storyline, taking in the lives of several crew members and passengers.

HOW COULD IT WORK TODAY? Moving to a 3D third-person viewpoint may well be more attractive to modern gamers, and the original's awkward control method would have to be addressed, perhaps with the support of an analogue pad. A range of puzzles inspired by *Resident Evil* and intelligent co-passengers adding their own expertise to the escape effort would add gameplay elements.

WHO COULD PULL IT OFF? With its *Tomb Raider* duo, Core Design has not only developed a solid 3D engine, but has given its environments a fitting degree of ingenuity and a true sense of 'being there'. The first 'Titanic' game?



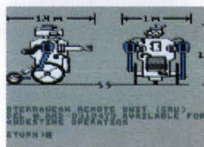
Publisher: Vic Tokai Developer: Human Format: SNES Release: 1994

HAVEN'T WE MET BEFORE?

When Oscar Wilde wrote, 'Talent borrows, but genius steals,' he could easily have been referring to videogame design. Although many ideas currently circulating the industry look totally original, there is often an 8bit skeleton waiting in the closet to take all the true credit. Here are a few contemporary titles, and beneath, their possible inspirations...



X-FILES UNRESTRICTED ACCESS
 (Fox Interactive, 1996)
 The player enters a mysterious world of conspiracy and espionage via a deliberately obscure interface. The aim is to hack into secret files and set up surveillance cameras to learn more about Mulder and Scully.



HACKER
 (Activision, 1995)
 The player enters a mysterious world of conspiracy and espionage via a deliberately obscure interface. The aim is to hack into secret files and set up surveillance cameras to learn more about a multinational company.



SILICON VALLEY
 (DMA, 1996)
 Take control of a robot as it transports aboard a spacecraft, then destroys the inhabitants by taking them over and acquiring their individual characteristics. A Mario 64-style 3D environment.



PARATROID
 (Hewson, 1995)
 Take control of a robot as it transports aboard a spacecraft, then destroys the inhabitants by taking them over and acquiring their individual characteristics. Smooth C64 top-down scrolling.

MERCENARY

IT WAS... An admirably open-ended sci-fi adventure, drawn mostly in vectors. Lacking the galaxy-wide vistas of *Elite*, the action takes place only on the planet Targ; the player's aim is to escape with no money and no means of transport after crash-landing. It soon turns out that a civil war is raging, making it possible to profit from running missions for opposing factions. There was a strong adventure element, with dozens of locations and puzzles. **WHAT WAS ALL THE FUSS ABOUT?** Like *SOS*, *Mercenary* skillfully blended several different game styles – arcade adventure, flight sim and shoot 'em up – in an innovative and addictive experience. The player had total freedom to roam the huge environment and to investigate the various

buildings littering its surface. It was also possible to pilot various craft (acquired by fair means or foul) and collect objects, giving the environment a greater sense of reality. **HOW COULD IT WORK TODAY?** The first-person perspective and mission-based structure would not be out of place today, but texture-mapping, realtime lighting and detailed scenery should replace the original's bland wireframe visuals. It would also be interesting to receive regular reports on the course of the war, so players could gauge their effect on the proceedings. **WHO COULD PULL IT OFF?** Activision's update of *Battlezone* showed it can produce revivalist games with depth as well as decent graphics.



Publisher: Novagen Developer: Paul Woakes Format: C64, Atari 400, Amstrad, Amiga, Atari ST Release: 1986

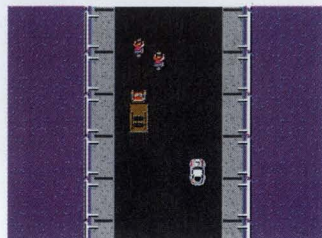
Updating a classic

Tony Crowther, *Gremlin*



'If I was pushed to give an answer, it would be to rewrite *Captive* using a 3Dfx card on a PC or an N64; it never fails to impress me. I still play it now and think, "I can't remember writing that bit." As to what I would change, it would be the graphics, as the game is sound. Changing to a *Doom*-style game would spoil the gameplay. You play the game in step movements, which makes the game faster and simpler to control.'

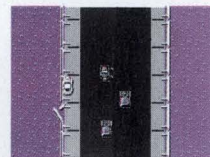
SPY HUNTER



Publisher: Bally Midway Developer: In-house Format: Arcade, C64, Spectrum, Amstrad Release: 1983

IT WAS... A top-down vertically scrolling driving game in which the player took on the role of secret agent chasing various bad guys along an endless highway. To make things a little more difficult, many enemy cars had wheel spikes to ram players off the road, and there were civilian cars which had to be avoided rather than destroyed. **WHAT WAS ALL THE FUSS ABOUT?** More a driving game than a racer, *Spy Hunter* was an early innovator in a number of respects. There were no consistent baddies to chase – they appeared on the road ahead and drove on until destroyed. It was one of the first games to blend shooting and racing. The player could also drive through a boat house turning the car into a speedboat, continuing the action on water. **HOW COULD IT WORK TODAY?** One of the best ideas in the game was the way you changed vehicles on the fly, so there was never a chance to get accustomed to new craft. The updated game could take in motorbikes, boats, even

aircraft, each with their own handling characteristics and separate foes, keeping the player constantly on the move. The original's power-up system, where the player drives aboard an ally's truck for missiles, oil slicks or smoke screens, is another essential feature. It should also be possible to customise the vehicle for better handling, armour plating and so on. Interactive scenery like ramps, chicanes and more alternative routes would also improve a game already featuring so many strong ideas. **WHO COULD PULL IT OFF?** After the illicit thrills of *Grand Theft Auto*, who else but DMA could do *Hunter* justice?



BUST A MOVE
(Enix, 1990)
Watch a series of groovy characters perform well-choreographed dance moves, then try to replicate the sequence in time to the music. Reviewed this issue (see page 97).



BREAKDANCE
(Epyx, 1984)
Watch a poorly animated, barely recognisable figure jerk through a laughable collection of breakdance moves, then try to replicate them with no concern for the tuneless dirge playing in the background.



CREATURES
(CyberLife, 1997)
Communicate with artificially intelligent onscreen creatures via a sophisticated interface, and marvel as they slowly learn to respond to your commands



LITTLE COMPUTER PEOPLE
(Activision, 1985)
Communicate with a ridiculous little onscreen man via a series of short phrases, and marvel as he completely ignores everything you ask him to do.



QUAKE 2
(id, 1997)
Explore a labyrinthine series of beautifully constructed complexes, battling with various imaginative creatures which duck and dive to avoid fire.



3D MONSTER MAZE
(JK Greve Software, 1981)
Explore a monochrome 1k dungeon inhabited by impossibly blocky creatures. Which don't move at all.

Updating a classic

David Jones, DMA Design



'Stunt Car Racer is ready for an update. You could do a really nice engine for it, update the physics and the handling so it feels like you really are driving on these weird tracks. One of the annoying things about the original was when you fell off the track: that was you finished, since it was pretty much impossible to catch up. That could be changed so that little mistakes aren't fatal; then add a multiplayer option.'

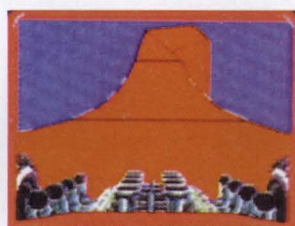
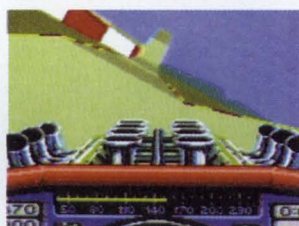
STUNT CAR RACER

IT WAS... One of Geoff Crammond's earliest driving games. *Stunt Car Racer* ditched the unrealistic follow-cam offered by dozens of *Pole Position* wannabe's at the time, and employed a first-person 'behind the wheel' perspective more readily comparable to today's cutting-edge efforts like *Gran Turismo*.

WHAT WAS ALL THE FUSS ABOUT? The game also rejected endlessly flat circuits in favour of narrow rollercoaster-style tracks with enormous peaks and stomach-churning troughs, a concept which sadly has yet to be attempted by modern racing game designers. Everything in *Stunt Car Racer* was constructed using polygons rather than 2D sprites (almost unheard of in the eighties), and there was an excellent two-player option.

HOW COULD IT WORK TODAY? Detailed, texture-mapped car models and scenery would be needed to replace the basic polygon machines and sparse backgrounds of the original. A *RageRacer*-style custom option allowing successful racers to update their vehicles with better acceleration and handling would be interesting (and useful, considering the original had no safety barriers). Apart from that, modern necessities such as a smooth frame rate, support for PC graphics cards and a more creative understanding of vehicle physics (like power sliding) would be all that was needed to bring this thrilling driving game bang up-to-date.

WHO COULD PULL IT OFF? Geoff Crammond himself would probably be best qualified.



Publisher: Firebird Developer: Geoff Crammond Format: C64, Spectrum, Amiga, Atari ST Release: 1988

WIZBALL

IT WAS... One of 8bit gaming's lost treasures. *Wizball* is still one of the few titles that truly defies categorisation. Players had to guide a bouncing ball around scrolling levels, both upgrading the ball's abilities and collecting coloured droplets. These drops then filled one of three cauldrons, depending on whether they were red, blue or green, with only one of each colour found on each of the six worlds. Once a cauldron was filled, part of the current stage would be coloured in, either in the desired primary or with a mixture on later stages.

WHAT WAS ALL THE FUSS ABOUT? The intricate gameplay was (and still is) a novel extension of classic arcade themes.

HOW COULD IT WORK TODAY? The potential for an update, given the current crop of technology, is fantastic. A 3D landscape, further integration of colours into the gameplay and area zoning, so that certain parts required certain colours, are just the tip of a multi-hued iceberg.

WHO COULD PULL IT OFF? **Edge** can only hope that Sensible considers the possibility of an update.



Publisher: Ocean Developer: Sensible Software Format: C64, Spectrum Release: 1987

To be reanimated?

If the industry rumour mill is to be believed, several more updates are on the way. Capcom, for example, is working on an N64 version of *Chouls and Ghosts*, while *Prince of Persia* may be in line for a PC rebirth. Finally, multi-player classic *Gauntlet* could soon be appearing on a home format courtesy of Atari...



THERE ARE OTHER GOAL BASED GAMES TO PLAY THIS YEAR



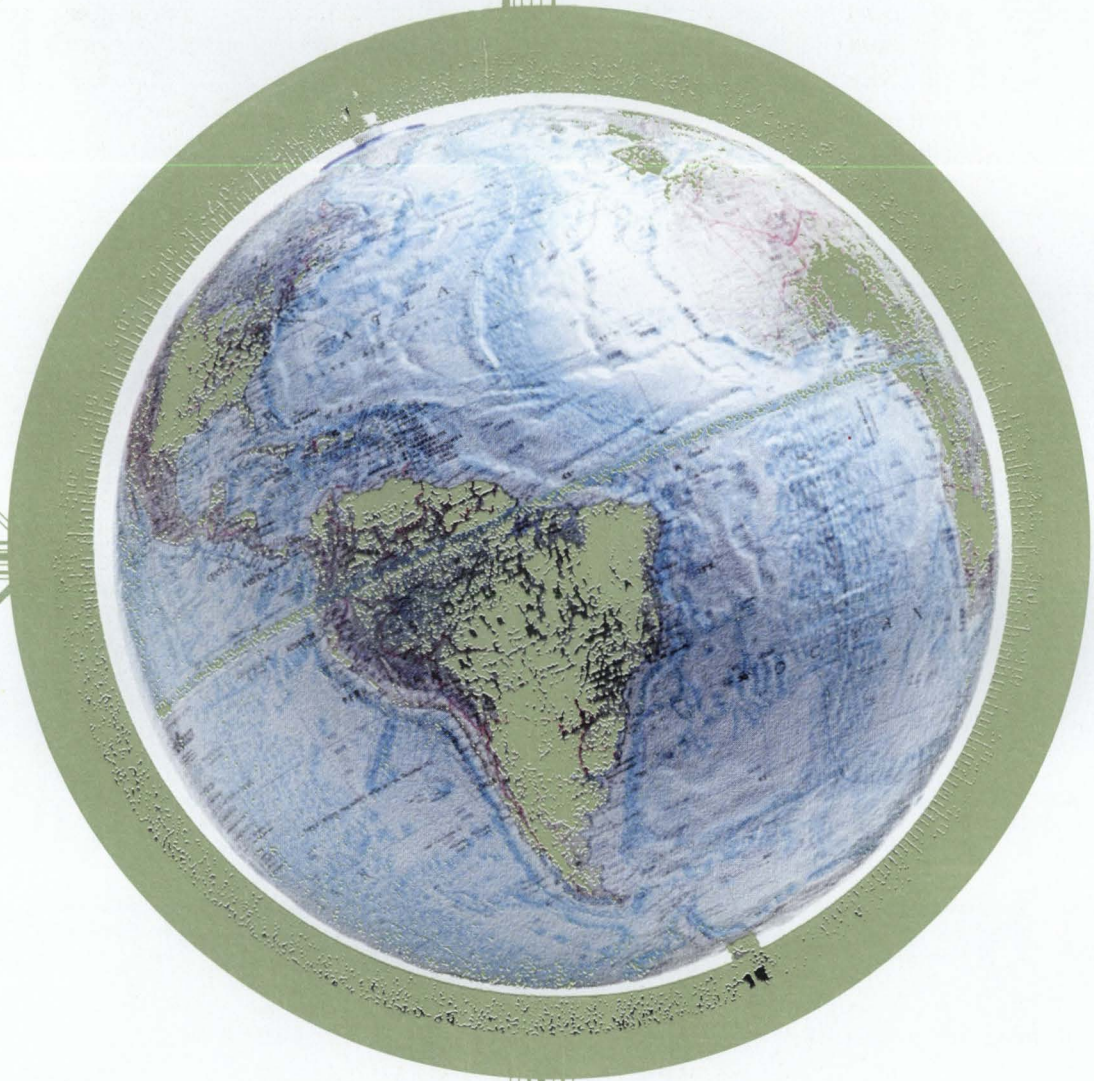
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the online game

The hype has died down but the work has only just begun. Half a decade into the much heralded 'multiplayer gaming revolution' and still no-one knows exactly where online gaming is headed. Edge charts the possible courses

In 1996, the computer industry market analyst Datamonitor predicted that the European online games market would be worth some £900 million in the year 2000. Yet 12 months later it revised its forecast to £600 million by 2002. If even professional industry watchers are confused, what chance has the average gamer got of understanding the online market?

Anyone who's played anything from *Quake* to *Hearts* on an office LAN knows where the buzz surrounding online games comes from. Playing with other human beings illicit a thrill that conventional games can only rarely manage. This has been obvious for years – witness how *Gauntlet* and *Street Fighter II* quickly became spectator sports when they first appeared in the arcades. Indeed, the Japanese make no distinction between multiplayer games, connect 'em ups like *Pokemon* and Internet games, which underscores the fact that the presence of the Internet merely ups the ante in the online stakes.

Today, enough entrepreneurs have been won over by the promise of Internet gaming to continue throwing money at what remains an embryonic industry. For now, these players can be broken up into four distinct factions: Multi User Dungeon (MUD) operators, the so-called 'aggregators' (such as Wireplay, DWANGO and Thrust World), Internet Service Providers and individual software publishers. When considering this proliferation of different online services, it's important to remember one thing. Compared to the overall size of the boxed games

The rules of the game

Richard Bartle invented the first Multi User Dungeon back in the early eighties while teaching artificial intelligence at Essex University. Here are his golden rules of online games design...

A great game is not enough

The players are the point, not the game. A coin-op simulation may suffer in comparison to a technological no-brainer like *Hearts*.

Being thrashed is no fun

The debutante *Quake* player who finds himself thrashed into submission will probably never return.

Users must be able to wander about

Not everyone is brilliant at gaming, so a truly democratic online experience should allow all players to take part at their own pace.

More isn't always merrier

Where's the joy in a community of thousands? Bartle suggests over-populated games should be sub-divided into groups numbering not more than 250 people.

Not just playable but replayable

If there's a logical conclusion to your game then users will finish it and move on. Even worse, shared knowledge means that new recruits will take progressively less time to get through.

Don't fix times for play

Despite falling phone charges and ISP rates people are still aware that the clock is always ticking. Players must be free to enter or leave the game at any time and still enjoy the experience.

Make it easy to meet other players

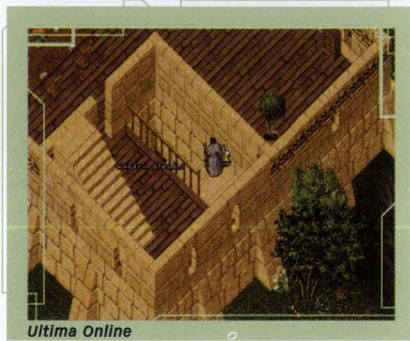
To reiterate, online games rely on player interaction. It's best to make interaction central to the game concept.

State of the art doesn't stay that way

A technological marvel in the offline business can only stay that way for a few months. Low technology online games might go on for decades.

Online games need love

Because online games should be organic they need someone to look after them. Work on an online product never stops.



Ultima Online

market, online is virtually non-existent. The odd commercial success like EA/Origin's *Ultima Online* is the exception that proves the rule that hardly anyone will pay to play online.

The most popular MUDs have a few hundred members. Wireplay claims 23,000 registered users but is lucky to have even one per cent of them playing at any one time. *Ultima Online* (flawed, but arguably the premier example of a tailor-made online game) is reckoned to attract up to 3,000 players at its peak.

But stand these next to the casualties and the confused state of online gaming is apparent. British startup E-On folded last November, US-based Internet games service TEN laid off 80 people a month earlier, and rival Engage reduced its staff by half in August.

Jeff Leibowitz, president of Engage, said at the time: 'It's simply a fact that the market isn't there. The Internet market just hasn't developed the way anybody expected it to.'

However, **Colin Duffy**, Wireplay's head of games, sees the sector at the start of a classical economic curve. 'All new products, whether TVs, PCs or videos, pursue the same curve. You start at a crawl being ignored by all but a few early adopters. Slowly the mass market catches on until the curve rises sharply and you're into rapid growth. I'm certain online gaming will be no different. We just don't know how long the process will take.'

Duffy's case is persuasive, but the cynical observer might feel the online market has had its chance. The Internet has been in the public consciousness for three years – five for the more clued-up gamers. It's almost as long since *Doom* first set office LANs ablaze at lunchtimes. The path from early text-based MUDs to Carmack's stunning *Quake* code hasn't always been smooth, but the public have had plenty of opportunities to be tempted online.

Arguably though, *Quake World* is a new phenomenon, the biggest success so far for online games. And it's achieved an unprecedented level of

success in spite of one huge and persistent handicap – latency. Like chewing gum on the shoe, the latency problem (or lag or ping) is an irritant that follows wherever remote multiplayer goes.

Latency describes the time delay between a player's actions and registering that action on the screen. It's caused by the need to communicate the action to the central server which runs the game (or to each individual player in games without a server). Latency affects games differently. While irrelevant to a turn-based game like *Bridge* or *Chess*, latency can render 'twitch' games like *Quake* unplayable – when one player's screen freezes, the other sees an immobile foe and fills him full of bullets.

Latency isn't an issue on office LANs and only rarely a problem when two players connect via a modem. But across the Internet, latency hits hard. The journey of every single packet of data can be hindered by connection quality, by bottlenecks due to narrow bandwidth, by error checking at the modem and by complex features running within the game itself. There's also the perennial problem of users' different machine specs. And even the speed of light is a bugbear if the signal goes international.

The consensus seems to be that no more than 150 milliseconds lag is a reasonable target. It is achievable – though not always. According to **Pete Hawley**, a producer at GT Interactive and respected *Quake World* player, latency often makes *Quake* unplayable. 'It depends on your Internet Service Provider, but I'd say 50 per cent of the time there are problems with ping times. Players tolerate it because of the competitive element in the game but, really, it's pretty frustrating.'

Developers have come up with various software techniques to minimise the tyranny of lag. VR-1 uses a predictive motion algorithm to calculate the likely path of objects on screen for smoother movement. MPath's *MPlayer* monitors the player's connection and displays red or green to indicate whether it can



Diablo on Battle.net



id Software's Quake

handle the requested game. Meanwhile Jack Mathew's QSpy finds the fastest available Quake World server and re-routes the player to it.

Of course, latency is not the same problem for every player – causing all manner of 'Netiquette' fury. Play by ISDN and ping times are reduced, giving those lucky enough to have this faster access – LPBs or low ping bastards – something of an unfair advantage in play. (An ISDN is a dedicated, purely digital, additional line to your local telephone exchange).

But don't put too much faith in ISDNs or in new modem technologies as the big solution. Over the next few years, a number of 'broadband' devices will enter our homes, such as ADSL and cable modems. These will provide enormous increases in bandwidth and should revolutionise the delivery of music and video across the Internet. But they're unlikely to reduce latency to any greater degree than an ISDN line. Broadband modems may offer more data but not necessarily faster delivery of this data. Only improvements in the Internet's underlying architecture can seriously crush lag.

Needless to say, latency is a crucial issue to aggregators who need to attract gamers away from 'free' sites such as Quake World servers. Hence, DWANGO's claim of 100ms ping times and Thrust World's 135ms. Wireplay, BT's dial-up service which runs across the public service telephone network to a dedicated server, projects itself as a nationwide LAN. Unhindered by many of the Net's obstacles the service claims 105ms ping times on *Virtua Fighter* and 65ms lag in the lab.

The other key issue with latency is whether the solutions to it are scalable. If 100ms can be achieved with ten users can it be sustained for 1,000? At some point, the cost of solutions like adding extra servers becomes prohibitive.

The fact that latency excites such intense debate hinges on the presumption that everyone wants to play 'twitch' games online. But there's simple

argument to suggest that they don't. In a 'twitch' game the same players usually win. And while it's fun to be an ass-kicker, it's no fun to be the ass kickee.

This is why there's a vocal caucus within the online community demanding a new type of gameplay. Just as storytelling on film is different from storytelling on stage, they reckon gaming needs to be considered differently when on or offline.

For many, community-based persistent worlds are the template. **Daniel James**, head of MUD creator Avalon, claims that, 'MUDs are the historical backbone of the industry. Their features are present in most online games. People play them for years and when they sign off it's like leaving home.'

Although *Ultima Online* and 3DO's *Meridian* provide an illustration of how to make persistent worlds visual, the text format still has its adherents.

Steve Cooke, of Ogalala, raves about the inclusive nature of words. 'Show non-gamers an arcade game and they have all kinds of preconceptions. They don't with text. And if you can persuade them to play for five minutes they get hooked. With improving voice recognition, text has the potential to define a lot of online gaming in the future.'

Others believe MUDs as they stand now are a cul-de-sac, defined and confined by their RPG roots. Pete Hawley: 'I see their appeal but they're not for me. You walk in and someone says 'thou hast entereth' and you just think 'Christ, no thanks.'

Jez San, managing director of Argonaut, is another doubter despite being 'Jez the Wizard' in the original MUD. 'The bullying by experienced players in MUDs is just as serious as it is in 'twitch' games like *Quake*. And gameplay is flawed because I think most gamers want to be able to go online and feel they've played something to the finish.'

Of course, MUD proprietors can make one great claim – they're profitable. **Clem Chambers**, pioneering founder of Online Plc maintains that every game his company makes recoups its costs within four weeks.



Warcraft 2

Online options

MUDs/Persistent worlds

Multi User Dungeon operators have two distinct advantages over their rivals in the race to shape an online future – they've been doing it for years and they're making money. There are said to be around 800 persistent worlds on the Internet, many located within ISPs' own domains. Most are text-based like the original MUD but there are some visual worlds like *Ultima Online*.

The aggregators

This unwieldy term has emerged to describe companies which act as a single site for online games or a dial-in network for boxed games with a multiplayer option. The UK's 'aggregators' are:

* BT Wireplay

Operating since October 1996. On Wireplay, players load up their offline game and click on a Wireplay icon to dial straight into the server and meet other players. The proprietary software can be downloaded from cover disks or the Website. Wireplay offers over 30 games and charges 2.5p a minute evenings and weekends, 6p all other times.

* Thrust World

Unlike Wireplay, Thrust World is Internet based. Its servers match players who pay £17.99 a month for unlimited usage (which includes other Internet access).

* DWANGO

The US service which made its name with *Doom* death matches is beta testing in the UK. It hasn't finalised a pricing model but in the US charges \$1 an hour.

* European Gameszone

A brand new gaming service set to launch in the UK, Sweden and Germany which promises little lag, chat zones and a service tailored towards Europe.

The Internet Service Providers

Games sites are usually available on an ISP's own service and they are generally the most popular destinations among subscribers. However, publishers are generally uncomfortable with being so dependent on the ISPs. In fact, 3D Realms withdrew from America-On-Line when the service asked for a fee. There is a belief that ISPs prefer customers to be Web browsers than gamers because it makes data traffic easier to manage.

The software publishers

Software publishers have the cash and resources to produce multiplayer software which could forge lucrative new markets. But they also have a vibrant offline market and a strong retail base which they do not want to upset. This makes online a risky proposition especially since, as one developer puts it, 'online games publishing and conventional games publishing are about as similar as movie making and sheep farming.' All the same, online-only games are coming out, with Sony's *Tanurus*, Red Orb's *Extreme Assault*, *Subspace* and *Sole Survivor* – both from Virgin, all recently making headlines.

Studio 3DO's *Meridian 59*

Chambers believes the ability of these sort of games to attract and keep players is underestimated by aggregators and ISPs right now. 'Content is queen and wires are king at the moment,' he says. 'One router company is worth five times the value of all Net content providers put together. But this will change. It happens in all media.'

If Chambers is right then online will be all about content in five years time. And because of the nature of the Net (there are no warehouses, or lorries, no distribution or point-of-sale worries) everyone thinks they can control the supply of content.

Some software publishers privately admit that they, too, aim to host their own sites rather than pass games, and potentially large profits, over to the aggregators. It's certainly a tempting opportunity for them – players buy boxed games and then pay a monthly site fee, with the added bonus of all that data mining to boot. Yet there are problems, not least of which – as *Ultima Online* has shown – are the ongoing costs of keeping abreast of the constant emergence of hacks and bugs. And what if a publisher has a big online hit, sets up a number of servers to cater for the demand and then follows up with a series of flops? Idle equipment costs money.

Naturally, Wireplay's Colin Duffy, speaking for aggregators, has further doubts about the viability of such publisher-led ventures. 'There are 20 million Websites out there. Just because it's easy to set one up doesn't mean anyone will visit it. Wireplay is a branding exercise. Our aim is to be a magnet for gamers, like the online version of Dixons.'

For all the bluster and partial predictions of the online community, ultimately no-one knows yet which business models or gameplay styles will predominate. But go along to any online games conference and it's immediately clear that there's a burning passion to make online happen. Keep your phonedines free, because the revolution is still coming. Just as soon as someone finds the right map.

Pay to play

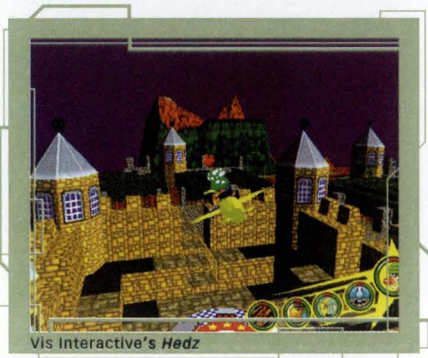
Much of the debate about online gaming centres on how to make money. This currently boils down to the choice between subscriptions or pay-per-play.

Both arguments have their merits. If subs are used clock watching is prevented, collection is made easier and users can budget accordingly. These factors convinced Thrust World to adopt the subs model. **Geraint Bungay**, head of marketing at Thrust World, says, 'The trouble with pay-per-play is that it's not conducive to immersion because you always have one eye on the time.'

Yet pay-per-play proponents (notably Wireplay), argue that their system is fairer and doesn't alienate new and uncertain gamers. Having said that, Wireplay has now introduced a credit card paying system to run alongside its original paying model.

A couple of companies have proposed fresh solutions. Scottish developer, Vis Interactive, mooted a new approach for the online version of its fighting game *HEDZ*. Players would win or lose their HEDZ (basically their stock of fighters) in one-on-one combat. If they ran out of HEDZ, they'd have to buy more from Vis. Sega's similar, but more general approach, is Limited Edition Digital Objects, or LEDOs for short (see E53). Here players purchase the core game, then buy extra weapons, vehicles or equipment as they see fit.

Of course, all these financial models struggle against the free gaming on offer at, say, id's *Quake World* and Blizzard's *Battle.net*. But as Wireplay's Colin Duffy says, 'Quake World is awesome. But it only works because it's *Quake*. Anything else and people wouldn't put up with it.'

Vis Interactive's *Hedz*


Imp: Argonaut's online gamble

For *Imp*, Argonaut has gone against the received wisdom that online games must be communal and persistent. Jez San, Argonaut's managing director, explains: 'I don't believe people want a substantially different or inferior kind of gaming on the Net.'

San claims this 3D game – heavily inspired by the seminal two-player C64 game, *Spy V Spy* – combines elements of classic arcade amusement: 'A bit of *Pac-Man*, some *R-Type*, some *Bombberman*'. And although San is making no claims for originality he believes the game will transcend latency to a degree never seen in online 'twitch' games before.

'Most Net ready games you see now are actually developed for a LAN which is why you get lag,' explains San. 'We thought about the problems of the Net right from the start. Instead of gunfire you drop bombs to kill each other and there's necessarily a delay involved. And during it the server can synchronise all the clients.'

As for bullying, San says it's important to allow players to play in small groups and choose their own level of opponent. There are also chat rooms which enable players to share experiences after play. For now, distribution isn't finalised, although it will sell as a box but may not include a single-player game.



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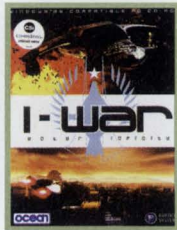


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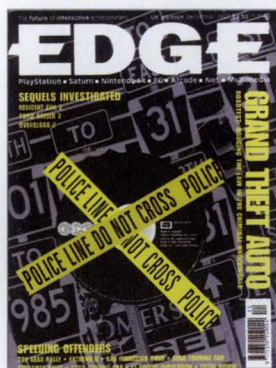
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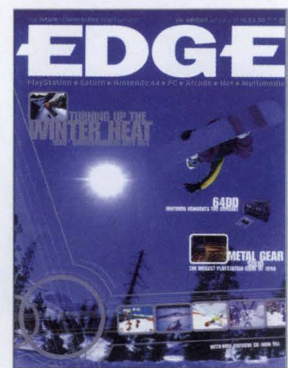
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Free Edge Interactive CD (Win 95 only)

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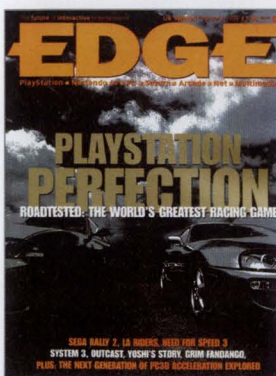
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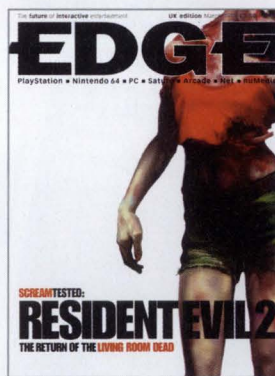
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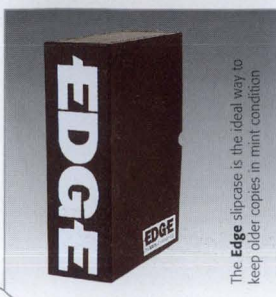


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Testscreen *Resident Evil 2*, *Fighters' Destiny*, *One*, *Ultimate Race Pro*, *Ore Tomba*, *Dark Omen*, *Nagano Winter Olympics*, *F-22 Raptor*, *Skull Monkeys*, *Last Bronx*, *Sega Touring Car Championship*, *Theme Hospital*, *Art of Fighting Twin*, *NHL '98*, *Snow Break*, *Actua Ice Hockey*
Features The US games industry's movers and shakers. **Edge** meets Sega's AM1 coin-op division; *Resident Evil* phenomena



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GAMEVIEW

Shiny's **Dave Perry** loves Bungie Software's real-time strategy game *Myth*, despite a myriad of annoying flaws...



Dave Perry is the President of Shiny Entertainment, the Laguna Beach codeshop who created *Earthworm Jim* and *MDK*. Upcoming games include *Wild 9*, *R/C Stunt Copter* and the much anticipated *Messiah*.

Members of the development community are invited to email Gameview submissions to edge@futurenet.co.uk

Myth: The Fallen Lords

Playing *Myth* feels like there's really a battle to be had. *C&C* is a little too removed from the action – you feel like the general sitting 35 miles behind enemy lines, sipping a dry sherry and pushing counters around a board. With *Myth*, you're a lieutenant at the head of your squad. The result is that you care about each of your men as much as a chess player cares about a piece – you don't want to lose them! New units cannot be manufactured mid-battle.

Some of *Myth*'s problems were fixed with a patch on Bungie Software's Website, but some annoying things remain. The archers are so dumb that once they're attacking the enemy they don't stop firing when the player's knights rush in, and thus kill them. A 'stop firing' button is a rotten excuse for intelligence.

Sometimes you set up an ambush and have one of your guys throw a grenade right into the middle of the enemy pack. The annoying thing is that these often fail to explode. According to the stupid story in the manual they are 'handmade' and therefore not reliable. If I drag 20 enemies all the way across an entire map into an ambush, finally getting my chance to napalm them then – dud – they wipe me out, I don't

think 'oh, it's handmade and so it probably won't work'. I think, 'stupid bloody game, the *only* explosive weapon fails whenever I need it'.

Furthermore, when I try to retreat my archers so my knights can enter battle, the latter become a logic wall. The dumb archers bang against that wall and the knights possess no program code to turn to the side and so let my fleeing archers through. The enemy swiftly approaches and wipes me out in seconds.

I don't mean to sound negative because I really do love the game. But I believe it could have been drop dead amazing with just a few more weeks of work.

I have to say that for a die-hard action guy, I am really getting into rule-based 'freedom' games more than their predetermined alternative. Even with very simple rules, a game like *Tetris* can be made. It may sound crap ('You pile up grey blocks'), but the freedom to do it any way you like means that you quickly generate personal strategies. When these fail you blame yourself and quickly try again. And so the 'just one more try' cycle begins.

Myth is one of the few games that I feel I have freedom in. In the meantime, I await *Zelda 64*...



Dave Perry admires *Myth*'s gorgeous 3D graphics, and revels in the feeling of battle the game inspires. Battles are usually bloody (left and middle) but remain visually handsome (right)

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VIDEOGAMES ON THE EDGE

The games – old, new, whatever – that have grabbed **Edge**'s attention this month



1080° (N64)

Slip-shifting down sheer mountain faces, pulling 540s whilst plummeting over straight-edged cliffs and loving every minute of it. Nintendo's snowboarding experience is astounding.



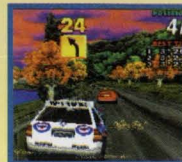
Castlevania (PlayStation)

Depriving certain members of the **Edge** team of vital beauty sleep, Konami's intricate platformer rewards, fascinates amazes and frustrates in just the right proportions.



Speedball 1 & 2 (Amiga)

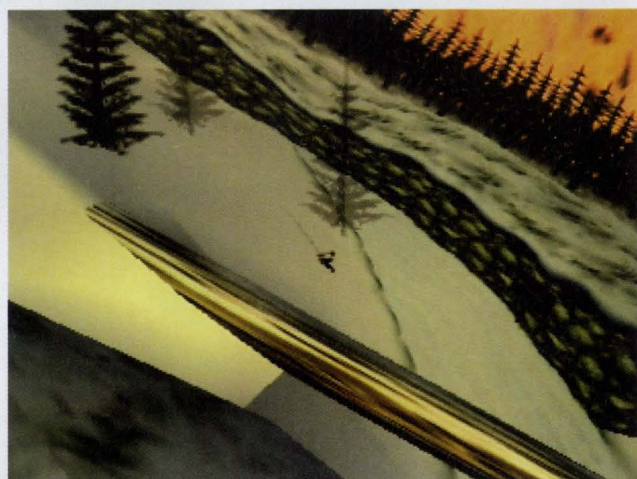
A heated argument about the Bitmap's brace of slam bangin' classics was an excuse for **Edge** to dust down its A500 and knacker its last remaining pair of Competition Pro joysticks...



Sega Rally (Arcade)

Inspired by *Gran Turismo* and last month's session with *Sega Rally 2*, racing fever has infected **Edge**. A recent trip to SegaWorld at London's Trocadero hit **Edge**'s wallet hard.

1080° Snowboarding



The contest mode (above) is particularly enjoyable and like many other aspects of the game, offers tremendous replay value. However, slowdown puts in an occasional - and irritating - appearance

This isn't a typical Nintendo release. Anyone expecting to see a flock of cute polygons, resplendent in primary colours, careening down a cartoon mountainside while shouting nonsensical comments in exaggerated children's voices at each other, is in for a shock. *1080°* takes itself seriously - even more so than *Wave Race 64*, NCL's similarly styled jetski sim.

Turn on the power and, after brief but legally necessary appearances by the Lamar snowboards and Tommy Hilfiger clothing logos, players are treated to a replay of a snowboarder rocketing down one of the game's tracks with a helicopter in hot pursuit. No over-zealous commentator, a solemn yet realistic colour scheme, and definitely no dolphins.

Tapping the start button doesn't disperse the atmosphere of sobriety; the only hint so far that this is the work of Japan's premier videogames publisher is the novel character selection screen, which features the



The later courses open up significantly, allowing players to pick their own route to the finish line, such as jumping off the side of a cliff should they wish to (above, left to right)



To progress to the next difficulty level, players must complete the same courses – plus another – against more fearsome opponents. The weather turns against the player too

different boarders sitting around a chalet looking as nonchalant as only snowboarders can. Players are faced with a multitude of competition choices, although the majority will find it hard to resist a quick match race. This offers a series of races against a CPU snowboarder which are divided into three difficulty levels, each of which adds the challenge of a new track to its predecessor's tally.

Progression to the harder setting is denied until all of the current setting's courses are successfully completed. Therefore, before access to the six-course expert level is granted, players must have beaten their rival over the normal four-course level and then proved themselves on the hard level's five tracks. To prevent players becoming numbed by having to tackle the same courses repeatedly, the regulars are given a meteorological overhaul between levels, so that whereas Crystal Lake might be played in the glorious midday sunshine first time round, the prevailing weather conditions will be less favourable by the time players tackle it on expert level.

However, after a couple of descents, players may feel the urge to expand their abilities – the courses are littered with jumps and obstacles that beg to be dodged with more aplomb than a casual flick of the board's backside. 1080°'s practice mode offers players the choice of a halfpipe or an obstacle course in which to attempt any of the game's possible stunts. Assistance is provided in the form of joypad instructions on-screen, which remain there until the stunts have been performed successfully.

Feeling confident with their newly-found snowboarding skills, players can now take part in the very

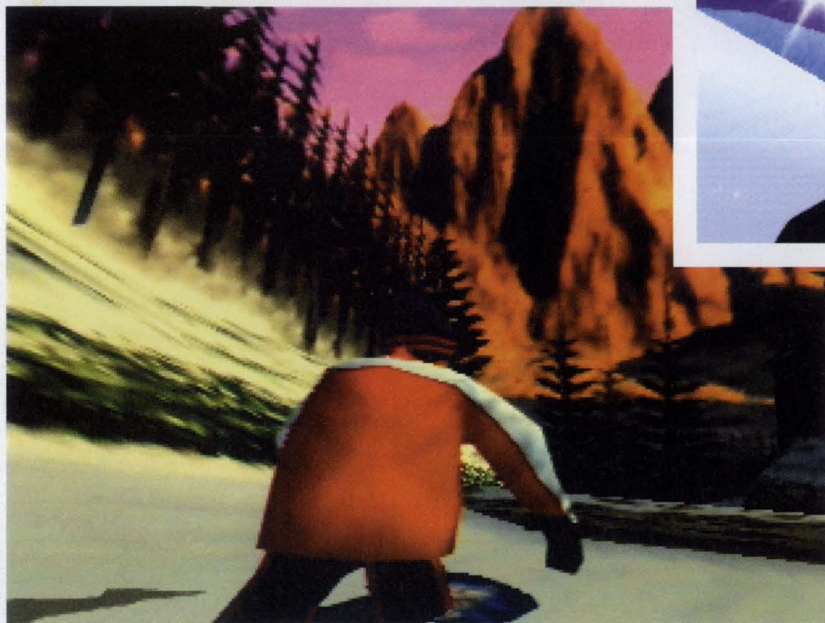
WHETHER STRUGGLING FOR CONTROL ON A FROZEN RIVER, OR SLICING SILENTLY THROUGH POWDERED SNOW, NO OTHER GAME HAS COME CLOSE TO CAPTURING THE DYNAMICS OF SNOWBOARDING

enjoyable contest mode, similar to *WaveRace*'s stunt option. Here, points are everything as the first three tracks are transformed into slalom courses, and players must negotiate the gates successfully in order to gain extra time as well as slipping in as many impressive tricks as possible. Adding variety to the seemingly endless (and highly enjoyable) zig-zag nature of the proceedings, Nintendo has also included a stunt ramp area and a halfpipe level to be tackled at the end of the first and third courses. The other three courses do not feature in the contest, but they can also be raced for points as individual courses in the stunt attack mode. Players are given a very stringent initial time limit – but, scattered throughout the course are gates that offer a generous 20 extra seconds apiece. Only by passing through enough of these does the finishing line fall within the player's grasp.

Ironically, both the stunt attack and time attack modes (in which it is possible to save and race against a player's ghost) prove more enjoyable than the actual match racing. This isn't due to an insufficient number of other snowboarders to compete against – it's hard enough work having to avoid the one CPU-controlled character, as the slightest contact results in a frustrating loss of speed. More contestants on the slopes would just aggravate the problem, as well as robbing the game of



Sadly, the CPU players seem to have pre-calculated routines when going down any of the game's tracks



As a result of its extravagant camera angles, the replay mode often manages to illustrate the beauty and attention to detail that has gone into *1080°* better than the three in-game views

The game's *Deadly Fall* track (above in replay mode) is as open as a real life piste and offers huge potential for fun

responsive and amazingly intuitive. The graphics are easily the best seen in a game of this type, with realistic backdrops and surprisingly genuine-looking snow. All of the boarders are superbly accurate representations of real life snowboarders and the game's authenticity is complemented by splendid sound effects.

All of this results in the most convincing videogame emulation of the snowboarding experience so far. Whether struggling for control on a frozen river, or cutting silently through powdered snow, no other game has come so close to capturing the sport's dynamics. That said, only *Deadly Fall* – *1080°*'s final course – is as 'open' as any real life piste, enabling players to make their way to the bottom without feeling restricted. Nevertheless, the lesser courses are still worth exploring as, in typical Nintendo fashion, they offer plenty in the way of alternative routes and potential shortcuts. A little exploration can yield some impressive surprises – and of course, there's the highly playable two-player option, which employs fogging and a marginal loss of detail in order to maintain an acceptably high framerate.

1080° is a flawed work of genius. However, players prepared to tolerate the flaws will be surprised and delighted by moments of sheer brilliance.



Edge rating:

Eight out of ten



Ploughing silently and softly through knee-deep powder is one of *1080°*'s most satisfying moments

◀ some of its realism – somehow, technical limitations aside, 20 boarders rushing down the side of a mountain would have a trivialising effect on the whole proceedings.

Rather, *1080°* suffers from the same irksome phenomenon that marred *Mario Kart 64* – the 'cheating' CPU opponents. No matter how much skill a player brings to bear on the game, one minor error near the end will usually see the other rider hot on their Lamar tracks. Indeed, many races are lost near the end, with only a fraction of a second in it. This would be tolerable if the game provoked a genuine feeling of racing against a real opponent, but sadly the CPU players seem to have a limited series of predetermined routes at their disposal. After a few plays it becomes easy to predict where and when they will fall over, offering an opportunity to pass but conveying little satisfaction with it.

There are further niggles. Landing, for example, is usually a case of pressing the Z button and matching the angle of the board with that of the slope. Yet the player's character will still fall over occasionally, which can prove particularly irritating during an important race. Also, the AI sometimes fails to display anything in the way of intelligence, resulting in players losing valuable seconds stuck behind an obstacle while the CPU decides whether or not to let the character circumnavigate it. These are not faults that one expects to find in a Nintendo title.

Yet there is an awful lot here that is right. Aside from the landing difficulties, the control system is exquisitely

FORMULA 1 97

“And now do my eyes deceive me or is that car sounding rough.”

Jenson Button



IT MAKES MORE SENSE THAN MURRAY!



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Battlezone



It's often necessary to hold back from a conflict. Instead, co-ordinating other units to do the fighting and sending fresh supplies to the front line using bizarre catapult-equipped armouries

An attacking Soviet fighter is ripped apart by a carefully constructed defence network of gun turrets and tanks

Games this ambitious are a scarce commodity. Those that live up to their promise even rarer. Despite the use of the classic coin-op's moniker, this new *Battlezone* has little in common with Atari's wireframe blaster of old. The only tanks to feature here have hover capabilities in place of rotating turrets, all manner of hi-tech weaponry instead of shells, and form just a small part of the attack force of the game's warring sides – the Americans and Soviets.

The choice of opposing factions may seem an odd one in this day and age, but *Battlezone*'s opening reveals that the action takes place right at the beginning of the Cold War, depicting a secret struggle worthy of the 'X-Files'. Following the discovery of a mysterious 'biometal', both sides have used the material to develop highly advanced military technologies, subsequently heading for the moon in search of more resources. It's here that the game proper begins, as the two armies



Giving orders using the HUD is easy and the AI excellent, but your vehicles don't always take the shortest route

battle it out over the lunar surface, before journeying to Venus, Mars and various satellites in the outer reaches of the solar system. The technology improves until the terrible truth about the alien-created biometal is revealed.

A cursory glance at the game credits reveals that *Battlezone* is based around both *Interstate 76's* game engine and *Dark Reign's* AI code. But, while this hints at the genre-crossing gymnastics going on in *Battlezone*, it can't even begin to describe how transcendental the result is. Developers are only just beginning to explore the idea of using full 3D graphics with a realtime wargame command system but, already, here's a game that has got the mix almost perfect. What's more, the designers have seen fit to include direct first-person action. Now demanding that players fight their own battles while managing resources, constructing new equipment and giving orders to other units is a huge risk. Yet, thanks to a streamlined, menu-driven command system, the need to think and act at the same time becomes one of *Battlezone's* strongest features – a challenge for the player to meet rather than a compromise to overcome. For example, the built-in context-sensitivity for units in visual range makes it possible to select a unit or give an order simply by pointing the crosshair at it and pressing a key – no restoring to sub-menus or additional screens.

This delicate balance has also made it possible to open the design right out, enabling the designers to include many inventive features. Some missions require players to leave the safety of their craft and head out on foot, while other battles might necessitate ejecting and calling for another vehicle to come and pick up the stranded player. In many missions, switching vehicles mid-battle is an essential part of a successful strategy, as is knowing when to send in other units rather than personally wade in and risk your own life.

The landscapes of the various heavenly bodies, while obviously providing a great excuse for diverse texturing and extra effects (lightning storms, heavy fogging, planets visible on the horizon and so on), also greatly affect the gameplay. So, some extra-terrestrial mountain ranges can only be scaled with the extra kick of booster rockets and there's even a weapon – the delightfully-named Thumper – that alters the lay of the land, causing an earthquake-like ripple that deforms the whole landscape right before the player's eyes.

But it's the level designs that are undoubtedly the game's greatest strength. Built around the solid narrative, each one presents a new challenge for the player. Some



This external view of the player's tank, with a newly built Walker vehicle close by, showcases *Battlezone's* often exceptional landscapes. Developers Activision used imagery sourced from NASA to create some of the texture detail making up the different planets' environments

rely on the construction of a good army, some demand stealth, whilst others push deployment skills to the fore, requiring multiple targets to be attacked simultaneously. And it's not uncommon for extra twists to present themselves mid-mission, completely changing the objective. Then there are the one-off missions – like a level where the player has to gain control of a Soviet craft in order to infiltrate enemy defences – which add an extra frisson to the already tense scenarios. Compound this variety of level design with the ability to tackle unit construction and deployment in any way desired, and the result is a game of breathtaking scope. And with a mission editor for solo players and a choice between deathmatch and strategic missions in multi-player mode, it's possible to break away from the plot-heavy campaigns and get straight into the action.

Designed from the outset to make full use of 3D technology, *Battlezone's* topography of impressively undulating landscapes represent a major step forward. Even without an accelerator card, its balletic vehicle movements and detailed environments ensure the sense of atmosphere is always maintained. Although rooted in fantasy, the sense of 'being there' is peerless.

Needless to say, ardent shoot 'em up purists will balk at the complexity of gameplay here, but computer gaming really doesn't get much more vital or dynamic than this. No simple arcade romp, *Battlezone* is light-years away from its basic wireframe namesake of the early '80s and deserves to rank alongside *Command & Conquer*, *Terra Nova*, and even *Quake 2* as a modern classic. As rewarding as it is demanding, Activision's creation exemplifies what PC gaming is all about, and along with Cyclone Studio's *Uprising*, will no doubt influence a whole new generation of 3D action/strategy hybrids. Expect the PC crowd to send in the clones but they'll have to go some way to better *Battlezone*. **E**

Edge rating:

Nine out of ten



Later levels introduce the Furies, semi-intelligent vehicles that could spell the end for both the US and Soviet forces (top). A Soviet transport is blown to pieces (above)

Final Fantasy Tactics



Graphically, *Final Fantasy Tactics* is far removed from the pre-rendered look of *FFVII*, with its characters sporting the traditional cute 'deformed' look seen in previous games in the series



Spells need to be cast with care. If any of your allies are too near, they can be caught in its effect



Although parties are often small, they are usually augmented with non-controllable guest characters

Japanese role playing and strategy games share opposite sides of the same coin. The former genre presents a story with a combat engine tacked onto it, while the latter offers a tabletop wargame simulator with a story applied to hold everything together. On reflection, it's surprising that SquareSoft didn't come up with an idea like *Final Fantasy Tactics* sooner, while it was still developing for the Super Famicom. 16bit Square strategy RPGs like *Front Mission* and, especially, *Bahamaut Lagoon* could have sold massive quantities with the addition of a few of *Final Fantasy's* trademark Chocobos.

It was left instead to the tiny developer Quest to create the definitive SNES wargame, with the little-known (in the West, at least) *Tactics Ogre* – a fact seemingly not lost on Square with this release. Not only is *FF Tactics*

almost a carbon copy of *Ogre* (bar the fact that the landscape inhabited by the bitmapped character sprites is now constructed out of polygons, and has all the viewpoint advantages this approach affords), but its development team, from character designer to music composer, is almost identical.

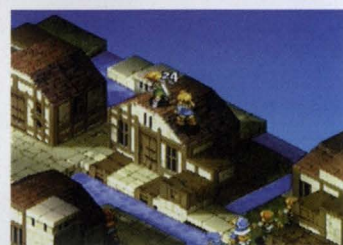
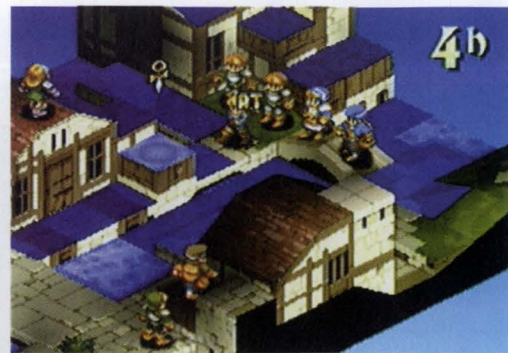
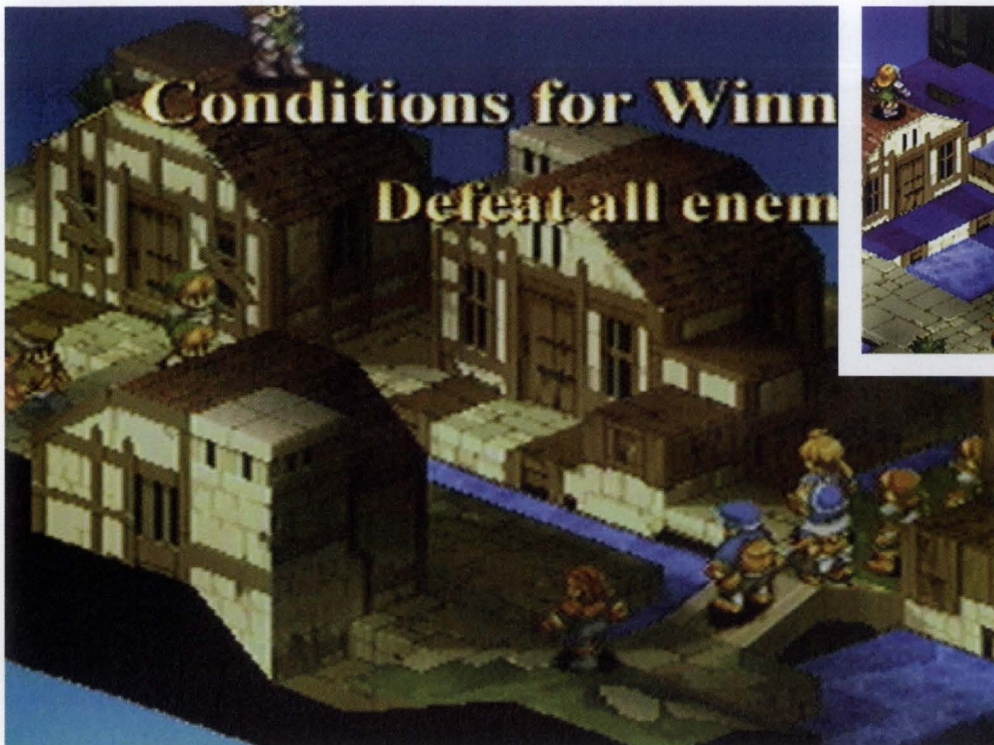
In assembling such a hardcore team, Square obviously had no desire to create a simple wargame for beginners, and *Final Fantasy Tactics* is certainly not for those after a quick arcade fix. Each skirmish can take the best part of 20 or 30 minutes, and to make any progress requires the player to quickly get their hands dirty in the myriad statistics and options the game contains.

Development of characters is of paramount importance, as they learn and master various tasks and the abilities that go with them. Even use of a simple item like a potion – which in a *Final Fantasy* RPG is available to any character as long as it's included in the inventory – can here only be accessed if a character has learned how to use it. Konami's *Vandal Hearts* – which to most eyes could be *FF Tactics's* twin – seems slight by comparison.

One of the stumbling blocks that every wargame must overcome to hopefully win its share of mainstream gamers is, like its role-playing counterpart, the potential tedium of turn-based combat. Square's Active Time Battle brought a much needed element of randomness to RPG battles, and *Final Fantasy Tactics* tries to do the same with its own combat engine. But because of the inherent complexity of positioning, weapon range, character power



Those with an aversion to game manuals... an in-game, onscreen, tutorial to take you through every aspect of *Tactics* step-by-step is available



Even in what should be the later stages of a battle, victory is far from certain. The enemy AI is such that they will help wounded comrades, and will even aid each other in bringing down weak units in a player's party

and, indeed, the essential need for players to be able to pause time and analyse their next move, it has to try that much harder. Thankfully, the new Charge Time Battle is as successful an attempt as you could have hoped for, given the game's nature. It gives characters of both sides a 100-unit Charge Time gauge, restricting movement and action (known as Active Time) until the gauge is full. The introduction of variables to dictate how quickly a character's CT gauge fills means different characters become active at different times. This has the effect of minimising the board-game feel of taking turns, as well as adding another strategic element. Keeping an eye on the AT table is essential to see who'll be moving and when.

The complexity of the battles is taken to even dizzy heights as you try to decipher the never-ending array of variables that decides the outcome of an encounter. Everything, from the elevation of your character on the landscape compared to that of its target to the compatibility of their respective zodiac signs, is taken into account as the game calculates how successful your attack has been.

While *Final Fantasy Tactics'* combat and structure have had some inspired work put into them, its story treads a more predictable path. Rather than *FFVII's* hard technological stance, *FF Tactics'* setting hearkens back to *Final Fantasy IV* (known as *FFII* in the West) and an *FF* world circa 1992 – although it takes its plot elements very much from *Quest's* previous games, eschewing even such *Final Fantasy* staples such as airships and crystals. Any player expecting the strong individual characterisation and colourful fantasy in a typical *FF* tale could be severely disappointed. The down-to-earth knights and kings, and the twists and turns between the two warring houses central to the story – along with their tongue-twisting

pseudo-Arthurian names – would have benefited no end from Square's storytelling flair and a stronger link to the established *Final Fantasy* mythos.

In the end, a *Final Fantasy* tag on something as unfashionable as a console wargame is a real blessing for Square and Sony. They can be sure that many will pick up *Tactics* purely on the heritage of its name alone; but it could easily mislead unsuspecting Western gamers whose only experience of the series is *FFVII*. Still, even without the *FF* brand behind it, the game more than stands on its own. For those who enjoy a more cerebral videogame challenge, *Final Fantasy Tactics* delivers exactly what it sets out to with considerable aplomb.



Edge rating:

Nine out of ten



Your party needs to be managed very carefully if progress is to be made



An analytical mind is essential to make sense of the information onscreen during a heated battle

Burning Rangers



Burning Rangers' explosions are impressive, featuring PlayStation-like transparency and filtering effects to provide a stunning pyrotechnical showcase. Such is the pace of Rangers' gameplay, players are rarely given the opportunity to view fires or explosions from close range



Walls of flame, cavernous warehouses and fast-spreading wildfires give BR a very distinctive feel



A simple choice between a male or female firefighter may be no more than cosmetic but Burning Rangers' strength lies in its unique gameplay

When Sonic Team created *NIGHTS*, many industry observers attributed the niche nature of the title to commercial naivete. What Sega needed, it was argued, was a *Sonic* game. Why then, had Yuji Naka's talented codeshop created a beautiful and somewhat whimsical 'gamer's game' when Sega so desperately needed a mainstream success? But if *NIGHTS* confused both critics and casual console owner alike, it more than delighted the dedicated hardcore that Sega now finds itself preaching to.

Burning Rangers is yet another example of Sonic Team's creative clout in creating offbeat, engaging titles – it's a game packed with quirky original ideas and has been executed with immeasurable finesse. The firefighting action is a curious fusion of recognisable gameplay mainstays and the Sonic Team's own imaginative, idiosyncratic flourishes. From the Manga-inspired introductory animation, to the inspired use of sound and speech, *Rangers* proves to be a refreshingly unique experience.

Although there's little development of its basic plot brief during gameplay, *Burning Rangers'* story does progress in its own way. In each of the beleaguered complexes, the player's choice of Ranger – from an arbitrary selection of male or female fire-fighter – is guided by a voice navigation system. But, far from the perfunctory *Sega Rally* instructions (which ran to 'turn left' and 'turn right') the standard of advice here is often quite complex. Rescued citizens also give the player help, from the simple to the unexpected. While many other developers employ speech as a trimming, *Burning Rangers* uses it as an essential part of its gameplay.

Using an enhanced version of the *NIGHTS* engine, *Rangers'* architecture is somewhat esoteric. Basic corridors give way to chambers containing water tanks with talkative dolphins contained inside them. It's immediately obvious that Sonic Team have set about creating a visual showcase for the under-exploited Saturn. Supposedly impossible transparency effects, realtime lighting and screen-sized explosions are just three tricks in the *Burning Rangers* repertoire. Such effects appear to come at a cost, however. Excessive clipping is rife, while



The key to mastering *Burning Rangers*' unique gameplay lies in the skilled use of the Rangers' spectacular Fire Extinguisher Units and jet packs (above, main)

pop-up is avoided only through use of carefully-designed rooms and walkways. Its engine appears designed to perform at its best while travelling at speed. Fortunately, there are few opportunities to halt and view glitches.

The focal point of *Burning Rangers* is, naturally, its wide variety of pyrotechnics. These can be extinguished through use of the imaginatively-titled Fire Extinguisher Unit (FEU), which can be charged to expel either large or small blasts. The effectiveness of this 'gun' is measured by the size of the shot, but the larger and more effective blasts yield few (if any) of the game's crucial crystals.

Much of *Burning Rangers*' gameplay involves the collection of crystals. The points system rewards players who collect great numbers of them, but they're mainly used to rescue citizens. To teleport a fire victim to safety requires six crystals but, like the title that gave Sonic Team its esteemed moniker, any contact with a fire, explosion or assailant causes the Ranger controlled to drop their collection. A number of these can be collected before they disappear but, as any *Sonic* adept will attest, that number will be a fraction of the previous total. Come into contact with any danger without crystals and a life will be lost.

Burning Rangers' fires are visually excellent, and the explosions that invariably act as their catalyst will impress all but the most curmudgeonly gamer. Players are given a brief warning before each blast occurs (a hissing noise and a reddening of the area about to explode) allowing them time to react. Thankfully, both Rangers are agile, capable of jumping in every conceivable direction, the trick being, of course, to jump in the *appropriate* direction. Experience gives players the ability to judge

where they should leap, but *Burning Rangers* is often one step ahead, lulling the player into a false sense of security. There are some excellent set-pieces too, in particular, those in rooms with fuel or gas canisters. Even the newcomer will recognise their significance on first viewing. It's wise to blow these up with the FEU from a safe distance before tackling the subsequent fires, but no player will avoid being caught by at least one such blast.

As with a lot of Saturn software *Burning Rangers* is fairly easy to complete, but in a similar fashion to *NIGHTS* Sonic Team has attempted to offer some replay value for players prepared to truly master its subtleties. Grades are awarded for a player's performance on each level, however, players used to receiving tangible visual rewards for their efforts may find this little reward for their labours. So if it does have a particular fault then, it's perhaps that there are too few surprises – a greater number of set-pieces would help sustain interest for those less interested in the simple accruing of points.

One of the last truly major releases for the Saturn, *Burning Rangers* is a curtain call that perhaps epitomises Sega's ill-fated 32bit machine – while undeniably accomplished, it sadly arrives too late to rescue the fortunes of its host machine. Ultimately, Sega backed a 2D horse in a 3D race that has seen Nintendo and Sony's thoroughbreds win by a mile. Fortunately, when it comes to gameplay, *Burning Rangers* extinguishes any doubts anyone might have about Sega's ability to compete.

Edge rating:

Eight out of ten



Rangers' view button allows players to search for trapped citizens from a safe vantage point. Wandering aimlessly often triggers explosions

Panzer Dragoon Saga



Even at its worst, *Panzer Dragoon Saga* is aesthetically accomplished. But at its best, Team Andromeda's work is simply breathtaking. Discovering new locations is, more often than not, a genuine pleasure



Every *Panzer Dragoon Saga* location boasts its own distinctive visual style. To describe it as the most attractive Saturn game created would be no exaggeration



Sections where Edge wanders alone play a large part in the advancement of *Saga's* storyline

It's a testament to Team Andromeda's versatility that the *Panzer Dragoon* series has shed its shallow-but-lavish shoot 'em up brief in favour of a complex RPG mandate. *Panzer Dragoon Saga* retains its predecessors' aesthetics, but adds a creative depth only SquareSoft games can currently rival.

Rather than re-record *Saga's* considerable spoken-word content, Sega has decided to add English language subtitles. Though many will (rightly) regard this as a blatant exercise in budget-trimming, *Saga's* use of text is infinitely preferable to the alternative of B-list actors reciting words they have little feeling for. The original speech remains, giving credence to onscreen captions, with inflection and tone accentuating the importance of individual situations. Happily, this dual-language approach keeps *Panzer Dragoon Saga's* strong story lucid and, with only a few exceptions, articulate.

Saga's gameplay is separated into three distinct sections: exploring with the well-named hero Edge on foot, travelling longer distances on Edge's companion Dragon and fighting battles. Separate zones are accessed via a traditional map screen. Each of these, from the valleys of an excavation site to the open spaces of a desert

inhabited by enormous *Dune*-style worms, boast distinctive visuals. When Edge chooses to explore alone, the resultant third-person view enables players to discover objects which can be examined and collected with a cursor; some contain collectable items, while others offer information or represent part of a puzzle. Dragon is controlled in realtime within a zone, but progressing to other areas is only possible through targeting and selecting a suitable exit.

Like *Final Fantasy VII*, *Panzer Dragoon Saga's* battles start often and without warning. *Saga* uses a power bar system similar to *FFVII's* to regulate the frequency of attacks, but its combat is far more tactical. Identifying weak points in assailants, the player can move the position of Dragon to attack accordingly. Equally, enemies often jockey for position to employ their more devastating attacks. The sheer range of monsters encountered rivals any other RPG game, with the design of individual combatants being consistently superb.

Panzer Dragoon Saga's gameplay is unquestionably engrossing, but superlatives can't do justice to its extensive FMV cut scenes. The introductory sequences alone last over 20 minutes, and have a cinematic quality that shames the work of almost every other developer **Edge** cares to mention. Their addition makes *Saga* complete, an RPG of true creative integrity. It's a tragedy that the Saturn's standing will ensure Team Andromeda's adventure, with a radically different approach to *FFVII*, will enjoy a fraction of its rival's success.

Edge rating:

Nine out of ten

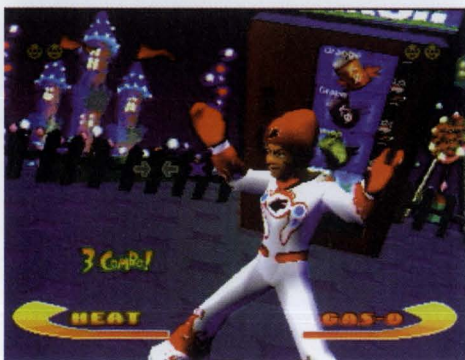
Bust A Move



All of *Bust A Move's* characters represent diverse music styles and their individual dance routines reflect their musical influences. Expect anything from a white-suited disco king (above), to dancing-loving Brazilian aliens (right)

Sony's decision to release *Parappa the Rapper* on the PlayStation last year was a brave and commendable one. Not least because on paper it may have seemed to have limited market appeal, but also due to the fact that no-one had previously toyed with, let alone dared release, such an unfamiliar concept.

Bust A Move continues the trend. Players attempt to hit an increasingly complex series of joypad instructions in time with the music's beat, the aim being to string together the most audacious dance combinations possible. Although little more than an eye-to-hand coordination test, this proves more troublesome than anticipated. With practice it becomes second nature, but the comprehensive training mode is worth exploring.



At several stages throughout a song, each of the contestants is given a chance to show off solo

Sadly, *Parappa* was marred by being too easily completed and failed to offer enough replay value. This isn't something *Bust A Move* completely succeeds in redeeming, although Enix has attempted to increase its lifespan by including a much-needed two-player mode. This turns out to be *Move's* saving grace, since after choosing one of the initially selectable characters, most players will dance their way through the game's 12 single-player rounds without much trouble.

There's little incentive to engage the CPU in endless swinging duels, when battling against a human opponent is far more entertaining. And entertainment is certainly assured. The characters' attempts to out-manoeuvre each other with a series of ridiculous – yet realistic – moves are highly amusing. Indeed, a lot of authenticity has gone into this title; the motion capture is impressive enough to convince most onlookers that the characters onscreen are genuinely dancing in their own particular style. The music on offer takes in an array of genres ranging from hip hop to handbag house, with disco and salsa nestling somewhere in between. Most are perfectly adequate, but will soon grate after repeated listening.

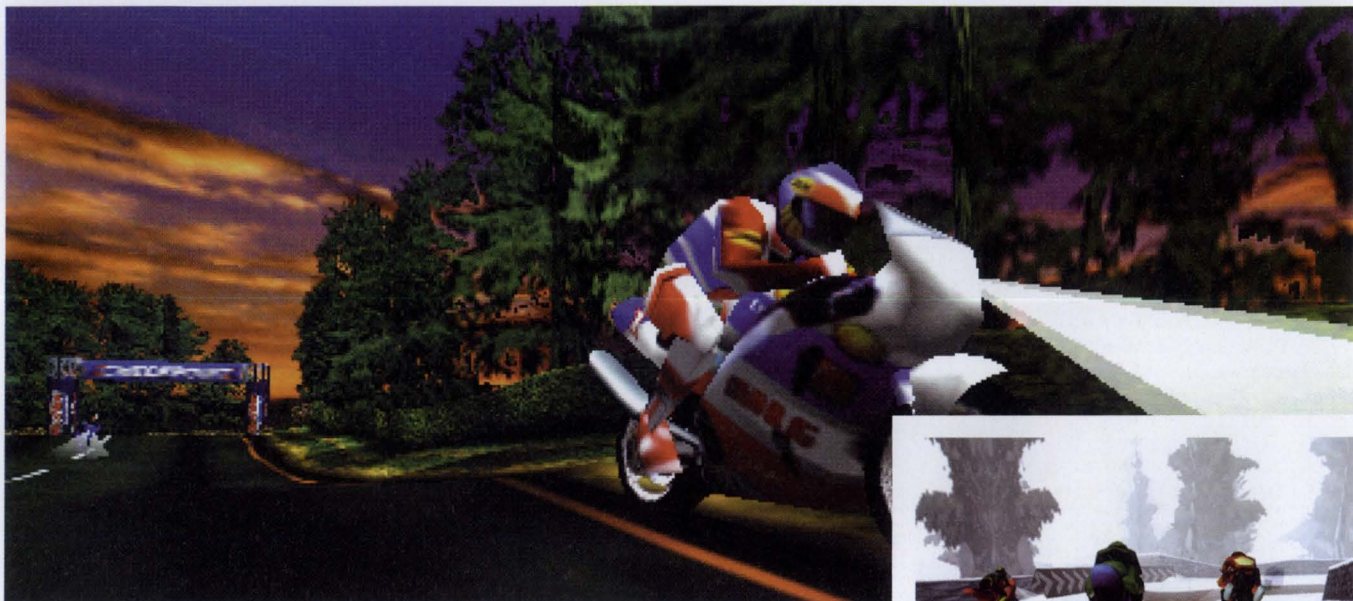
Beyond the accomplished melodies, pretty visuals and the novelty factor, games such as this are – in gameplay terms – highly restrictive. Players are given little freedom as to which button to press, and when to press it. Nevertheless, *Bust A Move* does provide plenty of Friday-night-after-the-pub frolics and as such is a very enjoyable title, rather than an essential one. **E**

Edge rating:

Seven out of ten

Two equally-matched players can often mirror each other's moves

Redline Racer



Opening the throttle wide and taking off from the line with the limited amount of turbo results in a near-uncontrollable wheelie. Unless the player happens to be of the Edge calibre, of course...



Despite its innovative setting, the game proves less playable than Delphine's superb *Moto Racer*



Familiar Tarmac tracks co-exist with surfaces more alien to racing games

Strangely, motorbike games on the PC have always been a rare breed, but now, like buses, several are about to arrive at once.

First up is Criterion Studios' *Redline Racer*, which joins Delphine's *Moto Racer* school of arcade thrills rather than the seriousness of anything Barry Sheen might have got involved with. The game's ten tracks therefore feature locations that are far removed from any idea of what a conventional race circuit might look like. As such, players should not be surprised to find themselves speeding along the sandy banks of a tourist-free beach, or battling against the weather in a snow-covered mountain pass. There are, of course, more orthodox circuits. These provide a good balance to what might otherwise have been an overly surreal experience.

The first thing to hit players when firing up *Redline* is the quality of the accelerated visuals. Highly detailed scenery flies by with impressive fluidity and the sensation of speed is realistically conveyed. This is aptly demonstrated by the claustrophobia-inducing narrowness of the game's English Country Lane track. This requires absolute concentration and shameless use of the brake in order to be successfully negotiated at death-defying velocity.

This authenticity also extends to the handling (albeit with some degree of arcade leniency), with each bike behaving differently. The riders too, look genuine, leaning into corners with the agility of their real counterparts. Until they come off, that is. Then they immediately become polygons bouncing along on the track ahead. This is certainly something the majority of players will experience initially, because *Redline* proves particularly unforgiving – the slightest scrape with a wall will usually send the rider flying towards the horizon.

Other than the arcade mode, players can engage in time trials and online battles with up to eight riders. A

visit to the Criterion Studios Website should throw up goodies other than the game's own extra vehicles.

Ironically, *Redline Racer*'s sublime visuals and complex physics sit awkwardly alongside its arcade aspirations. Somehow *Moto Racer*, with its better track design coupled with (admittedly) inferior visuals, conveys a more convincing coin-op experience.

It may cross the line just behind Delphine's game in playability terms then, but *Redline Racer* remains an enjoyable ride nonetheless.

E

Edge rating:

Seven out of ten



Redline Racer boasts some of the best looking visuals seen in any of the recent PC racing titles

testscreen round up

Fallout

Back in the early '80s, when computer gaming was still finding its feet, post-apocalyptic settings were all the rage across a myriad of genres. Times have changed and harsh prophecies of nuclear wastelands have been replaced by images of a 'near-future' tinged with a cyberpunk feel.

This is one reason why Interplay's latest RPG, *Fallout*, will prompt a pleasant glow of nostalgia in older gamers, as it's set firmly in a traditional 'Mad Max'-style post-nuclear war world. The player leaves the confines of a nuclear-fallout shelter to search the barren wastelands for a vital chip which controls the water recycling facility. Without it, the entire shelter population is destined for a thirsty grave.

It's not only the setting in *Fallout* which marks a return to many of the early conventions of the roleplaying genre. The search sees the player wandering around the wasteland and becoming involved in numerous sub-plots and mini-quests. Access to improved equipment is gained along the way and details about the central plot are revealed accordingly.

Luckily though, *Fallout* doesn't suffer from the same problems as the early RPGs on which it is obviously based. Instead, it takes the best of the traditional elements and combines them with modern technology and design principles for an engrossing and playable game. In a time when the RPG genre seems to have fallen from grace, this makes for a pleasant change.

Edge rating:

Seven out of ten



Format: PC Publisher: Interplay Developer: In-house
Price: £40 Release: Out now

Queen: The Eye

The committed Queen fan will find much to admire in *Queen: The Eye*. The characters and locations are drawn directly from various songs and lyrics, and the inclusion of four videos by the band isn't as indicative of ruthless self-publication as might first be thought; indeed, they are vital to progression through the game. The multitude of audio-only Queen classics that present themselves throughout the game are also linked to specific events and environments, providing a rather tenuous link to the in-game action.

For the hardened gamer though, there is little to recommend. Although the environments are always beautifully modelled and well presented, the game proper is sufficiently underdeveloped to stifle any sense of enjoyment.

Best described as a third-person action/adventure game, *Queen: The Eye* is riddled with a multitude of flaws, not least being the awkward and unresponsive control interface, which nulls any attempt at swift reaction or decisive combat. The camera is also frustratingly obtuse, staying fixed in a static position at any given location. Therefore, any combat or action that transpires is reliant on perfect positioning within its field of vision, or the player risks disappearing from view altogether as the antagonists obscure Dubroc (the game's hero). Commensurate with this is the ever-present danger of wandering too far from the camera so that the protagonist becomes a mere speck, or else stumbling into another area where the camera is stationed at a different, disorienting angle.

A discouraging and disheartening case of wasted potential, then.

Edge rating:

Five out of ten



Format: PC
Publisher: Electronic Arts
Developer: Destination Design
Price: £40 Release: Out now

Plane Crazy



The first game from Scottish multimedia developer Inner Workings is nothing if not ambitious. Created with an eye to the ArcadePC, *Plane Crazy* exploits a good 3D accelerator to conjure up some of the smoothest visuals seen yet on the PC. Canyons, cityscapes and even lava-floored tunnels unfurl without a hint of pop-up or frame rate reduction. Sadly, the gameplay doesn't prove to be so glitch free.

As a racing game set in the air, *Plane Crazy's* most obvious relative is probably *Diddy Kong Racing*, though there's little evidence of the sort of adventure which Rare's title revels in. *Plane Crazy* is pure novelty racing, *Mario Kart 64*-style. It's littered with power-ups and weapons which can be deployed against the enemy, and offers tracks crisscrossed with shortcuts. Control is satisfactory and responsive, and the airplane bobs about nicely in the turbulence, which changes according to the terrain.

But elsewhere *Plane Crazy* lets itself down. The opponents are unconvincing – however well the race is flown the other planes always seem to be just ahead or just behind and the courses are marred by frustrating snags, which often trap the player not once but several times. The power-ups yield even more arbitrary benefits than those found in *Mario Kart 64*, and the ability to fire rockets into the terrain seems superfluous at best. What's more, the full championship mode, which enables the plane to be upgraded – but only once the player has won a few races – misses the point.

Plane Crazy is occasionally enjoyable despite these flaws, but it can't begin to live up to its gorgeous graphics. Another missed opportunity.

Edge rating:

Five out of ten

Format: PC Publisher: Europress Developer: Inner workings Price: £40 Release: April

◀ Reboot

As Psygnosis puts the finishing touches to *Psybadek*, its long-awaited hoverboard title, the programmers responsible should perhaps check out this modestly successful shoot 'em up from EA. *Reboot*, based on the animated series of the same name, puts the player in control of Bob: one of a race of people who live in a huge computer. Unfortunately, said computer is under attack from a cruel digital dictator, Megabyte, who wants to overtake the mainframe by placing tears in the system code and killing off the peaceful cybertribe. It is Bob's job to ride through seven game arenas and 21 levels on a hoverboard, mending tears and blasting the various enemy droids.

What surprises about this game is not the pedestrian plot, but the well-designed levels filled with ramps, jumps and snaking corridors – the perfect environment for hoverboard action. Also impressive is the strength of the 3D engine, which, when confronted with a range of large, non-linear locations, draws way into the distance, enabling the player to pick out power-ups, enemies and tears (huge glowing balls of white light).

Learning to control the board makes for compelling gameplay, and the decent range of weapons and gadgets keeps players plugging away at their assorted foe. EA has done much to create an effective cyberpunk atmosphere, with droning craft circling overhead, weird mechanical noises in the background, and flashing neon lights.

Despite an interesting selection of bosses and challenging stages, the action can be repetitive, and some may tire of the darkness which constantly hugs the horizon. But players looking for a shoot 'em up that differs from the crowd could do much worse than this.

Edge rating:

Seven out of ten



Format: PlayStation Publisher: EA Developer: In-house Price: £40 Release: April

Poy Poy



Like *Bomberman*, *Poy Poy* is a multiplayer game, its solo mode appearing as an afterthought by comparison. The action centres around themed arenas, with four combatants hurling bombs, rocks and logs at their opponents to gain points.

Poy Poy's basic gameplay brief is simple, but Konami has added a measure of complexity in the form of 'special' throws. Their frequency is monitored by a power bar which replenishes with time. While it's relatively simple to avoid individual attacks, players will find themselves caught unawares by the outlandish specials on a regular basis. In such frustrating situations, some may find themselves longing for the purity of *Bomberman*, where wins and losses are attributed to skill, or a lack of it.

Unlike Hudson Soft's classic work, *Poy Poy*'s single-player mode mirrors its multiplayer game. With a TV show theme and minimal degree of presentation, players fight against CPU opponents in a series of rounds. Success means cash prizes, which can be used to purchase various 'gloves', each with different throwing abilities. However, players will rapidly tire of its repetitive gameplay.

Konami's game is relatively unique in that the human vs human battles accentuate its strengths and disguise its weaknesses. Until *World* (see right) arrives later in the year, *Poy Poy* is the closest PAL players will get to *Bomberman*-style action.

Edge rating:

Seven out of ten

Format: PlayStation Publisher: Konami Developer: In-house Price: £35 Release: Out now

Bomberman World

Considering that PC, Saturn and even N64 conversions of this classic multiplayer strategy game have all been and gone over the last two years (with varying degrees of success), it has taken an extraordinarily long time for anyone to get a Playstation version together. Perhaps Hudson Soft was unsure of how to update the game for this console's owners, given their obsession with 3D graphics. The SNES series was, after all, a totally top-down 2D affair, where the player inhabited a series of mazes which only occupied one screen apiece. Present this scenario to a publisher today and they would probably laugh themselves stupid.

At least the designers have had the courage to keep the gameplay intact. In *Bomberman*, there are three game modes: normal, challenge and battle. The first two are variations on the same one-player theme: you simply walk around each maze picking up crystals and dropping bombs to kill the enemies. Get all the crystals and you advance to the next level. Here though, the new isometric design adds a few fresh features: players get to blow coconut-throwing monkeys out of trees, go up and down slopes, and blow obstacles across ravines. PlayStation *Bomberman* also uses a wealth of familiar power-ups such as the ability to throw bombs, to increase their power and to set up remote bombs so they go off when required, but it abandons some of Hudson Soft's more bizarre moments (those weird jumping horse power-ups in *Bomberman 3*, for example).

As always, though, the real fun of *Bomberman* is in the battle mode where five Bombermen (up to four can be controlled by human participants via a multitap) get together and try to blow each other up on single-screen arenas. Bizarrely, the dodgy isometric perspective forces one corner of the maze off the screen, but it does add a few interesting new arena styles, and that familiar *Bomberman* mayhem remains intact. Although an unambitious interpretation, *Bomberman World* is still one of the finest multiplayer experiences the home console has ever produced.

Edge rating:

Seven out of ten



Format: PlayStation Publisher: Hudson Soft Developer: In-house Price: ¥5,800 (£30) Release: Out now (Jap)

NBA PRO '98

While videogame representations of sports such as ice hockey and football continue to increase in sophistication – both visually and in terms of gameplay – basketball titles appear to have advanced little since the days of 16bit consoles. If proof were needed to substantiate this argument, Konami's *NBA Pro '98* could be put forward as a compelling case.

Graphically, *NBA Pro '98* is comfortably accomplished, its player animation fluid and well-observed. Unlike similar titles, where a desire to embellish player movement leads to a reduction in manoeuvrability (and, therefore, playability), *Pro's* developers have ensured that team members are quick to respond to joystick instructions. Indeed, matches are often played at a consistently high pace, with players capable of walking, running and 'dashing' – a short burst of speed best used to avoid man-to-man marking.

But if *NBA Pro '98* is pleasant to behold, its artificial intelligence is disappointing. Functional at best, console-controlled players often appear to mill around aimlessly while defending. And, with every team member having an effective physical presence, there are numerous occasions where a player can become 'stuck' in a crowd – an unusual aspect of play for what is, in essence, a non-contact sport.

With its one-player game being – at best – fair entertainment, it's fortunate that *NBA Pro '98* is far more satisfying when played with a group. If Konami can invest additional effort into creating better player AI for a perhaps inevitable seasonal update, a potential *NBA Pro '99* would be a more complete and desirable package.

Edge rating:

Six out of ten



Format: Nintendo 64 Publisher: Konami Developer: In-house Price: £55 Release: April

Dark Omen

As a straight port of its PC equivalent, this PlayStation version of *Warhammer: Dark Omen* shares its many flaws. And, for those who don't own a PlayStation mouse, it adds the considerable nuisance of joystick-based control.

As *Edge's* review last month stated, players attempting to get to grips with *Dark Omen* will find themselves fighting its awkward interface as much as its Tolkien-esque groups of orcs and goblins. Similarly, this PSX conversion is equally difficult to control. When directing units at the edge of the display, *Dark Omen's* annoyingly over-sensitive scroll is often triggered by the slightest touch. It's also often difficult to ascertain whether orders are being obeyed, so players will find themselves repeating commands needlessly. At times, EA's fantasy wargame becomes more like hard work than play.

As certain units need to be preserved in order to succeed during *Dark Omen's* later levels, it's essential to re-play missions until the best possible victory has been achieved. Unfortunately, many such replays will be made because its interface makes a quick response to a particular threat near-impossible. Without a PlayStation mouse, *Dark Omen* is often an incredibly frustrating game to play – and, with *Red Alert* a desirable alternative, players should ask themselves if the additional expense is really worthwhile.

Edge rating:

Six out of ten



Format: PlayStation Publisher: EA Developer: In-house Price: £40 Release: Out now

Newman Haas Racing



The re-creation of real life motorsport in videogaming is a high art. Successful titles such as Codemasters's *TOCA*, and to a lesser extent Psygnosis' *F1 '97*, offer an accurate reflection of the various sports while remaining playable. Surface details, such as including decent facsimiles of the tracks, cars, teams and drivers are important but cannot match the need for a faithful handling response and a sense of 'being there'. Psygnosis' latest entry to the fray, *Newman Haas Racing* more than lives up to the earlier part of the formula but is lacking in the latter.

Constructed around the framework offered by the American equivalent of Europe's F1 racing, *Newman Haas* is an IndyCar racing title. The game has all of the visual niceties you would expect from a Psygnosis product, with developer Studio 33 owned by one of the Liverpool-based publisher's directors. Curiously, *Newman Haas* and *F1 '97* use different graphic engines, both of which are improvements on the original *F1's* and both of which are now create medium resolutions of 512x256. However, movement is disappointingly jerky, to the point of intrusion into the gameplay. All of the options imaginable have been put into the game, including a split-screen, two-player mode which is so myopic it requires either a sixth sense or an intimate knowledge of the tracks for successful navigation.

Newman Haas' central failing is its lo-fi handling model. Use of the analogue pad is negated by its highly sensitive calibration that returns it to a digital system, while the d-pad is reminiscent of an on/off switch. More seriously, there is little feeling of true interaction – fast corners are no more trouble than slow ones, while few racing cars have been equipped with as comprehensive a four-wheel drive system as found here. Off-roading in *TOCA* has, as you might expect, a serious impact on the handling of the vehicle, but it would seem that IndyCars are unafflicted by such woes.

On the plus side, the famous American high-speed bowl tracks are fairly interesting in a transient way, if only for offering a change from the usual winding circuits. The inclusion of a properly animated pit crew is a nice touch, as is the excellent engine note, and the commentary is remarkably welcome. However, the automatic zooming back of the camera at the slightest impact is incredibly annoying, and perhaps illustrates best of all the lack of thought that has gone into *Newman Haas*.

Edge rating:

Six out of ten

Format: PlayStation Publisher: Psygnosis Developer: Studio 33 Price: £40 Release: Out now

◀ Oddworld: Abe's Oddysee

Fate cruelly intervened between **Edge** and *Oddworld: Abe's Oddysee* when the game was originally released for the PlayStation in autumn last year. For in many ways this is a classic **Edge** title; a tight 2D platformer that's packed with innovative touches and some great character design.

Following Abe's quest as he struggles to save his Mudokan people from the monstrous food factory where they're about to be demoted from slaves to consumables, *Oddworld* could almost be defined as a puzzle game. Each successive flipped screen offers a greater conundrum that must be overcome before the Mudokans can be freed via the mystical 'bird portals'. But rather than increasing the complexity of platforms and levers of each section, Abe's creators have given him the ability to communicate with his people. By pressing various number keys, players can make Abe whistle, beckon, laugh, chant – even fart to the other characters, guiding them either to their doom or release.

Changes from the PlayStation original are negligible, although the controls are perhaps a little more sluggish. Happily, *Oddworld's* fantastic graphic style and animation have been retained, with the Mudokans, their Sliig guards, and the various other inhabitants all moving around with startling fluidity. For once, the FMV is also worth its CD space, as it blends seamlessly into and out of the action. **Edge's** only reservation is that PC gamers unaccustomed to such platforming precision may find the experience frustrating – *Oddworld* demands a certain level of commitment to progress. Other than that, this is a rewarding and enjoyable game that should tax the minds of even the most hardened player.

Edge rating:

Eight out of ten



Format: PC Publisher: GTi Developer: Oddworld
Inhabitants Price: £30 Release: Out now

F1 '97

Appearing six months after its PlayStation incarnation, and just in time for the 1998 Formula 1 season, *F1 '97* has finally driven up to the PC starting grid. Boasting a similar array of improvements over Psygnosis' original *F1* title as the PlayStation version (including 3D collisions, a flag system, dual commentary, higher resolution, dynamic weather), *F1 '97* offers an exaggerated arcade experience together with a more realistic mode for the serious F1 devotee. While it doesn't contain the level of authenticity of *F1GP2*, nor the amount of detail found in *F1 Racing Simulation*, for example, *F1 '97* is the more immediate title of this trio and still contains enough F1-related legitimacy to keep fans of the sport happy.

Other than better drawing distance (alterable at the expense of the frame rate), and nicer effects such as dust and water spray, this PC version differs little from its PS cousin, except, of course, for the eight-player network option. The handling too, particularly on the Grand Prix setting, seems a tad more forgiving than on the PS version, with the car's back end displaying less tendency to try and make its own way round to the front.

F1 '97's biggest problem however, is that by taking so long in making its trip to the PC, titles such as *TOCA* and the PlayStation-only *Gran Turismo* have since slipstreamed past with little effort. Both offer more thrills per lap than an entire F1 race but this is more a reflection of the nature of Formula 1 than the actual game itself.

As such, it remains a competent simulation of the sport.

Edge rating:

Seven out of ten



Format: PC Publisher: Psygnosis
Developer: Bizarre Creations
Price: £30 Release: Out now

House of the Dead



A leftfield release from Sega, *House of the Dead* was an unexpected hit for AM1. Comprising ideas from varied sources, *HotD* manages to incorporate aspects of *Resident Evil*, *Hammer*-style horror and even David Fincher's *Seven* to great effect. A domestic conversion was, given its arcade success, inevitable. Saturn owners, however, may be surprised by the fact that Australian developer Tantalus (responsible for Saturn *Wipeout 2097* and *Manx TT*, among others) was given the responsibility of coding its home debut.

As a straight port, *House of the Dead* is satisfying and eminently playable. Though its graphics use far more textures than the *Virtua Cop* games, it lacks the crisp precision of their visuals, its backgrounds appearing murky and ill-defined for technical rather than atmospheric reasons. But if these pre-calculated locations are lacking polish, *HOTD's* monsters are excellent. Like the arcade original, limbs and heads explode in showers of gore and assailants are large and fast-moving.

Unfortunately, such detailed assailants and moving backdrops mean that breaks for disc access have been considered a necessary evil. These breaks in play are fairly short, but ultimately significant. Not even the simple but effective 'heartbeat' noise played can disguise the fact that players are unable to continue for roughly five seconds while the break is in effect. Such a time may seem insignificant, but in an action game any delay can be seen as a flaw. It's ironic that a *House of the Dead* cut-scene can last longer, but a load will invariably elicit the more unfavourable comment from a player.

This perhaps unavoidable problem detracts from Tantalus's otherwise excellent work. Saturn-specific features – including the ability to play as different characters with varying abilities and weaponry – offer a great deal for the solo player, while the alternative routes and secret areas of the original all appear where veterans would expect them to be. Most Saturn owners will forgive *House of the Dead* for its CD-ROM access times, but if Nintendo wished to reinforce its decision to chase cartridge-based software, Sega has thoughtfully provided more than adequate evidence.

Edge rating:

Seven out of ten

Format: Saturn Publisher: Sega Developer: Tantalus Price: £40 Release: Out now

Atari Greatest Hits 2

Yet again the PlayStation is host to past arcade glories. But Atari's latest looks set to be one of the best...

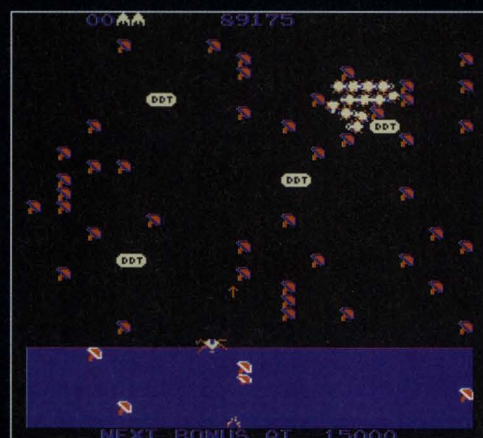
While the previous Atari retro collection was a commendably solid affair, the company's vaults hold several more recent classics. Although the superb *Toobin'* and *APB* have yet to be reworked for the PlayStation, *Atari Greatest Hits 2* assembles one of the most impressive golden-oldie casts yet seen. The six-strong cast can be divided into two categories. *Gauntlet*, *Paperboy* and *Marble Madness* are the three big names here, while *Roadblasters*, *Crystal Castles* and *Millipede* lend the backstage support.

It's remarkable for a retro collection to have such a strong line-up — some of Namco's museums are sound in curiosity value and little else. From *Gauntlet*'s frantic top-down maze exploration to the innovative inertia of *Marble Madness*' rolling balls, there's a huge amount of gameplay to be explored. Quite how the conversion will interpret *Madness*' trackball control system — or *Paperboy*'s handlebars — isn't yet clear. For those unfortunate enough to have missed *Paperboy* in days gone by, its name reveals its nature, with the player controlling a cycling newspaper delivery boy around a hazard-strewn suburb. *Gauntlet* was massively successful in its time, and is still immensely playable now. Hopefully, Midway's conversion team will be including support for Sony's PlayStation multi-tap so that the arcade cabinet's four-player action can be replicated.

Greatest Hits 2's other titles are clearly not on the same level as the three above. As its name implies, *Millipede* was the sequel to Atari's seminal *Centipede*, itself a twist on the *Space Invaders* theme, with bug-like enemies tumbling down the screen in order to be zapped. Of the other two, *Crystal Castles* is perhaps best described as an isometric *Pac-man*, with the alternative 'ghosts' able to steal the collectables. *Edge* is curious to see how well the racing shoot 'em up *Roadblasters* stands up to current standards, although fond memories still persist. With its genre currently dry, the game may well find favour among modern players. Overall, however, this would appear to be one of the strongest arguments *Edge* has heard for the continued survival of the retro gaming collections.



Racing with guns in *Roadblasters* (centre), plus the diverting but not essential *Crystal Castles* (bottom)



Top to bottom: *Marble Madness*' slopes, *Millipede*, and news delivery antics in the classic *Paperboy*

Format:	PlayStation
Publisher:	GT Interactive
Developer:	Atari
Release:	April
Origin:	US

Ehrgeiz

Personality and precision performance abound in Square's exhilarating combat coin-op



Dream Factory has imbued its polygons with a remarkable amount of individual character



Get ready to rumble, as Namco brings Dream Factory's creation to the masses

Previously treated to a prescreen in E52, the PlayStation-bound arcade beat 'em up *Ehrgeiz* was shown at Japan's AOU exhibition in its final, street-ready form. Created by the SquareSoft 'Dream Factory' team behind *Tobal No. 1* and *2*, this heavyweight contender has all the right credentials to fight its way to the top. **Edge** seized the chance to play the game at both AOU and London's recent ATEI show, and was impressed by the fluid, powerful nature of the gameplay.

Ehrgeiz is packed with innovative touches, which is no mean feat for a new entry to a genre populated by Namco and Capcom's creations. The former company has placed its publishing muscle behind the game, which is surprising given that some of Dream Factory's members defected from Namco to create *Tobal*. By using the PlayStation-based System 12 arcade board as a foundation for the title, there's a high probability that the translation to Sony's machine will be one of SquareSoft's current projects. Were it not for the obvious quality of the screen-grabs shown here, it



From projectiles to throws, players have a feast of actions available for deployment. Special attacks require urgent avoiding manoeuvres

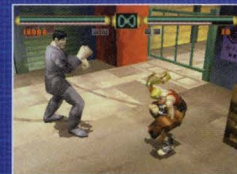
would be easy to write off *Ehrgeiz* and its System 12 brethren as mere console fodder.

Ehrgeiz's list of notable features begins with Prince Naseem (as in *Hamed*) available as a character, and goes on to include multi-layer environments with elements such as packing crates that can be picked up and used as weapons. Of the arenas **Edge** has so far seen,

Developer: SquareSoft
Release: Out now
Origin: Japan



Ehrgeiz's characters have a heavy, almost chunky feel to them, reminiscent of *Tekken's* Heihachi. Items such as crates (main) can be jumped from, thrown around and generally abused. Has Dream Factory set a new standard?



All of the expected, contemporary lighting effects, although these have a definite effect...

one of the most impressive placed the action on a fast moving train, circling around the side of a mountain. Another distributed the battle over three separate tiers, with players leaping from one to the next.

Combat is varied through the combination of both projectile and close-range attacks, although there has been a switch from earlier versions of the game which favoured long distance fighting. Although the action takes place in full 3D, with players able to move freely around the settings, the characters always turn to face one-another in order to

avoid awkward positioning. First time players will be pleased to note *Ehrgeiz's* steady learning curve, while more accomplished performers will find the expected range of attacks, and a control system reminiscent of *Tobal's*. Animation is reassuringly solid and smooth, with collision detection strong enough to avoid one of the fighting game genre's eternal problems – weak character interaction.

First impressions suggest that much of interest lies beneath *Ehrgeiz's* undeniably handsome exterior – **Edge** is holding its fifty pence pieces in order to find out.



This train ride to nowhere is one of the most novel fighting game arenas Edge has witnessed for some time (main). With controls based on the *Tobal* games, it was inevitable that some serious grappling would be on offer (top right)

Time Crisis 2

Namco's aim improves with a second chapter hit for its gun-toting series

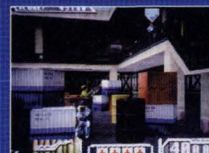


As expected, the scenery in *Time Crisis 2* is more complex in design than the original

participants will see the action through their character's eyes on their respective screen, and co-operation between them is essential if they plan to stay alive. As such, one of them inherits the supporting role and must provide cover fire while his partner darts around like a hot-headed killing machine. This interaction between players is an innovative feature in a lightgun shooting title, and proves particularly successful. In order to reach the next section players have to depend on each other to defeat and outwit the attackers.

Other than a two-player mode, *TC 2* also includes a wider variety of exciting locations for the shootouts, such as moving trains and powerboats. These extra elements should combine to set the standard for lightgun coin-ops to come.

E



Players must be careful not to shoot each other, as attacks often come from opposing angles



As in the original game, cut scenes feature heavily throughout and help carry the action rapidly along

Like its enjoyable and successful predecessor, *Time Crisis 2* features the same innovative action pedal which enables players to use the game's scenery as cover while reloading their weapons every time it's released. Not wanting to change a winning formula, the same strict time limit is imposed on players and the plot is just as absurd as first time round.

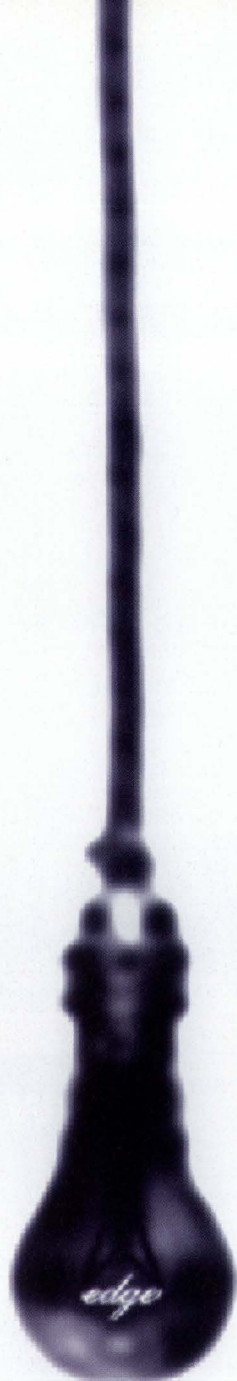
This sequel's major innovation though, is the two-player link-up mode. Each of the



Baddies have become more tenacious in their efforts to stop the player's progression, which may mean catching a lift from a speeding locomotive

Developer: Namco
Release: Out now
Origin: Japan

Rates Double-page spread £4,000 • Full page £2,000 • Half page £1,000 • Quarter page £500



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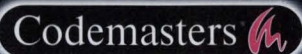
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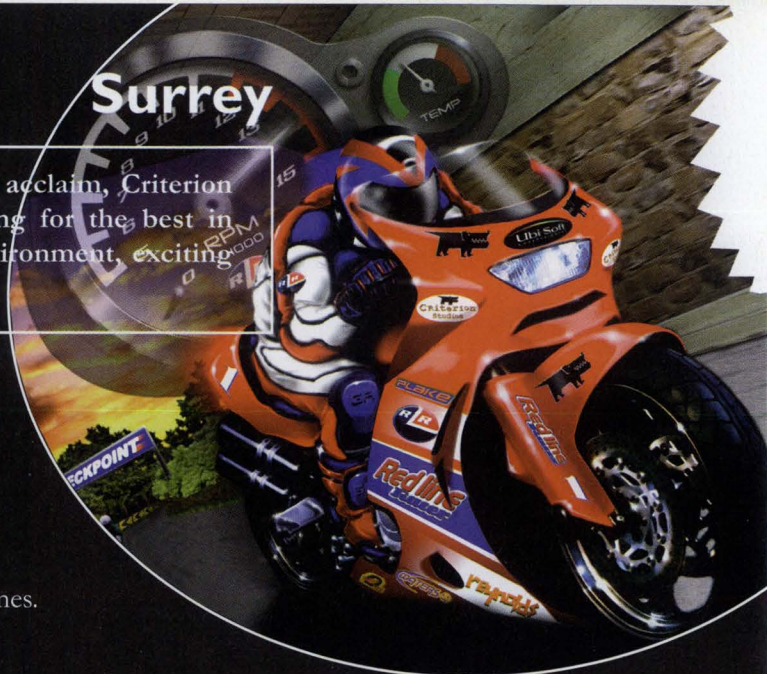
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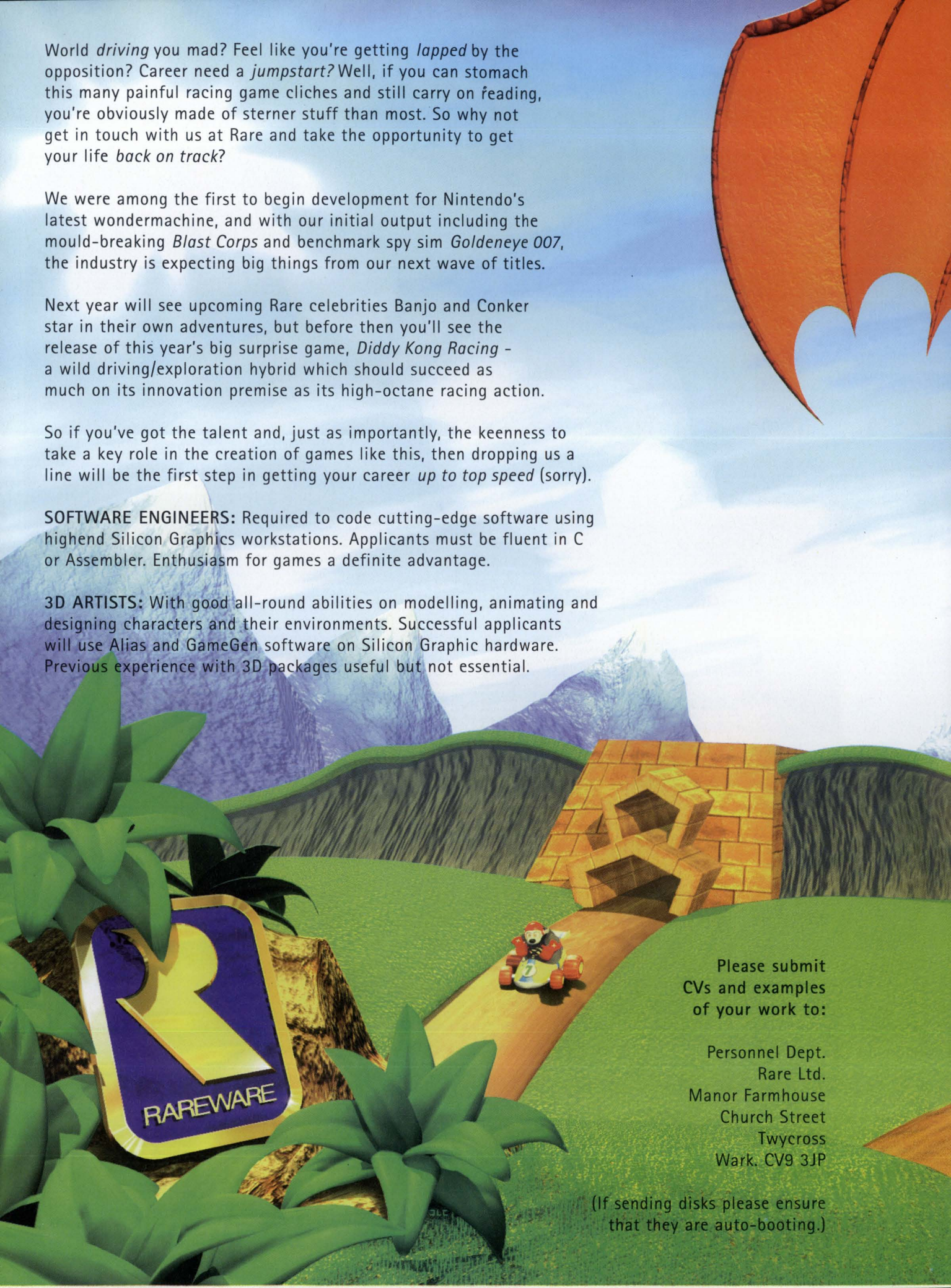
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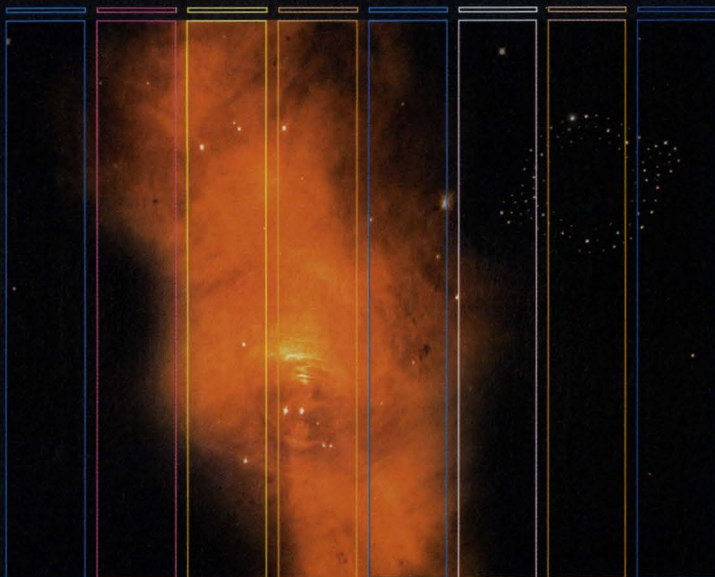
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Gallery

Inspiring computer-generated character designs from Japan juxtaposed with imagery from the anticipated *Command and Conquer 2*

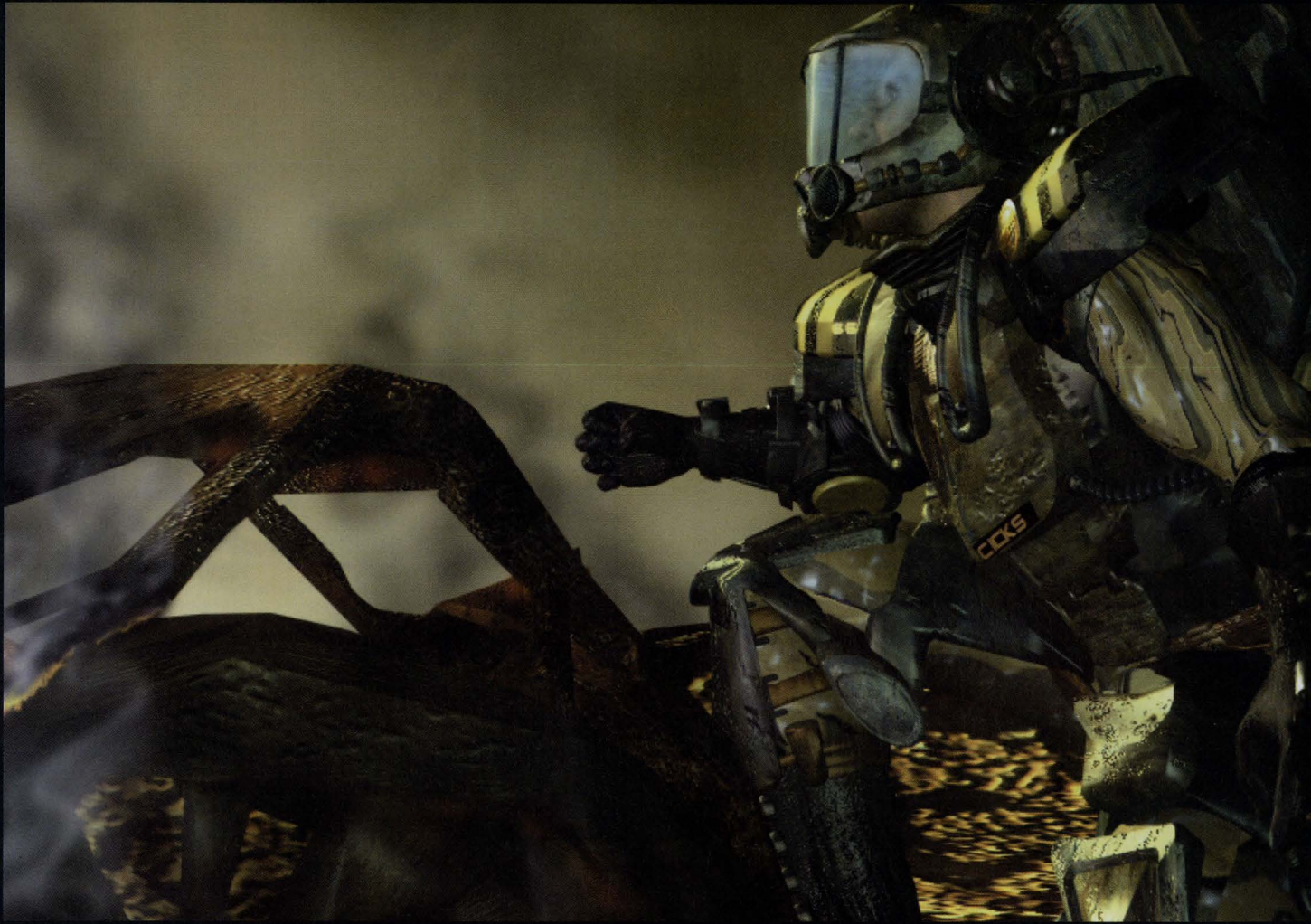
As featured in this month's arcadeview, SquareSoft's *Ehrgeiz* is the source for this varied collection of character designs. Notably, the usual manga influence so prevalent in Japanese games has been limited to moody posturing for this collection of bruisers. Although some of them, particularly the uniformed girl top right, adhere to fighting game stereotypes, others are more original. The especially troubled individual opposite is definitely worthy of note...

Images rendered by Dream Factory development group at SquareSoft Japan





© Westwood Studios 1998



These images, taken from *Time Crisis 2*, Namco's follow-up to its own successful lightgun coin-op (and PlayStation conversion) of last year, show close-ups of the game's two central characters, the improbably-named Keith Martin and Robert Baxter. Players must cooperate throughout the game, and avoid shooting each other as they confront a seemingly endless army commanded by the head of a corrupt and power-hungry international communications conglomerate about to use a series of satellites for military purposes.

Images rendered by Namco's in-house artists in Japan

Westwood Studios' rendered artwork has already obtained legendary status, with games such as *Command and Conquer* and *Red Alert* featuring some of the best FMV sequences yet seen on the PC. The stunning images shown here come fresh from the million-seller in waiting, *Command and Conquer 2: Tiberian Sun*. They show the GDI hovertanks and marines in their true colours, and demonstrate that the developer has no intention of letting standards slip. *Tiberian Sun* is slated for a September release and **Edge** expects much from the Studios' second outing.

Images rendered by Westwood Studios using 3DS Max 2 running on a Dual Pentium Pro 200Mhz, with 256Mb RAM



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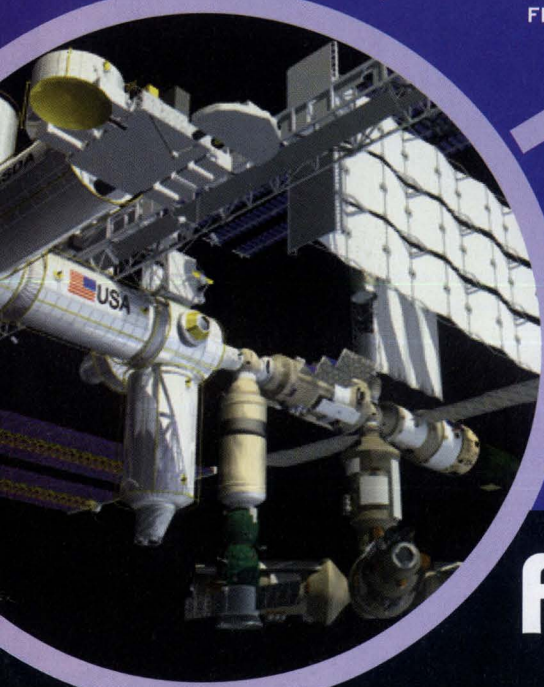
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Pushing the frontiers: extensibility in games

One common feature of many of the most successful and long-lived games is that they provide options for users to customise the game – adding new levels, monsters, sounds or simply tweaking the gameplay options. It is partly due to these features that games such as *Quake* and *Red Alert* are still heavily played today despite their relative age, with active players constantly releasing new patches for them. There are several ways, each with its own benefits and pitfalls, in which a developer can extend such options to build player loyalty.

The extensibility of ID Software's *Quake*, is provided by its built-in scripting language *Quake C*. This code is written to handle the motion and responses of every object in the game, so it's possible to change any of these behaviours simply by changing the code. *Quake C* is a very powerful language in many respects; patches such as the Reaper Bot, a computer opponent for multiplayer mode, demonstrate this well. *Quake C* also has the major benefit of being hardware-independent – patches written for one *Quake* version will work without modification on another. This approach has some drawbacks, however, the major one being speed. As *Quake C* is effectively an interpreted language, it can be slower than the equivalent native code, a factor that severely affects complex routines such as monster AI. *Quake C* is also confined to performing only those operations that the main *Quake* program provides, limiting its usefulness.

These factors prompted the switch in *Quake II* from *Quake C* to a DLL (Dynamic Link Library) system. Using a DLL means that the *Quake II* control routines can be programmed in normal C, C++ or any other language which can compile to a DLL, and can access not only the functions provided by *Quake II*, but any other system functions they require. As DLLs are compiled in native code, they are also significantly faster than *Quake C* patches. The DLL approach does have its disadvantages: the portability of *Quake C* is lost, as is a degree of the protection offered by *Quake*'s 'sandboxing' of the *Quake C* code, which makes it impossible to affect the rest of the system adversely.

A simpler customisation option is to make available only the parameters used by the game logic, rather than the logic system

itself. Many strategy games, such as *Red Alert*, have the controlling variables in a separate file (often a Windows-style .INI file, as these are easy to read and modify). A file may contain sections for each type of unit in the game, for example, along with its health rating, its maximum speed, its chosen sprite and so on. This makes it possible for users to change parameters with ease if they want to make a particular unit more or less powerful, or even to invent a completely new unit. It also aids the developer, as the game can be quickly modified during playtesting to try out new ideas and balance the gameplay.

Users may want to change the graphics, sound and music too. Here the developer needs to provide a converter that translates files between the game's own formats and other commonly-used formats, or even just to offer relevant documentation – if the game is popular, someone else will soon write a conversion program. Even a CD player option can dramatically improve things – everybody can have the in-game music they want.

A more recent and still evolving development is the shared universe concept, where several games based around the same world can be interconnected. A flight simulator and a tank game could be connected together, for example, with players able to drive or fly through the same environment. This can be made possible by using a unified representation for the world, and allowing each machine in the game to manipulate objects as required. The tank simulator may not know how an aircraft is supposed to move, but the flight simulator controlling the aircraft does. Alternatively, games could be linked on different levels, so that a strategy game could run the overall game, for example, calling on a simulator game only to fight the actual battles and pass the results back to it.

Some developers and publishers would argue that it is self-defeating to permit easy game modifications, as this enables other people to produce upgrades (free or otherwise) that compete with their own. This may be true in a few cases but the best upgrade packs rely on something different, either special changes to the game engine itself or the use of better-designed components, to set themselves apart from third-party offerings. The original developer is more likely than to understand how to keep the game balanced and stretch the engine.

Offering extensibility can only mean better games with more connectivity options and increased control for the user. What developers should appreciate, however, is that allowing the user to change the game options is not an excuse for failing to set them up correctly in the first place. **E**



```

Only the [Object] and [Sprite] sections are mandatory
Note that all targeting-type distances are squared. (in any distance used for target checks)
[Object]
Name=Name
The name of the object, as referred to in the game & in other object definitions
[Sprite]
File=filename
The first 4 characters of the sprite filename (name+name.bmp/.avi where (name="000-000")
Sequential=0
Use the filename sequential (000 001 002) or engine?
Animation=0
If set non-zero, start in the bottom-right pixel (only useful for mission objects)
Collision=0
If set, then the object is assumed to be an animation, and spr001=angle000, spr001=angle001, etc
Collision=1
The number of sprites there are (1-16)
Tint=1
The colour of the object on the radar
Reflection=99999
[Physics]
Actually the acceleration of the object
Mass=1000.0
The mass of the object (rotation and other weapons are fixed at new speed)
Translation=0
The rotation speed of the object (positive turning speed indicates clockwise turning)
Rotation=0
The linking speed of the object
Scale=1.0
The linking 'speed' (each frame, speed=speed*scale)
Scale=1.0
The object engine (for collision detection)
Collision=0
The number of the object's subtypes (0=1)
Collision=1
Think object, use it collide with? If Collision=0 AND Target=0 then collision occurs
If set to 0, then the player cannot override the object control - useful for animations
[Weapon]
Primary=Weapon1
Name of object to fire for primary weapon
Primary=Weapon2
Weapon delay
Primary=Weapon3
Weapon pod 1 x-coord (taken directly off sprite, use PSP bottom-left-of-screen to find)
Primary=Weapon4
Weapon pod 2 x-coord
Primary=Weapon5
Primary=Weapon6
Secondary=
For secondary weapons, just duplicate the gun above and put "Secondary" instead of "Primary"
  
```

Places to visit:
 ID Software <http://www.idsoftware.com/>
 Abuse (LISP-variant language) <http://www.crack.com/games/abuse>
 Activision (Dark Reign editing and add-ons) <http://www.activision.com/games/strategy/darkreign>

Activision's *Dark Reign* provides extensive editing facilities for changing many aspects of the game; just one of the options that any enterprising games developer should consider

Yaroze: getting to grips with C

Apart from the £350 price tag (for a reduced period), the thing most likely to stop gamers buying the Yaroze PlayStation programming system and attempting to create their own PlayStation masterpieces is that simple phrase, 'Users will need a working knowledge of C'. Although most console owners are certain to know a little about the process of creating games, their knowledge usually stops at the meaning of terms like texture-mapping, prerendered scenery and realtime lighting. C itself, the programming language that makes it all possible, is likely to remain an enigma.

So what does a prospective Yaroze user need to know about C? Perhaps the first step is to realise that anyone who has used a console, PC or Mac over the last few years will have encountered it: C has quite simply become the language of choice for a huge number of programming tasks, not least games. Unfortunately, just one look at the way C is laid out – lots of '{' and '}' characters and alien commands – is enough to put many newcomers off. However, while it's not the most readable language in the world (it's very easy to write barely comprehensible C), it's not too dissimilar from a number of other programming languages.

In fact, knowledge of any other language will be a big help to the beginner learning C. Whether it's BASIC (preferably some form of structured BASIC like the revered BBC model), Pascal, Cobol, or even something like the STOS or AMOS construction kits, C is not a million miles away. What is important is an understanding of data structures, knowing the difference between BYTES, WORDS and LONGs. C is essentially just another way of programming a computer, so whatever the user has done before with a programming language can be done in C. It is possible to buy a book and start learning the language from scratch, of course, but it's far better for users to try and replicate something they've already written in another language, so they can understand what the differences are.

Once even a basic grasp of C has been acquired, Yaroze users need to attempt doing something practical and visual with it. Unfortunately, it's not possible to just wade straight in and write *Ridge Racer* (despite what you might have heard); newcomers need to start with very basic routines to get them used to the hardware, and also to using C. Making sure that you can read joypad movement correctly is a good place to start; if users don't get that right, they're certainly not going to write a game in a hurry. Getting a simple shape up on the screen which responds to joypad prompts is the fundamental block on which to build.



Scott Evans' formula for *Bouncer 2* is a simple idea, but the game's programming will take months to master



George Bain's horizontally scrolling Yaroze shoot 'em up *StarFighter* may look basic, but the promising ideas it showcases were enough to secure him a job at SCEE

Be aware, however, that you won't get it right first time. Novice programmers often have to reorganise their code numerous times, because there will be something fundamental they have forgotten about. As Jonathan Cartwright, studio head at Corrosive Software asserts: 'It's a learning experience, and you shouldn't be downhearted if your early extravagant plans don't work out. Many of the Yaroze games are quite simple, and that's not a bad thing. If you're going to write a game, make sure you can achieve it. Even if you write some simple, stupid little demo, at least you've done it. And you can build on it from there. Nobody writes their best stuff straight away, and Yaroze is a limited format. However, its lack of memory and facilities should instill discipline, which will certainly pay off later...'

Talent Wanted

Several Net Yaroze members are looking for artists and musicians to collaborate on current game projects. Contact: ps_yaroze@playstation.sony.com



Competition news

For the last few months, **Edge** has been running a Yaroze programming competition with SCEE. The closing date for entries has now passed, and the winners will be announced in next month's issue.

Sign up

For information on how to become a Net Yaroze member (the only way to get hold of the machine), phone 0171 447 1616 or register online at www.scee.sony.co.uk

Alternatively write to:

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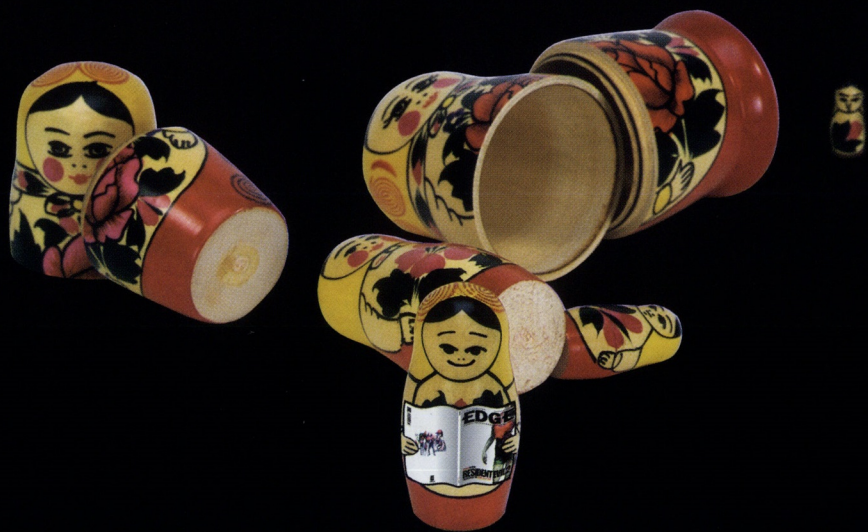
Next issue **Edge** presents a free supplement profiling the most successful console of the current generation – Sony's PlayStation. Featuring a technical analysis of the machine, as well as interviews with Sony's most talented developers working around the globe, this will be an essential pointer for PlayStation owners keeping an eye on the future.. Meanwhile, Namco's long-awaited conversion of *Tekken 3* should arrive in time for an appraisal inside the issue..

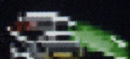
Plus, issue 58 sees **Edge** jet to France to meet Infogrames – a company that is rapidly shaping up to be a videogaming industry heavyweight. **Edge** looks at its impressive line-up, including Ocean's much-delayed-in-the-wake-of-*GoldenEye* license of *Mission Impossible*. Now that its development has been transplanted from the US to Infogrames' home town of Lyon, this is reputedly on its way to becoming a worthy challenger to Rare's benchmark Bond title...

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