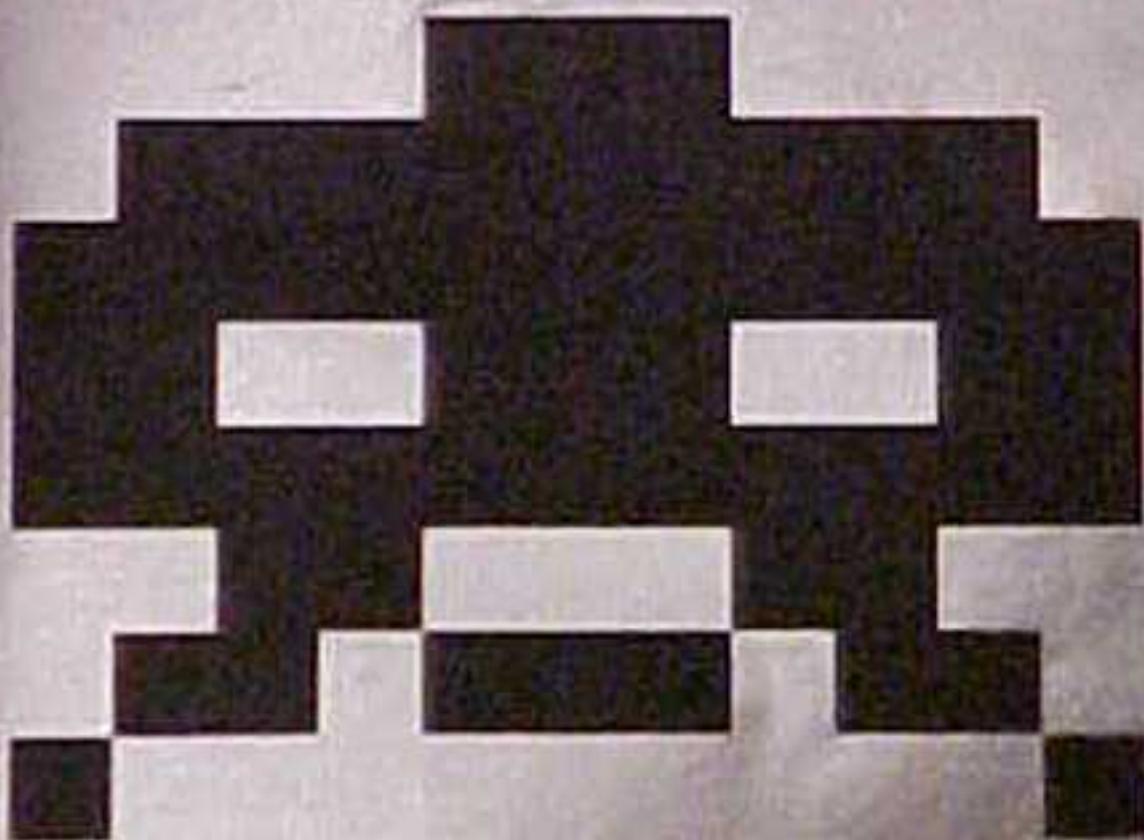


THE COMPLETE HISTORY OF COMPUTER AND VIDEO GAMES



ENTERTAINMENT
VIDEO
GAMES

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COMPUTER AND VIDEO GAMES: THEN AND NOW

As you creep through the sinister, echoing dungeons of *Quake*, or gleefully burn off the yellow Solvalou along *Ridge Racer Revolution*'s coastside drive, or slam Raxel through the glass walls of the City Tower's elevator in *Fighting Vipers*, do you ever stop to wonder how we got to this point in the history of video games?

No, of course you don't. Why should you dwell on a past in which gameplay consisted of moving a 'laser base' from side to side? Why should you have fond memories of games with black-and-white graphics that appeared to be made of Duplo blocks? Why reminisce about heating up the soldering iron to build your first home computer from a kit of circuit

Then: a powerful computer which, in 1985, used to occupy an entire room!
Now: The comparatively minuscule Nintendo 64 games console.





Then: C+VG, circa 1981, complete with airbrushed chrome effect. Very Metal.



Now: CVG circa 1996, cleaner-cut and more spacey to suit today's pop kids.

boards and Stone Age microprocessors? And could those 'good old days' really have been so good if, when you wanted some audio accompaniment for your 'TV game' entertainment, you had to put a cassette of The Human League in your music centre? Naw, better to just forget about all that old chuff and have another game of *Wipeout 2097* or *Mario 64*.

And yet, how much gamers owe to the events of the past 20-plus years. Would *Ridge Racer* or any other driving game ever have existed if Atari had never come up with *Pole Position*? And who would be designing these games now if Apple's Steve Wozniak and Steve Jobs and our own Sir Clive Sinclair hadn't developed computers that were cheap enough to appeal to enthusiastic amateurs – who then taught themselves to program and are now running major software development houses? And who would be playing these games now if people like Atari's Nolan Bushnell hadn't kicked off the video games business in the first place and people like the great Shigeru Miyamoto hadn't made them part of popular culture? And who would have been pushing all this technology to its limits if people who look, dress and smell exactly like you hadn't spent the last 20-plus years putting coins in slots and cash in tills and demanding better and better games for your money?

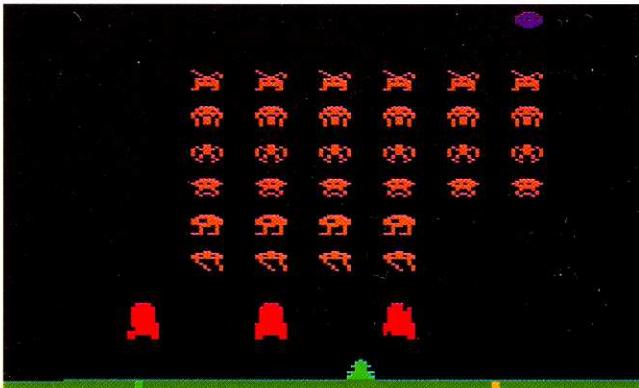
There you are you see? You didn't realise it, but you're already inextricably linked with the whole history of video games thing. That being the case, it's now your solemn duty to fill in those gaps in your education by turning the page and reading how things got to where they are today.

So, let us now take the advice of Julie Andrews in *The Sound of Music*, and start at the very beginning...

Then: Space Invaders on the Atari 2600 VCS was the coolest game around in 1981.



Now: These are the coolest games around in 1996. Note that none of them are Space Invaders on the Atari VCS.



HERE'S WHERE THE STORY REALLY STARTS

Who started this whole video games caper then, eh? Was it Nintendo? Sega? Surely it wasn't Amstrad?

In fact, the roots of the video-games industry can be traced way back to 1962, when Steve Russell, a student at the Massachusetts Institute of Technology with a fondness for science fiction, created a game called *Space War*. It was a simple game that pitted two line-drawn spacecraft against each other in head-to-head combat, but in those days of valves and vacuum tubes it was an advanced piece of programming that took the available technology to its limits. The only computers powerful enough to run it were the room-sized machines attended by bearded men in white coats down at the local university's computer lab. By the end of the 60s, though, *Space War* was making it big as an extra-curricular activity among America's science students.

Coin-op 1

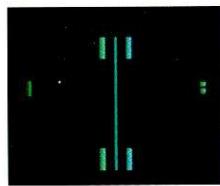
Among those students was one Nolan Bushnell, who, shortly after graduating from the University of Utah, decided to build his own version of *Space War* which he called *Computer Space*. Unlike the original game this version wouldn't need a mainframe computer to play it. Bushnell used the electronics skills he had learned to put together just enough computer hardware to play the game. He hooked the hardware up to a 19-inch black-and-white TV and the first arcade game was born.

Bushnell's game didn't require a full-blown computer inside the box, so he reckoned it would be relatively cheap to mass-produce *Computer Space* machines and set them up as coin-operated amusement gizmos in bars and arcades. He convinced an amusement manufacturer to build 1,500 *Computer Space* machines, but, surprisingly, hardly anyone was interested in buying them, possibly because they just weren't sure what they were. Some potential buyers worried that the machines would be stolen for the 'television set' they contained. But even the few players who got to try *Computer Space* were put off by the lengthy instructions and options screens that confronted them when they put their coin in the slot.

Bushnell put the failure of *Computer Space* down to experience, but he wasn't put off. He realised that a simpler game would be more likely to attract customers in a bar. The simplest game he could come up with was a sort of computerised tennis, in which two players used a 'bat' to bounce a 'ball' backwards and forwards across the screen; if your opponent let the ball past his bat, you scored a point. In 1972, the first commercial video game company, which Bushnell had named Atari, installed its first commercial video game, called *Pong*, in Andy Capp's tavern in Sunnyvale, California. And it was a big success.



Atari's infamous corporate logo.



Atari's Pong. Incredibly popular, but no-one knew any better back then.

Nolan Bushnell's first ever video game - Computer Space.





Nolan Bushnell. Without this man there would never have been any video games. After leaving Atari he moved into the pizza restaurant business and Atari ended up moving into the Jaguar business. Sigh.

Atari's founder, Nolan Bushnell named his company after the term used to describe a 'check' situation in a Japanese Chess-style board game called Go.



Ex-Atari engineers Steve Jobs and Steve Wozniak set up Apple Computers, and effectively kicked off the whole home computer business. Their Apple II (above) was a major success in the USA, but was too expensive to be really popular in the UK.

Home computer 1

Atari moved onward and upward, acquiring cash and a staff of enthusiastic young workers. Amongst them was a 17-year-old drop-out called Steve Jobs who was hired in 1974 as a technician to work on a video basketball game. A friend of Jobs was another electronics whiz called Wozniak. Steve Wozniak was a big fan of Atari's games and Jobs would smuggle his friend into work in the evenings to let him play the new 'Gran Trak' driving machines for free. Wozniak would also help out when Jobs ran into a technical problem, and eventually he came to work at Atari full-time, helping Steve Jobs to build the first *Breakout* machine.

Their joint interest in computers and video games grew until, after working numerous weekends in Jobs' family's garage, the pair came up with a computer of their own, which they called the Apple I. The Apple I wasn't terribly powerful, but the people who saw it thought it was something special, and before they knew it Jobs and Wozniak had 50 orders for the first Apple computer.

Steve Jobs realised there was money to be made here and while Steve Wozniak worked on the technical side of the operation, Jobs devoted himself to coming up with a way to make the Apple computers appeal to a wider audience, not just the sprockety electronics buffs who inhabited the local computer clubs. He came up with specifications, drafted in people to build a reliable power supply and a stylish case and so the Apple II was created, and pretty much the whole personal computer industry with it.

Games console 1

If Apple computer was to grow it would need investment. Steve Jobs tried asking his old boss, Nolan Bushnell, if he wanted in on the deal at the ground floor, but Bushnell declined. He had his own plans for the home

PROLOGUE

market, and they were to start with a home version of Atari's original arcade hit, Pong.

A similar game from a company called Magnavox had already been selling since 1972, but when Atari released its official home version of Pong in 1974 it had the advantage of being technically superior. After an initially poor response the machine had really taken off by 1975, so much so that many other American electronics conglomerates started to take an interest in this new demand for 'TV games'.

By the end of 1976 there were 20 competitors, all trying to out-do each other with more technically advanced machines. It took a company called Fairchild Camera to come up with the first game to use interchangeable cartridges, and looking to regain his position at the top of the heap he had started, Nolan Bushnell came up with something better.

The Atari 2600 VCS had colour graphics, sound and the promise of a host of game cartridges from the people who were creating all the great arcade games... but there was a price to be paid. The 2600 was expensive to produce and Atari didn't have the means to produce and market the machine on a large enough scale. Nolan Bushnell looked for investors and found Warner Communications, who offered to buy up the whole operation. A take-over wasn't what Bushnell had in mind, but he later admitted that he was relieved to find someone willing to help him out. Bushnell made a fortune on the deal and Warner also agreed to keep him on as Atari's Chairman. But the relationship soon turned sour and Bushnell found himself arguing with his new bosses at Warner about several aspects of Atari.

One of those arguments concerned Atari's entry into the personal computer market, which Apple was already making its own. Apparently galled by the fact that he missed his chance to be a part of Apple's success, Bushnell wanted the Atari 800 to trounce the Apple II and had it designed to include spectacular graphics and sound facilities which would make it perfect for games as well as business. But unlike Apple, which openly encouraged software development for its machine, Atari decided that no-one else would be allowed to write software for the 800. Consequently, while the Apple II thrived with a large catalogue of software, including several business programs that became essential, industry-standard packages, the Atari 800 was left trailing.

This policy hadn't been Bushnell's idea, and he insisted that the Warner top brass allow him to change it. He also demanded that Warner cut the price of the 2600 and rely on the increased income that would result from the sales of more cartridges. Warner didn't agree, and eventually Bushnell, the man who started the entire video games business, was compelled to leave Atari.

The invaders have landed

The industry he left behind was thriving, though. Atari built a strong and varied catalogue of cartridge games for the 2600, and it also became the



Early Nintendo Tennis-only video games system, "Block Ball".



The Atari 2600 VCS was the first mass-market games console. It was also the first games console ever to be finished in fake teak. And the last.



The Atari 800 was Nolan Bushnell's attempt to trash the Apple II, but Atari's policy of keeping all software development in-house prevented it from taking off as it should have. The £650 price tag was probably what kept it from taking off in the UK.

name in coin-operated video games, with titles like *Asteroids*, a development of the *Computer Space* concept, but with more action, and *Missile Command*, which turned the popular paranoia about imminent nuclear destruction into an addictive shoot-'em-up.

Other amusement companies who had been producing pinball machines and jukeboxes joined Atari in the arcade game business. Taito's *Space Invaders* landed in 1978 and started the first major arcade craze with its simple but hypnotic shoot-'em-up action. It was followed by Namco's similar but more sophisticated *Galaxians*, which had colour graphics and more dangerous aliens that made kamikaze runs at the player instead of just sitting at the top of the screen and taking pot-shots.

Taking arcade game sophistication to new heights, though, was Williams' *Defender*, created by Eugene Jarvis. This game can claim numerous video game firsts. For one thing, Jarvis gave the player a mission other than to simply defend himself, that being to prevent a quota of wandering spacemen from being captured by aliens. Also it wasn't just the aliens that moved in *Defender* – for the first time the whole screen moved, scrolling left and right at high speed to follow the action as the player flew his needle-nosed spacecraft across the game's mountainous landscape. Unlike most other games which only had one or two types of enemy craft, *Defender* had a whole cast of different foes, some of which were simple cannon fodder, while others laid floating mines or split into swarms of smaller, faster craft when they were shot. It was also the first game to give the player bonus weapons; smart bombs, which destroyed a whole screen-full of aliens in a flash, were awarded as score targets were reached. Definitely a milestone in the development of the video game.



Taito's *Space Invaders* first landed in the UK in 1979, to the delight of arcade players and chip shop owners throughout the land.



Williams' *Defender*. If you weren't a hyper-coordinated gaming genius in a Black Sabbath T-shirt you didn't stand a chance against this game.



How most of us old people remember it: every thing you wanted for Christmas!

Computers go home!

In the UK, home video games were behind the American scene, but not far behind. Atari's *Pong* machines and their many cheaper lookalikes from the Far East had been around since the mid-70s, and had become popular in the UK in a faddish sort of way. By 1979, the schoolkids who were already into video games from their trips to arcades were dreaming about owning an Atari 2600 VCS. This was before the consumer electronics boom had hit these shores, and most parents would never have considered spending £100 on a toy that would end up hogging their TV set.

Buying a home computer was an even more outlandish idea. The Apple II and the Atari 800 were being imported, along with Commodore's all-in-one PET system and the Tandy TRS-80, but they were only available from specialist retailers or mail order firms. As far as most British consumers knew, computers were for offices and universities, and they certainly weren't going to pay good money to have one in their home. The Atari 800 retailed for around £650, a sum which would have bought most families a new fitted kitchen. Yet there was a small market for computers in the UK, mainly made up of electronics buffs wanting to experiment with new technology. Computers were available in kit form for around £200, though com-

PROLOGUE

pared to the American machines they were pretty basic, consisting of a motherboard without a case and sometimes lacked even a keyboard. Not surprisingly, games for these machines were almost non-existent.

The big change came in 1980 when Clive Sinclair, an English inventor, decided to release a low-cost, all-in-one computer kit which was simple to assemble and could be programmed in an easy-to-learn computer language called BASIC ("Beginner's All-purpose Symbolic Instruction Code"). Once assembled, the £100 Sinclair ZX80 kit was a small, white, flat machine, with a touch-sensitive keyboard, an 8-bit Z80 processor and a minuscule one kilobyte of random access memory (RAM) to play with.

Not that playing with the ZX80 was easy. It didn't quite have enough computing power to process instructions and keep the display going at the same time, so when a program was running the TV screen would go blank until it had finished. Not ideal for a rip-roaring conversion of *Space Invaders*, then. It also had a tendency to overheat and break down, so much so that some users stood a bottle of milk on the case to keep it cool.

While the ZX80 wasn't much of a games machine it introduced a new batch of semi-techy folk into the ways of the microcomputer. By creating a market for low-cost home computers it paved the way for the machines that were to follow...



Clive Sinclair. Rumour has it this man has never played a video game in his entire life. He just enjoys inventing.

After pioneering the market for digital watches and electronic calculators, Clive Sinclair got people interested in cheap computers with this, the Sinclair ZX80 (£100 including post and packing, milk bottle not supplied).

sinclair
ZX80
personal
computer



Somebody's older brother gets to
grips with Atari's Battlezone.

CHAPTER 1: 1981

As far as video games were concerned, 1981 began much as 1980 had ended. However, it was to turn into one of the most significant years in gaming history, and for several reasons. In Britain, the popularity of arcades was growing as new, more advanced games appeared. Atari kept adding to their range of cartridges, making the VCS the home video games machine. Hand-held clones of popular coin-ops were released to keep kids on a low budget amused. And the UK's home computer business, though still restricted mainly to the soldering iron brigade, was slowly expanding. Then three companies released three new microcomputers that were to give the business the boot up the bum it needed.

Up and Atom

Cambridge based Acorn launched the Acorn Atom, which offered a nippy 6502 8-bit processor, a colour display, sound, a real typewriter keyboard and a whole 2 kilobytes of memory for around £120 in kit form or £170, ready built. Plug it into the TV, hook up a standard cassette recorder for storing and retrieving programs, and you were ready to go.

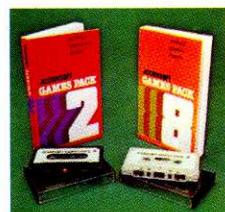
Here was a computer that actually looked like it could do things. Here was a computer that you could probably afford and didn't have to build yourself. You could use it to program – provided you could work out the bizarre, abbreviated form of BASIC the Atom used. You could use it as a business computer – as long as you bought the upgrade that boosted the memory to 12K. But could you use it to play games?

There were a few limitations, but the fact that it was cheap, fast and could generate high resolution colour graphics and even sound and music made the Atom a pretty good entertainment platform. Within a few months of its release, the machine had a growing catalogue of games software, mostly take-offs of popular coin-ops such as *Asteroids* and *Space Invaders* which were being programmed and sold mail-order by the Atom users themselves.

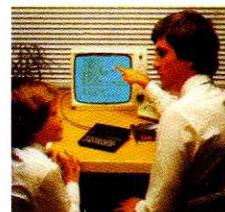
The return of Clive Sinclair

At around the same time as the Atom launch, Sinclair Research followed up the minor success of the ZX80 with an updated model, the ZX81. To look at, the ZX81 wasn't much different from its predecessor; a small slab of plastic, matte black this time, with a flat, touch-sensitive keyboard. Compared to the Acorn Atom it looked pretty basic, and it only came with 1K of memory, but it did have price on its side. At £49.95 for the kit version and £69.95 for the fully-built machine it was very affordable, a computer for the masses, almost. Sinclair even took the bold step of advertising the ZX81 in the Sunday colour supplements as well as the computer press, and thus succeeded in enticing numerous formerly normal people into the world of computer tinkering.

The Acorn Atom. Not only did it look like a real computer, it also did a pretty good *Space Invaders*.



First ever pieces of software for the Acorn Atom. On cassette, of course.



One day this young lad would be telling his Dad how to work the VCR.



Clive Sinclair really brought micros to the masses with the Sinclair ZX81 which defined the term 'cheap and cheerful' - and black and white.

Apart from its price, the ZX81's other endearing feature was that it was very easy to program. Typing commands on a flat keyboard was somewhat wearing on the fingers, so, as with the ZX80, Sinclair's designers fixed it so that a single keypress could enter a whole BASIC command. The commands were all printed on the keys, so users were soon able to get to grips with knocking up their own simple programs and games.

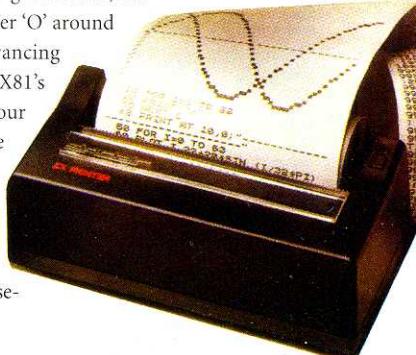
A whole slew of 'How To Program Your ZX81' books were released to satisfy the clamour of this new generation of budding coders. Indeed, many ZX81 users would buy a book full of program listings in preference to a cassette of pre-recorded games, as the machine's tape interface was so slow and unreliable that it could take hours of fiddling about to get a game to load.

Though the ZX81 only used four microprocessors as opposed to the ZX80's 21, it was a faster and more powerful machine. It used a larger system chip and because it didn't have the ZX80's "Oh-No-I-Can't-Think-And-Keep-The-Screen-Working-At-The-Same-Time" problem, action games weren't such a problem. The lack of sound and any kind of high resolution graphics facilities were a slight setback, but users soon got used to piloting a letter 'O' around the galaxy, or shooting down advancing fleets of 'A's. It was all part of the ZX81's charm, and besides, having to use your imagination seemed to make the games that bit better.

It wasn't easy to program the perfect *Space Invaders* clone with only 1K of memory, though. Fortunately Sinclair released the ZX81 with two use-



Everything for the ZX81 was under-powered, but it was affordable.





Performance at a price. The Commodore VIC 20 had colour graphics and a four-channel sound synthesiser, but at £189 it was slightly more expensive than its competitors.

ful add-ons. The most essential was a £50 16K RAM upgrade that plugged (shakily) into a slot on the back of the computer. Also priced at £50, there was the ZX Printer, a small but ingenious device that resembled a space age toilet paper dispenser. The fact that it only printed on four-inch-wide rolls of aluminium-coated paper meant you couldn't really use it to write that job application or ask for an overdraft, but for the new generation of programmers it was just the job for churning out hard copies of their code.

Yes, VIC is here

Commodore's VIC 20 was the third major micro to be released in 1981. Commodore, the American company whose PET computers had proved popular in business and educational environments, had spotted the potential of the home market and come up with a machine that was almost a cut-down Atari 800. The VIC 20 had 3.5K of memory on board, a real typewriter keyboard, colour graphics, good sound facilities, it could accept software on plug-in cartridges and you could even hook up a joystick – an ideal games machine in many respects.

The VIC 20 did have its shortcomings, though. For one thing it was the most expensive of the three computers. The machine itself cost £190, but you also had to buy Commodore's own special £45 cassette deck to store and retrieve programs on standard audio tapes, which knocked the price up to nearly £240. Also, it wasn't as easy to program as the ZX81. Using the machine's more advanced facilities such as colour graphics and sound meant learning lots of numerical memory addresses. Nevertheless, these didn't stop a few hardy souls leaping on the machine and coming up with a string of unofficial arcade conversions – usually of the same three or four popular coin-ops.

The new Invaders

Arcades were still the places where all the hot new gaming action was happening. Every other machine was still a *Space Invaders* cabinet to cater to



Games were much more family oriented in 1981. Plus it was exciting to pit your wits against a real computer.



Above: *Matrix* was one of Jeff Minter's first games.
Below: The classic *Jetpack*, by Ultimate, on the VIC 20.



There's a story that *Donkey Kong* was originally meant to be called *Monkey Kong* but a missprint on a memo resulted in an inadvertent name change somewhere along the production line. Of course, this is all rhubarb. As Shigeru Miyamoto reveals in David Sheff's book *Game Over*, he saw Kong as a stubborn, rather than evil, villain, and on looking through his Japanese-English dictionary, the best word he could find that described Kong's personality was 'Donkey'. Of course, that sounds like rhubarb as well, but at least it's more official rhubarb.



Pac-Man, by Namco. Expert players could play this game blind-folded. All you had to do was learn the patterns.

Pac-Man netted millions of dollars for Namco and made it the biggest arcade games manufacturer in the world. The man pictured right is Toru Iwatani, who invented the game.

the old lags and the youngsters who were training themselves up for *Defender*. But the arcade manufacturers were all trying to outdo each other with some wonderful new coin-ops, many of which are now regarded as classics.

Atari released the first 3-D vector graphics game, a spectacular and suspenseful tank shoot-'em-up called *Battlezone*, and a trackball-controlled blaster called *Centipede* (allegedly the first coin-op programmed by a woman). Then there was *Moon Cresta*, Nichibutsu's skilful up-the-screen shooter, famous for its spacecraft docking sequence. Midway's *Gorf* had five screens of varying action and was one of the first arcade games to incorporate a speech synthesiser (during its attract sequence it called out things like, "LONG... LIVE... GORF!"). *Phoenix* by Centuri was a *Galaxians* variant with squawking birds that hatched out of zig-zagging eggs and had the novelty of a deflector shield button that the player could press whenever things got too hairy. The *Galaxians* themselves had spawned a sequel, in the form of *Galaga*, Namco's own follow-up which pitted the player against faster and more cunning aliens that tried to capture his spacecraft as well as obliterate it.

Namco were also responsible for the most successful arcade release of 1981. Unlike just about every other coin-op of its time, *PacMan* had no missiles, lasers or bombs, just a yellow mouth that wakka-wakkaed around a maze, gobbling dots and avoiding four deadly ghosts. The game was an instant success and licensing deals for *PacMan* pillow cases, lunch boxes, records and even cartoon shows made Namco the richest arcade game company in the world. The story goes that Namco's boss, Masaya Nakamura, awarded *PacMan*'s creator a \$3,500 bonus, but the man (whose name isn't recorded) was so annoyed at being given such a piffling share of *PacMan*'s success that he left the video game industry, never to return.

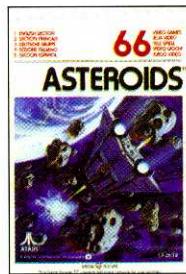
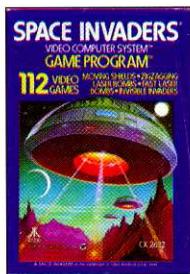


Photo: Rex

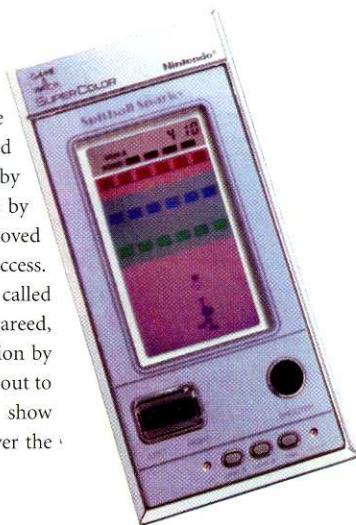
While *PacMan* was the most successful arcade game of 1981, the most momentous was undoubtedly *Donkey Kong* which introduced three important names to the video gaming world. *Kong* was created by Nintendo, a vast Japanese corporation that had made its fortune by manufacturing Japanese *Hanafuda* playing cards and had recently moved into the video games business, without (thus far) a great deal of success. The man who created *Kong* was an industrial design graduate called Shigeru Miyamoto, and the character he created for *Kong* was a dungareed, big-nosed carpenter called Mario. In spite of an attempted injunction by *King Kong* movie producers, Universal Studios, *Donkey Kong* turned out to be a massive success (complete with pillow case and cartoon show licences), and we were to hear much more of those three names over the years to come.

Christmas console wars

As the end of 1981 approached, it was clear this was going to be the first big computer game Christmas, and electronic toys lined the shelves of the big stores. At the low end of the price scale were hand-held versions of popular arcade games, selling for between £20 and £30. *Space Invaders* and *PacMan* lookalikes were plentiful and Nintendo was having a crack with its range of *Game and Watch* toys. MB Games' MicroVision was the most advanced hand-held, having the ability to accept interchangeable game cartridges (ten years before Game Boy). The simple displays and the squeaking sound effects didn't really do much to simulate the arcade experience.



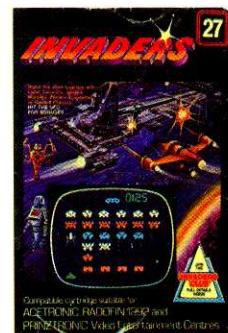
Atari's VCS had been building momentum all year, with a strong catalogue of games and the promise of more to come. Atari's £99 pack included a VCS, a pair of joysticks, a pair of paddles (the rotary controllers used in *Pong*-type games) and the *Combat* cartridge, which included a bunch of simple tank and aircraft shoot-'em-ups. Right behind the VCS on most Christmas lists was the Atari *Space Invaders* cartridge, which provided no less than 112 variations on the standard game, such as having to contend with invisible aliens armed with 'bendy' bullets. The other big seller for Atari this Christmas was its VCS conversion of *Asteroids*, which provided 66 game variations and included features from the original game and a few from *Asteroids Deluxe*.



The kids who couldn't afford a computer or an Atari had to make do with a hand-held machine like these tiny Nintendo *Game and Watch* gizmos.



Game and Watch generated further appeal when Nintendo released dual screen versions, such as *Rainshower*.



One of the first console versions of *Space Invaders* for the G7000.

The G7000 - also known as the Philips Video-Pac. There was even a kids club in the UK, which used to update youngsters with newsletters.



By the Christmas of 1981 the Mattel Intellivision was considered the ultimate home games system, thanks partially to its impressive soccer cartridge. Shame about those horrible disc-like controllers, though.



There were kids who were aiming even higher than an Atari, though. The machine they wanted was Mattel's Intellivision, which cost £200, but was capable of better graphics and more sophisticated games. Mattel advertised it on TV by showing the soccer game included with the machine. It looked amazing because, for the first time, the screen showed a grandstand view of the action, and the players were actually people-shaped. Atari's Soccer cartridge was a rather hopeless, top-down-view affair, in which the players looked like those joke diagrams of Mexicans riding bicycles. Needless to say, a quality soccer game was always worth a lot to European – and especially British – gamers. There was also the promise of a plug-in keyboard that turned the Intellivision into a 16K home computer – an option which provided a lot of leverage for kids trying to convince their parents that by buying an Intellivision they were buying into the whole computer revolution and all its educational wonders.

For the kids who didn't really have much of a clue there was the Philips G7000. This was a big silver console with a built-in touch-sensitive keyboard that was hardly ever put to use in a game. The games it supported were mostly mediocre, though there were a few novelty variations on the classics: when your tank was blasted in *Space Monsters*, the driver was left standing in mid-screen and had to run for cover before he could get a new tank and rejoin the battle. There was also a superb variation on *PacMan*, but that was some years off, arriving, unfortunately, shortly before the G7000 died.

Here to save the day...

Oh yes, making the wrong buying decision now could prove catastrophic in the future, but with so much choice and so many new games and machines appearing how could punters cope? It was a lucky break for civilisation when, in October of 1981, the first issue of the world's first video game magazine hit the shelves. The name of that mag? Why, Computer and Video Games, of course!



Issue one of Computer and Video Games, dated November 1981. The cover game was a *Space Invaders* program, which you had to type into a Nascom, one of the few computers ever to be made by a car spares manufacturer.

CHAPTER 2: 1982

As British kids returned to school after their Christmas break, they compared notes on the goodies Santa had left them, and it turned out that Yuletide of 1981 had indeed been a profitable season for the new electronic toys. The hand-held games had proved to be popular gifts, the Atari and Mattel machines had sold very well, and even home computers had done better than anyone expected; by the end of 1981, Sinclair had sold 250,000 ZX81s thanks to a deal which got them on the shelves of High Street biggie, WH Smith. Now that the public were switched on to the pleasures of video games and the market was thriving, the only way for the new hardware and software businesses was up... and up... and up.

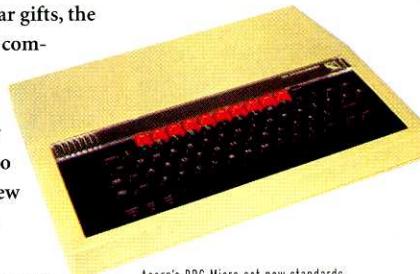
There was no time for anyone to get complacent, though. Eager to stake a claim in this new-found vein of ready money, various electronics manufacturers were designing new and better hardware to take the top-sellers' positions. Meanwhile, the computer companies already in the top slots were redesigning their hardware, desperately trying to come up with a 1982 model that would trounce the opposition.

The BBC Home Computer Service

The first new machine to arrive in 1982 was the illustrious BBC Microcomputer. The British Broadcasting Corporation, in its role as educator of the British public, had decided to launch a computer literacy project which would introduce new technology to its viewers through several series of 'how-to' shows. To go with the show, they wanted a computer which they could use to demonstrate programming and which viewers could buy to try out what they were learning. Various microcomputer manufacturers were invited to come up with a design for this computer, among them Sinclair Research and Acorn, who were currently selling the Atom. Sinclair came up with a low-cost, medium-specification design, but in the end, Acorn clinched the contract with a more expensive and more powerful machine.

When it was released the BBC Micro set a new standard for... just about everything really. It had a wealth of colour graphics facilities, excellent sound, a real keyboard, it was incredibly fast, it was an excellent programmer's machine, and it had plenty of memory. The downside was the high price — £300 for the 16K Model A version or £400 for the 32K Model B machine.

Fortunately for Acorn, there was a white knight in Whitehall who was about to help them out. The then Education Minister, Kenneth Baker, inaugurated a computer literacy project for school children and got every school in the country to set up some kind of computer facility. The micro that many schools picked for their pupils was the BBC Micro. This had two knock-on effects. The first was that many teachers



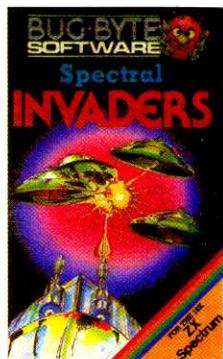
Acorn's BBC Micro set new standards in home computer performance, and was also the recipient of numerous excellent coin-op conversions.



Quicksilva's Asteroids clone, Meteor, was one of the very first Spectrum games. It even spoke, shouting, "Meedor alurd! Meedor alurd!" at the start of every level. Advanced stuff in those days.



The young Kevin Keegan endorsed the Grandstand Video Sports Centre.



You had to use your imagination a lot in those days. This is how Bug Byte placed you in the heat of the action.



Players must have been pretty impressed with *Spectral Invaders*, as the resolution was good enough to show minute damage to the bases!

The ZX Spectrum finished the job that Sinclair had started with the ZX81 - this really was the computer for the masses. Well, for the British masses at least. Timex released an upgraded version of the Spectrum to the US market, with limited success.

then bought BBCs for themselves and their families. The second was that Acorn could now convincingly sell the Beeb to wealthy parents who wanted a computer for their children that would educate rather than simply play games. Heh heh heh... Little did those parents suspect...

So, in spite of a few production problems and some initial delivery delays, the BBC Micro and Acorn looked set for a bright future. But who was that bald man with glasses waiting in the wings with a smoking soldering iron? Wha...? Clive Sinclair?

Clive Sinclair: The Revenge

Yes. Clive Sinclair. He was back, and by all accounts he hadn't been best pleased about losing the BBC contract. Sinclair had taken the design of his proposed BBC computer and made some modifications to turn it into the next Sinclair machine.

In April he announced that the ZX Spectrum was ready. It was Sinclair's first colour computer, with high resolution graphics, a sound facility, a slightly yukky silicone-rubber keyboard and plenty of memory. And, at £125 for the machine with 16K of RAM and £175 for the 48K model, it was less than half the price of the BBC Micro.

In his ads, Sinclair openly put down the BBC Micro with comments like "... the BBC makes the world's best television programmes, but Sinclair makes the world's best microcomputers." Comparison charts also made the Spectrum look better than the Beeb, but they only compared it to the low-end BBC Model A, a point which was argued by enraged Beeb owners on the letters pages of several computer mags, including Computer and Video Games. Loyal Sinclair fans (who even referred to their hero as 'Uncle Clive') had their retorts ready for printing in the following issues.

Sinclair soon discovered just how many fans he had. As soon as the Spectrum was announced, the company's mail order department was



swamped with orders. Demand massively outstripped supply and customers who had been promised a 28-day delivery turnaround ended up waiting three months for their machines.

When the first machines arrived in July it was clear that this was going to be a games computer, and many of the small software companies who had been making a tidy profit on ZX81 and VIC games quickly found room in their catalogues for their first Spectrum arcade conversion. Bug Byte got in first with the excellent *Spectral Invaders*, followed immediately by Quicksilva, who released the equally impressive *Meteor Storm* (*Asteroids* with speech — sort of), and the not-so-good *Space Intruders*. Many others soon followed, among them an ostentatious young company called Imagine... but we shall hear more of them later.

The fact that every other home computer game was a conversion of one of four arcade games can be explained when you consider that, at this time, software houses didn't hire games designers, only programmers. The best most of them could do was produce an identical copy of a popular coin-op. Mind you, there were some spectacular copies. Bug Byte's *VicMen*, a VIC 20 version of *PacMan*, was so close to the real thing that it had to be withdrawn after threats of litigation. Once the BBC Micro was released Acorn's software arm produced a collection of superb conversions most of them spot-on in every respect. Old timers still speak of such classics as *Planetoid* (which was *Defender*), *Rocket Raid* (*Scramble*, except that the bombs dropped diagonally instead of following a curved trajectory) and *Snapper* (*PacMan*, again flawlessly reproduced).



Some classic coin-op art taken from some of Atari's biggest hits.

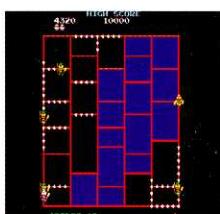
Jeff Bridges was the star of the first video game movie, Disney's *Tron*. David Warner (below) played Sark, the evil MCP servant. It was pretty silly, but the computer-generated light cycle and tank battle sequences still look pretty cool today.





The Ridge Racer of 1982; Namco's ground-breaking 3-D racer, *Pole Position*.

Xevious, again from Namco, the first vertically-scrolling shoot-'em-up. Below is Konami's *Amidar*.



Lively artwork captures the spirit of Nintendo's follow-up to *Donkey Kong*. This is the only game to have starred Mario in the role of a villain.

Playing the Real Thing

Fortunately, arcade developers were still introducing ideas for everyone else to copy, and 1982 was the year that all sorts of new game types were minted.

The driving game came of age when Namco launched the superb 3-D racer, *Pole Position*. Namco released the first vertically-scrolling shoot-'em-up in the form of *Xevious*, but Sega topped this with the wonderful *Zaxxon*, which was the first shooter using isometric-perspective graphics to give the action a three-dimensional feel. Sega even tried to give gamers a genuine 3-D experience in the form of *Subroc 3-D*, a dodgy air/sea blaster which had a pair of 3-D goggles mounted on the cabinet.

Williams was still producing nerve-jangling games worthy of their *Defender* pedigree. *Defender man*, Eugene Jarvis came up with *Robotron 2084*, a real laser frenzy in which the player had to wipe out room-fulls of marching robots out to assimilate helpless humans. Williams also had the novel *Joust*, probably the only game in which a knight astride a flying ostrich had to unseat his opponents and drop them into lava pits. Then there was *Sinistar*, an awesome blast which many *Defender*-lovers saw as their next worthy conquest.

Alongside these new games were reworkings of the previous year's hits. Namco revived *PacMan* into *Super PacMan*, and tried to lure more female players into arcades with *Ms PacMan*. Konami released *Amidar*, another maze game, but this time the player had to guide a paint roller around a grid of lines, colouring them in while evading angry pigs and spear-toting warriors. Exidy's *Pepper II* was along the same lines.

Nintendo's *Donkey Kong* had demonstrated the pulling power of the new 'platform' games, and it was followed by the role-reversing *Donkey Kong Jr* (Kong's son rescues his caged dad from cruel Mario), and Data East's *Burger Time* (chef dodges angry fried eggs to drop burger components onto buns).

The other momentous arcade release of 1982 was Midway's *Tron*. Momentous, not because it was particularly good, but because it was based on scenes from Walt Disney's new movie of the same name, the first motion picture to be set in the world of video games. Yep, even Hollywood was cashing on the boom!

Quest of the Spectrum-Beaters

As Christmas approached the boom in the games console and home computer markets got even boomer. Shortly after the Spectrum was released it seemed like at least one new competing computer was launched every month. They all offered the same features, 32K of memory or more, colour graphics and sound, at a £200-or-less price.

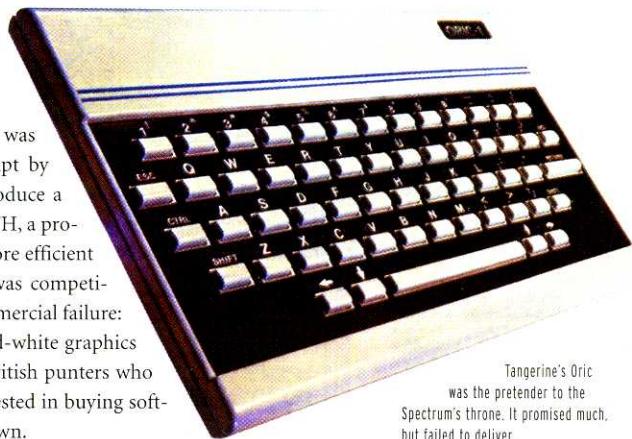
Toy giants Mattel backed a Welsh company to produce the Dragon 32, a £200 machine with 32K of memory, which was based on Tandy's less-than-successful Color Computer. Another UK company, Computers, tried to crack the home/business market with the Lynx, which offered 48K of memory. The Colour Genie was a revamp of an old machine that had been

around for years. Then there was The Jupiter Ace, a brave attempt by two ex-Sinclair designers to produce a home computer that used FORTH, a programming language that was more efficient than BASIC. Though the Ace was competitively priced at £90 it was a commercial failure: only 3K of memory + black-and-white graphics + no games = apathy among British punters who were now becoming more interested in buying software than programming their own.

Tangerine, another British company, launched their Oric-1 directly against the Spectrum. It did everything the Spectrum did, only Tangerine claimed it could do them better, and cheaper. The 16K model only cost £99 compared to £125 for a 16K Spectrum. The few who hadn't already committed themselves to a Spectrum ordered an Oric, only to find themselves frustrated by the same long delivery times that had plagued early BBC and Spectrum customers. Then, when they finally got their machines (in early 1983) they found them buggy and lumbered with poor documentation. Also, because all the major software manufacturers were committing to the Spectrum, Oric games weren't as abundant as they had expected.

The machine that aroused even more interest than the Oric was 'The Binatone Computer'. Binatone, famous for its low-price electronics gear (it was the Alba of its day), was rumoured to be jumping on the home micro bandwagon with a machine that offered all the essential games computer features for only £50. At that price it would have taken the whole market by storm. As Christmas approached, specifications were released and everything appeared to be going ahead, but for some reason the machine never materialised.

Meanwhile, Commodore, which was still successfully plugging away with its VIC 20, released its latest model. The Commodore 64 had a whopping 64K of memory, excellent colour and sound facilities, as well as special game-specific abilities, such as hardware sprite graphics. In a monstrously strange piece of marketing, Commodore decided to sell this fantastically powerful games machine as a business computer and priced it at around £350. But they would come to their senses soon.



Tangerine's Oric was the pretender to the Spectrum's throne. It promised much, but failed to deliver.



Even when all these colour computers were coming out, Sinclair's original ZX81 (by now priced at only £49.95), was still chugging along. A few programmers managed some incredible games. Old '81 fans will still remember the wonder of J K Greyle's fantastic 3D Monster Maze. It was the nearest thing they had to Doom back in 1982.



The games machine of the future: the Commodore 64. Unfortunately, when it was launched in 1982 Commodore thought they should try selling it as a business computer. Honestly, who ever heard of a business computer with four channel sound synthesis, two joystick ports and hardware sprites?



Art from the original *Star Raiders* on the Atari VCS. The game came packed with its own special touch pad.



VCS *Defender*. Somehow most players convinced themselves that this was the arcade experience in the home!



How could we close the 1982 chapter without a mention of Jeff Minter? This was the year the famously hairy coder launched Llamasoft with some cool VIC 20 arcade games. He would go on to write some cult games for the VIC and the C64, including *Grid Runner*, *Attack of the Mutant Camels*, *Hover Hover*, *Metagalactic Llamas*, *Battle It Out At The Edge Of Time*. In his later years he moved on to console games, working on a game for the doomed Konix system, and producing the wondrous *Tempest 2000* for the Atari Jaguar.

Atari was already coming to its senses, but perhaps too late. Its two computers, the 800 and the cut-down 400, were no less powerful than the Commodore 64 and the BBC Computer, but they had still only garnered a tiny proportion of the UK market because the prices of the hardware and software were so high. Just before Christmas, Atari tried to make their machines more competitive by slashing the price of the Atari 800 from £600 to £400, and the Atari 400 from £300 to £200. But it wasn't enough to get Atari into a 'major player' situation. The competition, although it wasn't as good, was much cheaper and had a wider range of software selling for around £5 per game, as opposed to £30 for the Atari equivalent on cartridge.

The Console That Was To Come...

Atari's price-cutting policy also included the VCS, which was reduced from £99 to... £89. The VCS was still popular because of its ever-increasing range of good arcade conversions, but it was facing stiff competition from the likes of the Spectrum.

The catalogue of VCS software grew enormously in 1982, especially towards the end of the year, as Atari allowed other companies to produce games for the machine. Activision came up with such classics as *Pitfall* and *River Raid*, while Imagic's *Astro Wars*-style *Demon Attack* became the USA's number one VCS title over Christmas. Parker Brothers scored some major licenses and produced a VCS version of Sega's *Frogger* coin-op, as well as the *Defender*-like *Empire Strikes Back*. Atari themselves released the official VCS conversions of *Defender* and *PacMan*, as well as announcing a VCS version of the spectacular 3-D space shoot-'em-up, *Star Raiders* (a long-time favourite on the Atari computers), and *Raiders of the Lost Ark*, a novel action adventure based on the hit movie.

Atari's main competitor, Mattel, was also cutting prices, and by the end of the year its Intellivision had plummeted from £199 to just £129. After generating so much interest the previous

Christmas with its excellent soccer cartridge, the Intellivision hadn't quite lived up to gamer's expectations. Unlike Atari, Mattel couldn't draw on a big collection of arcade favourites to fill its cartridge catalogue. Big titles had been thin on the ground during the year, and Mattel users were looking to the likes of Imagic and Parker Brothers to provide conversions of their VCS hits. The promised computer keyboard never arrived in the UK either, though even if it had it probably wouldn't have aroused that much interest.

What was arousing interest as the year closed was talk of a new console from the American toy giant, Coleco. Phrases like 'state-of-the-art' were being bandied about, and word had it that among the first games to be released would be a 90% accurate conversion of Sega's dazzling coin-op, *Zaxxon*. Could such a thing be possible? Could this really be the ultimate console which everybody dreamed about? Gamers everywhere held their breath in anticipation of the mighty ColecoVision!

CHAPTER 3: 1983

By the end of 1982, video games were to be found in every corner of the world, and the whole industry was going crazy.

Japan was so arcade-happy that the government had to mint extra 100 Yen pieces replace the ones disappearing into coin slots. Meanwhile the US arcade business coined in over \$5 billion, leading parents and politicians to consider banning children from playing. But the pull would get even stronger during 1983, when games would become more and more realistic – witness Atari's three-screen-wide motor-sport thriller, *TX-1*, and *Star Wars*, a 3-D shoot-'em-up which placed you in the climactic space battle from the hit movie. New arcade technology made the arcade experience ever more authentic; Sega's *Astron*, Cinematronics' *Dragon's Lair* and Mylstar's *M.A.C.H. 3* all used video laser discs to generate visuals a million miles away from the coarse computer-generated graphics of the time.

In America, the console business had taken in around \$3 billion, mostly due to Atari's VCS, which, since its release, had sold a total of 20 million units and accumulated a vast collection of over 1,500 game titles. As 1983 began, Atari accounted for half of Warner Communications' entire revenue. Analysts, amazed at how a toy fad could have turned into such a huge industry, wondered how long the boom could go on...

Atari vs Coleco

At the end of 1992 Atari launched its new 5200 Supersystem in the USA, with a UK release scheduled for Spring 1983. Like the Colecovision, the 5200 promised perfect arcade conversions by virtue of its advanced hardware. In fact the machine was the guts of the Atari 400 computer in a different case. In the USA, VCS players were disappointed to find that the 5200 wasn't backwards-compatible with their sizeable collections of old games. Also, the machine was cursed with a pair of ghastly analogue joysticks.



Atari's *TX-1* was a driving coin-op that used three monitors placed side-by-side to give players a panoramic view of the action.



Cinematronics' *Dragon's Lair* was one of the first of the new laser disc coin-ops. The action was frustrating and there wasn't much player participation, but the visuals, created by ex-Disney animator, Don Bluth, were dazzling.



Everyone wanted to play Sega's *Zaxxon* in some form or another. Colecovision had the best version.

Drama in the high seas. Players defended themselves from just about everything airborne in *Subroc*!



Colecovision promised arcade-quality conversions, and though the conversions weren't really arcade quality', most players could hardly imagine getting any closer to the real thing

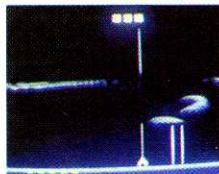
Though the 5200 was superior, and had some decent software, it did badly in the USA. Over in the UK, Atari announced that they had postponed the 5200 launch until the end of 1983, blaming the set-up of a new Atari production plant in Ireland. As it turned out, the 5200 didn't happen in the UK at all, leaving the way open for the much talked-about Colecovision.

Colecovision surfaced during 1982 in the USA, and got off to a roaring start because it came bundled with a spot-on conversion of Nintendo's *Donkey Kong*, still one of the hottest arcade games. It had a similarly dazzling effect on UK punters when it arrived just after Easter in 1983. At £150 it was pricey, but with excellent graphics and quality coin-op conversions such as *Zaxxon* and *Gorf*, the Colecovision quickly acquired a dream-machine reputation.

Even more exciting were the hardware add-ons for Colecovision. A driving module with a steering wheel and accelerator pedal came packaged with the conversion of Sega's *Turbo*. A VCS cartridge converter made the Colecovision the ideal next machine for those VCS owners Atari alienated with the 5200. Atari themselves weren't too pleased about the converter, and sought an injunction to stop Coleco releasing the device. After months of legal wrangling Coleco paid Atari a royalty on all the converters sold, and it was finally released in the UK in September.



A crazy bonus round in *Carnival* had players aiming at a bear which whizzed about the screen.



Hard to make out here, but this is Imagic's controversial *Demon Attack*.

Atari vs Imagic

Atari's legal department were also kept busy by another injunction they were attempting on Imagic's top-selling, award-winning VCS shoot-'em-up, *Demon Attack*. The claim was that *Demon Attack* copied Century's *Phoenix* coin-op – which Atari already had the licence for, and which was about to appear on the VCS. After more protracted legal shenanigans, no solution was reached and both companies settled out of court.

There was something disturbing about Atari flinging lawsuits around like this. In spite of its tribulations over the years, the company was still viewed as the home of video games. Suddenly Atari seemed less like the gamer's friend and more like guys in suits.

Atari vs Itself

There was more going on at Atari than the players realised. The VCS was losing its momentum in the USA, and Atari found itself churning out more cartridges than it could sell. The story goes that, after buying the licence to put *PacMan* on the VCS, Atari built more cartridges than there were VCS players. The burial of 6 million *ET: The Extra Terrestrial* cartridges in the Nevada desert is another well-known part of game industry lore.

British gamers heard about this, but Atari's UK arm was able to give the impression of 'business as usual'. Activision released the acclaimed *Decathlon* and *Pitfall*, and Parker Brothers launched a cool *Spiderman* cartridge. Atari announced plans for a keyboard to turn the VCS into a computer, and in May, Starpath launched a system which boosted the VCS's

1983



memory capacity allowing it to load games from tape, promising more gameplay at a lower cost.

By summer the quantity of new games seemed to slacken, and cartridge prices were dropping – Atari's take on the *Scramble* genre, *Vanguard*, was released at under a tenner. When VCS *Centipede* appeared, adverts exhorted players to buy quickly at the special offer price of £24.99 because the price would be going up to £29.99 on August 1st. In retrospect, Atari probably had good reason to try selling as many games as fast as possible.

Over in the USA, Atari was in a major cash crisis. Desperate to get rid of stock, it was knocking out \$40 games for \$4. On Wall Street, Warner Communications' shares plummeted in value and Warner were forced to announce that, over just the second quarter of 1983, they had suffered a \$283.4 million loss, and most people blamed Atari.

Atari vs Nintendo AND Coleco

Atari's computer business was having just as bad a time as its console arm. The 800 and 400, which had never been big sellers abroad, had started losing out in the USA to the Apple II. Atari's chairman, Ray Kassar, tried to acquire the exclusive home computer rights to *Donkey Kong* from Nintendo in the hope that such a big title would help the 800 back on its feet. Nintendo was happy to forge a link with Atari, because it wanted to sell Atari the outside-Japan rights to a console it had been successfully selling in Japan. A deal was struck and Kassar was ready to sign the contracts at the 1983 Summer Consumer Electronics Show when he walked past Coleco's stand and saw an official *Donkey Kong* running on the new Coleco Adam, a computer based on the Colecovision. Thinking he had been double-dealt, he got Atari's busy legal department to threaten Nintendo with legal retribution if something wasn't done.

That night Nintendo's president, Hiroshi Yamauchi met with Coleco boss, Arnold Greenberg, and blew his stack at him for jeopardising Nintendo's Atari deal. Greenberg tried to pass it off as a misunderstanding, but Yamauchi was having none of it and threatened massive legal action against Coleco if they continued to sell *Donkey Kong* for the Adam.

Coleco had to relent, but the problem worked itself out in the end. The three parties eventually got together to sort out the *Donkey Kong* problem, but shortly afterward the Coleco Adam sank without trace, and Atari started to come apart at the seams.

Nintendo Of America's president, Minoru Arakawa, was mortified to lose the console distribution deal with Atari, but his regrets were short-lived. He later discovered that Atari had just been trying to buy out a possible competitor to take its technology then drop the product. If the deal had gone through, no-one outside of Japan might ever have seen the machine that was to become the Nintendo Entertainment System.



Pictured here is *E.T.* Atari buried excess copies of the game in the Nevada Desert.



Coleco's conversion of *Donkey Kong* got the machine off to a great start, but there was trouble in store when Atari found out that Coleco had also converted it to run on its Adam computer.

Atari vs the UK Computer Market



An Atari 600XL. Pricey software let it down in the end.



Mattel's Aquarius, even by Spectrum standards, was underpowered.



The mini 'disk drives' that Clive Sinclair promised on the original Spectrum adverts finally materialised in 1983. The Microdrives were actually tiny tape cartridges which could store and retrieve up to 100K of data at high speed. An add-on box followed which gave the Spectrum a cartridge slot and joystick ports. By this time, though, many games producers were using clever software methods to accelerate cassette loading so most Spectrum owners didn't see the need for the Microdrive, or a cartridge slot. And most already had a joystick adapter.

Back in Britain, Atari was still stumbling along in the computer market. Though the 400 was selling for just £99 and the 800 at £249. The new Atari 600XL seemed like another one of the crowd of Spectrum imitators, though, like its stablemates, it had far superior hardware... just hardly any affordable software.

As in 1982, 1983 had seen numerous new releases into the Spectrum end of the home computer market. Mattel launched the under-powered Aquarius, while Computer Games Limited released the Sord M5, which was competent, but unpopular. Memotech had a similar problem with their MTX 512, probably one of the highest-spec home computers of the time, priced to compete with the BBC Micro, but doomed to oblivion simply because no-one produced any games for it. It was a vicious circle that

trapped so many new machines: if no-one was buying the computer, games companies wouldn't program for it, and if there were no games available, no-one would buy the computer.

Acorn was lucky with its new machine. The Electron was a cut-price, cut-down BBC Micro, which meant that the numerous software houses already producing BBC games were able to easily translate many of their hit titles. As a result the Electron did comparatively well.

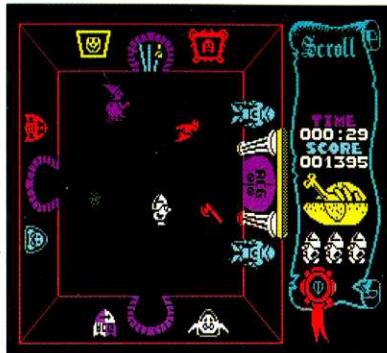
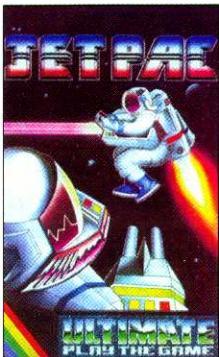
However Sinclair's Spectrum was well and truly established as the number one games computer, with the most games and a price that was right. At the start of May, in the face of meagre competition from the likes of the Oric-1, Sinclair turned on the pressure even further by dropping the price of the 16K Spectrum from £125 to £99, and the 48K model, the one everyone was now going for, went down to only £129. Shortly afterwards it went into WH Smiths' computer departments and after that, it looked like no-one else would get a look-in.

The Spectrum Sets the Software Standard

The quality of Spectrum games was improving greatly from month to month. Psion, today renowned for their electronic organisers, was one of Sinclair's tame software houses at the time and produced such classics as *Flight Simulation* and *Hungry Horace* – a *PacMan* game starring a character who managed to be charming and sinister at the same time. Melbourne House released *The Hobbit*, a sophisticated graphic adventure game, based on the Tolkien tale. Bug Byte was the fortunate publisher of the summer's biggest Spectrum game, a fiendish platform game called *Manic Miner*, which eventually changed hands when the programmer, Matthew Smith started his own company, Software Projects.

Special mention must be given to three Spectrum software houses which surfaced during 1983:

Ultimate Play The Game seemed to come from nowhere with its amazing arcade-quality titles, which started with the awesome *Jetpac* and *PSST*,



Ultimate Play The Game, a secretive band of arcade programmers produced some of the best Spectrum software ever during the course of 1983 and 1984. Among their titles were *Jetpac*, *Atic Atac*, *Sabre Wulf* and *Knightlore*.



and continued with the jaunty *Tranzam* and *Cookie*. By Christmas they would be wowing the Spectrum-owning public with the awesome *Atic Atac* and *Lunar Jetman*. Actually, Ultimate's programmers were arcade game designers, responsible for Century's classy 3-D blast, *Gyruss*, although they produced that under one of their other trade names – Rare.

Manchester-based Spectrum Games started off with an iffy conversion of *Donkey Kong* and within a year was trading as Ocean Software, with licensed versions of Century's *Hunchback* coin-op, a golf game endorsed by the Royal Birkdale club and a *Burger Time* clone, starring the promotional character from the Wimpy restaurant ads, *Mr Wimpy*.

And of course, there was Imagine Software. Imagine kicked off at the end of 1982, with its excellent Spectrum blast, *Arcadia*, but during 1983 it made itself the software house with the highest profile through lavish magazine advertisements. Ads featured pseudo-interviews with Imagine's programmers, hyping them up as if they were rock stars, although they were producing as many as many misses as hits. By Christmas the company had some decent titles on its hands, though, including an entertaining 3-D aircraft shoot-'em-up called *Zzoom*. Imagine also boasted of plans for two new super-games for the Spectrum and Commodore 64, called *Psyclapse* and *Bandersnatch*. Few details were given, but it was rumoured that both games were so advanced that they would need plug-in cartridges to enhance the computers they were running on.

The new dream machine

By Christmas, Commodore dropped the price of the C64 to £199. Though still £70 more expensive than the Spectrum it was a tempting buy now that it had some impressive games. One of the most exciting titles to appear was Commodore's *International Soccer*, probably the best computer football game of its time, and probably one of the first 'killer apps'. Some C64 games were also filtering over from the States where the machine was second only to the Atari 800, so software houses were converting top Atari titles for the C64 as well as developing games on both platforms simultaneously. Maybe the Atari was going to be worth the extra money after all...

Who can forget A+F Software's *Chuckie Egg*? One of the most addictive platformers ever released on the Spectrum, BBC, C64, Dragon 32...



The name of young Matthew Smith will forever be remembered as the creator of the superbly zany and supremely playable *Manic Miner*.



Toymaker Milton Bradley arrived in the console business in the summer of '83 with its £150 Vectrex machine. It was unusual because it had a built-in vector graphics monitor, but alas, against the Colecovision it wasn't an attractive buy. Notable games included *Mine Storm* (the *Asteroids* game built into the system), *Battle Zone* (3-D tank-killing classic) and the hilarious *Spike* (which gargled the cry "EEEK! SPIKE!" at the start of each level).

CHAPTER 4: 1984

It was the writer George Orwell who predicted that by 1984 technology would empower government agencies and help oppress the average Joe. As the real 1984 dawned, gloomy pundits wondered whether or not the growth of home computers was going to take us all one step closer to Orwell's vision. It didn't seem that way - If it was, everyone was having too much fun with their new machines to notice.

It had been a big Christmas for all the main computer brands, with plenty of hot new games driving sales. Its new lower price had helped sell the 48K Spectrum, and *International Soccer* had helped sell the Commodore 64 to more well-heeled players who wanted to be part of the schoolyard elite. The kids whose parents were teachers weren't complaining about their new BBC Micro, because it meant they could play a pretty good version of *Donkey Kong*, in the form of Program Power's *Killer Gorilla*, and Acornsoft were still turning out such corkers as *Starship Command* (which let players fly all sorts of famous sci-fi spacecraft into battle) and *Aviator* (a Spitfire flight simulator by the young Geoff Crammond).

The Game Is Up For Consoles!

The only people in the games business who weren't relishing the growth of computers' popularity were the console manufacturers. Their business was suffering badly in the USA, and the fact that more and more European players were turning to computers was proving a major problem.

Atari's 2600 was by now dead in the water and sinking slowly. Atari and the other VCS software producers were trying to stave off the machine's obsolescence by releasing cartridges which had more memory and new 'super chips' inside them to provide more levels, better graphics and improved sound. The trouble was, all this just bumped up the price of the cartridges. As far as British players were concerned, the games were still no better than their Spectrum equivalents (in some cases they were notably worse) but they cost nearly six times as much.

In the States, things had long ago reached crisis point at Atari. The massive price cuts had helped clear its stock of cartridges but Atari was still losing money. Its bosses tried to revive the company's fortunes with some new projects, such as the underpowered Atari 600XL computer and Atarisoft - a division offering official coin-op conversions to a home computer crowd who no longer cared about playing another version of *PacMan*, official or otherwise. There were staff cutbacks and office closures but Atari had had it. On July 6, 1984, the company was broken up and sold. The computer and console hardware divisions went to the founder of Commodore, Jack Tramiel, who had recently been ousted from the company he started and wanted his new Atari Corporation to take on both Commodore and Apple. The arcade end of



Elite, the game. David Braben and Ian Bell created an all-time classic video game when they programmed their 3-D space combat and trading simulation on the BBC Micro and Acorn Electron. Acornsoft released the game just before Christmas with an accompanying novella, *The Dark Wheel* and a challenge to become the first player to reach 'Elite' status. Firebird would release C64 and Spectrum versions the following year.



This year was pretty much the end of the line for the Atari VCS, though companies such as Activision continued to sell cartridges even after Atari had ceased production.



Sinclair's attempt at a business machine. QL was supposed to stand for 'Quantum Leap' but pundits quipped that it really meant 'Quite Late'. How the Sinclair customers laughed.



1984 was a bad year for Atari, but it still had a strong presence in arcades with innovative titles like *Crystal Castles*, *I, Robot*, *Marble Madness*, and *Return of the Jedi*. Though Atari's arcade reputation ended up in the hands of Namco the name would still remain the mark of innovative and entertaining coin-ops.

Atari was sold to Masaya Nakamura and Atari Games became a division of Namco.

Meanwhile, the price cuts Atari had instigated sent the whole US console business into a flat spin. Other manufacturers had to cut their prices to remain competitive. The result was that, by the end of the year, Mattel had sold off its electronics division and Coleco, which had weathered the storm better than most (though mainly thanks to its other big toy craze, the Cabbage Patch Dolls) folded. And with that, a long silence settled over the Western world's console industry.

Sinclair's Quantum Leap

In spite of some disappointing post-Christmas software sales, the UK's home computer business was still alive and kicking.

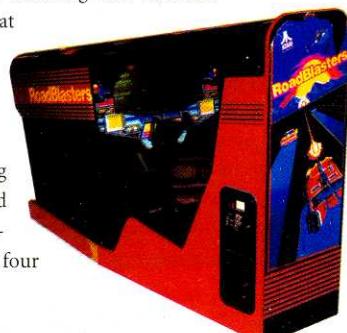
New machines were still appearing, among them the Sinclair QL. This was a major departure for the boy Sinclair, who was aiming higher up the market than he had with the Spectrum. The QL was meant to be a low-cost home/business machine, fit to take on the new IBM PCs and their clones with its 128K of memory, 16-bit processor and twin Microdrives. At £399 it was also an attack on Sinclair's old nemesis, Acorn, which was still selling the BBC Micro at that price.

But this time Clive was biting off more than he could chew. The QL was launched in January and orders for the machine flooded in, though it soon became apparent that the machine wasn't even finished. The first machines didn't go out until several months later, with a placatory software bundle and 'the dongle' – a cartridge that fixed bugs in the QL's ROM. Customers who received the bodge machines were promised they would be able to swap them for completed ones as soon as they were available.

Though it was cheap, the QL was no match for serious business machines because it didn't have the industry-standard software, nor would it ever become available on the tiny Microdrive cartridges. In fact very few companies saw fit to release any software for the QL, and the machine turned into Sinclair's first major flop.

Something did become of the QL's hardware, though. Towards Christmas, Sinclair released the Spectrum+, a new version of the Spectrum which was identical to the old one except that it came in a new QL-type case, with a QL-type plastic (as opposed to clammy rubber) keyboard. With Spectrum software houses still churning out fantastic games, the Spectrum+ was a big hit at Christmas, though some of the early models drew criticism because, if they were turned upside down, the keys fell out of the keyboard.

Commodore weren't idle during 1984 either. Its Commodore +4, released in the autumn, was an attempt at a QL-type machine with 64K of memory and four





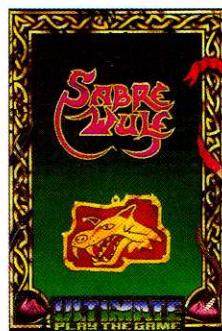
Sony, Yamaha, Canon, Toshiba, Sanyo, JVC and several other Japanese consumer electronics giants took part in the MSX project which turned out to be something of a flop in Europe. The machines were quite popular in Japan, though, after companies such as Konami released conversions of their arcade games. Some companies even released MSX 2 machines a few years later.

business applications squeezed onto a 32K ROM chip. This plummeted between the two stools of business and home computing; the applications were far too crude for business use and because the +4 wasn't compatible with the Commodore 64 it didn't have access to a ready supply of games. The +4 was only compatible with the Commodore 16, released at the same time, but seeing as that only had an inadequate 16K of memory, it was also destined for oblivion.

Behold The New Standard

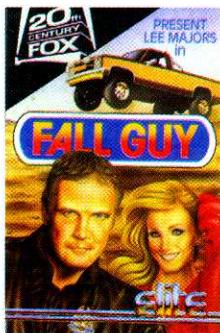
There were two notable hardware releases this year, though. MSX was the first. This was an attempt by an alliance of Japanese electronics giants to take the home computer world by storm, just as they had been doing with video recorders. They reasoned that one of the biggest problems facing the computer business – from everyone's point of view – was that there was no standard for hardware or software; a punter who bought a Commodore machine couldn't use Spectrum software, and software manufacturers had to squander resources producing several different versions of the same software for each machine.

The VCR manufacturers found this situation familiar, having had to deal in a market where two different cassette formats, Matsushita's VHS and Sony's Betamax, had battled for supremacy. Two companies, a hardware manufacturer called Spectravideo and the software developer, Microsoft, were asked to come up with a specification which could be used as the basis for all the new machines. The idea was that all of the machines would be compatible so that they could all run the same software and use the same hardware add-ons, but they wouldn't necessarily be identical. The basic format was unspectacular (64K of RAM, 16-colour graphics, cartridge slot, etc.), but different manufacturers were able to add individual touches to their own machines. Sony's MSX machine, the Hit-Bit, incorporated a personal data-file program to store addresses and phone numbers. Yamaha's machine had superior sound facilities which could be controlled by plugging in a Yamaha music keyboard. Pioneer's MSX connected to the Pioneer laser disc player and there was talk of laser disc arcade games appearing on the machine.



Ultimate's *Sabre Wulf* set the Spectrum scene alight when it was released just before Christmas. It was the first arcade adventure to use this isometric-perspective viewpoint, and spawned a host of imitators.

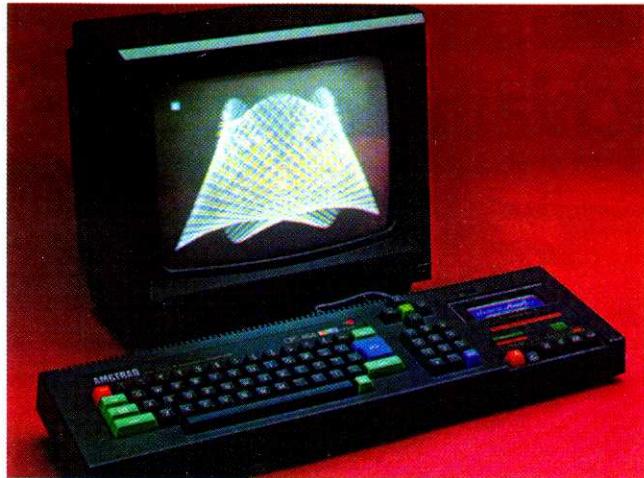
Amstrad took the all-in-one strategy they had used for music centres and applied it to computers to produce the CPC-464. It was an excellent machine, though it was never able to conquer the Spectrum or the Commodore 64.



Elite, the game company, got its name after running a 'Name the Software' competition in Computer and Video Games. Its first release was a jolly time-travelling platformer, imaginatively entitled *Kokotoni Wilf*. It followed that up with games based on dodgy American TV shows, such as *The Fall Guy* and *The Dukes of Hazzard*. Thankfully, the company moved on to better things before it got to *T J Hooker*.



Data East's *Karate Champ* coin-op was the original one-on-one beat-'em-up. If they had only thought to patent the game style the company's directors could all have reaped on the royalties from Capcom.



After so much investment, the consortium must have been somewhat surprised when their new standard failed to make any impact outside of Japan. In the USA, Apple was still the established home computer manufacturer, with Commodore coming up on the inside and PC-compatibles growing in popularity. In Europe the MSX machines promised nothing new or interesting in either hardware or software, and the £300 price tags made them too expensive to be competitive.

MSX's other problem was that it was an attempt to standardise the whole computer industry on unambitious 8-bit, Spectrum-competitor hardware, when other manufacturers were already looking at building the next generation of 16-bit computers. Within a year the MSX machines would have started to look dated. In fact they faded away before that happened, and most of the MSX manufacturers would never return to the home computer business.

After the music centre...

A more successful entrant into the European computer scene was Alan Sugar's Amstrad. After making a mint by flogging all-in-one music centres, Sugar decided to move into all-in-one computer systems. The Amstrad CPC-464 came with a built-in cassette deck and a monitor, all for the princely sum of £239 (with a green screen monitor) or £339 (with colour monitor).

The machine itself was well designed and Amstrad had made sure that there would be some good software available when it launched. It also had the benefits of Amstrad's distribution network to stores like Comet and Rumbelows, and it had an established name on the box. Parents looking for 'the family computer' were pleased to find an all-in-one package that looked like good value for money. It wasn't long before the Amstrad began challenging Spectrum and Commodore 64 for the hearts of the games-playing public.

Software Ups And Downs

For the moment, though, most companies favoured the Sinclair and Commodore machines over all others. With 16K systems now a thing of the past, programmers were able to work on increasingly ambitious games.

Software Projects had the Spectrum community in a frenzy waiting for *Jet Set Willy*, Matthew Smith's follow-up to *Manic Miner*. Then there was Beyond Software's *Lords of Midnight*, a role-playing game which was described in the adverts as "the world's first epic game with 32,000 possible panoramic views". Ultimate's *Sabre Wulf* was a vast jungle maze game, and *Knight Lore*, released just before Christmas, was a smart arcade adventure with gob-smacking isometric-perspective graphics.

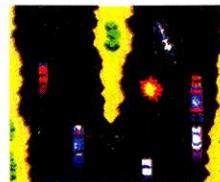
Commodore 64 owners were delighted to see Ultimate developing for their favourite machine, too, even though its first 64 title, *Staff of Karnath*, looked a bit ropey. By the end of the year, however, most of the best C64 games were being imported from abroad. Birmingham-based distributor, Centresoft, set up an operation which would ship in the wealth of classy Commodore and Atari games being developed in the States, and sell them in Europe on a new label, 'US Gold'. The new company's first title was Access' *Beach Head*, an entertaining multi-stage combat game which proved an instant hit. It was followed by cool conversions of coin-ops such as Sega's *Zaxxon* and *Buck Rogers*, and Bally/Midway's *Spy Hunter* and *Tapper*. US Gold also signed up a range of wargames and flight simulations from Microprose, and a range of celebrity-based games, including an excellent Bruce Lee platform game, from Datasoft.

US Gold's success prompted other software companies to look abroad for their titles. Quicksilva took on some titles from Epyx, the first one being a spectacular sports simulation called *Summer Games*. The German record company, Ariola, introduced Europe to the work of Electronic Arts, releasing a whole slew of C64 hits.

Budget software ranges also kicked off in 1984. The first was Mastertronic's which seemed to appear everywhere, from computer stores'



The first C64 title that US Gold shipped in from the States was Access' award-winning *Beach Head*. It was to be the first of many.



Spy Hunter, by Bally/Midway.



Summer Games from Epyx. Classic.

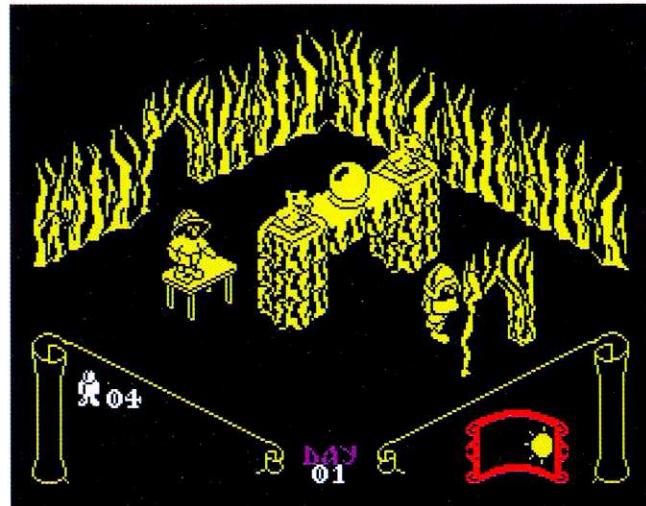
(LEFT) Imagine would spend a fortune on ads even when they didn't have games to advertise. Towards the end the company was blowing its cash on hyping up the prowess of its programmers, but in fact, none of the games they produced were as classy as the Ultimate titles, or even Imagine's own original hit, *Arcadia*.

During this Olympic year Konami got millions of arcade fans hammering the buttons on its Hypersports arcade machines. Home athletics games came in the form of Activision's *Decathlon* and *Daley Thompson's Decathlon*, whose joystick-thrashing controls were responsible for many a shattered Quickshot II.

Ultimate's *Knight Lore* amazed Spectrum owners with its incredible isometric 3D graphics.



Mike Singleton's *Lords of Midnight* was a vast strategy game which could generate 32,000 different views of the landscape.



The game Spectrum players were going mad for Software Projects' *Jet Set Willy*. The game followed on from *Manic Miner* but it was much bigger.

racks to newsagents' counters. Likewise, the Firebird range from British Telecom's new computer games division. With a price point of around £2 the games took off immediately as pocket-money or impulse buys, but the low price was sometimes used as an excuse for low-quality games. Having said that, both companies produced as many gems as they did duffers, and they served as the launch pad for the careers of some of today's best games programmers.

Pirates Ahoy!

Something else that can't have helped Imagine was a growth in software piracy during 1984. Commercial piracy was on the grow, but players swapping games in the schoolyard was the big problem. The classified ad pages of magazines featured ads for tape-copying software and at computer clubs up and down the country, gamers gathered to spend a pleasant Saturday afternoon swapping and copying games.

The best that software houses could come up with to restrain piracy was to record the games using non-standard tape techniques and include extra devices in a game's packaging, thus ensuring that only legitimate copies would load and play. Code sheets which required the player to look up a sequence of colours or letters were the most popular, though more exotic items, including the infamous LensLok, were yet to come.

A company called JLC Data came up with what must have been the ultimate anti-piracy gizmo, though. Before anyone could use it, the Ministry of Defence seized it and made its design the subject of a secrecy order. Apparently it was so effective at protecting software that the MOD feared it could be used to pass secrets.

So George Orwell was right after all. By 1984, Big Brother really *was* watching you.

CHAPTER 5: 1985

After the brouhaha of 1984, where consoles were going down the pan and yet more new computers being released, 1985 started off comparatively quietly.

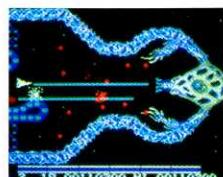
As far as the British games scene was concerned there were really only three main players in the hardware stakes. The Spectrum was still going strong and the Commodore 64 was growing mightier by the day, especially with the influx of more and more top-notch American software. In third there was the Amstrad CPC. Though still a comparative infant, it was very well received over the Christmas period, and continued to sell well into the new year, thanks to Amstrad's plan to bundle the machine with a pack of ten software cassettes.

The BBC Micro had become more of a 'sleeper' of late. It was still ticking over with the occasional good game (Acornsoft's *Elite*, released just before the previous Christmas had created major stir), but over the year it was to fade gradually into the background.

Atari - Back from the Dead

Over at Atari Corporation, Jack Tramiel was practically giving away the old stock of computers he had inherited. Atari 400s were going for £29 each while stocks lasted, and the more recently released 800XL was down to only £129. Now that companies like US Gold were selling high-quality imported Atari games for under a tenner, and other Atari software companies were following suit, Atari's user base began to grow again.

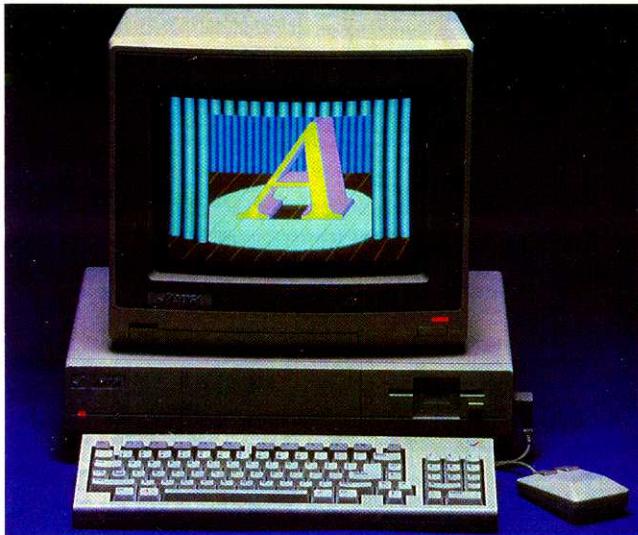
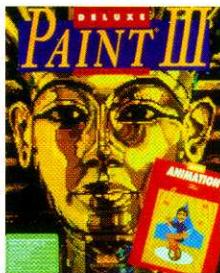
By summer, Atari had a 128K machine out, the 800XL, though this was still an 8-bit machine designed to be compatible with the old 400 and 800. Jack Tramiel's main focus was on Atari's new range of 16-bit machines, which had started appearing in July.



1985 was a heck of a year for classic coin-ops. From Atari we had *Paperboy* and the four-player fantasy blaster, *Gauntlet*. Konami had the unpleasantly-titled *Rush 'N' Attack* (renamed *Green Beret* for European players) and the heavily-weaponed side-ways-scrolling blast, *Salamander*. Capcom (then still known as Japan Capsule Computers') gave us the excellent *Ghosts 'n' Goblins* and *Commando*. And for Nintendo, Shigeru Miyamoto created the infamous *Super Mario Bros.*.

The 16-bit revolution starts here...
The Atari 520 ST was named after
Jack Tramiel's son, Sam. He must
have been so honoured!

The Amiga started off on the drawing board as a \$400 games machine, and ended up as a £1,000+ dream computer - which no-one could afford.

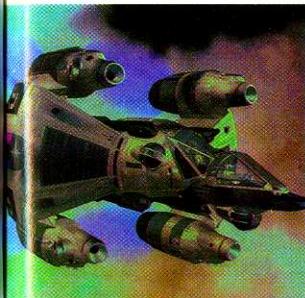


Some reviewers dubbed the Atari 520 ST 'The Jackintosh', as it bore all the marks of being a cheaper version of the Apple Macintosh. With the Macintosh and its predecessor, the Lisa, Apple had pioneered a new kind of computer, taking ideas from cutting-edge research laboratories where new user interfaces were being developed and incorporating them into a personal computer. The Macintosh's mouse and easy-to-use graphical 'desktop' display had made it a popular machine among computer-haters in the USA, but it cost nearly £3,000. Now here was a machine that offered as much – if not more – power and the same user-friendly facilities for only £750. A bargain... Sort of.

The ST was a powerful machine all right – but £750? For most home users in Europe, any computer hardware that cost more than £200 wasn't worth the money. After all, most people really only wanted a computer to play games on, and there weren't even any games available for the ST – which was disconcerting considering this was an Atari machine. The ST had high resolution graphics, a 256 colour display, three channel sound, two joystick ports, a cartridge slot, one of the new 3.5-inch floppy disk drives... It certainly had all the prerequisites of a fine games machine, but until games players started buying the ST, who would want to produce games for it? And until software publishers started releasing games for the ST, why would the game fans want to buy it? It was the old 'Catch 22' again.

Amiga Living

But if the ST looked like a white elephant, what about Commodore's new 16-bit machine, the Amiga? Like the ST, the Amiga garnered strong reviews because it looked so amazing – possibly even more spectacular than the ST, thanks to its superior sound and graphics capabilities – but Commodore were



The second-ever video game movie was Lorimar's *The Last Starfighter*, in which a young lad is recruited to take part in an interstellar war after exhibiting his prowess on *The Last Starfighter* coin-op. Like *Tron*, *The Last Starfighter*'s special effects were all computer-generated. The movie also spawned its own arcade game.

charging more than £1,000 for the machine! Again, there were no games available, and apparently all you could do with the Amiga was watch a 3-D model of a ball bounce around inside the monitor or mess around with a picture of Tutankhamun in a new screen art package called *Deluxe Paint*.

This was another occasion when Commodore were marketing what was patently a games machine as a business computer. In fact the Amiga had been designed as an extraordinarily powerful games machine. But when the bottom fell out of the console business and the development funds started to dry up, the developers at Amiga Computing Inc. decided they needed to sell their almost-finished project to someone before they all found themselves out of a job. The company's directors approached Apple, Sony, Philips and Hewlett-Packard without success. Eventually they found themselves talking to Jack Tramiel after he took over at Atari.

Tramiel had heard that his old foes at Commodore were thinking of bringing out a games machine, and, still wanting revenge against his old company, he saw himself snapping up the Amiga project and using it to sink Commodore's. What was even better was the fact that these Amiga guys seemed desperate for cash, so he reckoned he could get the machine dirt cheap. He gave them \$500,000 to keep things going for a month while a deal was cut, then he proceeded to offer them increasingly lousy prices for the company. Just two days before the month was up, the phone rang. It was Commodore, who promised more than five times the amount Jack Tramiel was offering. Contracts were signed and Commodore, in a hurry to get the machine on the streets, took over.

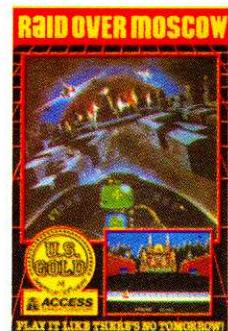
When the Amiga did arrive, though, no-one really knew what to do with it. Commodore was saying it was a business computer, but it seemed obvious to everyone that it was really an over-expensive games machine. But that price was going to have to come way down before it was accepted by the public at large. If only things were to work out the same way as they had with the Commodore 64...

Commodore gets the cream

Fancy though they were, the new 16-bit computers couldn't distract many gamers from the fun they were having with their old 8-bit machines. Now that the mad rush of new computers had ended, software houses were able to focus their attention on producing games for the three main machines, the Spectrum, the C64 and the Amstrad.

The first big release of the year was US Gold's *Raid Over Moscow*, a terrific shoot-'em-up, programmed by the American developer, Access (the *Beach Head* people). It was a massive hit, though it did have a few ideological problems insofar as it sent the player on a mission to blow up Moscow and various other Russian cities. Complaints were made and by the time US Gold had produced their Spectrum conversion, the game's title had been truncated to simply *Raid*.

A wealth of excellent software really made the C64 shine during 1985. Epyx followed their 1984 Olympics simulation, *Summer Games*, with the



Bearing copy like, "The Soviets believe their treachery will lead to total world domination", US Gold's Raid Over Moscow ad didn't sit well with some members of the gaming public during the burgeoning period of Glasnost.

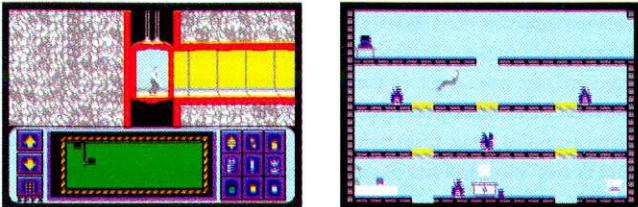


Summer Games 2 introduced exciting new events to the mix.



Archer Maclean's *Dropzone*.

Epyx's Impossible Mission was notable, not just for its entertaining platform gameplay, but also for its extensive use of speech. "Stay a while," called Professor Elvin Atombender at the start of each game, "Stay... FOREVER!!"



Rescue on Fractalus. Groundbreaking for its use of fractals to generate the alien landscape.

Though it was slightly flawed, Melbourne House's *Way of the Exploding Fist* was the first game to bring one-on-one chopsocky action into your home. The best was yet to come, though.

even more advanced *Summer Games II*, and *Impossible Mission*, an excellent platform-puzzle game with great graphics and speech. From US Gold came *Drop Zone*, a terrific clone of Williams' *Stargate*, programmed by a young Brit called Archer Maclean.

Activision, having moved out of the VCS business was working at converting a few of its best Atari titles to other formats, amongst them the jungle-based platform experience that was *Pitfall II*. Activision's trump card, though, was its licence with the new software division of Lucasfilm, the company behind the *Star Wars* movies. The first title to be released was *Rescue on Fractalus*, a 3-D blast set in the tortuous fractal-generated canyons of an alien planet. It was a staggering to see such a game on the Commodore, though Atari owners were quick to remind everyone that Lucasfilm had already released a far superior version of *Fractalus* on their system, when the game was entitled *Behind Jaggi Lines*.

Ocean Software revived the Imagine name, adopting it as a label for its range of arcade games. The first Imagine title was *World Series Baseball*, which was classy but not a major hit in the UK (baseball games never are). Ocean quickly followed up with a classy line of Konami coin-op conversions, starting with the excellent *Hyper Sports* and the... not excellent *Yie Ar Kung-Fu*.

The UK punters had already been turned on to martial arts games by a C64 game from Melbourne House called *Way of the Exploding Fist*. This was a side-viewed one-on-one beat-'em-up, like the Data East *Karate Champ* coin-op. It gave each fighter a range of kicks, punches and leaps and players progressed through best-of-three battles earning Karate-style ratings. It was great fun, but it suffered from a flaw which allowed players to beat all opponents with just a couple of moves.



Other notable C64 titles were coming from Hewson Consultants. Programmer Andrew Braybrook's jaunty platformer, *Gribbly's Day Out*, won applause from the C64 pundits, but not as much as his next game, *Paradroid*. This was a masterly blast, original and addictive, in which the player patrolled a vast spacecraft full of belligerent robots, using an 'influence device' to control and destroy increasingly sophisticated androids.

Spectrum going stale?

And what of the Spectrum? Ultimate, having set the standard for Spectrum games with *Knight Lore*, seemed to be taking it easy. *Underwurld*, which surfaced early in the year was like *Atic Atac* in a platform game form, and *Alien 8*, which followed, was a sci-fi re-run of *Knight Lore*. Both were fine games but it just showed what a tough act to follow *Knight Lore* was. Ultimate's Christmas release, *Nightshade*, made punters think again about Ultimate's reputation, though. This was a *Knight Lore*-style game with extremely bland gameplay and nothing new except for the fact that the screen scrolled instead of flicking from one room to the next. Everyone wondered – could Ultimate be going off the boil?

Similar thoughts occurred to Spectrum owners regarding Software Projects when it released *Jet Set Willy II*, which was basically the same as *JSW*, but with extra rooms to jump around in. Players who had expected more were disappointed, though, again, the quality of *JSW* and *Manic Miner* was always going to be hard to match. By the time *JSW II* appeared, other companies had moved into *Miner Willy* territory with more ambitious platform adventures, among them Mikro-Gen who came up with the *Wally Week* series, which started with the simple platform collect-'em-up, *Automania*, and progressed to *Pyjamarama*, then *Everyone's a Wally* and *Herbert's Dummy Run*.

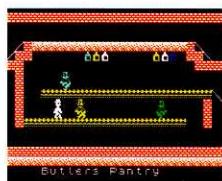
There were some definite instances of game-building genius evident among Spectrum programmers this year, though. Among them were the range of 3-D arcade adventures which Steve Turner programmed for Hewson Consultants, starting with *The Legend of Avalon*. These were only matched for depth and style by Gargoyle Games' *Tir Na Nog*, *Dun Darach* and *Marsport*. Firebird also pushed the boat out for the Spectrum when it released a conversion of *Elite* on its new full-price label, as well as a stunning 3-D maze puzzle called *Gyron*.

Can I See Your Licence?

With the standard of new games rising ever higher the software business became increasingly competitive. The old days of rehashing *Space Invaders* and *Asteroids* were gone and companies had to look for ways to beat their competitors off the shelves. Some of the smaller companies increased their advertising budget to give themselves the same profile as the big boys. Others just put their games in bigger boxes. And others yet looked for foreign games to snap up, especially stuff from the States, which players were beginning to recognise as the source of some of the best titles around.



When Andrew Braybrook was creating *Paradroid* for the C64, he was producing one of the greatest video games of the 80s. A classic.

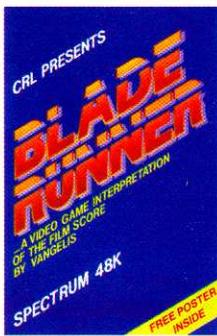


(TOP) *Underwurld* from Ultimate
(MIDDLE) Software Projects' *JSW 2*
(ABOVE) *Pyjamarama* from Mikro-Gen.



Tir Na Nog. from Gargoyle Games.

Frankie Goes To Hollywood from Ocean justified the (then) hot license.



CRL based their *Blade Runner* game on the film's soundtrack!

This grey shoe box surrounded by robots and guns was first seen at the American Consumer Electronics Show in June of 1985. Nobody liked it much. But soon all would kneel before the Nintendo Entertainment System. Except for those who bought a Sega Master System.

To some, licensing was the answer, so sought after celebrity endorsements. Ocean's *Frankie Goes To Hollywood* was an unusual arcade adventure based on the music of the band who were big news at the time, and Elite used boxing champ Frank Bruno's name to promote their clone of Nintendo's *Punch Out*.

Other licenses were desperate attempts to save mediocre games from oblivion. CRL created a *Blade Runner* game, which, instead of being based on the movie, was a video game interpretation of the film score by Vangelis. Presumably the licence was cheaper. Argus Press, which had made such a good job of its official *Alien* game, went a bit mad with a game based on Paul McCartney's movie musical, *Give My Regards to Broad Street*.

Taking the prize for Lamest Licence of 1985 was *Cooperman*, starring the blundering Tommy-Cooper-as-Man-of-Steel created by Russ Abbott. Fun it wasn't, but who could have been responsible for such a travesty? Why it was none other than Probe Software, now better-known as the sought-after development house behind the home conversions of the *Mortal Kombat* games and *Alien Trilogy* on the Playstation.

As software companies expanded and started shelling out big bucks on licences, some of the costs had to be passed on to the players. Game prices started to rise inexorably from around £6 towards £10. This helped cover extra expenses, but gave kids greater incentive to pirate games they couldn't afford – ironic, seeing as piracy was one of the 'expenses' that the price rises were intended to cover. In an attempt to silence cries that companies weren't offering good value for money, more started up budget labels to sell their B-rated games or to re-release their older titles. As Christmas approached, there was much back-catalogue rooting and the compilation pack was born.

But though the tills were still ringing through to the end of December it was becoming clear that this would be the last Christmas that certain companies would be spending in the games business. 1986 would be The Year of the Shake-Out.



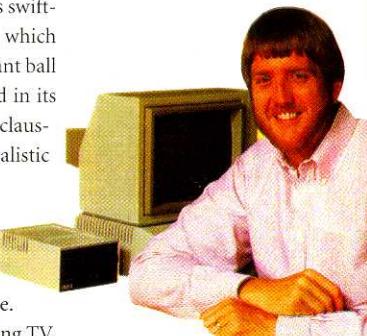
CHAPTER 6: 1986

Players who had chosen a Commodore 64 for Christmas must have felt pretty good about themselves when 1986 opened with a batch of terrific new games for their new computer.

Lucasfilm launched three new titles in three months, starting in January with a 3-D planet-roving scavenger hunt called *Koronis Rift*. This was swiftly followed by *Ballblazer*, an exhilarating futuristic sports game in which two players zipped around a chequered 3-D pitch trying to slam a giant ball into their opponent's goal. Lucasfilm's 3-D fractal routines returned in its next game, *The Eidolon*, though this time they were used to render claustrophobic caverns populated by fabulous dragons, rather than realistic mountainscapes.

Meanwhile, Activision's David Crane (creator of the *Pitfall* series and many other Activision hits) had come up with *Little Computer People*. This digital version of the Cabbage Patch Doll installed a simulated pet person and his dog into an on-screen house. The 'player' then got to observe him going about his business, watching TV, playing on his computer and so on. It proved an attractive novelty game, but player interaction was limited to playing cards with the LCP and delivering presents to keep him happy.

Novagen's *Mercenary* was more substantial. It was a vast 3-D adventure game in which the player got to explore the embattled world of Targ, scouring its surface, secret underground bases and even a floating city for a means of escape. The programmer, Paul Woakes, had packed *Mercenary* with intricate details and sub-quests but most players were won over by the 3-D graphics, the like of which had been thought impossible on the Commodore.



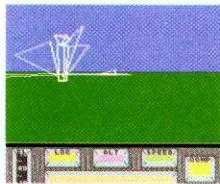
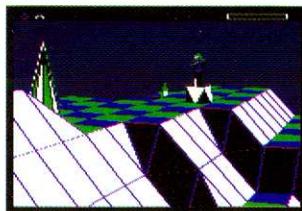
Activision's *Little Computer People* gave C64 players a house on a disk, complete with an individually-named occupant and his dog. Unfortunately, because most 64 owners didn't have disk drives, they had to make do with cassette-based LCPs, all of whom led exceptionally boring lives.

Koronis Rift (top left), *The Eidolon* (bottom left), and *Ballblazer* art, all from Lucasarts.



(LEFT) Geoff Crammond's *The Sentinel* - one of the greatest games ever to grace the surface of this planet.

(RIGHT) *i/K+* on the Commodore 64. A significantly enhanced sequel to an already fantastic combat game.



Paul Woakes' *Mercenary* featured unprecedented wireframe 3D graphics on the Commodore 64.



Rob Hubbard, the musical talent behind a host of hit C64 games.



Every Spectrum software house was doing *Knight Lore* clones during 1986. Unfortunately, Ultimate Play The Game were still doing them as well, and they weren't doing them any better than they had been two years earlier.

Geoff Crammond, who had created some of the BBC Micro's best games, was another programmer who pushed the Commodore hardware to its limits in *The Sentinel*. This was an ingenious game of strategy played out on thousands of mathematically-generated three-dimensional chequerboard landscapes. It was unlike anything that had gone before, and there hasn't really been anything like it since, though many players with long memories wish there had been.

Less cerebral but just as enjoyable was *International Karate*, programmed by Archer Maclean (of *Dropzone* fame) and released by System 3. This was really just a re-run of the previous year's *Way of the Exploding Fist*, only with the flaws knocked out and some cool new moves and scenery graphics. It was a major hit, though, and players decided they wanted more of these 'beat-'em-ups'.

Commodore Heroes

It was with releases such as these that the Commodore started to ease ahead of the Spectrum in the games-superiority stakes. While the Spectrum seemed to have run its course as far as new programming techniques and effects went, Commodore coders seemed to be pushing the envelope further with every new release. Even the programmers who set the music to Commodore games were to become renowned personalities among the players, and to some, the music of Rob Hubbard and Martin Galway was as collectable as that of major chart bands.

A demo scene grew up on CompuNet, Commodore's electronic network, on which budding programmers would try to out-do each other with cool mini-games, fantastic audio-visual displays, and seemingly impossible tricks, such as placing graphics outside the normal limits of the screen. Several successful programmers first came to light on CompuNet, among them Chris Yates and Jon Hare, who went on to found Sensible Software.

The Spectrum Starts to Fade

It wasn't that Spectrum releases were dwindling, but as the price of the C64 came down to under £150, and as players saw what the Commodore could offer they started changing sides. As the trend continued, software houses that had treated both machines equally began to prioritise the 64, and Spectrum owners found that the best games they had to look forward to were conversions of Commodore titles.

Even that stalwart of Spectrum quality, Ultimate Play The Game, seemed to have lost its touch, having turned out nothing but weak *Knight Lore* clones since 1985. Even so, it came as something of a blow when it was revealed that the company behind Ultimate, Rare, had decided to split the home computer scene, and had sold the Ultimate label to US Gold.

There were still some diamonds left among the dust, and plenty more would be dug up over the next few years, but there's no denying that by the end of the year, with the Spectrum shelves straining under the weight of budget games, cut-price re-releases and compilation packs, it felt like the glory days were over for Sinclair's machine.

As if to compound the sense of gloom many Spectrum owners felt, in April of 1986 Clive Sinclair was forced to sell his computer business and it ended up in the hands of Amstrad. The Spectrum had been a massive success (according to some reports it was the most popular home computer ever), but Sinclair's more recent projects, such as the QL, the Sinclair flat-screen miniature TV and the infamous Sinclair C5 electric 'car', had taken their toll on the company's coffers. The Sinclair name lived on, gracing the new-and-improved 'Amstrad-Sinclair' Spectrum 128 which came out for Christmas. But without Uncle Clive there, it was the end of an era.

16-Bit Games: The Arrival

But another era was just about to begin. The Atari 520 ST, which had been admired by all but bought by few during 1985, finally seemed to be making some headway in the game-playing world.

A new Liverpool-based company called Psygnosis got the ball rolling with an intriguing but not entirely lovely platform adventure called *Brataccas*, but it was Firebird's sister label, Rainbird, which released the first really impressive ST games titles. When pictures appeared of *Starglider*, awe-struck readers scrutinised the detailed graphics and smooth colour graduations, the like of which had never been seen before on a home machine. Developed by Argonaut Software, *Starglider* was a 3-D shoot-'em-up which looked like some kind of fantastic cross between *Elite* and *Battlezone*. Even more visually attractive was *The Pawn*, an adventure game with beautiful artwork accompanying each location, and novel drop-down command menus. Towards the end of the year, Firebird announced that Mike Singleton (the *Lords of Midnight* creator) was working on the first official *Star Trek* home computer game, which would feature 3-D space battles and digitised pictures of the original *U.S.S. Enterprise* crew.

Adding to the Firebird stuff, System 3 released pictures of an ST version of *International Karate*, featuring extra-realistic graphics. It was hinted that the game would also feature three player punch-ups!

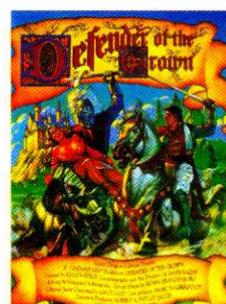
The Amiga, though still plenty expensive, was also attracting game developers. Electronic Arts created a spot-on version of one of 1985's hippest coin-ops, Atari's *Marble Madness*, and news filtered back from some American trade shows that a company called Cinemaware was creating what amounted to interactive movies on the Amiga. The screenshots of



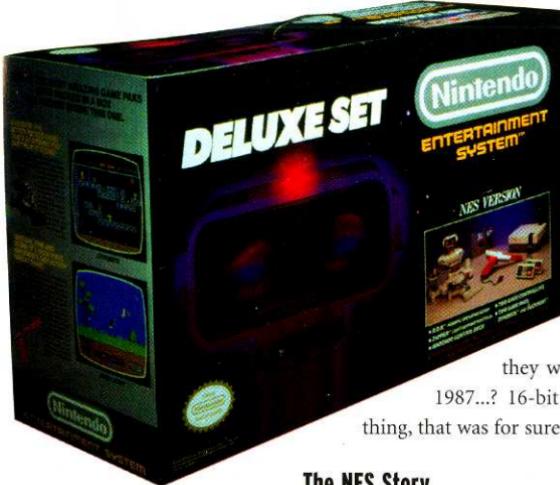
Like most Psygnosis games, *Braticus* looked fantastic.



Jez San's *Starglider* was the first game that really made British game players desire a 16-bit machine. This, and *The Pawn* were responsible for selling quite a few Atari STs.



The Commodore Amiga was still much more expensive than the ST, but the sight of Electronic Arts' spot-on conversion of *Marble Madness* and Cinemaware's *Defender of the Crown* prompted wealthier gamers to open their cheque books.



Who would have thought that such a bland, unobtrusive box could change the face of the entire video games market? No-one, that's who. Not even Nintendo, at the time.



(ABOVE) The prototype NES, and its proposed add-ons.

(MIDDLE) The Famicom Computer Disk Drive. 'Only' 4 million were sold.

(BOTTOM) Nintendo Co Ltd, 1959.



Defender of the Crown certainly looked amazing... especially the ones of a princess dressed in her night attire... And with such sexy pictorial delights, the 16-bit games industry was born. These were the machines that most British players were now setting their sights on. Maybe they wouldn't be able to get one this year, but in 1987...? 16-bit computers were going to be the next big thing, that was for sure. Possibly.

The NES Story

Just as 16-bit machines were about to hit their stride, news filtered across the Atlantic that consoles were back – old-fashioned 8-bit consoles – and they were doing a roaring trade.

While Western players had been buying their Ataris, Colecovisions and Spectrums back in 1983, Japanese gamers had become hooked on a different game machine, the Nintendo Famicom ('Family Computer'). The Famicom, though still an 8-bit machine, was technically superior to anything else on the market at the time, and, at around £70 it was half the price of its competitors too. Within two months of its launch Nintendo had sold half a million Famicoms in Japan, and demand showed no signs of dropping off.

Nintendo's strategy was a shrewd one: sell the machines as cheaply as possible and make money on the games. In fact it was doubly shrewd, because Nintendo retained all rights to produce Famicom game cartridges. This meant that if a developer wanted to get into the lucrative Famicom market, it had to sign a contract that made it an official Nintendo licensee and then had to pay Nintendo to actually manufacture the games. It was a deal that propelled what had once been Japan's foremost playing card company into the big leagues of the consumer electronics industry, and made the game developers a lot of money too.

For the first two years of the Famicom's life Nintendo seemed content to limit its success to Japan, then in 1983, when Atari showed an interest in buying the home computer rights to *Donkey Kong*, Nintendo also considered selling Atari the Famicom. Atari would use its extensive distribution network and years of experience in the video games business to market the Famicom outside of Japan, and Nintendo would get a royalty for each machine sold. But when Atari went down taking the rest of the Western console market with it, the deal collapsed too.

However, Nintendo realised that many of the players Atari left behind were still just as turned on to video games – they had just become disenchanted with the games they were being sold. Work began on retooling the Famicom for the Western market and at the January 1984 Consumer Electronics Show the Nintendo Advanced Video System made its debut. Whereas the Famicom had been designed to look like a toy, the AVS was

designed to look like it could have been part of a hi-fi stack. Nintendo was going out of its way to distance the AVS from the games consoles that most stores had vowed never to touch again, but the bluff didn't work. Few wanted the AVS. Its collection of add-ons, which included a computer keyboard, a music keyboard, and a cassette data-storage device were considered inappropriate for a machine that was supposed to be devoted to entertainment.

Still keen to crack the foreign market, Nintendo went back to the drawing board and 18 months later returned with the Nintendo Entertainment System. This grey box went on show at the Summer '85 CES show, surrounded by a range of unusual add-ons, a light gun for shooting on-screen targets, and a small robot that watched the screen and moved spinning gyroscopes around on a plinth. It was the robot, R.O.B. (Robotic Operating Buddy), which attracted the interest of most of the toy trade visitors, but they were still reluctant to actually place orders.

With optimism in increasingly short supply, Minoru Arakawa, the head of the recently formed Nintendo of America, tried out the NES on groups of kids to test their reactions to the system. They hated it, but when Arakawa reported this to Nintendo's boss, Hiroshi Yamauchi, he was told to ignore the research and go with the product. It was decided that the NES would go into toy stores – in New York only to start with – in time for Christmas of 1985. Arakawa's team worked night and day trying to get store managers to stock the NES, and then setting up promotional events to introduce the system to the public.

It was slow going, but eventually the machine took off across America. By the end of 1986 one million systems had been sold in the US, and the demand for the NES was growing – thanks, at least partly, to its killer game, a spot-on conversion of Shigeru Miyamoto's *Super Mario Bros.*

Consoles - Back for Good?

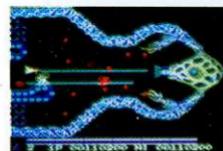
Most British gamers were oblivious to this gaming revolution, and the first they heard of the NES was in 'Coming Soon' news stories in magazines like Computer and Video Games. The general tone was: "This thing isn't bad but why would you want one if you have a Spectrum or C64?"

If anything, the British press seemed more interested in two other new consoles which were being released in the USA, the Atari 7800 and the Sega Master System. The Atari machine was interesting because it meant Atari were getting back into the games business. The Master System was interesting because Sega had recently become a big name in hot coin-ops, with awesome 3-D games like *Space Harrier*. An official home conversion on Sega's own machine was bound to be good.

Could consoles make a comeback in Europe? And if so, which would be the best? Or would 16-bit be the way forward? Perhaps all would become clear in 1987...



Without this game, Nintendo may never have got to where it is today. Before long, Shigeru Miyamoto's Mario character would be more widely recognised than Mickey Mouse.



Konami's coin-op designers had been turbo-charging the good old scrolling shoot-'em-up. *Nemesis* and its sequel *Salamander* were the first games to use arrays of collectable 'power-ups' to give players incredible destructive capabilities. What a rush!



(BELOW) Sega's classic design for the UK MasterSystem.

(BOTTOM) Atari's 7800 promised home versions of arcade games like *Pole Position 2* as well as translations of hot computer titles such as *Rescue on Fractalus* and *Impossible Mission*.

Nintendo's Laser Clay attraction,
designed in 1973 by Gunpei Yokoi -
the same person responsible for
Game Boy. Something of a difference
in size, don't you think?



CHAPTER 7: 1987

As 1987 opened, any thoughts of the imminently-arriving consoles soon faded from most players' minds. They didn't need to buy new systems to play arcade conversions – over Christmas the shops had been full of Amstrad, Commodore and Spectrum versions of all the big games! There were even conversions of the mighty *Space Harrier*, which had been okay, but ultimately disappointing – though that only went to prove that *Space Harrier* was a rudimentary game spruced up with fancy graphics. Any conversion, probably even the official home version from Sega wouldn't be much to write home about. So what was the big deal?

No-one was exactly gagging for the arrival of the Nintendo system either. What was going on with that robot? Guns to wave at the screen? How childish. And if the best game they had was *Super Mario Bros...* Well... A lot of British players hadn't even bothered with that in the arcades, preferring the games with fancy graphics, explosions and lasers, to the ones with bricks, turtles and plumbbers.

Indeed, why bother waiting till the summer for consoles to arrive, when you could play hot arcade games like *Gauntlet* on your Commodore 64, right away, courtesy of companies such as US Gold. In fact, between the three of them, Elite, US Gold and Ocean seemed to have conversion deals tied up for just about every decent coin-op around – including those fancy Sega games – and it wouldn't be long before Activision boarded the arcade licence gravy train too. Consoles? Hah. A mere fascination. And you couldn't copy the games for your mates, either.

16-Bit Market - GO-O-O!!

If anything was going to make the kids sell their Spectrums and 64s it was going to be the lure of the ST and Amiga which was growing stronger month by month.

Support for the Atari machine was building fastest for the simple reason that it was the cheaper of the two machines and hence was more popular.

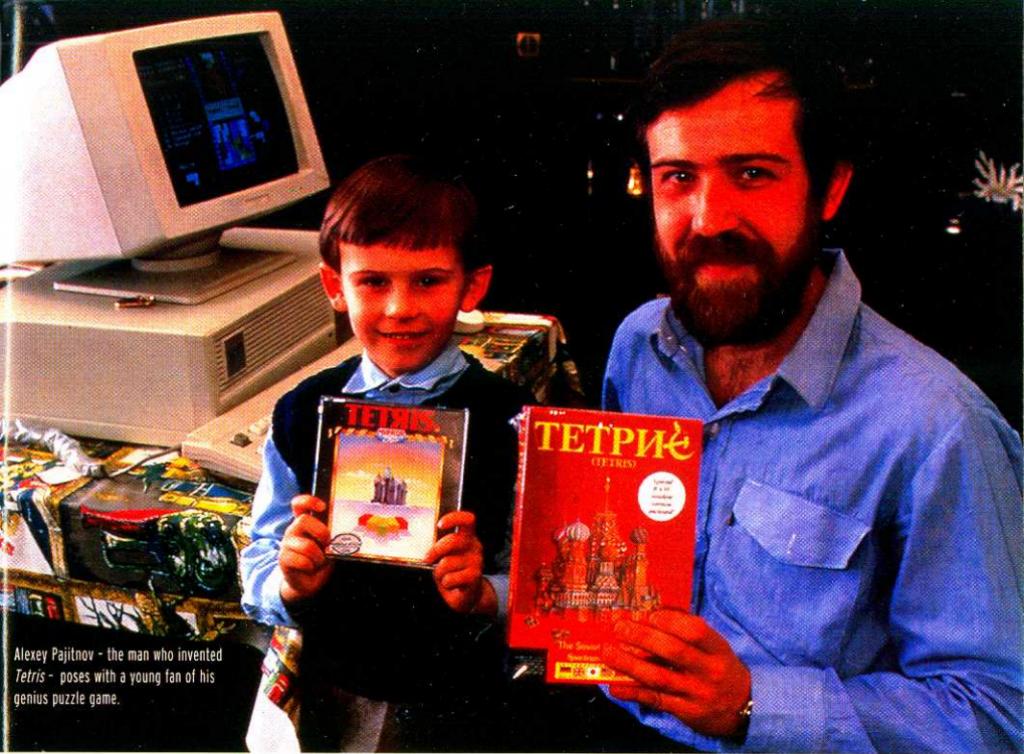


Super Mario, given the ability to fly with a magical Raccoon outfit.



Sonic the Hedgehog, and Amy his girlfriend. Would be conqueror of the UK console market.

Just how far a publisher is prepared to go with packaging, defined by Infocom's *Leather Goddess of Phobos*. Nearly all of Infocom's adventure games were accompanied by the likes of scratch-n-sniff boards, maps, 3D glasses, and other such items.



Alexey Pajitnov - the man who invented Tetris - poses with a young fan of his genius puzzle game.

ular. By May the price of a 520 ST-FM (with a built-in disk drive) had come down to £400 - pricey next to a Spectrum, but, gamers rationalised, it wasn't that long ago that Acorn were charging the same price for the 8-bit BBC Model-B with 32K of RAM and a cassette interface. The ST had approached the Wealthy Players' Expense Threshold and the attraction of nifty arcade conversions such as *Arkanoid* (Taito's addictive *Breakout* with power-ups), and *Gauntlet* was enough to tempt more and more of them into the 16-bit domain.

The more ardent adventure players were also rather taken with the ST, which offered them Magnetic Scrolls' ground-breaking graphics-enhanced quest, *The Pawn* in 1986, was showing off its sequel, *The Guild of Thieves*, in 1987. Level 9 software, who had been master-builders of adventure games since The Year Dot, also moved onto the ST with *Knight Orc*, which featured hand-painted-then-digitised artwork for every scene. Best of all, every adventure player's hero company, Infocom, were also producing their games, including the legendary *Zork* series and the newer, racier *Leather Goddesses of Phobos*, on the ST.

In September, Atari were to net more potential upgraders by dropping the price of the ST-FM even further to £299. By the time Christmas rolled around again, these new-born 16-bitters would be looking forward to Domark's fantastic conversion of Atari's *Star Wars* coin-op, Firebird's *Bubble Bobble* translation and Activision's cool *Super Sprint* licence, as well as a colourful 3-D shooter from Novagen (remember *Mercenary*?) called *Backlash*. To keep ST owners drooling, Novagen promised that the sequel to *Mercenary*, called *Damocles* would be making its debut on the ST in 1988.



Wondering what happened to the Atari 7800? Atari shelved it and decided to launch the Atari 65XE console instead. This was priced at £80, and was to have a computer keyboard upgrade available for an extra £40. The games were almost all conversions of titles already available on the C64, so perhaps it was no surprise that the 65XE didn't make much impression and soon disappeared from the shelves.

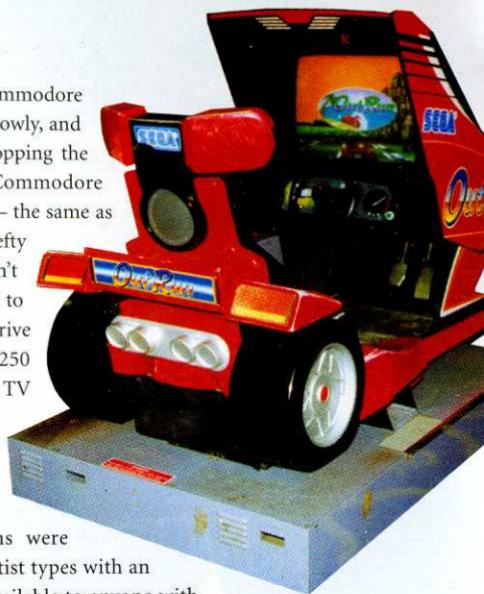
Amiga Market - GO-O-O!! Come ON!

It was all going well for the ST, but what were Commodore doing all this time? The Amiga was shifting, but slowly, and the reason for this sloth was the price. After dropping the original 256K RAM version of the Amiga, Commodore unveiled the new Amiga 500 (with 512K of RAM – the same as the 520 ST) in April, priced at the still slightly hefty £499 plus VAT. For some reason, Commodore didn't put a TV modulator in the case, so if you wanted to see the Amiga do something apart from flick its drive light on and off, you either had to spend over £250 on a monitor or (the cheaper option) the £25 TV modulator box.

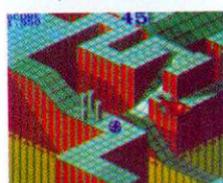
For obvious reasons, the Amiga software catalogue wasn't as bountiful as the ST's at this stage, but the machine was already developing a selection of 'killer apps'. The big attractions were Electronic Arts' *Deluxe Paint*, which provided artist types with an array of computer graphic tools previously unavailable to anyone without access to a visual effects studio. Mirrorsoft (the software wing of Robert Maxwell's Mirror Group) had snagged the licence to distribute the Cinemaware games, and the eagerly-awaited *Defender of the Crown* made it over here first. A medieval strategy game benefiting from Hollywood production values, it wowed players with its fantastic graphics and music and just about all new Amiga owners ended up with a copy in their software library.

Players who wanted a bit more action were pleased to hear that Rainbird were also moving into Amiga territory, with a conversion of *Starglider*, as well as an innovative cartoon adventure game called *Dick Special – The Search For Spook*. The latter was being programmed by Sandy White, an ex-sculptor turned programmer, who had produced the equally innovative Spectrum hits, *3D Ant Attack* and *Zombie Zombie* for Quicksilva. Sadly, *Dick Special* never appeared.

Electronic Arts, having earned a reputation for quality Amiga software with its conversion of *Marble Madness*, was preparing two new Amiga titles which caused the jaws of all who saw them to drop. *Ferrari Formula One* was a racing simulation with fantastic graphics. Even more amazing was Bob Dinnerman's *Interceptor*, an air combat simulation that let the player take off from the San Francisco airport in an F/A-18 jet, zip under the Golden Gate bridge then head out to sea to chase down incoming cruise missiles before the Bay Area got nuked. *Interceptor* was dazzling, not just because it was the first flight simulation to have action and realism in it, it also had spectacular graphics and view controls which let you watch the action from almost anywhere inside or outside the aircraft. Another ground-breaking game to add to the Amiga's catalogue. Could the consoles possibly match this?



This was the year that Sega dominated the arcades. The 3-D graphics technology seen in *Space Harrier* was used to produce the classic arcade driving experience, *OutRun*. This was followed by the bouncy *Enduro Racer*, the exhilarating *Super Hang-On* and the even more exhilarating (though at the same time slightly dull) *Afterburner*.



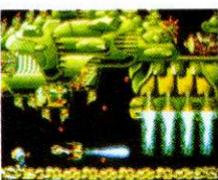
Marble Madness, the arcade version.



Bob Dinnerman's thrilling *Interceptor*.



The complete NES game master's kit, complete with ROB and Zapper gun.



Taking its inspiration from Konami's new range of mega-weapons shoot-'em-ups with disgustingly realistic graphics, Irem's *R-Type* is one of the classiest arcade blasts ever.



Capcom were strengthening their presence in British arcades with cool shoot-'em-ups like *Sidearms* and that novel beat-'em-up with the pressure-sensitive buttons, *Street Fighter*.



Taito revived the gun game, with their two-player Carnival of Bullets that was *Operation Wolf*.

Revived Console Market - Get Going!

Nintendo put the UK marketing of the NES in the hands of Mattel who then released the machine in two different packs. For £200 you could have a NES with ROB the robot, a Zapper gun and two games, *Gyromite* (specifically designed for use with ROB) and *Duck Hunt* (a Zapper game). The cheaper pack, priced at £140 consisted of the console, two controllers and a copy of *Super Mario Bros*.

A total of 27 'Game Paks' were also launched with the machine ('cartridges' was a taboo, 'old console market' word), though around 26 of those were duds. To most players, even *Super Mario Bros* didn't look that good, and it was only once you'd played it that you gradually came to realise what the fuss was about. In fact, all of the games suffered from looking childish and old-fashioned: *Clu-Clu Land* appeared to be some kind of *PacMan* clone; *Golf* was crude next to the *Leaderboard* games which had been hot on the Commodore 64 the year before; *Donkey Kong* – oh, please, not again!

Mattel must have been surprised when the sell-out situations seen in Japan and the US didn't repeat themselves in the UK. But the introverted British market had been too interested in talking about the latest Spectrum and Commodore releases to take any notice of what had been going on in Japanese toy stores so the NES had practically no word-of-mouth publicity. The selection of games, all of which were old news in Japan and the USA, didn't help either. When British kids were dreaming of incredible 3-D arcade games like *Space Harrier* and *OutRun*, and interactive movies and cool blasters on the new 16-bit systems, Nintendo was offering old-fashioned platform games for little kids.

Within two months, Mattel had dropped the price of both NES packs. The Deluxe Nintendo set was down to £159 and the basic pack was only £99. But then it had to. The opposition had showed up.

Revived Console Market - Now We're Getting Somewhere!

Sega's console attempt had fallen flat in both Japan and the USA, but in Europe the Master System was going to revive the console market single-handedly. Sega put the Master System's distribution in the hands of the kings of the budget game, Mastertronic, who started marketing it as "The Ultimate Home Video Arcade Machine". The important word was "arcade". Mastertronic put together a £99 Master System package which contained the console, two controllers and a conversion of Sega's old 3-D bike racer, *Hang On*. As a game it wasn't a patch on *Mario*, but to players who didn't already know better, it at least looked superior.

Even the console itself looked better than Nintendo's. The NES had all the style of a grey shoe box, while the Master System was an angular, black slab which looked high-tech and cool. Even Sega's *Light Phaser* looked cooler than Nintendo's grey *Zapper Gun*. And rather than having a silly robot, Sega promised something completely new – 3-D Visor Glasses! No-one really knew what they could be at the time, but they sounded exciting.



(LEFT) *World Games*, from Epyx, did great business for US Gold.

(RIGHT) Sensible Software's *Wizball* - a shoot-'em-up like no other, and one of the finest C64 games ever.

The two most eye-catching things on Sega's magazine ads were the screen shots of *Space Harrier* and *OutRun*, both of which were to appear on the Master System imminently. These certainly looked better than any efforts that would be possible on the Spectrum, Commodore and Amstrad... and suddenly some 8-bit owners had a new upgrade option.

Commodore 64 - Still Going!

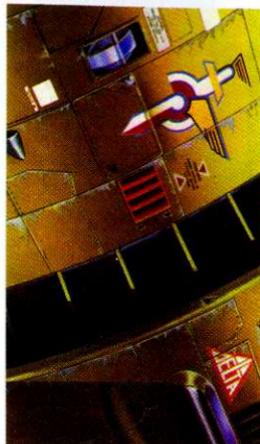
Judging by the quantity and quality of software being released during the year, the C64 clearly had plenty of life left in it.

The magazine publisher, Newsfield, had moved into the software business with its Thalamus label, for which it earned plaudits with games like *Sanxion*, the audiophonically astounding *Delta*, and *Quedex* – all of which, incidentally, were programmed by the same young Finn, Stavros Fasoulas. US Gold's licence deal with Epyx was paying off, with *World Games* and *California Games* proving to be two of the best sports simulations ever. Mirrorsoft also had success with the simple, yet addictive *Tetris*. Ocean were also going strong, with a slew of conversions of minor coin-op hits. Its most worthy 64 release of the year was Sensible Software's *Wizball*, a shoot-'em-up with so many original features that merely classifying it as a shoot-'em-up does it a disservice. The most significant 64 release of 1987, though, was Cinemaware's *Defender of the Crown*. Though it was originally only available on disk, players decided it was worth the cost of a £200 disk drive just to own it.

Spectrum... Running Out Of Steam

On the Spectrum, things weren't so rosy, and this year saw few notable releases. There were a couple of high points, though. *Mercenary* was a hit, and, in the same 3-D exploration vein, there was Incentive Software's *Driller*. Perhaps the most memorable Spectrum title of this year, though, was Ocean's *Head Over Heels*, a novel isometric platformer which gave players the task of solving problems by using two separate characters. This was the zenith of the *Knight Lore*-style game.

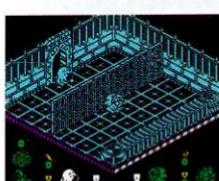
Earlier in the year Amstrad relaunched the Spectrum 128 as the Spectrum +2, with a drab, grey case and a built in cassette deck, then towards Christmas the Spectrum +3 arrived in a black livery, with one of Amstrad's 3-inch disk drives mounted in the case. Prices were set at £139 for the +2 and £199 for the +3, and they did some pretty good business over Christmas. But as the year ended, Spectrum owners must have felt that they didn't have much good stuff left to look forward to.



Newsfield's game *Delta* sported some outstanding artwork for the time.



Incentive Software's 3-D exploration game *Driller*. Good for the Speccy.



The *Knight Lore*-style game peaked on the Spectrum with Ocean's *Head Over Heels*, designed and programmed by Jon Ritman and Bernie Drummond.



Already in 1987, old coin-ops were becoming collector's items - a symbol of cool. Stephen Spielberg here probably bought this Space Invaders machine in 1981, though!



CHAPTER 8: 1988

At the end of 1987, Spectrum owners were ready to pull the plug on his old machine and buy a spunkier video games system. The kindest thing to do would be to bury it respectfully in the classified ad pages of the local newspaper. Yet, just as the Grim Reaper seemed to be beckoning for the Spectrum, it suddenly got its second wind. The days of every Tom, Dick and Willy turning out an endless stream of *Manic Miner* clones seemed over, and software houses were commissioning Spectrum conversions of all those coin-ops and games-of-the-movies that they had just licensed.

During 1987, Spectrum fans had been gobsmacked by Activision's conversion of Sega's 3-D motocross coin-op, *Enduro Racer*, and Elite's translation of *Space Harrier* had been none too shabby either. 1988 would be the year that Spectrum fans would be playing home versions of *Super Hang-On*, Sega's extremely cool bike racer (Activision) and *OutRun*, the Sega Ferrari-thrashing experience (US Gold). Then there was a brace of hot Konami shoot-'em ups to come, namely *Salamander* (sequel to *Nemesis*) and *Gryzor* (*Contra*).

Software houses weren't prioritising the Spectrum, though. They knew they would need to put every effort into getting a strong 16-bit line-up ready for next Christmas, but they weren't about to dump the vast numbers of 8-bit users yet. During the year, Spectrum, Amstrad and C64 owners all got the same selection of games. Surprisingly, of the three machines, the Spectrum's conversions often seemed to come out looking the best.

What proved particularly amazing was the fact that Firebird produced Spectrum conversions of two of its hit 16-bit titles, *Virus* and *Carrier Command*, both of which were considered state of the art even for an ST or Amiga. While the Spectrum could handle them, the C64 was judged ill-equipped for the games.

US Gold's conversion of *OutRun* was one of many Spectrum arcade conversions that turned out surprisingly well in 1988. In fact, some of the C64 and even ST and Amiga conversions looked shoddy in comparison.



(ABOVE) Spectrum *R-Type*.
(BELOW) Spectrum *Road Blasters*.

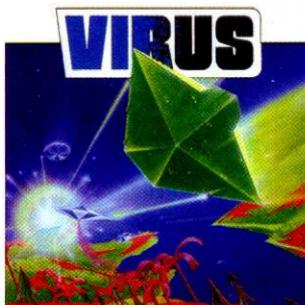
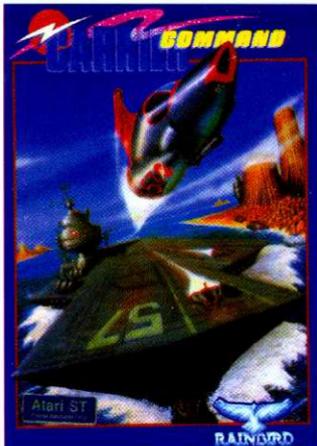


System 3 tapped players' love of fisticuffs by releasing a follow-up to International Karate called *IK+*, as well as a martial arts arcade adventure called *The Last Ninja*, and a Thai-boxing simulation called *Bangkok Knights*.



Realtime, the company that had squeezed all sorts of sophisticated 3-D games out of the Spectrum, produced the even more sophisticated *Carrier Command* for the ST.

After co-programming the original version of Elite with Ian Bell, David Braben produced another 3-D game called *Zarch* for Acorn's Archimedes. *Virus* was the name of the ST (and indeed, the Spectrum) incarnation, and pretty good it was too.



It could hardly be said that 1988 was a bad year for the C64, though. The shelves were thick with decent, original, home-grown games. Thalamus had *Hunter's Moon* a clever puzzle/shoot-'em-up, and the dazzling *Armalyte*, a supremely flashy blast with frillions of weaponry options.

Archer Maclean returned to satre Commodore owners lust for fisticuffery with the delicious sequel to *International Karate*, *IK+*. His masters at System 3 continued in the martial arts field with the Thai boxing game, *Bangkok Knights*, and the thrill-packed arcade adventure *Last Ninja II*. In an innovative bit of marketing, System 3 packaged *Ninja II* with a black ninja mask and a rubber shuriken, though complaints from worried parents and retailers forced their removal from the second production run of the game.

The other big contribution to screen violence in 1988 was Palace's excellent *Barbarian II*. The first *Barbarian*, a one-on-one beat-'em-up with axes, had been the first video game to feature gore; it included decapitation move, and a green gremlin dragged the corpse off the screen, kicking the severed head like a football. *Barbarian II* incorporated similar action into a more adventurey format, and pit the barbarian or a brass-bikini barbarian babe against all kinds of hideous monsters, many of which enjoyed chomping off the player's head.

The C64 scored some cool soccer games during this year. *Microprose Soccer*, programmed by Sensible Software, had a top-down view and – a first – an instant replay option, complete with flickering black-and-white tape-rewind effect and flashing 'R' in the corner of the screen. Audiogenic's *Emlyn Hughes International Soccer* adopted a traditional grandstand view of the action, rather like the original *International Soccer*. Though the graphics were barely more refined than said golden oldie, the gameplay felt much more realistic and proved to be even more widely favoured than the Microprose game. The surprise hit was *Tracksuit Manager*, by Goliath Games. Football management simulations were nothing new (a bloke



As well as programming the smash-hit *RoboCop* games for the home formats, Ocean also programmed the coin-op for Data East – and what a cool coin-op it was!



Bangkok Knights, from System 3.



Barbarian, from Palace Software, made famous for its gore, and a particularly aluring press ad.

called Kevin Toms had successfully made them his life's work since 1981), but this one had the novel approach of letting the player pick his team, set up his strategy, and then read a kick-by-kick match commentary generated by the computer. Reading about the unfolding action was almost like listening to a match on the radio – weird, but strangely atmospheric.

There were two more notable original 64 titles... although perhaps 'original' is the wrong word for them. US Gold seemed to have a gem on its hands in the form of *The Great Giana Sisters*, a very playable *Super Mario Bros* clone programmed by German coders, Rainbow Arts. The game looked set for big success until one of Nintendo's staff spotted the game on display at a German computer fair and immediately demanded its removal. A further threat of legal action from the mighty N was enough to can the game and its sequel permanently.

After such an experience, it's surprising that US Gold didn't smell trouble when, a couple of months later, the selfsame Rainbow Arts presented them with a pretty amazing Commodore shoot-'em-up called *Katakis* which had loads of weapons and looked rather like Irem's *R-Type*. Unfortunately, Activision, owners of the licence to convert *R-Type*, thought it was too close to the real thing, and *Katakis* was pulled at the last minute, then sent back to Germany for some binary surgery.

The two biggest 8-bit games of the year were to come at Christmas, from Ocean Software. Ocean had timed their release of the *Robocop* game-of-the-movie to coincide with the film's release on video, and there was even an ad for the game at the start of the tape – the first time such a technique had been used to sell a game. It must have worked, though, because *Robocop* was to be a number one hit, not just over Christmas, but over most of the following year too. Equally successful were the conversions of Taito's *Operation Wolf*.

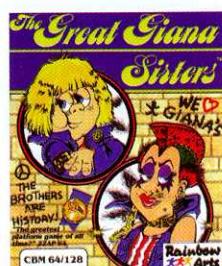
Amiga vs ST

As 1988 started, the 16-bit software bandwagon was gathering momentum quickly. The ST, now going for under £300, was well ahead of the Amiga,

Last Ninja, from System 3, remained a talking point for years to come.

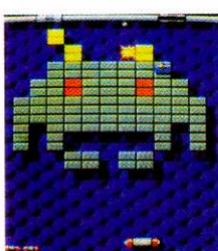
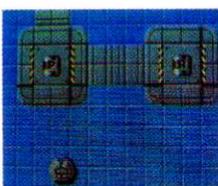


The Great Giana Sisters was banned because it was a direct rip-off of the Nintendo game, *Super Mario Bros*!





American developers FTL were the geniuses who single-handedly redefined the role-playing game with the devilishly clever *Dungeon Master*. The ST version was released in January by Mirrorsoft - Amiga owners had to wait a year for their version.



(TOP) *Xenon*.
(MIDDLE) *Buggy Boy*.
(BOTTOM) *Arkanoid*.

recently reduced to £399. Most software houses still favoured the ST, but by the end of the year the two machines would be pretty much neck and neck.

One of the first big releases of the year was released on ST and Amiga almost simultaneously. *Xenon*, programmed by a new development team called The Bitmap Brothers, was an up-the-screen scrolling shoot-'em-up with cool graphics and cool weapons. Reviewers raved about how it demonstrated the Amiga's and ST's capability for arcade-standard games, and it was sort of true - *Xenon*'s publishers, Melbourne House, were also installing the game in a new range of Amiga-based coin-ops.

ST owners were already aware of their machine's abilities after playing superb conversions of Atari's *Star Wars* (Domark), *Gauntlet II* (US Gold) and *Super Sprint* (Activision), as well as Taito's *Arkanoid* (Ocean) and *Bubble Bobble* (Firebird), and Tatsumi's *Buggy Boy* (Elite). Amiga owners had to make do with clones until they got official conversions of their own, but they weren't starved of arcade action. Logotron's *Star Ray*, was a terrific-looking *Defender* game which really showed what the Amiga hardware was capable of, especially when it was compared with the ST version that followed. The Amiga version moved smoothly, it had detailed, colourful graphics and fantastic music. The ST version wasn't as smooth or as colourful or as audibly boisterous. It showed all the signs of turning into a rerun of the C64 versus Spectrum situation.

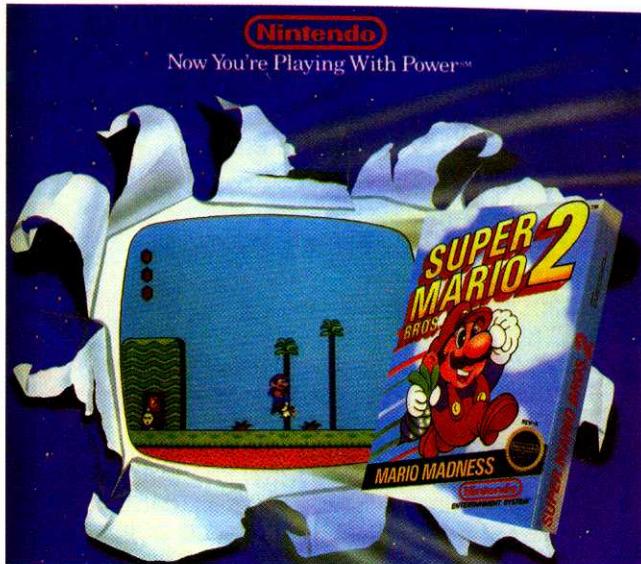
Just like the Spectrum, the ST seemed more capable with certain types of games. It handled vector graphics better than the Amiga, as evidenced by Rainbird's *Carrier Command* and *Virus*. *Carrier Command* was a sophisticated 3-D battle simulation and *Virus* was a bizarre yet enthralling shoot-'em-up which had originally appeared on Acorn's Archimedes computer under the name of *Zarch*.

The real star of the 16-bit show this year, though, was Rainbird's *Starglider II*. Programmed by Jez San's team at Argonaut Software, it was a spectacular 3-D space epic with elements of exploration, combat and problem-solving which spanned an entire solar system full of such mysterious creature as mechanical space-going whales. For once the Amiga and ST versions of the game were released simultaneously - indeed they were both on the same disk - and it was a well-deserved hit on both formats.

NES vs Master System

The 8-bit owners who had made the move to a console, must have been wondering why they had bothered. As the year began, the games weren't exactly flooding into the shops, and the only really impressive Nintendo title was still *Super Mario Bros*. At least Sega were sufficiently on the ball to keep post-Christmas interest in the Master System going by replacing the pack-in game, *Hang-On* with a choice of either *OutRun*, *Space Harrier* or the boxing simulation, *Rocky*.

Mattel seemed to have been trying to get the NES to sell itself, without much success. At the start of the year, Nintendo took the machine out of Mattel's hands and started up a new company, NESI, to market the NES.



(LEFT) A typically dynamic Nintendo ad for the sequel to *Super Mario Bros.* (BELOW) *Super Mario Bros. 3* returned to the more traditional Mario fare.



NESI created *Playchoice 10* coin-ops, NES-based arcade machines with a selection of ten games inside for players to try out. NESI also promised NES owners a faster flow of software from the US to Europe to broaden the console's catalogue, but it took a long time for this to happen. For most of the year the only really good Nintendo game was *Super Mario Bros*, and by Christmas there were only a few quality additions to the range.

RC Pro-Am was a fun radio-controlled buggy racing game programmed by Rare – so this was where the ex-Ultimate programmers had gone! *Mike Tyson's Punch Out!!* was Nintendo's conversion of its own comedy boxing coin-op with the name of the then heavyweight champ tagged on the front. *Rad Racer* was an *OutRun*-style road racer that looked as good as, if not better than, Sega's own *OutRun* conversion for the Master System. There was also *Metroid*, an ingenious platform adventure which also happened to be one of the first games to feature a female hero – though players didn't know that till she took her helmet off at the end of the game!

The best NES game of the year, though, was Shigeru Miyamoto's *The Legend of Zelda* a huge role-playing game full of puzzles, secrets and belligerent monsters. At £40 this was more expensive than other NES titles, but the extra expense paid for a battery-powered memory chip inside the cartridge where players could store their progress through the adventure. It was also the only NES game that UK players had seen so far that had been able to match the quality of *Super Mario Bros*, and the cartridge's gold livery seemed to signify that this was a truly special game. The word was that *Super Mario Bros 2* would appear in a similarly lustrous form in 1989.

There was a spate of overnight queuing outside Japanese toy shops when Nintendo released *Super Mario Bros 3* on the Famicom. UK NES owners weren't to see the game until the end of 1991.



After scoring a major hit with Mario, Shigeru Miyamoto created another world-beating hero called Link, for the epic NES adventure *The Legend of Zelda*.



Starglider 2 - now featuring real filled-in polygons!



This rather spiffy conversion of *Afterburner* was enough to convince a lot of players that a Sega Master System was the machine for them.



NEC's PC Engine - a four-inch-square box that could reproduce coin-op-quality from a cartridge not much bigger than a matchbook. Amazing! Amazing that this was an 8-bit machine, and amazing that NEC didn't take the opportunity to release it in the UK in time for Christmas and clean up.

Unlike Nintendo, Sega were relying on the public's lust for licensed games and came up trumps with conversions of *Afterburner* (renowned 3-D jet fighter blast), *Alien Syndrome* (massacre of the disgusting aliens), *Thunderblade* (helicopter blast in the *Afterburner* mould), *Shinobi* (semi-popular ninja beat-'em-up) and *Double Dragon* (popular urban beat-'em-up).

The 3-D visor finally put in an appearance, and what a clever widget it appeared to be. When the visor was plugged into the console, liquid crystal shutters over each eye opened and closed alternately at high speed, allowing the right eye to see the screen, then the left. The shutters were synchronised to the display, so that the player got a slightly different view in each eye, and thus was the illusion of a three-dimensional image created.

Though it sounded good, the visor wasn't a popular item; it cost £45 and only worked with special 3-D editions of certain games, such as *Zaxxon 3-D*, *Space Harrier 3-D* and the duff *Maze Hunter 3-D*.

NEC Starts Its Engine

Towards the end of the year, players' budding interest in consoles was heightened by news of hot new games machines being developed in Japan which promised to be far superior, not only to the NES and Master System, but the ST and Amiga as well.

NEC had released a cheap 8-bit console called the PC Engine, which though tiny in appearance (the machine was only four inches square and all the games came on credit card-sized cartridges) could produce genuinely arcade quality games. The first titles to be seen were a scrolling fighting game called *Drunken Master*, which had the biggest graphics ever seen on any home system, and *Victory Run*, a neat recreation of the Paris-Dakar, Rally which also looked the business. These were followed by flawless conversions of the fantastic *R-Type* (which came on two cartridges) and Namco's *Galaga 88*. Even better, NEC were planning to release a CD-ROM unit for the PC Engine (this was when hardly anyone had heard of CD-ROM), which would allow it to play a perfect conversion of Capcom's *Streetfighter* coin-op.

The PC Engine looked so good that some players couldn't wait for it to be released in the UK and actually ordered machines from Japan and had them converted to run on UK power supplies and TV sets. Some of those players even went on to set up their own console importing businesses – which would prove very profitable over the next year or so.

There was something even more exciting than the PC Engine though, and it was the news that both Sega and Nintendo were producing new 16-bit consoles for release in 1989. The time had now definitely come for Spectrum owners to place that ad.

Spectrum OutRun

US Gold's conversion of *OutRun* was one of many Spectrum arcade conversions that turned out surprisingly well during 1988. In fact, some of the C64 and even ST and Amiga conversions looked shoddy in comparison.

CHAPTER 9: 1989

After enjoying a second childhood during 1988, the 8-bit computers were finally starting to show all the signs of advancing age in 1989. The ST and Amiga were stealing all the limelight and the development resources, and the shrewder software companies were secretly investing in Sega and Nintendo development contracts. Spectrum, Amstrad and C64 players were left with the memories of past glories, in the form of the numerous budget-priced re-releases that filled up their diminishing corner of WH Smith's computer department.

The supply of fresh software wasn't quite dry, but the best of the remaining 8-bit programming teams were only working on the sure-sale movie and arcade licences. There was no-one left to innovate on the old machines, and the year's 8-bit highlights were games like US Gold's conversion of the Capcom blast, *Forgotten Worlds*, and Ocean's two Christmas titles, *Chase HQ* (which was particularly good on the Spectrum) and the game of the new *Batman* movie.

8 Bits'-Worth of Difference

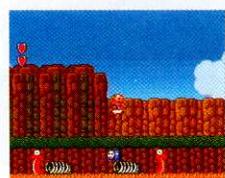
Games like *Batman* must have plainly illustrated the necessity of upgrading to any 8-bit hold-outs. The game featured a Batmobile driving sequence, which, in the Spectrum version, took the form of a horizontally-scrolling, monochrome, obstacle-dodging game. The same section in the Amiga and ST versions of *Batman* was a full-colour, full-screen, full-on 3-D race which looked like it could be from an arcade game.

There were plenty more Amiga games that widened the gap between 8-bit and 16-bit. From Cinemaware, the people who had produced *Defender of the Crown*, there came *TV Sports Football*, an impressive American Football game, *Lords of the Rising Sun*, a war game set in ancient Japan, and *It Came From The Desert*, which gave the player the starring role in a convincing take-off of a 1950s science-fiction 'B' movie. All three took an intelligent and unusual approach to their respective genres, and were superbly presented.

Maxis' *SimCity* and Electronic Arts' *Populous* were both examples of games designed to appeal to players who wanted to do more than blast aliens, and both were applauded for developing what was effectively a



Ocean's *Chase HQ* was probably the finest arcade conversions ever to grace the Spectrum. It was also one of the Spectrum's last decent games.



Top Nintendo release of 89 was *Super Mario Bros 2*. Nintendo's original *SMB2* was just like a rerun of the first game only with tougher levels, but rather than release that Nintendo took a game called *Doki-Doki Pen* and reworked it to suit the Mario scenario.



Batman on the Amiga, which featured this stunning driving sequence.



Bullfrog's *Populous* was the first ever 'God game' - and it showed that, if you wanted innovative games software, the Amiga or the ST were the machines to own.

Cinemaware's *It Came From The Desert*, starring you as the hero of a '50s-style science-fiction 'B' movie.

Few could resist stepping inside one of Sega's magnificent *Super Monaco GP* coin-ops. Not even your Dad.



The Bitmap Brothers' *Xenon 2* set new standards for Amiga arcade games. Great graphics and background music by Tim Simenon of Bomb The Bass gave it that touch of class.



Some 'cool' kid prepares to put pedal to the metal in Atari's *Race Drivin'*, the arcade sequel to *Hard Drivin'*.



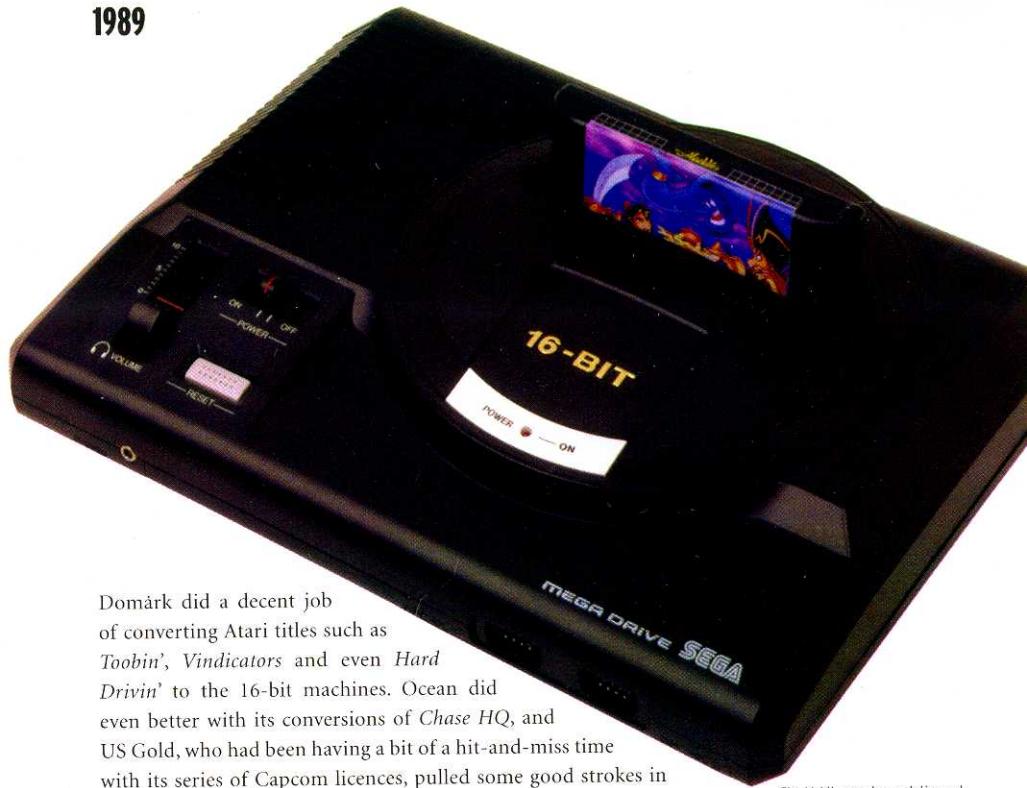
The PC Engine was the first console to have a CD-ROM drive. The unit gave the Engine access to more complex games, but most were unplayable for non-Japanese linguists. There were some cool arcade conversions though, notably the original Street Fighter and Capcom's big-gunned blast Sidearms.

brand new idea – the God game. Ocean came up with a flight simulation that set new standards in graphical realism, *F29 Retaliator*. The Bitmap Brothers followed up their 1988 hit *Xenon* with the even more exuberant *Xenon II*, which featured near arcade-quality graphics and a soundtrack by *Bomb the Bass*. With *Shadow of the Beast*, Psygnosis showed that the Amiga's graphics and sound facilities could be used so spectacularly that they could actually make a weak game look like the best thing since sliced bread. And Canadian developers Readysoft surprised everyone when they Amigarized the old laser disc coin-op, *Dragon's Lair*, a game which was entirely constructed around cartoon graphics. These games used the facilities of the 16-bit machines to the max, so unlike most of the ST and Amiga titles that had gone before, there wasn't much chance of them surviving a conversion to a Spectrum or C64 intact.

By this time software houses had pretty much stopped giving ST releases priority over the Amiga games. The Amiga user base had been building steadily since Commodore reduced the price to £399, so there was less need for software houses to test a game in the more established ST market before releasing the Amiga version. Also, production processes had been streamlined so that programming teams were able to work on both 16-bit versions of a game simultaneously. Both machines used the same Motorola 68000 central processor, so, if need be, the bulk of a game's code could be used on both machines and only the appropriate graphics and sound routines would need to be added. This often resulted in both versions looking and playing very similarly, and software houses sometimes came in for criticism with obvious 'ports' which wouldn't make the best use of the machine they appeared on.

Arcade conversions – of which there were many during 1989 – were often the most obvious ports, though there were some that were excellent games in their own right. Activision had acquired most of the Sega titles, but though *Power Drift*, *Galaxy Force II*, *Altered Beast* and *Dynamite Dux* weren't bad, they weren't as good as its conversion of *Super Hang On* from 1988.

1989



Domark did a decent job of converting Atari titles such as *Toobin'*, *Vindicators* and even *Hard Drivin'* to the 16-bit machines. Ocean did even better with its conversions of *Chase HQ*, and US Gold, who had been having a bit of a hit-and-miss time with its series of Capcom licences, pulled some good strokes in *Strider*, the strange sabre-swinging platform coin-op, and *Forgotten Worlds*, a jet-packing laser-storm, was even better. Sadly, *Ghouls 'n' Ghosts* seemed to lose a lot in the translation to Amiga – which was unfortunate because, shortly after the Amiga version was released, Sega unveiled an arcade-perfect translation of this excellent game on its brand new 16-bit console, the Mega Drive.

Genesis of the Megadrive

The Mega Drive appeared in Japanese stores in March, and found its way into Britain shortly afterward, courtesy of the clutch of console importers that had sprung up to service the craving for PC Engine hardware and software. The machine was released with three conversions of Sega arcade games, *Super Thunderblade*, *Space Harrier II* and *Altered Beast*, none of which were exceptional by today's standards, but back then they were impressive, if only because they were better than any of the conversions that the Amiga had been capable of thus far. Suddenly, it looked as if the Amiga's position as the master of 16-bit games had been usurped, and by a machine that was £300 cheaper.

The software that followed only emphasised the Mega Drive's superiority as a games machine. *Thunderforce II* and *Tatsujin* were both fantastic shoot-'em-ups at least as good as the Amiga's *Xenon II*. The Mega Drive versions of *Forgotten Worlds* and *Super Hang On* were both slicker than the highly-acclaimed Amiga conversions, and *Ghouls 'n' Ghosts* was streets

The 16-bit console revolution got underway with the Sega Mega Drive. Quality conversions of top coin-ops like *Ghouls 'n' Ghosts* made this the coolest machine to have, even if you could only buy it on import.



(ABOVE) *Super Thunder Blade*.
(BELOW) *Altered Beast*. Both by Sega.



(TOP) Capcom's *Forgotten Worlds* arcade game.

(ABOVE) Technosoft's *Thunderforce II* for the Mega Drive.

ahead of anything that had been seen on the computers. *Super Shinobi* beat all previous beat-'em-ups to a pulp with their excellent graphics and sound, and smooth, arcade-quality gameplay.

Engine Still Running

Gamers who wanted to be at the cutting edge of electronic entertainment jumped at the chance of owning a Mega Drive, though the PC Engine was still showing itself to be an impressive platform for arcade-quality games. *Dragon Spirit*, *Shinobi*, *Sidearms* and *Mr Heli* were all spot-on coin-op conversions, but some of the original games were even better. *Alien Crush* was an incredible pinball game, vaguely based on the *Alien* movies, with scuttling face huggers and eggs for targets. *Dungeon Explorer* was a superb multi-player role-playing game which played like a souped-up version of *Gauntlet*. Hudsonsoft, the company that had helped design the PC Engine for NEC, had two of the best titles in *PC Kid*, a whacked-out *Super Mario*-style platform quest, and *Gunhed*, a vertically-scrolling shooter with fantastic music and extraordinary laser pyrotechnics.

The PC Engine showed an even greater potential when NEC released a CD-ROM drive for the console in February. CD-ROM was cutting edge stuff at the time, especially on a games machine, but alas, the system never really took off among UK PC Engine fans, partly because it was an expensive add-on to import (upwards of £300), and partly because there were only a few CD games that didn't require an understanding of Japanese from the player.

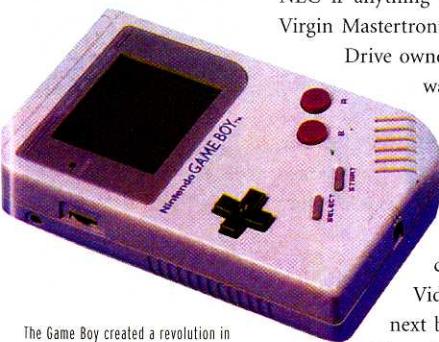
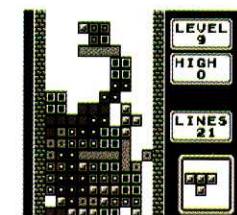
Of course, this wouldn't have been a problem if NEC had released an official UK version of the PC Engine, but whenever the company was questioned on the subject its officials always gave a strict 'no comment'. NEC were concerned about third parties importing Japanese machines, and the company took half-page adverts in magazines urging people not to buy the machines, and if they did buy them, they were told not to come running to NEC if anything went wrong with them. Sega's European distributor, Virgin Mastertronic, ran similar ads to ward off potential import Mega

Drive owners, adding that future Mega Drive hardware and software would be incompatible with imported systems.

Nintendo Launch Game Boy

The import market was thriving though, and as the year went on, more and more players realised that Japan was where all the hottest new hardware was coming from. The May 1989 issue of Computer and Video Games gave British players their first sight of the next big thing rising in the East, a hand-held console from

Nintendo called the Game Boy. The picture showed a *Super Mario* game gracing the Game Boy's tiny LCD screen, so it looked almost like a portable NES. The growing army of NES fans knew that such a gadget would be worth its weight in gold if Nintendo ever released it.



The Game Boy created a revolution in gaming, especially in Japan, where commuters could often make new friends by taking part in linked-up *Tetris* challenges.



After spending years developing a Spectrum-compatible machine, MGT finally got the Sam Coupe out just in time to see the 8-bit computer market fade into oblivion.

At the time, NES players were still frustrated by the lack of decent games for their machine. In America, where one in four homes now contained a NES, new titles, and new NES add-ons such as the bizarre U-Force and the Power Glove, were pouring onto the shelves all the time. Meanwhile, in Britain, Nintendo were supposedly sticking to a policy of only two new games per month – though as it turned out, even that turned out to be over-ambitious.

At least the standard of NES releases was improving. The first decent NES shoot-'em-up, *Gradius*, was released just after Christmas. In fact, it was a near-perfect conversion of the smash Konami coin-op, known in British arcades as *Nemesis*, with just about all the levels, bosses and weapons of its arcade forerunner. Even better than *Gradius*, though, was *Super Mario Bros 2*. By this time, cynical British gamers had finally got the idea that the Mario games, though they looked kind of childish, were actually pretty cool, and *SMB2* (which actually started life as a game called *Doki Doki Pen*) enhanced his reputation with its improved graphics, more involved gameplay, and yet more clever secrets for players to discover.

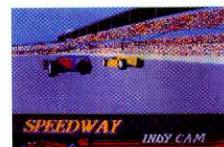
In stark contrast to Nintendo, Virgin Mastertronic were churning out new Sega Master System releases at a rate of knots. RPGs like *Y/S*, *Phantasy Star* and *Wonderboy III* rivalled *Legend of Zelda* for depth and intrigue. As for arcade games, Sega's conversion of *R-Type* was superlative, as were *Galaxy Force II* and the Master System version of Epyx's *California Games*. There was even a pretty good platform game in the form of *Psycho Fox*. These releases, as well as Virgin Mastertronic's more in-your-face marketing and a price cut, which took the Master System down to £79.95 helped widen the gap between Sega and Nintendo in Europe.

Atari's Advantage

But there were yet more console happenings in the offing. Excitement over the wondrous Game Boy was tempered when Atari announced that it was also releasing a hand-held console – and unlike the Game Boy this one would have a colour screen. The Atari Advantage (which would eventually be renamed 'the Lynx'), was an incredibly powerful machine which had



Dino Dini's soccer simulation, *Kick Off*, may not look like much compared to today's 3-D Playstation and Saturn efforts, but for speed and 'feel' it just couldn't be beaten.



The IBM PC was the dominant format for computer games (as opposed to console games) in the States, and this was the year that PC titles started making an impact on the British games scene too. Companies like Electronic Arts, US Gold and Microprose imported some fantastic simulations and role-playing games, which were always fore-runners of ST and Amiga translations. *Indianapolis 500* here, was one of the most outstanding games of the year.



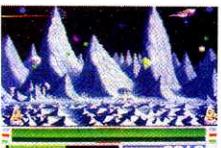
After Sega announced the Mega Drive, Nintendo brought their new 16-bit machine out of the closet. This is the first picture of the Super Famicom, which was originally intended to be backwards-compatible with all NES games. The first title that was shown off with the NES was a biplane simulation called *Dragonfly* which now looks suspiciously like an early version of *Pilot Wings*.

been designed by R J Mical and Dave Needle, who also designed the Amiga. It had a 4,096-colour screen palette, four-channel stereo sound, 3-D sprite scaling hardware and a communications port that let up to eight players hook up their Lynxes for competitive play.

Atari also decided that, as Christmas approached, the time was finally right to dust off its 7800 Pro System console and present it to the British public at the low price of £70. Sadly, by this time the 7800's range of conversions of old Atari coin-ops and outdated Atari computer games looked feeble next to the latest 16-bit console titles.

Among all these foreign entrants into the console market there was one British creation. The £200 Konix Multisystem was to be the most ambitious console yet, with a 16-bit processor and all kinds of custom graphics and sound hardware that would provide high resolution graphics in 4,096 colours and 25-channel stereo sound. Software would come on custom-format floppy disks, so it would be a lot cheaper than console cartridges.

The Konix seemed like it would be ideal for realistic simulations. The system was based around a steering wheel controller, which could easily be reconfigured as an aircraft-style yoke or even motorcycle handlebars, and it even came with a throttle/gear shift lever and a foot pedal unit. Other peripherals included a £40 recoil-action light gun, an exercise bike (!), and even a mechanical moving chair, which was expected to cost around £150. With all this development and investment Konix may have been biting off more than it could chew, and after several postponed launches, the Multisystem never did appear, taking any British hopes of ever conquering the console hardware market with it.



The Konix Multisystem, in all its mocked-up splendour. It's hard to imagine what the console market would be like now if it had succeeded. Would all consoles now have steering wheels instead of joypads? Would there be a motorised chair in every home?



CHAPTER 10: 1990

The old days of 17-year-old programmers working in their bedrooms to knock up another Commodore 64 hit were long gone. And any software house that wanted to stand a chance of surviving into the next decade would need to embrace the prospect of becoming a console software licensee and selling their games around the world.

The ST and Amiga would keep things going for a while, but neither machine had made it big in the USA. There owning a computer meant an IBM PC or possibly a Macintosh, and owning a games computer meant a Nintendo or nothing. But until the console game production line could be set up, companies like Ocean, US Gold, Activision and Domark set to work on some 16-bit sure-sellers, most of which were arcade conversions and movie licences.

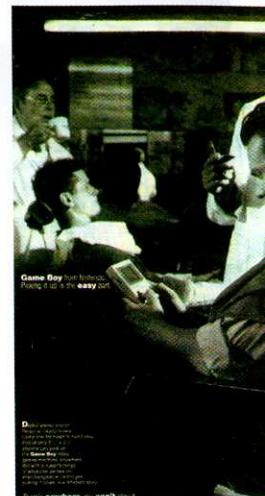
Of the non-licence games, there were only a few that made much impact. Broderbund's clever platformer, *Prince of Persia*, would, over the years, end up on just about every home format in existence. *Speedball 2*, the Bitmap Brothers' spruced-up future sport proved popular because of its great two-player action. Likewise, Anco's updated football title, *Kick Off 2* and Gremlin's fun split-screen racer, *Lotus Esprit Turbo Challenge*.

Though the ST was still cheaper at £299, the Amiga was starting to dominate the 16-bit computer market. Gamers realised that they might as well pay the extra money and get the computer with the superior specification. Atari tried to combat this factor by releasing the Atari STE – an upgraded ST designed to match the Amiga's capabilities – for £399; like the Amiga it had a 'Blitter' chip, which could shift large chunks of data around quickly (the secret to many Amiga games' superior graphic effects), and its video hardware was upgraded so that it could display more colours. A few companies released STE-enhanced games, but by this time gamers and software publishers were losing interest in the ST anyway.

Nintendo Enlists Turtle Power Against Sega

So which console should the gamers switch to? Nintendo had given the NES a shot in the arm at the start of the year with *Mega Man*; *Track and Field II*; *Life Force* (better known as Konami's *Salamander* arcade game); and *Cobra Triangle*, a clever speedboat game programmed by Rare, in the same style as *RC Pro Am*.

The welter of hot titles that had made the machine so popular in the USA still wasn't evident in the UK, though, and during the rest of the year there were only a couple of interesting new releases. Sunsoft's *Batman* was one. The other, which gave the NES the massive kick up the rear it needed, was *Teenage Mutant Hero Turtles*, the game of the cowabunga cartoon craze that was sweeping the world by the autumn. Nintendo made one of their smartest moves when they produced a special Christmas bundle containing a NES and a copy of the Turtles arcade adventure game. Packs sold like hot cakes,



Establishing the Game Boy as a cool piece of kit for anyone was a stroke of genius on the part of Nintendo. The magazine ads and coverage in all the style press gave it the image of being an executive toy, not just something for kids.



Graffiti (home of such programmers as Andrew Braybrook and Steve Turner) had produced the excellent Amiga and ST conversions of Taito's *Rainbow Islands* for Firebird back in 1989. When British Telecom closed down Firebird the game spent nearly a year in limbo until Ocean picked it up.

even though the game wasn't that good. But the Turtle-crazy kids didn't care, and Nintendo had finally got a foot firmly in the door of British homes.

All through the year, though, Virgin-Mastertronic were building on their lead in the 8-bit console fight by continuing a steady flow of Master System releases. The bulk of these were nothing special – a result of Sega switching its programming teams to Mega Drive projects – but the marketing machine continued to make this the more popular 8-bit console. The price of the machine itself was down to only £79.95, and Virgin-Mastertronic tried to lure the remaining 8-bit computer owners its way by knocking down the prices of older Master System titles to around ten pounds.

Most exciting new releases were, not surprisingly, arcade conversions. The mystical beat-'em-up, *Golden Axe* was well received, as were the very playable *Chase HQ* and *Operation Wolf*. Just before Christmas came a simplified but nevertheless entertaining conversion of Sega's own *Super Monaco GP* racing coin-op.

Unlike Nintendo, Sega had kept most of its game development in house, but as its worldwide business expanded with the release of the Mega Drive, it started to grant software licences to publishers around the world. US Gold were among the first five European companies, and they wasted no time in coming up with some of the best Master System games to date. The first two cartridges were an excellent conversion of *Gauntlet* (complete with digitised speech) followed by a platform adventure based on *Indiana Jones and the Last Crusade*.

The Mega Drive Arrives

What everyone was really looking forward to, though, was the official release of the Sega Mega Drive and the hoped-for delivery of a European PC Engine. Things looked pretty good on the latter score early in the year, when NEC seemed to be conceding to players' demands and rumours abounded of an official PC Engine by the end of the year, at the guaranteed-clean-up price of £99. Further announcements were not so promising, though. NEC decided not to release the machine at all, but in September an Austrian firm, Digital Image Systems, announced that it had acquired a European marketing licence for the new American version of the PC Engine, called the TurboGrafx-16. The machine would be out in 1991, along with 50 of the best game cards and the new colour portable PC

Engine, the TurboExpress. NEC's eventual decision not to release the machine in Europe was explained when it transpired that the TurboGrafx-16 was bombing in the US, pitted against Sega who had just released the Genesis, (the US name for the Mega Drive) and Nintendo, with its massive established user base.

By the time Virgin-Mastertronic released the official Mega Drive in September, British game players were gagging for it. Games mags had spent the year filling their pages with reviews of cool imported games such as *Super*



Artwork for Rare's speed-boat racer, *Cobra Triangle*.



Capcom's platform-puzzler, *Mega Man*, was the first entry in what was to be one of the longest-running series of Nintendo games.



Konami's *Teenage Mutant Hero Turtles* - heroes in a hard shell!



Hang On, *Golden Axe*, *New Zealand Story*, *Afterburner* and the dazzling shoot-'em-up, *Thunderforce III*. Undoubtedly, this was going to be the next big thing in the world of home video games, and the official Mega Drive, priced at £189.99 was top of countless Christmas lists.

The initial range of games was limited to five titles: *Altered Beast* (the pack-in game), *Space Harrier*, *Super Thunderblade* and two others that had proved massive hits on import, the fantastic conversion of Capcom's *Ghouls 'n' Ghosts* and Sega's skillful ninja adventure, *Revenge of Shinobi* (aka *Super Shinobi*).

For various sane business reasons, Virgin Mastertronic didn't want players who had bought the official Mega Drive buying imported Japanese and American games. Hence, Sega rigged it so that the official Mega Drive would only play official European games, but the physical, rather than electronic, fix wasn't very effective. The Mega Drive's case had been slightly remodeled, with plastic lugs added to the cartridge slot so that Japanese cartridges wouldn't fit in the machine. Convertors which simply extended the cartridge slot soon appeared, though thrifty players simply hacksawed off the lugs and suddenly they had a machine that played Japanese, American and European games. Some games even showed different title screens and had slightly different gameplay when they were played on a European machine. Virgin-Mastertronic griped a little at magazines still covering imported games, but seeing as the reviews were almost invariably very enthusiastic, it all added to the Mega Drive hype. Capcom's *Strider* was a major hit on import, as was *Mickey Mouse in the Castle of Illusion*, a game which set new graphical standards for platform games.

The big official game that everyone wanted for Christmas, though, was *John Madden's American Football*. This was a gridiron game par excellence, with realistic action and 3-D graphics, which appeared right at the time when a craze for the sport was beginning in the UK. The game was the work of Sega's first Mega Drive licensee, Electronic Arts. EA had grown to become one of the largest computer games firms in the world, but until this time it hadn't produced a single console title because its boss, Trip Hawkins, had balked at paying huge sums of money to Nintendo for a licensing deal. When the Mega Drive came along, it looked like a machine that could handle EA's more advanced style of games, and Sega were willing to give EA a more favourable licensing deal than Nintendo. The result was the first must-have Mega Drive title which sold the Mega Drive, not only to long-time game fans, but to regular kids keen to be seen with the coolest stuff.

Cool

Another Sega toy that fell into the 'cool stuff' category was its handheld machine, initially dubbed 'The Microdrive'. When rumours of the machine first appeared in January, it was thought to be a portable Mega Drive with a colour screen. As such it would probably have trashed Nintendo's Game



The game which sold the Mega Drive to so many people. Electronic Arts' *John Madden's Football*. It even converted some UK players to the sport!



Taito's *New Zealand Story* has become a hotly sought after Mega Drive game. Along with *Rainbow Islands*.



The Mega Drive version of Sega's *Golden Axe* helped strengthen the machine's strong arcade association.



The 'Microdrive', or the Game Gear, turned out to be the only successful colour handheld, thanks to Sega's strong software support.



The other console launched in Japan during 1990 was SNK's Neo-Geo. It was the most powerful machine of the lot seeing as it was an arcade system in a black box. The selection of games consisted mostly of one-on-one beat-'em-ups like King of Fighters, but the 40 megabyte cartridges cost a massive £140. Not surprisingly, the Neo-Geo's appeal was severely limited. More recently SNK have released a CD-ROM version, at last making the games affordable.



A superb machine, the Lynx, but a lack of software killed it. Atari's *Klax* was probably the best Lynx game available.

(FAR RIGHT) NEC's Turbo Express, a hand-held PC Engine.

Boy (and probably the Mega Drive as well) but further news revealed it as the 'Game Gear', a machine more akin to a portable Master System – less exciting but still pretty cool.

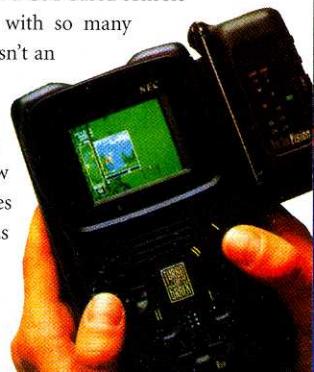
A potential flaw in the concept of colour handhelds was revealed when reviewers finally got their hands on the Atari Lynx, officially released in September, and the American PC Engine portable, the NEC TurboExpress. Both machines required large supplies of batteries to power their back-lit colour screens. Six batteries died in under two hours, making both machines expensive to run. The other problem was that the machines themselves were expensive; the imported TurboExpress cost over £250 and the Lynx was £180 – almost the same price as a Mega Drive, and with hardly any games to play on it either (a few months after launch the Lynx was already down to £130). The Game Gear would at least benefit from a wide selection of converted Master System titles, but when it finally arrived, could it successfully take on Game Boy?

Game Boy was released officially in time for Christmas, and quickly became established as an even cooler games machine than the Mega Drive. Bandai, who were by this time distributing Nintendo gear, had taken the radical step of marketing the Game Boy to adults as well as kids. Their press ads featured a black-and-white picture of a trendy guy getting a sharp haircut while he played Game Boy, and Game Boy articles appeared in style publications like *The Face* and pop magazines such as *Smash Hits*. Games like *Tetris* had made it the machine for everybody, and at only £69.99 (including *Tetris*) everybody wanted one.

Not So Cool

This growing emphasis on 'cool' was to claim some victims as hardware manufacturers who hadn't yet started on consoles tried to elbow their way into the party. Commodore took the keyboard off the Commodore 64 and lo, the C64GS was born. It had no tape interface so the GS was limited to using C64 cartridge software – of which there was hardly any. Ocean tried out four games on the C64GS, and System 3 released their latest *Last Ninja* game on cartridge only. But the C64 was old hat by this time, and paying £100 for a C64-based console (and £20 for cartridge-based games) with so many more exciting systems out there just wasn't an option for most players.

It was a similar story with the Amstrad GX4000, a spaceship-shaped console based on an upgraded chipset Amstrad were using in their new CPC-like computers. A few British software houses were said to be developing for it, but the GX4000 was never really in the running.



The Supreme Coolness That Was To Come

There was one machine yet to come though, and 'cool' was its middle name. Nintendo had insisted that it wasn't going to join the 16-bit console race until they were good and ready, but on October 21st, it was as ready as it was going to be, and the Nintendo Super Famicom was launched in Japan. The initial production run of 300,000 consoles sold out in three days.

It was instantly apparent that this machine was going to give the Mega Drive more than a run for its money. The hardware was noticeably superior, with better sound, more colours and lots of special graphical tricks that made 3-D games a snap. Even the joypad, which had six buttons as opposed to the Mega Drive's three, gave the impression of a more powerful machine. In Japan it sold for the equivalent of £120 but by the time the first import machines arrived in the UK they were going for closer to £400 – but console kids craving the best machine on the block snapped them up anyway.

The first pair of games were both superb, and gave ample demonstration of what the machine was capable of. *Super Mario World* didn't look that impressive but, as far as gameplay went, this was a massive leap beyond Mario's NES adventures. The Super Famicom's graphics processor showed off its power in *F-Zero*, an astonishing 3-D racing game.

More games followed close behind. Capcom had the conversions of their hit fighting coin-op, *Final Fight*, and *Super Ghouls 'n' Ghosts*, which put the excellent Mega Drive *Ghouls 'n' Ghosts* in the shade. For shoot-'em-up fans there was Konami's *Gradius III*, an almost arcade-quality blast, and the even better *Super R-Type*.

First impressions were that Nintendo had a machine that was streets ahead of Sega's, but it had arrived over a year later. Some pundits wondered whether Nintendo could possibly make up their lost ground.



Jaws dropped when their owners saw *F-Zero* for the first time. It used the Super Famicom's ability to flip 'play-fields' into a 3-D perspective to display the smooth-scrolling race track.



Capcom's *Super Ghouls 'n' Ghosts* made a clear distinction between the Super Famicom, and Sega's Mega Drive.

Super Mario World on the Super Famicom is still regarded by many players as the best game of all time. It may not have looked much next to *F-Zero*, but there was more to the gameplay than just about any other console title.

Thankfully Nintendo settled upon the Japanese styling of their machine for Europe, as opposed to the ugly purple and grey US SNES box. To this day the Super NES has a loyal following.





CHAPTER 11: 1991

At the start of 1991, when British players saw the Super Famicom in their favourite magazine or their local games import store, none could deny that this was the best games machine on the market. One look at *F-Zero*, and a quick go on *Super Mario World* convinced most of them that this was a machine to put even the Mega Drive in the shade. Many players decided to wait and see which of the 16-bit consoles would come out on top before they changed up. The more cautious gamers held onto their money and decided they would stick with their Amiga or NES or C64... for the time being, at least.

Amiga's Golden Years

Next to the 16-bit consoles the Amiga was looking a little past its prime as a games machine. However, the A500 was still one of the strongest formats in Europe, and rather than dying off it started to mature with games that pushed the machine to the limits of its operational envelope.

Fans of arcade action had their laser-lust sated by games like Sales Curve's *SWIV*, a rip-roaring blast for two. Team 17, a distributor of public domain software, produced their first game in the form of *Alien Breed*, a top-down shoot-'em-up which took its inspiration from the *Alien* movies and combined the suspense with quality blasting action.

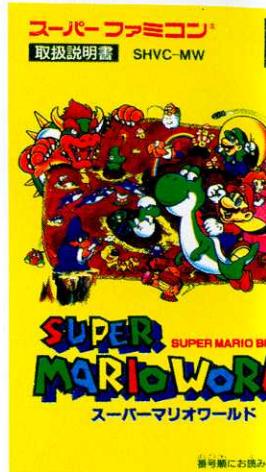
Top coin-op conversions included US Gold's translation of Sega's *Super Monaco GP*, and Capcom's *Mercs*. Activision, despite financial problems, released a great Amiga conversion of *R-Type II* in time for Christmas.

There were some splendid original games too. Activision's *Hunter* was an ingenious 3-D adventure, which had the player exploring a vast landscape in helicopters, Jeeps, motorcycles and even by windsurfing. Hit-making programmer, Archer Maclean, turned the jaded Snooker game format on its head in Virgin's *Jimmy White's Whirlwind Snooker* by using an impressive 3-D table display to let the player get in on a shot the way they would in a real game. Another respected programming name appeared on the Amiga scene when Microprose released Geoff Crammond's *Formula One Grand Prix*, a 3-D vector graphics racing game that set new standards for authentic driving action.

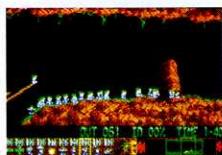
There was one game that didn't need 3-D graphics to make its mark on Amiga history though. Psygnosis' *Lemmings* was the cleverest puzzle game to appear since Tetris, and its armies of suicidal green-haired Munchkins made it look a whole lot cuter. It was rightly hailed as a classic and would eventually be converted to every format imaginable.

The Price of Progress

By this time the Amiga was also inheriting titles from the growing PC games market, such as Lucasfilm's hilarious graphic adventure, *The Secret of Monkey Island*. So a few gamers, mostly the older, wealthier ones, were



When copies of *Super Mario World* first appeared on import, British gamers went crazy for it!



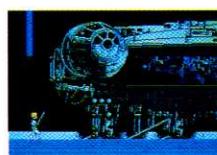
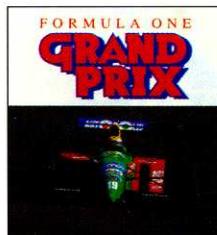
Lemmings as it appeared on the Amiga - before being published on countless other formats.



Team 17 went from distributing shareware Amiga product to releasing their own software. *Alien Breed*, their first major release, was the game everyone was playing in 1991.



Geoff Crammond was always one for setting new standards. His *Formula One Grand Prix*, released by Microprose, was an outstanding 3-D racing simulation that beat the pants off EA's *Indianapolis 500*, and pushed the Amiga's processing power to the absolute limit.



Star Wars proved that there was still life left in the old NES.



The growth of satellite TV in Britain meant that this year's big craze among feisty young males was the World Wrestling Federation. After making a heap off last year's fad for *Turtles*, Nintendo were able to cash in on WWF with Acclaim's NES game based on the 'sport'.

tempted towards making a PC their next computer. It could run real business applications and play all of the top-quality games that had been making their way over from the States for the past year or so, top simulations like Electronic Arts' *LHX Attack Chopper* and *Chuck Yeager's Air Combat* and Microprose's *Railroad Tycoon* and *Civilization*. A top-grade PC could be pretty expensive though, somewhere in the region of £1,000 for a medium-spec 16MHz 80286 machine and even more if you wanted the best – a 33 MHz 386 for example.

As usual, it was Amstrad who saw the opportunity to provide an easy solution for wary punters and Alan Sugar's engineers put together a games-oriented PC package which consisted of a 16 MHz 286 with "a massive 1Mb of RAM, 40Mb hard drive, and 1.44 Mb 3.5" floppy disc drive". For this you payed £899 plus VAT (£1,056.33), the same price that 133MHz Pentium-based machines go for today. Who'd have imagined?

Games of the Living Dead

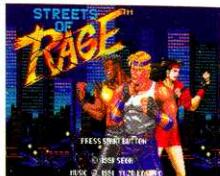
At the other end of the home computer spectrum, the 8-bit machines were still holding on with cheap-and-cheerful budget games and re-released classics. Nearly all of the major software houses had their own budget labels. Meanwhile, budget specialists such as Code Masters were making a fortune by knocking out a continuous stream of original, if unambitious, titles at pocket money prices. During May, the Gallup all-formats game chart had the Spectrum, Amstrad and Commodore 64 versions of Code Masters' *Magic Land Dizzy* occupying the top three positions.

Consoles Stoop to Conquer

Even though the hardware was looking dated, this wasn't a bad year for the Master System. And a price cut to £59.99 helped. Some of Sega's European licensees, notably Mirrorsoft and TecMagik, came up with some excellent Amiga conversions, such as *Populous*, *PacMania*, *Speedball* and *Xenon II*. US Gold also came up with a corking Master System conversion of Anco's classic soccer simulation, *Kick Off*.

Impressive as these were, they didn't quite have the oomph of the NES products which appeared during 1991. Having sold a heap of *Turtles* packs over the Christmas of 1990, Nintendo had a lot of new players to entertain, and they did it with classy titles like *Megaman 2*, and Rare's games *Pinbot* (one of the best console pinball games ever), *Solar Jetman* (a sort of quasi-sequel to the Spectrum Jetman games) and *Snake, Rattle and Roll*.

Nintendo's Christmas line up was phenomenal. *Star Wars* let the player control all the heroes from the hit movie, and interspersed platform action with shoot-'em-up stages. *WWF Wrestlemania* wasn't particularly good, but sold because it tied in with the craze for American wrestling. The biggest UK NES release of the year was the long-awaited *Super Mario Bros 3* with its sharper graphics, better sound, and even more depth to the gameplay. Most players would agree, that this is still one of the best console games ever made.



(ABOVE) The Mega Drive's answer to *Final Fight* on the Super NES.

Arguably much better because it was two-player and much funkier.

(LEFT) *Sonic the Hedgehog* didn't have *Super Mario World*'s depth and long-term playability, but it did have a terrific, fresh look and incredibly fast and furious action.

Super Famicom Power

Even better than *Super Mario Bros 3*, though, was *Super Mario World*, the game that had sold the Super Famicom to 300,000 Japanese within three weeks of the machine's launch. And over the course of the year at least one big title filtered through the importers per month – nearly all of them setting new standards. Capcom's almost-perfect arcade conversion, *Final Fight*, was followed by a fun pseudo-flight-sim, *Pilot Wings*. February saw the release of *Actraiser*, a title which combined god-game strategy with platform action and had a fantastic orchestral soundtrack. *SimCity* arrived in June, with comical cartoon interludes to distinguish it from its Amiga predecessor.

Super R-Type came next, a jazzed-up version of the shoot-'em-up coin-op. Another great arcade-born shooter was Capcom's *UN Squadron*. Even more spectacular was Konami's *Castlevania IV*, a vampire-hunting platform game which showed off the Super Famicom's graphics tricks with levels which rotated and distorted around the main character.

In August, the Super Famicom was released in the USA as the Super Nintendo Entertainment System. The launch didn't go as easily in the States as Japan, as the Super NES couldn't play any of the NES cartridges that parents had spent hundreds of dollars helping their kids collect. Newspapers even ran angry editorials on the subject. To counteract the bad press, Nintendo spent \$25 million on a TV ad campaign that proclaimed the machines superiority over certain other 16-bit games systems, and parents grudgingly began to succumb to their kids' nagging. But Sega weren't going to let Nintendo take the 16-bit console market the way they had taken the 8-bit one. It had the very best in-house development teams put on the case, and the results must have been surprising even to Sega.



Master System owners probably never expected to see a game that looked this good on their increasingly humble-looking system. Mirrortsoft was the company responsible for the conversion of the Bitmap Brothers Amiga hit, *Xenon II*



Considering it was one of the first Super Famicom titles to be released, Capcom's near-arcade-perfect conversion of *Final Fight* was an excellent demonstration of what the machine could do. The conversion's only major omission, a third player character and one of the bonus stages, was rectified at the demand of thousands of Japanese fans when an updated version of the game, called *Final Fight Guy* was released in 1992.



Commodore tried to get the multimedia revolution off to a start with the CDTV, a re-boxed Amiga with 1 Mb of RAM and a single-speed CD-ROM drive built in. They even brought in Nolan Bushnell (remember him?) to promote it, but the CDTV was doomed by its £499 price tag - a hefty price to pay for a machine that only played Lemmings and a demo of a Psygnosis game called *Planetside* that would never see the light of day.



Excellent sports sims like *EA Hockey* were just the ticket for attracting older 'lads' to the Mega Drive.

Imagine a video game played in a completely immersive sensory environment - that was what Virtual Reality was supposed to offer. W Industries' early *Virtuality* machines didn't quite have the technology to back up the good intentions, sadly.



March of the Mega Drive

In Britain, Sega maintained post-Christmas demand for the Mega Drive by dropping its price to £149.99, repackaging the machine with the smart-looking platform game, *Mickey Mouse in The Castle of Illusion*. But this was no *Mario World*, and Sega had trouble holding onto the spotlight when, every month, magazines devoted spreads to imported Super Famicom games. Sega had plenty of good arcade conversions, but only a few *really* good games. What it needed was a *Mario* of its own. By September, it had one.

Like *Super Mario World*, *Sonic The Hedgehog* was a platform game, but rather than having a podgy plumber for its star, it had a razor-sharp-looking blue-spiked hedgehog in hi-tops. *Sonic* didn't have the depth of gameplay of the *Mario* games, but it had cooler graphics and an incredible turn of speed. Anyone who saw the two games running side-by-side would assume the Mega Drive was the superior machine - something Sega were counting on during the run-up to Christmas.

With no sign of an official European Super Nintendo, Sega were able to make the Christmas 16-bit console market their own, with a *Sonic the Hedgehog* Mega Drive pack and a new wave of hot titles to back it up. Sega themselves had the weird, but entertaining two-player explorathon, *Toe-Jam and Earl*, and a *Final Fight*-style beat-'em-up with fantastic music, called *Streets of Rage*. To cater further to the legions of American Football fans there was *Joe Montana's Sportstalk Football*, which ingeniously used the digitised voice of said gridiron hero to commentate on the on-screen action.

Electronic Arts updated its own, much better, American Football game *John Madden '92*, which also used digitised speech. This was joined by *EA Hockey*, an ice hockey simulation with on-rink punch-ups, and an equally violent bike-racing game called *Road Rash*. Suddenly the Mega Drive became an essential lifestyle article for young males.

Streetfighter II: The World Warrior

There was one more entry into 1991's Canon of Cool. Capcom's *Street Fighter II* revived the stale one-on-one combat genre and took the arcades by storm. It had a cast of a dozen characters from around the world, who ranged from a fire-breathing yogi to a sinister, caped overlord with glowing eyes and glowing fists. As well as the usual range of kicks and punches, all of the characters had their own trademark moves, including some spectacular superhuman attacks. Beating the CPU players meant mastering the most devastating of these moves, which could only be pulled off with intricate combinations of joystick manoeuvres and perfectly timed button-presses. Better than that, this was the most adversarial and competitive

coin-op yet, and arcades became packed with players who had been up early practising so they could take on human challengers. To them *Street Fighter II* was practically a new martial art. Question was, who would be the first with the home version?

CHAPTER 12: 1992

One name did spring to mind for a home *Street Fighter* conversion. Most of Capcom's recent arcade games had been appearing on the Super NES, so it came as no surprise when Nintendo announced that *Street Fighter II* would be coming out on Super NES too.

The first copies of the game arrived from Japan in July, and it was promptly hailed as one of the best arcade conversions, and one of the best console games of all time. The 16-megabit cartridge (a first) contained all the action of the original arcade version of *Street Fighter II*, and with the aid of a secret button-sequence cheat, players could switch the game into a pseudo 'Championship Edition' mode. Who could ask for anything more?

Normally, there would be a delay of at least six months between a game being released in Japan and Britain, but after Nintendo launched the European SNES at Easter they made sure that they got supplies of official *Street Fighter II* into the shops as soon as possible. The line-up of games they had released with the machine were good – *Super Mario World*, *F-Zero*, *Super R-Type*, *Super Tennis* and *Super Soccer* – but *Street Fighter II* would be the game that could singlehandedly sell the Super NES. That task had previously fallen to *Super Mario World*, but Sega's release of *Sonic* had reduced any advantage that *Mario* had given Nintendo. *Street Fighter II* would once again put Nintendo ahead in the games stakes, and to make sure Sega owners knew it, Nintendo put double-page-spread advertisements in the Sega press, which bore the slogan, "Street Fighter II... Sega owners... dream on." "If you want to play Street Fighter II," it added, "it's got to be Super Nintendo."

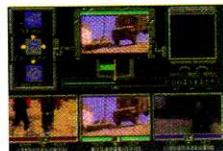
By Christmas, the standard SNES pack containing a *Mario* cartridge, would be joined on the shelves by a more expensive *SFII* bundle.



© Capcom



The SNES version of *Street Fighter II*. Capcom did an amazingly thorough job on this conversion, and it seemed to put the SNES even further ahead of the Mega Drive in the games stakes. Mega Drive owners were heartened by news that Sega would be releasing an even better Mega Drive version of the game in 1993.



The Sega Mega-CD. Everyone expected it to change the face of Mega Drive gaming, but there wasn't much chance of that with games like *Soil-Feace* and *Thunderstorm FX*. And certainly not while it was still priced at close on £300.

(LEFT) Mega-CD was perfect for full-motion-video based jollies, such as the celebrity *Make My Video* series.

Mega-CD - The Next Big Thing?

The *Street Fighter II* launch and the high quality of the early SNES releases made it look like, from now on, Nintendo would be scoring all the best games leaving Sega to play catch-up. Maybe the Mega-CD was something to get excited about?

The way the press talked about it, Mega Drive players expected the Mega-CD to revolutionise their gaming. It was a plug-in unit that would supposedly turn the Mega Drive into a games machine that left the SNES in the dust, and for several reasons. Among them, Sega had incorporated new graphics processors in the unit which improved the visual capabilities of the Mega Drive with features such as sprite scaling and sprite rotation. These were built-in SNES effects, and the reason so many SNES games, such as *F-Zero* looked so spectacular next to their nearest Mega Drive equivalents. With the Mega-CD out on the market, the SNES would no longer have that advantage.

When the Mega-CD appeared on import at the very start of the year, though, Mega Drive owners' hopes of wiping out their Nintendo-owning rivals were dashed. The Mega-CD was expensive at around £300, the first games were universally rubbish, or at least no better than any Mega Drive-only equivalents, and none of them made any impressive use of the new graphics facilities. The most notable of the first Mega-CD games were titles like *Thunderstorm FX* and *Road Avenger*, which, like the old laser disc coin-ops, put the player in an interactive cartoon. They weren't bad, but they certainly worth buying an expensive upgrade for. News reached the UK of JVC and Sega both releasing Mega Drive and Mega-CD all-in-one units which would be called the Wondermega, but they would never appear in Europe.

The Nintendo Equivalent

Nintendo had been working on a CD system since 1988, in conjunction with Sony. The Sony PlayStation, as it was called, would essentially be a Super Nintendo with a CD-ROM drive incorporated. A cartridge slot would accept SNES cartridges, and the Sony-designed CD-ROM drive would accept Sony's own 'Super Discs'. But as work had progressed on the system it became increasingly obvious to Nintendo's management that by co-developing a machine with Sony they could end up losing what had always been the company's trump card – its absolute control over software. Secretly, Nintendo also signed a development deal with Sony's rival, Philips, which didn't exactly violate the Sony contract, but meant that any further co-operation on hardware design was unlikely. Although the Philips deal caused a lot of bad feeling, it got Nintendo off the hook. Philips came up with the CD-I home multimedia system, but as far as the consumer was concerned, the fruits of the deal with Nintendo hardly seemed to go beyond a couple of terrible CD titles featuring Mario and Link, the hero of *Legend of Zelda*. A plug-in CD-ROM system with enhanced sprite manipulation and polygon-generation capabilities was announced by



Now Chairman of Nintendo of America, Howard Lincoln had a lot to smile about even in 1992.



Lucasfilm had started making role-playing games for everyone in the 80s when it released the pointer-driven graphic adventure with laughs, *Maniac Mansion*. By 1992 the interface, the graphics and the plottlines were flawless, as in *Indiana Jones and the Fate of Atlantis* on the PC. But the best was still to come.



(FAR LEFT) *Super Mario Kart* seemed like a strange idea at first. But soon became one of the greatest games of all time. And that's official.

(LEFT) Another Super NES classic, which appeared very early on - Konami's spectacular, *Castlevania IV*.

Nintendo at the Summer CES show in Chicago, but nothing was to become of it. The company patched up its differences with Sony and the two giants appeared to be working together again. However, by 1993, when the SNES CD-ROM drive was expected, Nintendo seemed to have lost interest in the format, and Sony was rumoured to be reworking the PlayStation as a brand new standalone 32-bit console.

During 1992, Nintendo proved that the SNES didn't really need a CD add-on to play quality games anyway. As well as having *Street Fighter II* on the shelves for Christmas, Nintendo had *Super Mario Kart*, a fantastic two-player driving game based on the Mario games. Meanwhile, the Nintendo licensees were coming up trumps. Konami had *Super Probotector*, a two-player blast with tremendous graphics and awesome levels of destruction, and Electronic Arts had converted its hit Mega Drive shoot-'em-up, *Desert Strike* to the SNES.

Mega Drive Christmas Delights

Sega also had a busy Christmas planned. The official Mega-CD release expected in November was going to prove impossible, but Sega did have another hardware add-on for Mega Drive owners, a £60 light gun called the Menacer. This made hardly any impact on the Mega Drive gaming community, and apart from the pack-in cartridge that contained six mini-games, there was only ever one Menacer-compatible cartridge released, namely Acclaim's conversion of the *Terminator 2* coin-op - though that was very good.

Much bigger news was the sequel to *Sonic the Hedgehog*, which was released in November, on *Sonic 2's-day* (it was a Tuesday), to storms of applause. It was a larger game than the first one (an 8 Mbit cartridge as opposed to the original 4 Mbit job), with better graphics and some novel two-player modes in which the blue hedgehog raced against a fox-like buddy called Tails.

The size of cartridges generally was increasing all the time. In the early days a Mega Drive cartridge very rarely contained more than 4 Mbits of memory, but by the Christmas of 1992 Sega were releasing 16 Mbit games such as *Streets of Rage 2* and *Revenge of Shinobi 2*. Both used the extra memory for more levels and better graphics, but they cost a lot more than other Mega Drive games. One of the surprise Mega Drive hits of the year was *Ecco the Dolphin*, an imaginative exploration game in which the player con-



With all eyes on the official SNES this wasn't a big year for NES games, though 8-bit owners were rather taken by the incredibly playable toy-racer, *Micro Machines*, which was created by British budget-boys, Code Masters.



Nintendo's Game Boy was proving to be a massive hit all over Europe. It's big Game Boy release of 1992 was *Super Mario Land 2 - The 6 Golden Coins*.



Great Amiga games were few and far between in 1992. Renegade's *Sensible Soccer*, an update on the *Kick Off* format, was about the best title of the year.



Here was a further sign that video games were insinuating themselves into popular culture. *The Lawnmower Man* was a sci-fi movie based on the computer buzz-phrase, "Virtual Reality". Nintendo also announced a movie of *Super Mario Bros* which would star Hollywood's most Mario-like actor, Danny DeVito. And on TV, Channel 4 started showing the second series of the nation's first real video games show, *Gamesmaster*.



Midway tried cashing in on the *Street Fighter*-induced craze for fighting games with the even more violent *Mortal Kombat* coin-op. It wasn't very well received at first, but the digitised characters who punched each other's heads off and ripped out their opponents' hearts proved a big hit with arcade-goers.

trolled a lost dolphin, searching through time for her family which had been kidnapped by aliens. Right at the end of the year, news came through that *Street Fighter II* actually would be appearing on the Mega Drive – and it would be a conversion of *Street Fighter II: Champion Edition*. The Sega/Nintendo odds looked like they'd be even again by this time in 1993.

The End of Computers?

So it was really a console Christmas, and indeed, a console year. The old 8-bit computer formats had definitely had it, and all the magazines servicing the Spectrum and Commodore markets were gone.

The 520ST and the 1MB 1040ST became cheaper and cheaper as they were slowly moved more to the sidelines of the games market. Atari tried to revive interest in its computers by releasing the powerful Atari Falcon, which had a 32-bit processor, CD-quality sound and the ability to display millions of colours. It beat the pants of an Amiga and, at £499, wasn't really overpriced either, but where were the games? Joe Public just wasn't interested in a machine that didn't have any games software and with all the main developers now concentrating on console titles the Falcon never took off.

By this time, though, even Amiga development was slowing down. With the A600 down to £299, and the 32-bit A1200 going for £399 there was plenty of new hardware around, but rather than upgrade to a new machine, many players found it cheaper to buy one of the exciting new consoles.

Of the handful of good Amiga titles released in 1992, many of them did look like they were trying to appeal to a console-loving audience. Gremlin's *Zool* was a *Sonic*-inspired platformer, while Hudsonsoft's *BC Kid* was in fact a conversion of an old PC Engine title. About the best Amiga game of the year was Renegade's *Sensible Soccer*, a *Kick Off*-style football game programmed, of course, by Sensible Software.

The only computer format that seemed to be blossoming as a games machine was the PC. It was still very early days and the hardware was still crude and expensive compared to current standards, but any gamers who wanted first crack at the new breed of top-quality simulations and adventures, and who could justify the expense by using the PC as a working machine, were not disappointed. Microprose was setting new standards for air combat games with titles like *F-15 Strike Eagle III*, while Lucasfilm had long since re-invented the adventure game and was now mixing superb plotting with excellent graphics in *Indiana Jones and the Fate of Atlantis*. At the end of the year, Lucasfilm were even showing off a fantastic-looking combat simulation based on the X-Wing fighters from the *Star Wars* movies.

Could cheap consoles and expensive PCs be the future of gaming? Well, that was the way things had been in the USA for a couple of years already. And the UK was almost sure to follow.

CHAPTER 13: 1993

The video games industry has always had a voracious appetite for new technology. The secret to staying ahead of the competition seems to have been to have imaginative R&D teams coming up with ever more exotic and specialised computer hardware that will support a new generation of software. It's then the job of the opposition to beat that.

Over the course of the past twelve years, this process had driven the industry from 8-bit computers with 1 kilobyte of built-in memory to 16-bit consoles, capable of displaying thousands of colours, synthesising stereo sound and running games that occupied whole megabytes of memory. It was hard to imagine how much further it could go, but we were soon to find out. During the course of 1993 all of the major players in the home games industry announced they were working on new machines that would contain 32-bit processors twice as powerful as those inside the SNES and Mega Drive. Indeed, some went a stage further and said their systems would actually contain a 64-bit processor.

Strap-On Muscles

Standards weren't just being set by whole new systems, though. Nintendo had already produced SNES cartridges – *Super Mario Kart* was one – containing co-processors that helped the console's own CPU with certain kinds of games. In early 1993 it released the first game to feature the new Super FX chip, *Starfox* (or *Starwing* as it would be retitled for Europe). It was a 3-D space shoot-'em-up that used polygon graphics – not something a SNES could normally handle, but which the Super FX chip was able to take care of. The result was one of the most spectacular SNES games yet seen, and the second Super FX game, a 3-D racing game called *FX Trax*, looked just as exciting when it went on show at the Summer CES show in Chicago.

Sega had its game-enhancing add-ons too. There was the Mega-CD of course, which was launched in April to a fairly ambivalent reception and, later in the year, Sega announced that it would be incorporating the Sega Virtual Processor chip into a Mega Drive conversion of *Virtua Racing*. This was a conversion of Sega's ground-breaking driving coin-op, which used vector graphics to generate the cars and scenery. Again, these weren't the Mega Drive's forte, but with the aid of the DSP chip it could generate a reasonably fast facsimile of the arcade game.

The Mega-CD, priced at a hefty £279, wasn't looking as useful, and the anticipated cascade of SNES-style sprite-manipulating games and video-packed adventures didn't appear. Or at least, they did appear, but very few of them were worth anyone's time. *Batman Returns* was one of the few, and it featured a remarkable 3-D driving section which made excellent use of the Mega-CD's sprite-scaling hardware. There was also an arcade-perfect



While NES support was winding down, the Game Boy was proving to be a continuing success, maintained by an ongoing supply of excellent games. Notable among this year's top GB releases were Shigeru Miyamoto's *Kirby's Adventure* and the awesome *Legend of Zelda: Link's Awakening*.



British developer, Argonaut Software (of *Starglider* fame), worked in conjunction with Nintendo to produce the SNES-boosting Super FX chip. The first Super FX game was the ace space shooter, *Star Wing*.



Mega Drive owners had a smile on their face when Sega released the 24 M-bit *Street Fighter II: Special Champion Edition*. Nintendo answered with an improved *Street Fighter II* for the SNES.



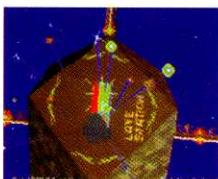
Midway through the year Sega announced that it was releasing a redesigned Mega Drive and Mega-CD. Though changes were only cosmetic.

Acclaim stole some of *Street Fighter II*'s limelight by releasing fantastic conversions of Midway's *Mortal*

Kombat arcade game. SNES players who only enjoyed the coin-op for the gore were disappointed to find that it had been expunged from their version of the game.



Night Trap, with its full-motion video sequences of black-clad aliens grabbing innocent teenage party-goers, caused a minor outrage among the UK's oh-so-moralistic tabloid press. Sega must have been happy to get so much press for the Mega-CD.



The long-awaited sequel to *Elite* finally arrived in '93. David Braben's sophisticated space trading and combat simulation, *Frontier*, was hailed by reviewers as a classic, and hailed by some punters as boring and bug-ridden.



version of Capcom's *Final Fight* which suffered none of the limitations of the SNES version, although by this time it wasn't the freshest of games. Core Design were the only developers to really make good use of the hardware, and it was to turn out excellent 3-D arcade games, the first being a terrifically impressive helicopter shoot-'em-up called *Thunderhawk*.

Sega experimented with new forms of console entertainment, such as the *Make My Video* series, which played slices of music videos by artists such as INXS and Kris Kross, and allowed the player to mix scenes together to create the ultimate pop promo. This sort of full-motion video was also used in several Mega-CD adventure games. *Night Trap* was a horror adventure, which allowed the player to monitor surveillance cameras in a house full of teenage girls who, one-by-one, were being kidnapped by aliens. Though the video was grainy and the content was ridiculous rather than sinister, *Night Trap* nevertheless caught the attention of the national news media, all of whom expressed outrage at this sort of game. The British Board of Film Censors was brought in to certify the content of subsequent similar titles, though, as ever, having a certification label on a game only served to attract customers rather than warding them off.

Though a few very good Mega-CD games did appear during the course of the year, none of them were striking enough to make the Mega-CD an essential piece of kit. Some were little more than cartridge games with beefed-up CD soundtracks and elaborate intro sequences, and the rest were uninteresting video-based entertainments which illustrated nothing so well as the fact that the machine could only produce very small and very grainy FMV clips.

The other monkey wrench in the Mega-CD's works was the fact that, suddenly, a whole load of advanced Mega Drive titles were appearing, which beat all the Mega-CD games hands-down, and didn't require any extra hardware. US Gold's remarkable platform adventure *Flashback* used inter-level cut-scenes to reveal its plot perfectly well without recourse to full-motion video. Sega's own *Ranger X* and *Gunstar Heroes* were both superb shoot-'em-ups with plenty of action, great soundtracks and visuals, and they even exhibited sprite-rotation tricks – and not an extra graphics processor in sight! Larger cartridges of 16 megabits or more meant that presentation details such as between-level animations could be quite elaborate even without the luxury of CD-ROM.

The Only Computer Left in the Game

This was all very well, but the fact remained that putting more memory chips into a cartridge made it more expensive, and the only viable way of producing tomorrow's mega games at affordable prices was to use CD-ROM. Sega's Mega-CD may not have turned out as well as everyone had hoped, but there were other systems appearing that would become more widely accepted.

The PC was already well on the way to becoming an awesome games machine when Virgin released the first PC CD-ROM entertainment title. *The 7th Guest* was a spooky puzzle game with realistic digitised graphics which played directly from the disc. Though it wasn't a great game it was a fine demonstration of what CD-ROM was capable of and it prompted a number of the new generation of PC gamers to spend £200 on a CD drive. The ones who weren't convinced by *The 7th Guest* soon caved in to the merits of CD-ROM games when they saw LucasArts' *Star Wars* shoot-'em-up, *Rebel Assault*. This one placed the player in the cockpits of various spacecraft from the movies and while semi-interactive video of Star Destroyer attacks and canyon runs was spooled from the CD. Critics complained that games like this were flawed because they 'ran on rails' and the player wasn't really in control of where he was going, but all the punters saw was a game with great graphics, great sound and which was lots of fun to play.

The Future is 32-Bit

But the real progress for games would come when CD-ROMs were used properly, as storage devices, and a game's graphics were generated within the console, rather than being loaded in as pre-rendered images. Thus would the game environment be fully interactive. Only problem was, generating this sort of graphics would require some pretty hefty processor power, the sort that even a souped-up Mega Drive couldn't provide. Enter the 32-bit systems.

Commodore were actually the first to bring a 32-bit console to the market. Its CD32 system was actually an A1200 with no keyboard and a CD-ROM drive attached. For £300 it was a very capable machine – even if the external design was hideous – and various software houses made encouraging noises about developing games for it. Unfortunately, most of them preferred to show their commitment by simply releasing their Amiga titles on CD as well as floppy disk. With Amiga development already in a decline, there really wasn't much to get excited about on the CD32 either and the machine never really made it into the gaming mainstream.

The industry had higher hopes for 3DO. This was the system formulated by EA's founder, Trip Hawkins, to be a new industry standard. Like the MSX systems of old, 3DO would simply be a set of specifications and technologies which could be licensed to any company that was interested so that they could build a 3DO-compatible machine. Panasonic had the first machine out just before Christmas, but further machines were to come from Goldstar and the American communications giant, AT&T. 3DO combined all sorts of technologies in what Trip Hawkins hoped would be a



Far from being an excuse to make money from old rope, the *Super Mario Collection* (*Mario All-Stars*) became another Super NES must buy.



One of the finest games ever written, *Tempest 2000* is one of the Jaguar's few 'killer apps'.



LucasArts' *Rebel Assault* persuaded many a PC owner that buying a CD-ROM drive would be a good thing to do.



(TOP) Lamb dressed as mutton? The CD-32 was the first 32-bit console and very powerful it was too.

(MIDDLE) Was this the shape of the future? Trip Hawkins' 3DO was supposed to do to consoles what VHS did to video recorders, but it was a standard that was never widely accepted.

(ABOVE) The Atari Jaguar - great hardware let down by a dearth of good software. Sounds familiar.

jack-of-all-trades home entertainment appliance. It contained a double-speed CD-ROM drive, a 32-bit RISC (ie FAST) processor, and graphics circuitry that could handle three-dimensional texture-mapped visuals – perfect for games, but the 3DO was also an audio CD player, a movie player which used the new digital video CDs, and there was talk of it being incorporated into new video-on-demand cable systems, which basically meant downloading movies and interactive TV shows.

It was an ambitious project that got off to a shaky start when Panasonic launched the first 3DO machine in the States just before Christmas. Reports came in of users returning their \$700 players when they discovered that the supposed revolution in video gaming wasn't in evidence. Being an all-in-one home entertainment appliance was all very well in theory, but people still wanted their video games, and though numerous companies had been signed up to produce all sorts of exotic entertainment software, there was no essential game that would sell the machine.

The Atari Jaguar also appeared in the States in December. This system used a 64-bit processor which was surrounded by some of the most advanced graphics chips yet seen in a console. The Jaguar's big advantage should have been that it was cheap (under £300) because it didn't have a CD-ROM drive and used large cartridges. Atari promised a CD drive would appear later on, along with a Virtual Reality visor.

Alas, Atari wasn't able to provide what Jaguar owners would really want – decent games. The first batch of titles were mainly mediocre and didn't show off the system at its best, but instead of getting better the standard of games just got worse until the machine became something of a laughing stock. This was an ill-deserved reputation, though, because the Jaguar really was a capable machine and its best games, such as Jeff Minter's *Tempest 2000* were genuine classic video games.

There were two companies who, it could safely be assumed would be able to come up with the games when their next consoles were released. Sega's 32-bit, CD-based console was rumoured to be based on Sega's latest arcade technology, which had produced games like *Virtua Racing* and the new *Star Wars* coin-op, and if gamers could have arcade-perfect conversions of games like this, it was widely agreed that Sega would undoubtedly have a major success on its hands... if it could get it out before Nintendo's next machine.

Nintendo had announced it would also be releasing a new console, apparently a 32-bit, CD-based machine, though details were scarce. It soon emerged that Nintendo were developing the machine with the help of Silicon Graphics, an American computer hardware company that produced state-of-the-art graphics systems, including those behind the *Terminator 2* and *Jurassic Park* special effects.

Could such a thing be possible? A game with *T2* effects, running on a console that was going to cost no more than £200? Gamers were going to have to wait a while to find out, and in the meantime another home entertainment corporation was preparing to show its hand...



CHAPTER 14: 1994

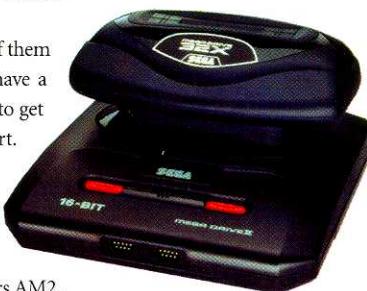
When Sony finally unveiled the Playstation in June some gamers were almost surprised to see how impressive it was. Sega and Nintendo had a proven track record with consoles so their efforts were bound to be interesting, but Sony had had no experience in this market, except perhaps for the old Sony Hit-Bit MSX computer, and some pundits had been sneering at the way it was "buying its way into the video games business".

What had emerged from Sony's R&D labs was a mighty powerful piece of kit. The 32-bit RISC processor and double-speed CD-ROM drive weren't unexpected, but the specification of the PlayStation's graphics engine gave it the potential to be the most powerful games machine around. Sega and Nintendo, neither of whom had released their new machines yet, reappraised their own designs in the light of the PlayStation's. Sega hurriedly boosted the power of the Saturn's graphics engine. Nintendo, which probably wouldn't have wanted to get its hands dirty in a three-way slugging match with yet another 32-bit CD-based console, announced that Project Reality would be a 64-bit machine which used cartridges (a medium which would be much easier for Nintendo to control than CD-ROMs).

With the challengers now lined up it only remained to see which of them would release the first machine. Nintendo stated that it wouldn't have a machine ready before the end of 1995, so it was up to Sony and Sega to get their feet in the door first and reap the benefits of a year's head start. Both the Saturn and PlayStation hit Japanese shelves in November, and they had arrived on import in the UK by Christmas. Neither machine had much in the way of software at first, but there was the promise of great things to come. Sega showed off the first mega-game, namely its conversion of *Virtua Fighter*, programmed by arcade coders AM2, and there was a Saturn version of Sega's latest arcade driving sensation, *Daytona USA* coming in 1995. The big name in the PlayStation's catalogue was *Ridge Racer*, a translation of a flashy Namco driving game which was good but didn't quite have the cred of *Daytona* at the time. There was also a 3-D beat-'em-up called *Toshinden* which, though unheard of, looked like it could be even better than the Saturn version of *Virtua Fighter*.



Rumours that Nintendo were developing a 32X-style processor booster for the SNES were quashed when the Virtual Boy, a 32-bit Virtual Reality console appeared at the 1994 Shoshinkai, a major Japanese toy fair. For a Nintendo machine it was given a rather cool reception.



The magic mushroom that was the Sega 32X. Would it turn a Mega Drive and Mega-CD combo into a Saturn? No it wouldn't. Would it significantly enhance Mega Drive players' gaming experience? No it wouldn't. Would it have any software support a year after its release? No it wouldn't.



(FAR LEFT) The PlayStation's first killer game was Namco's conversion of their own *Ridge Racer*. Quite simply, it was the most realistic-looking race game to have appeared on a home system. (LEFT) *Stunt Race FX* became Nintendo's second title to benefit from the Super FX chip. It's a stunning game, which great replay value.

The excitement was building, and players wondered which machine they should upgrade to. By the time the import PlayStations and Satrums had arrived at Christmas, the 3DO and the Jaguar had both been officially available for a couple of months, and all four looked promising machines.

By this time the 3DO looked like it was acquiring some quality software, including conversions of Electronic Arts' *Road Rash*, *John Madden Football* and *FIFA Soccer*, all with superb 3-D graphics, and coming in time for Christmas there was the best *Street Fighter* so far, *Super Street Fighter II Turbo X*.

The Jaguar wasn't so well off for software, but it did have the advantage of being cheap. At £229 it was £170 cheaper than the 3DO – and it did have *Tempest 2000*, and the exciting-looking *Alien vs Predator* to come.

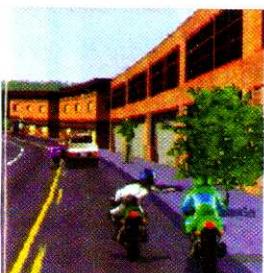
More Strap-On Muscles

Partly in an effort to prevent Mega Drive owners from upgrading to someone else's machine before they were ready, Sega had launched the 32X in time for Christmas. This £150 plug-in module boosted the Mega Drive's graphics and processing power so that it could handle more advanced, but sub-Saturn, games. The first 32X games, such as the conversions of Sega's *Star Wars* and *Virtua Racing* coin-ops, were okay but nothing special, and Mega Drive owners who had been stung with the Mega-CD were wary of the 32X. In fact most gamers saw it for what it was, a stop-gap measure, and simply made do with their Mega Drives until the machine of their dreams turned up.

The Mega Drive was far from dead anyway, judging by the titles that appeared during 1994. Mega Drive *Virtua Racing*, complete with Sega Virtual Processor, was impressive, even incorporating a split-screen two-player mode, but it suffered from a £70 price tag. Just as good, and a lot cheaper, were the new breed of innovative platform games like Sega's *Dynamite Headdy* and Virgin's *Earthworm Jim*. Best of all, though, was

Code Masters' wonderfully playable *Micro Machines 2*, which came on a special 'J-Cart'. These cartridges sported two extra joypad connectors so four players could race against each other without the need for any additional hardware.

Nintendo developers were also doing their best to make the most of the SNES hardware. Nintendo released two more Super FX games, the 3-D comedy driving game, *Stunt Race FX*, and the more sophisticated, and less entertaining, *Vortex*. Ubisoft had a *Mario Kart*-like 3-D go-kart game called *Street Racer* which used an amazing split-screen technique to let up to four players compete simultaneously. Nintendo's big game for Christmas, though, was



Of Electronic Arts' catalogue of games, *Road Rash* was the ideal choice for 3DO (and subsequently Saturn, PlayStation, and PC).

Nintendo's new Ultra 64 machine wasn't due to appear in Japanese stores until the end of 1995, but arcade players would be able to sample the hardware straight away, in the form of two new Williams coin-ops, *Cruis'n USA* and *Killer Instinct*, which were based on Ultra 64 hardware.



Donkey Kong Country, a platform game with fantastic rendered graphics that necessitated a massive 32-megabit cartridge – the biggest yet.

The PC Takes a Piece of the Action

Though consoles did dominate the playing public's interest during 1994, the PC was also making its presence felt, and very significantly too. There were classic strategy games such as Bullfrog's *Theme Park*, Maxis' *SimCity 2000* and Microprose's *Colonization*. There were classic role-playing games like LucasArts' hilarious talking adventure, *Sam and Max Hit the Road* and Broderbund's eerily beautiful *Myst*. There were tremendous simulations of which LucasArts' *TIE Fighter* and Origin's multi-CD epic *Wing Commander III* were fine examples. There was Bullfrog's marvellous *Magic Carpet*. And, of course, there was *Doom*.

During 1994, the American developer id Software had become rather well-known for a neat PC game that was doing the rounds as shareware.



Theme Park, from Bullfrog, applies an entertaining twist to the 'god-game'.



Another long-running rumour had it that Nintendo was developing a colour Game Boy, but all that ever appeared was the £50 Super Game Boy, a plug-in adapter which allowed SNES owners to run GB games. A bit of a strange concept, but it did increase the SNES's software library by several hundred titles.

Surprisingly, Nintendo's big Christmas game didn't feature any moustachioed plumbies, but it did star his old nemesis. *Donkey Kong Country*, programmed by Rare, featured spectacular pre-rendered graphics in the biggest SNES cartridge yet. The sequel, *Diddy's Kong Quest*, proved to be even better.

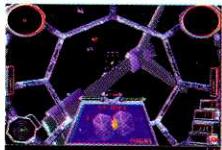
Wolfenstein 3D was a 3-D maze shoot-'em-up in which you played an American prisoner of war trying to break out of a Nazi stronghold, grabbing weapons and sustenance and gunning down any stormtroopers that got in your way. It was noted for its fast 3-D graphics that made the most of the limited PC hardware of the day, and also for its unashamedly bloody graphics.



The game that made id Software into widely-worshipped software gods, *Doom*. After inducing shotgun mania in PC owners this game would end up being converted to any machine that could handle the complex graphics, as well as inspiring far too many inferior clones.



Magic Carpet, from Bullfrog. Another ground-breaking title from the mind of Peter Molyneux.

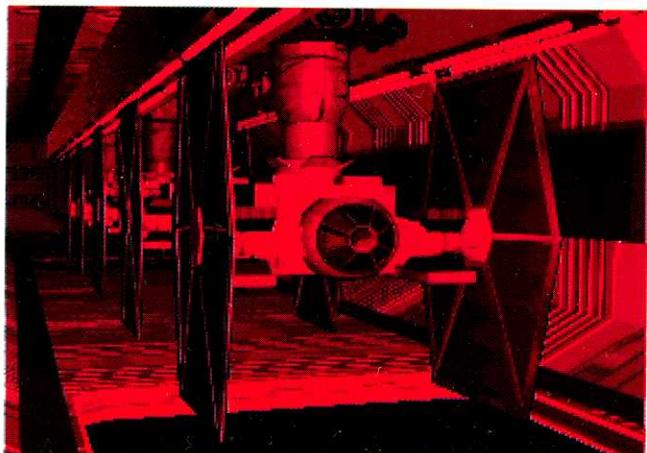


If you liked the Star Wars movies, here was another good reason to own a PC - LucasArts' *TIE Fighter*. As a simulation of space combat it was a slightly revved-up sequel to *X-Wing*, only this time you fought on the side of the Empire rather than the Rebel Alliance. If PC owners thought this was good, they hadn't seen *Dark Forces* yet.

Doom was id's next step along the road to hot lead mayhem. This time you were cast as a lone space marine out to rid the moons of Mars from an invasion of demons. The plot wasn't as important as the staggering realism of your surroundings. Texture-mapped polygon graphics were used to create vast complexes of granite-hewn corridors, dimly-lit staircases and secret chambers, all crawling with zombie troopers and hideous behemoths from Hades, all clamouring for your soul. Playing *Doom* could be a genuinely scary experience, but also a thoroughly exhilarating one because you were given a range of mighty weapons to see off these armies of undead: shotguns, chainsaws, miniguns, rocket launchers, and even a ray gun that disintegrated every fleshy object in sight. The only thing better than destroying droves of demons was blasting your buddies over a network, and systems managers in offices all over the world were driven crazy by surreptitious *Doom* 'Deathmatches' slowing their computer systems down to a crawl.

Doom was another game that extended the reach of video games beyond the traditional teenage boy market and roped in all sorts of players. It also set a whole new standard for shoot-'em-ups generally and it proved that, with hardware prices coming down and software standards matching the best of the Super Consoles, the PC was just as ready to make gaming history as the consoles were.

For the first time it appeared that the home computer market - expensive as it was - could compete alongside the dedicated games machines. The next few years would prove to be very interesting indeed!



CHAPTER 15: 1995

With nothing else worth reporting on the Jaguar, 3DO and Ultra 64 (which was still shrouded in secrecy), the press spent the first few months of 1995 following the birth pangs of the Playstation and Saturn. The enthusiastic previews encouraged early-adopting madmen to pay £500+ for imported Japanese Playstations and Satellites, but the more level-headed punters were content to wait.

At the start of the year there was no telling which of the two would end up in the driving seat. There was very little software available to base a decision on, and all the information that was available was that the Saturn had *Virtua Fighter* and the PlayStation had a fancier but less cool 3-D beat-'em-up called *Toshinden*. The next major releases were both driving games, *Daytona USA* on the Saturn and *Ridge Racer* on the PlayStation. The two machines seemed to be matching each other blow-for-blow, but it was still anyone's fight.

As the year went on and official launch dates approached the Saturn started to pull ahead. Sega's arcade heritage was serving it well when it came to providing Saturn software, and Sega announced more sharp-looking coin-op conversions. *Virtua Fighter 2*, *Virtua Cop* and *Sega Rally* looked fantastic, and Capcom was also releasing its latest *Street Fighter*-style fighting game, *X-Men: Children of the Atom*. Meanwhile, the PlayStation looked distinctly under-fed as far as good games went. Apart from *Toshinden* and *Ridge Racer*, and another 3-D beat-'em-up from Namco called *Tekken*, there were only a couple of old arcade conversions, *Cybersled* and *The Raiden Project*, neither of which were remotely spectacular.

The 32-Bit Battle Begins Officially

Sega launched the Saturn officially on July 8, celebrating the event by projecting a huge Saturn advertisement onto the walls of the Houses of Parliament in London. The launch games were *Virtua Fighter* (the pack-in game), an unusual 3-D blaster called *Panzer Dragoon* and *Daytona USA*. It was a great machine with great software... and a too-great price – £399 was a bit too steep for many players' liking. And no matter how great the machine, most people have better things to do in the height of summer!



Playstation's *Wipeout* was the game that sold the PlayStation following its official launch in September.



With the Ultra 64 still some way off, Nintendo were continuing to support its older machines. Even the Game Boy did well, with its own versions of *Killer Instinct* and *Donkey Kong Country* (called *Donkey Kong Land*).



Sega's arcade team, AM2, programmed their own Saturn conversion of *Virtua Fighter*. Apparently it was a bit of a knock-off that only used 40% of the Saturn's power, so, shortly after its release AM2 released a 'remix' version, with fully texture-mapped graphics.

If aesthetics are anything to go by, the PlayStation has half the battle already won in the 32-bit war. However we all know there's more to gaming than just looks. Right?

Sega's official Saturn launch was marked by this spectacular stunt: A huge Saturn ad projected onto the wall of the Houses of Parliament in London. It even had a satirical element, with the two Virtua Fighter characters bearing the heads of political rivals John Major and John Redwood.



Breathtaking new games like Sega's *Panzer Dragoon* proved that 32-bit could bring originality.

The Saturn looked even more overpriced when Sony launched the official PlayStation in September, priced at only £299. It wasn't as if the low price was making up for some kind of deficiency either. Suddenly the PlayStation seemed to have acquired a wide selection of excellent games, with plenty more to come. Chief among them were two race games from Psygnosis, *Destruction Derby* and *Wipeout*. *Wipeout*, with its incredible futuristic graphics and music by well-known ambient music acts was quickly identified as the best game on the machine and it was reported that, shortly after its launch, a copy of the game was being bought with every new PlayStation.

Over the first few months of its official UK existence, the PlayStation was outselling the Saturn by approximately seven to one. Sega hurriedly dropped the price of the Saturn to £329, then, by Christmas, to £299. It was still a potent machine, though, and many pundits still fancied it over the PlayStation purely on the strength of its forthcoming range of cool coin-op conversions. It was still early days for both machines, though, and both had a huge supply of exciting-looking titles lined up for 1996.

The Also-Rans

And what of the other 32-bit consoles? The 3DO had been faltering for most of 1995, with a minimal range of decent software titles and a massive price drop from £400 to under £200 over the course of the year. *Super Street Fighter II Turbo*, a classy shooter by the name of *Return Fire* and EA's conversions of *John Madden Football* and *FIFA Soccer* were the only games worth having. At the start of the year, unhappy 3DO owners must have been cheered by news that the 3DO Company were already developing its next machine, which would be available as a complete unit and as an upgrade. 'Bulldog', or M2 as it came to be known, was a 64-bit specification which 3DO claimed would out-do every other home games system – including Nintendo's Ultra 64 – with its almighty graphics engine, capable of enormous polygon-rendering power as well as all sorts of sophisticated 3-D and colour palette effects. But by the end of the year things didn't seem so certain, as the 3DO Company had sold the M2 specification exclusively



Arcade-goers were developing an insatiable appetite for beat-'em-ups, and nearly all of the hit coin-ops of 1995 were fighting games: *Mortal Kombat 3*, *Street Fighter Alpha* and *Fighting Vipers*. At the end of the year, Sega even announced a new *Virtua Fighter*-style beat-'em-up starring Sonic the Hedgehog!

to Matsushita Electrical Industries, leaving itself free to develop software rather than hardware. Having paid an estimated \$100 million for M2 there was no danger of Matsushita shelving it, but details were scarce on when the system might appear.

The future of Atari's Jaguar looked even less certain than the 3DO's. More than a year on from its launch it still had only two worthwhile games in its catalogue, and of those, only *Doom* was capable of mass appeal. *Tempest 2000* was a game for arcade nostalgics and video game purists, *Alien vs Predator* had turned out to be all atmosphere and not enough action, and *Rayman* was merely a pretty platform game with sub-Sonic action. New releases were announced but rehashes of ancient arcade games such as *Defender 2000* and *Breakout 2000* weren't going to do it for Atari when Sega had *Sega Rally* and Sony had *Tekken* and *Ridge Racer*. The promised Jaguar CD drive didn't arrive and nor did the VR helmet. By Christmas, the Jag was in a sorry state and was going for a mere £159.

Nintendo Ultra 64 - The Future is Revealed

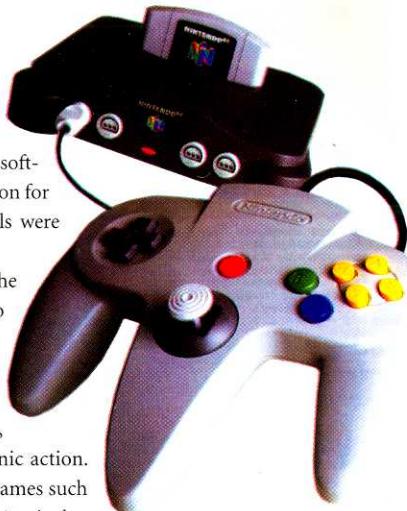
The wild rumours of Nintendo canning the Ultra 64 because it would be too expensive to produce were quashed when the machine was finally given its first airing at the November Shoshinkai show in Japan. Nintendo gave the trade attendees hands-on experience of the new Ultra 64, thus proving that, yes, it did exist and yes, it certainly was the most powerful games system available. The preview also confirmed that Nintendo did intend to stick to using cartridges instead of CDs, although there was much talk of an add-on 'Bulky Drive' which would use special 150Mb magnetic disks.

Though most of the software was only visible on show-reel videos, all of the games had a screen presence that was beyond anything that had been seen before. Clearly the collaboration between Nintendo and Silicon Graphics to produce the Ultra 64's graphics hardware was paying off, and it was clear that console players would have some spectacular 3-D games to look forward to including Ultra 64 versions of some of the best-loved SNES games, *Pilotwings 64*, *Super Mario Kart R*, *Legend of Zelda 64* and, best of all, *Mario 64*. Nintendo also announced that work on the SNES version of the long-awaited *Starfox II* had been cancelled in favour of *Starfox 64*, which was again being produced by Argonaut Software in the UK.

It all looked mouth-wateringly good stuff, and Nintendo UK cleverly followed the excited magazine reports with a full-page ad showing a picture of the Ultra 64 and advising potential PlayStation and Saturn buyers that they should "Wait for it..." A European release date at the end of 1996 was mentioned, but would it be met?

Time For a Change?

The potential upgraders were definitely getting itchy feet. After all, with programmers like Argonaut trading in their SNES development kits for Ultra 64 models, did this mean that the old 16-bit machines were finished?



The 64-bit future beckons. Nintendo's Ultra 64 (or simply the Nintendo 64 as it would be renamed) set new standards in graphics and proved conclusively that console gaming was moving into the third dimension.



(TOP) PilotWings 64.
(MIDDLE) Mario Kart 64.
(BOTTOM) Star Fox 64.
All these games promise to be ace!



As ever, Nintendo remained true to their high standards with the *Yoshi's Island* platform game on the SNES.



id Software's *Doom II* created quite a stir when it was released in the spring. Most players loved it, but some condemned the game for not being sufficiently different.



Interplay's *Descent*, on the other hand, added a new 360° angle to the whole corridor game scene.

LucasArts' *Dark Forces* was *Doom*-meets-*Star Wars* - a potent combination that made for a superb game.

The Mega Drive was definitely losing its momentum, and Mega Drive players only had a handful of good new games to choose from during 1995. Sega's big Christmas game, a platformer based on the hit movie *Toy Story*, sold well but didn't have anything new apart from pre-rendered character graphics, which was what Nintendo had given *Donkey Kong Country* the year before. There was talk of Sega releasing an all-in-one Mega Drive and 32X system called 'Neptune' in September, but apart from an excellent conversion of *Virtua Fighter* the 32X hadn't really contributed anything to the gaming world. By Christmas both the 32X and the Mega-CD were retailing at £99 apiece.

The flow of SNES games also slowed down over 1995, but the machine still had some action in it. Konami's *International Superstar Soccer Deluxe* was hailed as one of the best football games the world had ever seen, and Rare had the sequel to *Donkey Kong Country*, *Diddy Kong's Quest* as well as a conversion of the Ultra-64-based arcade fighting game, *Killer Instinct*. Nintendo themselves had *Yoshi's Island*, the latest *Super Mario* platform game, which ably lived up to its prestigious pedigree, and there was a startling conversion of *Doom* which used the Super FX chip to recreate a game that had needed several hundred pounds'-worth of PC hardware the year before.

The PC Doom-Boom

There was one section of the gaming community for whom *Doom* was old hat, though. PC owners had played the game to death and had even taken to customising it with their own level designs, new sounds and graphics. *Doom* was a gaming phenomenon, and when *Doom II* showed up in the spring with new levels and new monsters it looked like the craze would continue. Suddenly, everyone was producing 3-D shoot-'em-ups in the *Doom* style, and though most of them were hurriedly-produced bandwagon-jumpers, some actually improved on the formula, such as LucasArts' *Dark Forces* and Interplay's *Descent*.

While imitators struggled to catch up, id Software were working on a game that would set the gaming world alight once more, just as *Doom* had in 1994. It would be a 3-D shoot-'em-up more realistic and more bloody than anything seen before. And it would be called... *Quake*!



CHAPTER 16: 1996

At this point it was hard to believe that commercial video games had been around longer than a lot of the kids who were playing them. It was also hard to believe that it was only 16 years ago that everyone was hooked on machines that could only display phosphor-burning white rectangles on black screens and "boop... boop... boop" constituted a soundtrack. And it was even harder to believe that people actually thought *Space Invaders* and *PacMan* were both terrific games.

In those golden days of the late 70s even the most ardent believer in the future of video games would never have believed they would eventually be controlling full-colour, photo-realistic, three-dimensional characters in the comfort of their own homes. Yet in 1996 that's just the position we found ourselves in.

This was a year when the press repeatedly used the words "best ever" to describe some of the latest games. This was significant indeed, because within the sphere of video games journalists these were regarded as sacred words that were once misused in the scurvy name of hype, and rendered into cliche at some time between 1988 and 1990. However, this time they were being used accurately, and their meaning was thus restored. The new breed of consoles and computers provided a platform that allowed programmers and game designers to write the games they always wanted to. Their imaginations had room to run amok and they could now create the games we all dreamed of playing.

Best Coin-Op Ever?

Most arcade development has always been hardware-led and it has often been the technological advances that have made new coin-ops exciting — why else would anyone have played *Space Harrier* if not to see the fantastic graphics and ride the hydraulic chair? Now that home console hardware could do almost anything a dedicated coin-op could the emphasis had to be shifted back towards improving arcade software. Sega's AM2 development team had refined the creation of beat-'em-ups to a fine art, and it was widely thought that things can't get much better than *Virtua Fighter 3*, with its finely rendered characters and the vast array of techniques that players had to master.

Still the development of fighting games continued, though. Capcom, the company who revived the whole genre with *Street Fighter II* prepared *Street*



Sega's *Virtua Fighter 3* sets exciting new standards for 3-D graphics and fighting gameplay.



Psynopsis' *Formula One* is tops in virtual motorsport experiences, though hats should also be doffed in the direction of Geoff Crammond's so-realistic *Formula One Grand Prix 2*.



(FAR LEFT) Sonic Team give you *NIGHTS*, a game which defies rational description. Nonetheless, it's awesome! (LEFT) But no matter how much Sega try to push their new mascots, the arcade games still drive the message home better. *Sega Rally*, for one.



Wipeout 2097 is another monument to the PlayStation's cool.



Saturn is the only place players will get to play great conversions of Sega's new generation arcade games, such as AM2's *Fighting Vipers*.



Even though it only plays on hugely expensive PCs, *Quake* is still one of the most popular games in the world. It has the potential to last forever!

Fighter III, which would have more characters and more moves than ever before. Meanwhile Namco's *Tekken* team busied themselves creating *Tekken 3*, which they claimed would be better than *Virtua Fighter 3*? Would it ever end?

Best Racing Game Ever?

There were some terrific arcade driving games launched over 1996, Sega's *Manx TT* and Namco's *Rave Racer* among them, but some of the best racers appeared on consoles. Saturn owners had *Sega Rally*, but PlayStation owners got an even better deal when Psygnosis released *Formula One*. Not only was it the best console driving game, it was the biggest-selling CD title ever and during its first weekend on sale in the UK 30,000 copies were snapped up by race-hungry punters. *Formula One* was regarded as the best racing game on any home system, though PC owners might have argued that Microprose's *Formula One Grand Prix 2* put up some stiff opposition.

Though either of these could be regarded as the all-time king of racing games, the title of Coolest Racing Game Ever Made had to go to another Psygnosis PlayStation title. *Wipeout 2097* was a dream sequence in racing game form. Its hyper-real visuals and awesome special effects seduced the eyes while the ambient soundtracks seemed to act on the subconscious mind until the player's autonomic nervous system became synchronised to the pulsing of the bass line. Oh yes.

Best... Thing... Game Ever?

PlayStation owners weren't the only ones to have their senses treated, though. The creators of Sega's *Sonic The Hedgehog* games created a Saturn game called *NIGHTS* which defied categorisation. It was a soaring trip through a surreal and beautiful 3-D landscape where artificial life-forms lived and died and, if you didn't bother them, made up songs. It was so different from anything else that Sega had to come up with a new control pad just so Saturn owners could play it properly. *NIGHTS* — a unique video gaming experience.

Best Blast Ever! RAARGH!

Everyone had *Doom* pegged as one of the best blasting games ever, but when id Software announced it was working on something better it was hard to imagine how this was possible without some kind of transdimensional technology. But at the start of '96, PC players got their first taste of *Quake* in the form of a free three-level test edition, and they went mad.

Unlike *Doom*, *Quake* was a fully three-dimensional game, with three-dimensional characters roaming three-dimensional dungeons and carrying big three-dimensional weapons. Even the preliminary version got the old *Doom* crowd so excited that they constructed their own map editors, then their own maps, then their own character designs which turned their characters into *Star Wars* Stormtroopers and Terminators.

The eight-level shareware release and the full game didn't come out until September, by which point PC players were in a frenzy of excitement.

In single player mode, it was 30+ levels of eerie atmosphere and big monsters, but the best way (some would say the only way) to play *Quake* was against other players over a network. The same had been said of *Doom* when it first appeared, but back then very few players had access to a network. In 1996, though, the growing number of Internet connections meant that *Quake* fans could log on to a remote server and conduct rocket tests on other players from all over the world. Experts agreed that this type of Internet-powered trans-global competition was the shape of things to come.



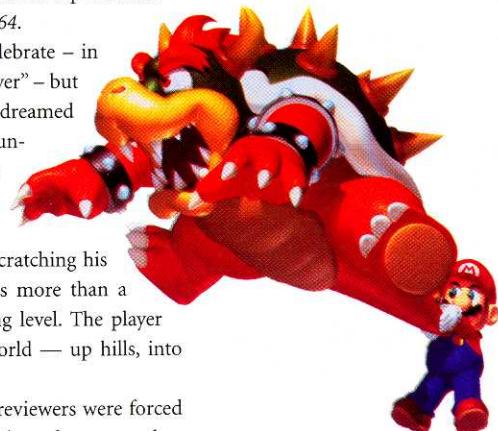
Virtua Fighter 2 - best fighting game ever? Oh, let's not start all that, eh!

Best Game Ever, Ever!

Nintendo treated us to another vision of the shape of things to come, though. When the Nintendo 64 finally appeared in June it was revealed as a staggeringly powerful machine that lived up to everyone's expectations. No game demonstrated that better than *Super Mario 64*.

A Mario game has always been something to celebrate – in their day they have each been called “the best game ever” – but *Super Mario 64* was beyond anything that his fans had dreamed of. Mario was no longer a picture of a chubby guy in dungarees toddling around your TV screen. This time he looked so real that you felt you could almost reach into the screen, pull him out and he'd be standing on the palm of your hand, grinning and blinking and scratching his moustache. The landscape Mario could explore was more than a bunch of obstacles placed side by side on a scrolling level. The player could take him anywhere in a three-dimensional world — up hills, into secret caves, down to a submerged shipwreck.

This was like no game ever seen anywhere, and reviewers were forced to blow the dust off *The Book of Forbidden Words* and, as one, they dubbed *Super Mario 64*, “the best game ever”.



The Best is Yet to Come!

As soon as they had said that, though, the reviewers wondered if they had spoken too soon. Nintendo had upped the stakes again and it surely wouldn't be too long before other companies would be rising to the challenge and producing hardware and software to give Mario a run for his money.

If the past 16 years have taught us anything, it's that the video games business never stands still, and in ten year's time – or five years or maybe even less – the games that we're playing now will look like ridiculous antiques. Sure, mouldy reviewers will be saying, “Okay, so it's old, but *Wipeout* is a classic, man! I still remember the day it came out...”, but most of us will have moved on to something immeasurably better.

Right now we can only wonder what that will be. But you can be sure that right now, there's someone sitting in an R&D lab somewhere in the world who is working on the game that everyone will be playing at the turn of the century. Will it be by Sega? Nintendo? Sony? Will it be a 3-D system? Virtual Reality? Or something we just haven't thought of yet?



Oh, okay. Sorry, everybody. Nintendo wins. It seems there's nothing to top *Super Mario 64*... or at least, not yet.



The coolest game ever – and that's official! Psygnosis' *Wipeout 2097* is so cool you could use it to keep your doorstep pinta fresh for a whole six months! Metaphorically speaking.

ANOTHER PROLOGUE

It's usual for the editor to provide an introduction, or forward, to a book. Mine is printed here at the back for a couple of reasons: 1. We only had room for the contents at the front. 2. the video games industry is still very young, and what we know already is still only a foundation for what is to come.

COMPUTER AND VIDEO GAMES the scene

Since video games first made the step from arcades into the home, games publishers and hardware manufacturers have been treading a fairly rocky path. The MSX, and 3DO formats made some attempt at bringing developers together. But this is essentially what the PC has been achieving in recent years! Fair to say that a publisher's only safe bet is to do what has been done all along – to jump on the highest-profile bandwagon until the wheels show signs of buckling.

Each time someone invents a new 'box' which transforms the telly into state-of-the-art, interactive audio-video kit, gamers will go crazy for it. Everyone else will want a piece of the action too – once it becomes established (a safe bet), and affordable. At this moment in time, Sony have the PlayStation well placed in the UK as a mainstream machine. Sega's Saturn is keeping the action seekers enthralled. Nintendo are preparing to bring their new 64-bit system to the party. Matsushita have their 64-bit system prepared for launch in Japan. Right now it's fair to say that there is no sign of a single format happening.

But so what. The world would be pretty boring if we all listened to one style of music from one label. Without the situation where hardware manufacturers are able to say "now look what I can do better", we will have lost a major part of the excitement. The music analogy can be used another way too, in that a games machine boasting a classic game need never become obsolete. CD is the mass market, but the coolest tracks are often only available on vinyl. People are paying £400 for the privilege of owning a practically antiquated Vectrex in 1996. A PlayStation is state-of-the-art and only half that price...

As to the way I imagine video games to progress, well it seems developers are becoming so keen to reproduce reality, they may be losing sight of the almost psychedelic charm of the originals. When you walk into an arcade in 1996, the place is full of driving simulators, and polygonal fighting games. In 1984 you hardly knew what to expect.

Maybe the next ten years will see true Virtual Reality (goggles and gloves) in the home. Multigen have recently announced that it's a strong possibility. Imagine this kind of set up linked via the Internet, or otherwise, and the prospect is mind blowing. But it's how this technology will develop the concept of a game that is important. The answer to that question is entirely at the whim of a designer's creativity, which is why it is so



In the 'good old days', multi-player gaming involved sharing the same coin-op with one of your mates. Already the term has taken on a whole new context, with players competing against each other from opposite parts of the world!



Photo: Rex

But there's nothing to replace the feeling of being the best at the latest coin-op. It would be terrible to see the arcades disappear in exchange for a bunch of people sitting in their living rooms wearing funny hats!

important that companies stay faithful to the concept of originality – not just profitability.

This amazing scene, which practically reinvents itself every couple of years, has made it out of the bedroom and into the hippest clubs. Transformed from almost unintelligible blocks and bleeps, to enthralling sight and sound thrills which rival Hollywood. Better than that, remember, the experience is interactive.

With revelations happening on such a regular basis, it's crucial to stay in touch. And that's what the magazines is for.

COMPUTER AND VIDEO GAMES the magazine

While it's exciting for a time to consider how games publishers and hardware manufacturers aim to survive the peaks and troughs of their industry, let's not forget why Computer and Video Games (CVG) was launched 15 years ago. One word: FUN! CVG became the world's first fun computer games mag, and happily remains the UK's biggest-selling, number one publication dedicated to its scene. We do the best because we try our best to honour our readers' razor sharp interest. We play the games every bit as hard as you. And don't you forget it! But most of all we have loads of F-U-N. That's the perspective we like everyone to have on their games, and life in general.

I'd like to thank Paul Glancey for dedicating too much time crafting the words you have just read. Also I'd like to give David Kelsall, the designer, my next credit on any game he chooses – yes he has worked ridiculously hard too. Without either of these people in charge, this book just would not have been.

But of course the biggest thanks of all must go to you, the reader. I hope it was a real buzz seeing 15 years of interactive computer entertainment 'compressed' into 100 pages. Now you know as much as we do. How does it feel? Excited? You will be.

Paul Davies

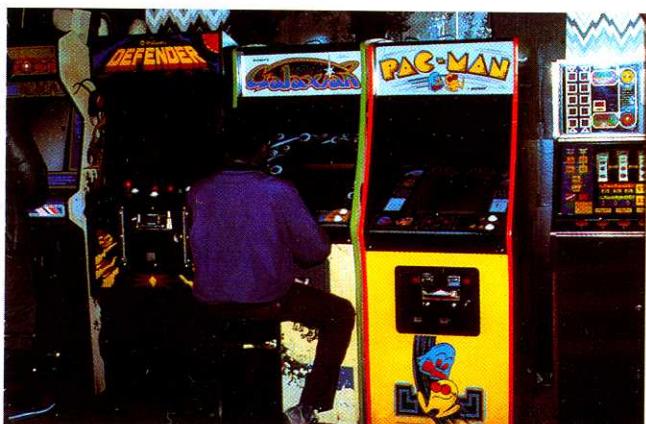


Photo: Rex

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David Kelsall - for being pretty handy with an expensive camera too. And for owning far too many old games!

Mick Yates - for the loan of his old games, before somebody bought them all.

Alex Ward - mad retro gamer at Acclaim for referring us to good source material.

Enrico Tadeschi - collector, and custodian of many Clive Sinclair prototypes (handed to him from the man himself!).

Richard Leadbetter - intrepid Internet explorer, and all-round nice guy.

Namco - for Pac Man, and all their other great games!

Sega - especially Steve Cross who supplied shots of most Sega hardware.

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THE Games - and Jim Pride who rifled through the files to uncover amazing Nintendo archive images.

Psygnosis - for the Braticus screen-shots, and WipeOut of course.

Atari - for help with source material. Plus where would we be without this company?

John from the Trading Post - another invaluable source of rare, and interesting old games.

All the magazines at EMAP Images - for assistance with source material.



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Written by: Paul Glancey

In 1988 Paul joined legendary C64 magazine 'Zzap 64' alongside Julian "Jazzer" Rignall - another industry legend. Shortly after Jaz jumped ship to Computer and Video Games, Paul did too. Perhaps best known for being the Editor of Mega Drive magazine, Megatech. If anyone else would like to benefit from Paul's expertise, he's now freelance and available for work!



Designed by: David Kelsall

Dave has been a complete video games fanatic since he first played Lunar Lander in a Bournemouth arcade. He joined EMAP Images four years ago to work on Nintendo Magazine System and Mean Machines Sega. We thought he was just some upstart designer. Little did we know that his knowledge of video games would exceed even that of our own!



Edited by: Paul Davies

Having spent far too much of his teen years playing computer games, Paul didn't have a clue where his career prospects were heading. So he applied for a job on Mean Machines magazine, and spawned himself a place as Staff Writer. Four years of staying late to play games in the office later, Paul evolved into the Editor of Computer and Video Games!

A decade-and-a-half of computer and video games. To some of you 1981 is recent history, and it seems like only yesterday. For others 15 years goes beyond the time you were born. Whatever your age, it's almost guaranteed that you have played a computer or video game in your lifetime. Perhaps too many! If that's the case, you and this book were made for each other.

Computer and Video Games, the magazine, has been around since the very beginning of home computers. So this Complete History of Computer and Video Games celebrates not only the development of an incredible scene, but pays tribute to a magazine which has been there all the way, ensuring players get the most fun from their most favourite pass-time. From Clive Sinclair, to Silicon Graphics; Space Invaders to Sega Rally and beyond. All the important names and the games they created are in here. And more...

