The **future** of **interactive** entertainment

UK edition **March** 1995 **£**three ¥2100 $ten

EDGE

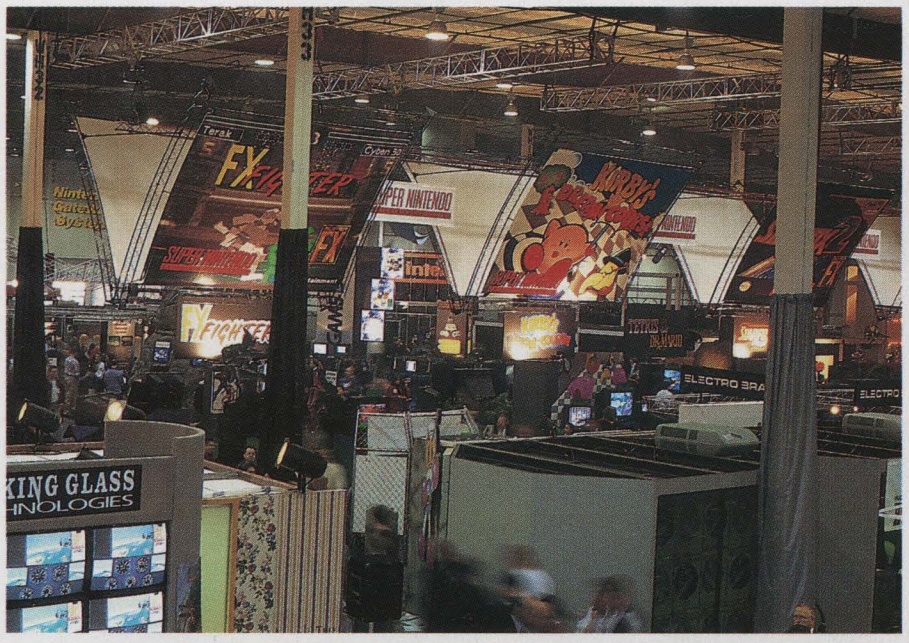
Sony ■ Sega ■ Nintendo ■ 3DO ■ PC ■ Amiga ■ Atari ■ SNK ■ Arcade ■ NEC ■ CD-i

Voted **Magazine of the year**

Industry awards

The Atari logo was once synonymous with the videogame. Could the familiar flared symbol be about to perform a Phoenix-like rebirth? Edge examines the rise, fall and rise of the company that started it all...

Issue **eighteen** **18**



Videogames form only a small part of the Winter CES. Despite the lack of major attractions, this year's show was as daunting in size as ever

Nintendo and Sega laid on the glitz (top and centre), while queues formed for Nintendo's 'Virtual Reality System'

With its incessant ringing of slot machines, indigestible 'all you can eat for $2.99' buffets and culturally bankrupt nightlife, Las Vegas is the undisputed hedonist capital of the world. It's also the annual venue for the Winter Consumer Electronics Show, which took place in January at the city's colossal Convention Center.

The games industry's share of the CES has grown over the last few years from 15% to almost 30%, with many exhibitors now reduced to taking space inside tents erected at the rear of the centre. This year's show, while understandably quieter than the summer event in Chicago, was the most disappointing of recent years, signalling a period of stagnation in the games community. Next-gen hardware lurked in the shadows far from the prying eyes of journalists and retailers, and exciting new games were genuinely hard to find.

Sega's burgeoning 32X format was primed with *Metal Head*, a textured 3D robot stomp 'em up

Big space takers Sega and Nintendo conspicuously lacked big-name titles. *Starfox 2* was Nintendo's attempt to maintain interest in the SNES, but somehow, despite more varied play mechanics, the prototype game seemed to lack the immediate appeal of its predecessor, relying instead on free-roaming levels (like Argonaut's ageing polygon shooter *Starglider 2*). And those Super FX polygons are unlikely to draw many gasps. Another unimpressive Super FX game was *Comanche*, converted from the PC title and boasting the same Voxel-based graphics. Sadly, on the SNES the low resolution made for a chunky display.

The Ultra 64 was, typically, cloaked in secrecy. Despite claims that the chip was complete, Nintendo's only acknowledgement of its next-generation platform was the announcement of a 'Dream Team' of development partners including SGI, Alias, Rambus, MultiGen, Rare, Williams, Acclaim, Paradigm, Spectrum Holobyte and DMA Design.

Edge spoke to NOA chairman Howard Lincoln and was assured that the system was on schedule and would meet its target price of $250. This is contrary to rumours of wrangles between Nintendo and SGI over the price of the chip (SGI has allegedly set a price at least double what Nintendo is prepared to pay).

The only Nintendo hardware on show was the Virtual Boy previewed at the Shoshinkai show in November.

Who is it?

This man was pivotal in the early stages of Commodore's US marketing campaign for the ill-fated CDTV. He reputedly earned a huge amount from the then computer giant for promoting the 'multimedia' cause

Highlights

Bill Gates' speech about Microsoft's forthcoming *BOB* package proved a major attraction. Its content was actually quite dull, but the entire population of Las Vegas could have been swallowed by the crowd of onlookers.

Alias Research's latest innovation drew a few gasps from experienced SGI artists. Version 6 of *PowerAnimator* now includes the ability to render lifelike hair (something that wasn't even possible in The Flintstones, SFX fans). The technique uses particle systems instead of polygons.

There were numerous social highlights at CES, but few kept a straight face when Philips' Tony Takoushi (CVG, circa 1987) was whisked onto stage and behind a sheet during Penn And Teller's show at Bally's hotel. His task: to make sure that they were both completely naked...

Continued next page

Atari displayed the Jaguar CD despite the fact that it only had one game running (above). However, the system's video playback was impressive. SNK took a large stand to introduce its Neo-Geo CD to the US market (right)

it is...

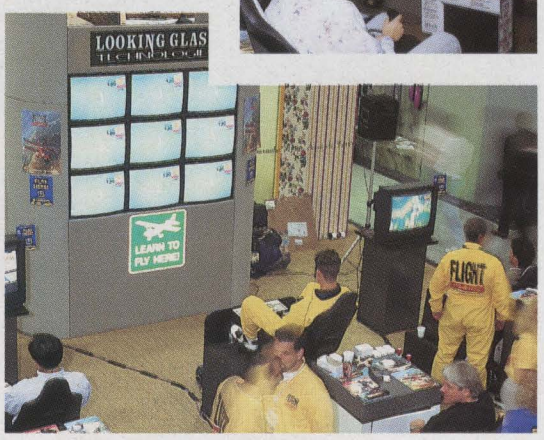
Nolan Bushnell, co-founder of Atari. In 1991 he showed vigorous enthusiasm for the project, firmly believing that the way forward lay with CD. It is thought he no longer has any connection with Commodore

Unlike the Japanese show, at CES Nintendo chose to make the Virtual Boy accessible by appointment only. Expectant delegates queued to enter a room where new software projects were previewed on large screens with the aid of a cardboard viewer held to the eyes. They included a 3D wireframe shoot 'em up, a racing demo, a side-on *Mario* game and a version of *Gunhed*. Encouragingly, the system's 3D graphics abilities were far better demonstrated by this new crop of games, with 2D titles making effective use of depth. The system proper could be played in another room, with only two titles, *Telero Boxing* and *Space Pinball*, made available.

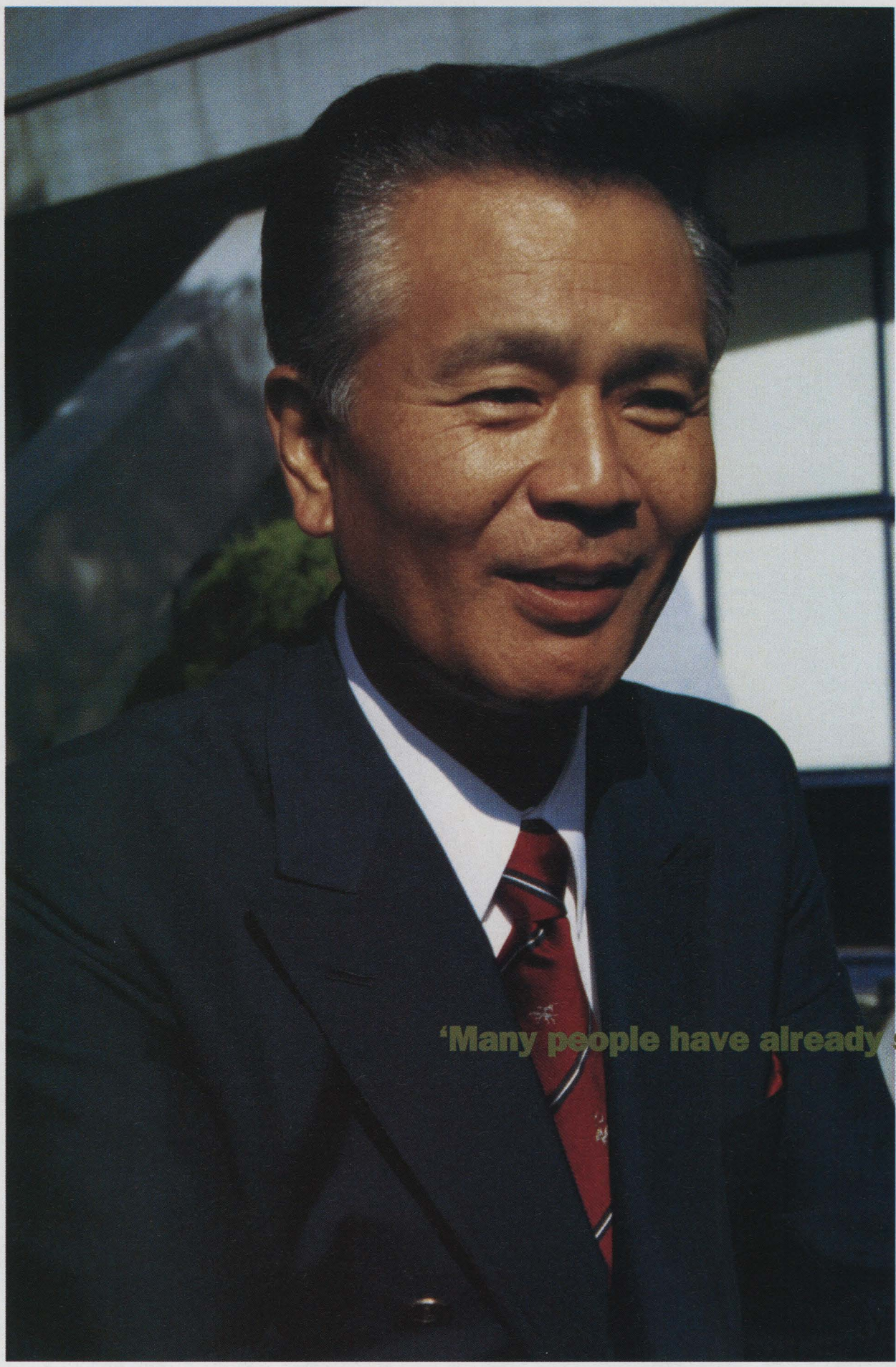
Sega was naturally geared up to pushing its fledgling 32X format. The announcement of a 32X/Mega Drive combo called Neptune proved that Saturn wouldn't be the only other new piece of Sega hardware arriving in 1995, although some of the titles (*Space Harrier*, *After Burner*, *Motocross*, etc) did little to spur interest in the currently unproven format. To try and bolster **Edge**'s enthusiasm, Sega granted a sneak preview of 32X development work undertaken by talented US developers Scavenger, and the results showed that the format does indeed have potential.

Sega was slightly more willing than usual to talk about Saturn. At the rear of its private suite, a Japanese machine played *Virtua Fighter* and the walls were decked with reminders that the rest of Sega's coin-op lineage was also Saturn-bound. Curiously, on the first day of the show the solitary Saturn was seen beside a PlayStation running 3D blaster *Crime Crackers*. However, later it had disappeared. Presumably the rival system was whisked away after someone arrived with a copy of *Toh Shin Den* suggesting it would have made a fairer comparison...

The rivalry between Sega and Sony continued offsite in a different vein. At the Alexis Park Hotel – traditionally Sega's own CES playground – newly →



Virgin's range of software varied from the exceptionally well crafted *Lands Of Lore II* (with arguably the finest *3D Studio* visuals to date) to Looking Glass's *Flight Unlimited* (right and inset) and *Terra Nova: Strike Force Centauri* (both games previewed on page 28)



Photographs: **Kilye**

'Many people have already said that they can't understand

An **audience** with...

Gumpei Yokoi

Nintendo's hardware guru and the designer of the Game Boy talks to **Edge** about the latest addition to his portfolio, the much maligned Virtual Boy

In 1969, Gumpei Yokoi was a young electronics graduate looking for a job in his home town of Kyoto. He was taken on by Nintendo as a factory maintenance engineer at the time when the company still specialised in the manufacture of Japanese *hanafuda* playing cards. Soon the Nintendo chairman, Hiroshi Yamauchi, recognised his creative flair – Yokoi was an electronics tinkerer who was forever knocking up gadgets out of spare parts – and moved him into a new division set up to create games and toys.

Yokoi's first project was the Ultra Hand, a extending-arm toy that sold 1.2 million units on its launch in 1970. After several other successful toys, including a baseball pitching machine, a periscope, and even a 'love tester' for teenage couples, Yokoi started to concentrate on electronics. What followed was the phenomenally successful Game And Watch and, several years later, the Game Boy.

Edge spoke to Gumpei Yokoi at the recent Shoshinkai show in Chiba, Japan, where his latest creation, the infamous Virtual Boy, was unveiled to a less than impressed games industry.

Edge Just how important is the Virtual Boy to Nintendo?

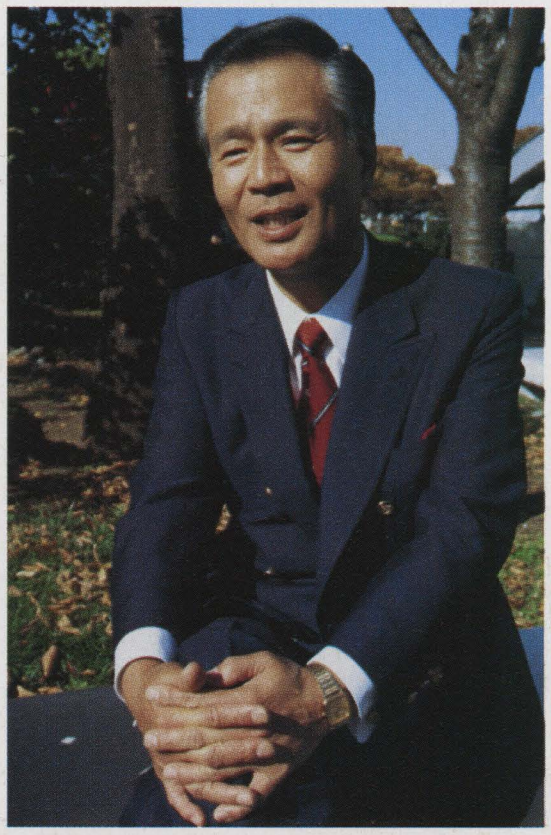
Gumpei It really is a very big project, partly because it will be the first product of its type to reach the market and uses very sophisticated technology. We are even telling the Japanese press that we will achieve three million hardware sales in its first year onsale in Japan. At the moment we only have plans for its release in Japan.

Edge Is it Nintendo's next Game Boy?

Gumpei Yes, in some ways. But we expect both the Game Boy and Virtual Boy to co-exist alongside each other rather than the Virtual Boy being a replacement.

Edge When did the development of the Virtual Boy begin and how many engineers are working on the project?

Gumpei There are four R&D groups within Nintendo, and my department [R&D1] has about 60 people working specifically on the Virtual Boy. Before this, we worked on numerous projects including the Game Boy, and also software for the Famicom and Super Famicom such as the *Metroid* series. Other departments – R&D3, for example – are working on the Ultra 64 [under Ultra 64 project leader Genyo Takeda, and in close cooperation with Silicon Graphics in the USA].



the difference between the next-generation machines and the 16bit machines'

Edge When was the deal with Reflection Technologies tied?

Gumpei They approached us about three years ago, but they didn't have any specific end-product in mind. So we hit upon the idea of utilising two separated screens to make a 3D display.

Edge Did you look at many other forms of technology before deciding on LED?

Gumpei Our first decision was to make use of virtual reality-type technology. From there, we thought about many concepts as display apparatus, including LCD devices.

Edge Most people who've seen the Virtual Boy in action are disappointed by its performance. Just how happy is Nintendo with the initial Virtual Boy software lineup?

Gumpei I think that the most important point is to show the general public and thirdparty developers what kind of functions the Virtual Boy has. The initial lineup does that, although it's worth pointing out that it's not yet final.

Edge Some of the early Virtual Boy software looks distinctly 2D. Is it fully realising the power of the 32bit processor?

Gumpei The machine is running two displays simultaneously, obviously with two different images, and they have to be synchronised. That's why we need such a powerful CPU – it's effectively doing twice as much work as a conventional videogames system.

Edge How many thirdparty licensees have you got signed up?

Gumpei We haven't been eager to show the technology to many thirdparties. We've limited it to only a couple up until now, although every developer was shown the product at Shoshinkai, and any interested will be given full product specs and the tools they'll need to develop for it. I believe that there will be a significant number of licensees interested in working on the Virtual Boy.

Edge Why have so few licensees been shown the technology before now?

Gumpei This particular strategy was dictated by Nintendo's president, Hiroshi Yamauchi. The main reason is that if we are going to allow any software publisher to develop games for our platform, there's a danger that poor-quality software will appear. So we wanted to limit that danger and maintain as much control as possible.

Edge Do you have any plans for polygon-based titles or games with other types of 3D environment?

Continued next page

interview

Gumpei Yes, polygon-based games are included in our plans, although I can't announce anything just yet. At Nintendo we have been extensively testing polygon software on the system, and thirdparties will no doubt be using their own techniques to develop polygon games. [It's known that Hudson Soft has a polygon shoot 'em up in development for the Virtual Boy.]

Edge What do you think will be the most common type of game to appear on the Virtual Boy?

Gumpei Personally, I think that it will be most suited to action and puzzle games, but in the future RPGs and simulations will become popular. [Nintendo loyalist and RPG specialist Square Soft is the only other thirdparty to have been announced.]

Edge What are your plans regarding further software releases?

Gumpei About one title per month will be released immediately after the machine's launch, but that will obviously increase as time goes on.

Edge Has Mr Miyamoto been involved in any software development?

Gumpei Not at this stage, no.

Edge Is Nintendo worried about the potential physical dangers of true virtual reality, using head-mounted displays? Wasn't the Virtual Boy originally going to use a head-mounted display…

Gumpei No, we didn't think that a head-mounted display would be necessary for a virtual reality system that doesn't use any kind of motion tracking facility. We are worried about the possible dangers of HMD technology, but we also considered the fact that if a woman wearing make-up was to use the head-mounted design, the next person might be hesitant in wearing it! So we changed the design so that you can just look into the viewing apparatus and still appreciate the 3D experience. The standard format was shown at the Shoshinkai show, but we have plans for a shoulder-mount adaptor so you won't need a table or desktop to use the system.

Edge And this attachment will appear with the machine…

Gumpei No, it will have to be bought separately.

Edge So what will buyers get with the system when it goes onsale?

Gumpei The stand, the main unit, the controller and the battery box that will be slotted into the controller.

Edge The demonstration machines at the Shoshinkai were running from AC adaptors. Will that be the machine's primary power source?

Gumpei No, it's a battery-operated machine. It uses six AA batteries which last for around seven hours. An AC adaptor will go onsale separately at the same time as the system.

Edge Since the Virtual Boy uses cartridges, what size will most of the games be?

Gumpei Eight megabits will be the initial standard for most games, although 16-megabit and 24-megabit titles are feasible and will most likely appear at a later date.

Edge Is there anything else you can reveal about the hardware?

Gumpei Sorry, I'm not in a position to give you details at the moment – only thirdparty publishers that are currently signed up have that information.

Edge Are you currently working on any other hardware projects at Nintendo – such as Ultra 64 development, for example?

Gumpei At this stage I'm only working on Virtual Boy. We [R&D1] aren't involved with the development of the Ultra 64 hardware – that's being handled in the US by Silicon Graphics and also R&D3.

Edge Isn't Nintendo worried about the arrival of Sega and Sony in the market with what could be very successful machines? How do you feel about the Ultra 64 arriving almost a year later?

Gumpei When we started work on the Virtual Boy it was at a time when the Super Famicom was booming, but we still had doubts as to how long it would take before the general public would eventually get bored with a traditional display. So we came up with the idea of a 3D image project. Now we are showing a product that coincides with the release of the PlayStation and Saturn. And I think that what we originally thought was right, because many people who have seen the demonstrations of these so-called next-generation machines have already said that they just can't understand what the difference is between them and the 16bit machines. Therefore, I think that the Virtual Boy will prove very important in this respect.

The Virtual Boy will be released in Japan in April for ¥19,800 (£127), and in the US at the same time. Three games will be available at launch.

'We are telling the Japanese press that we will achieve three million hardware sales in the first year onsale in Japan'