



■ The track design was inventive to say the least, while the two-player split-screen mode was painfully addictive.

BEHIND THE SCENES

UNIRALLY

Whoever said 'two wheels are better than one' clearly didn't experience this wholly unique racing title. games™ speaks to the team behind one of the most beloved SNES titles of all time and reveals how corporate sniping tragically cut short the success it truly deserved



Released: 1994
Format: SNES
Publisher: Nintendo
Developer: DMA Design

KEY STAFF:
Mike Dailly (Programmer/Tools)
Robbie Graham (Artist)
Andrew Innes (Programmer)
Martin Good (Animation)

IF YOU CONSIDER yourself a true artisan then there's nothing worse than pouring your heart and soul into creating something breathtaking only to be accused of flagrant plagiarism. Such an allegation robs you of the unique satisfaction that crafting something beautiful brings. Spare a thought, then, for the development team of *Unirally* – they succeeded in forging an astoundingly enjoyable piece of software that was denied the limelight thanks to largely unfounded claims of idea theft.

Developed by Scottish code house DMA Design and published for Nintendo's dominant Super NES console in 1994, *Unirally* (or *Uniracers* as it was known outside Europe) was anything but a conventional videogame release. Announced in the CGI-tinged wake of *Donkey Kong Country*, DMA's racer was initially viewed with almost equal amounts of suspicion and expectation – the visuals possessed that shiny rendered look that so many developers craved at the time but also retained a degree of simplicity that lead many early sceptics

to comment that it was little more than a glorified tech demo. Ironically, this was actually closer to the truth than many suspected.

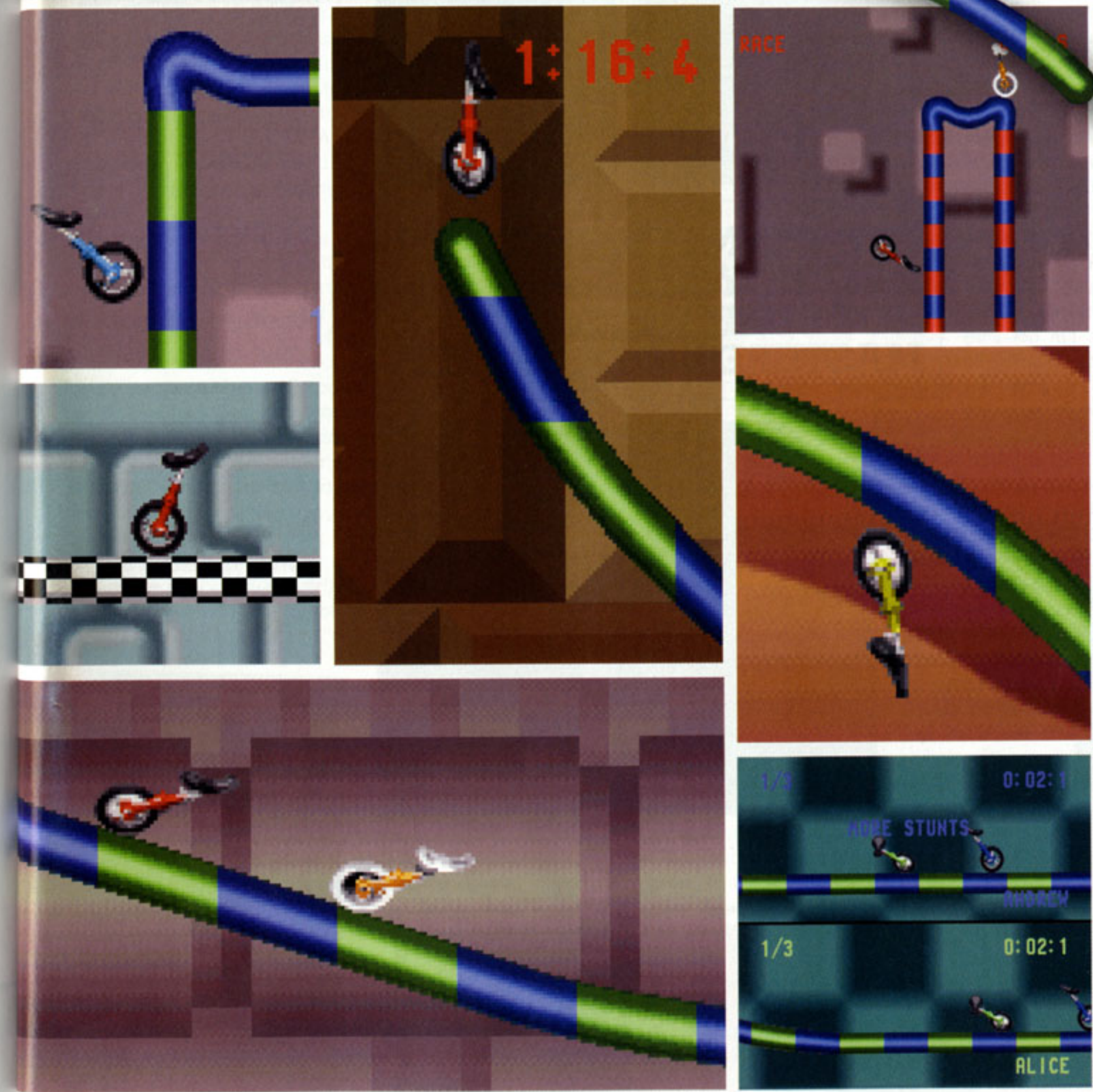
The birth of *Unirally*, like so many of DMA's other titles, was typically unorthodox. "*Unirally* did actually evolve from a tech demo," recalls former DMA Design member Andrew Innes. "It was an obscenely difficult unicycle simulator and it was decided that it could be turned into a game. I think there are parallels between this and *Lemmings*, which evolved from some Deluxe Paint animations of little walking men, and *Grand Theft Auto*, which evolved from a tech demo of a software-rendering engine. This style of game genesis differs markedly from every other company I've been involved with. The typical approach is to remake whatever is currently selling well but put more stuff in it and do shinier graphics."

Fellow DMA Design cohort Robbie Graham expands on this, revealing that *Unirally* didn't begin life as a racing game. "The goal was to do a platformer with a unicycle character as this had plenty of potential for interesting physics and balancing gameplay. As the design progressed, it became more and more a racer and less a platform-type game. As the racing part became

THE VISUALS HAD THAT SHINY RENDERED LOOK THAT SO MANY DEVELOPERS CRAVED

more important and the Advanced Computer Modelling on the unicycle ate up much of the graphics memory, the game adopted its unique 'clean' look."

These graphics obviously enabled *Unirally* to stand out from the crowd, and to some degree the game capitalised on the frenzy of interest *Donkey Kong Country* had created in the art of CGI. However, adopting this new technology **CONTINUED >**



FROM THE FORUM

Posted by: DJTROOPER

▲ *Unirally* was truly excellent. It was a completely unique racing experience that let the player perform twists and turns in mid air with moves like zigzag and flip. I spent many hours trying to beat my own times and get the harder cups. I just loved the way that the unicycle had a unique sort of attitude and personality of its own at the end of every race, where it would look like it was having a bit of a dance if you won, and bowed its head in shame if you lost. Classic. Oh, the memories.

Posted by: SUPAGORGONIZER

▲ It took a couple of goes before you could really get to grips with *Unirally*, but once you have a rough idea of the courses, you were jumping and spinning round the track like a madman. This is one of those videogames that really rewards you for playing. Brilliant multiplayer to boot.

Posted by: SMURPH

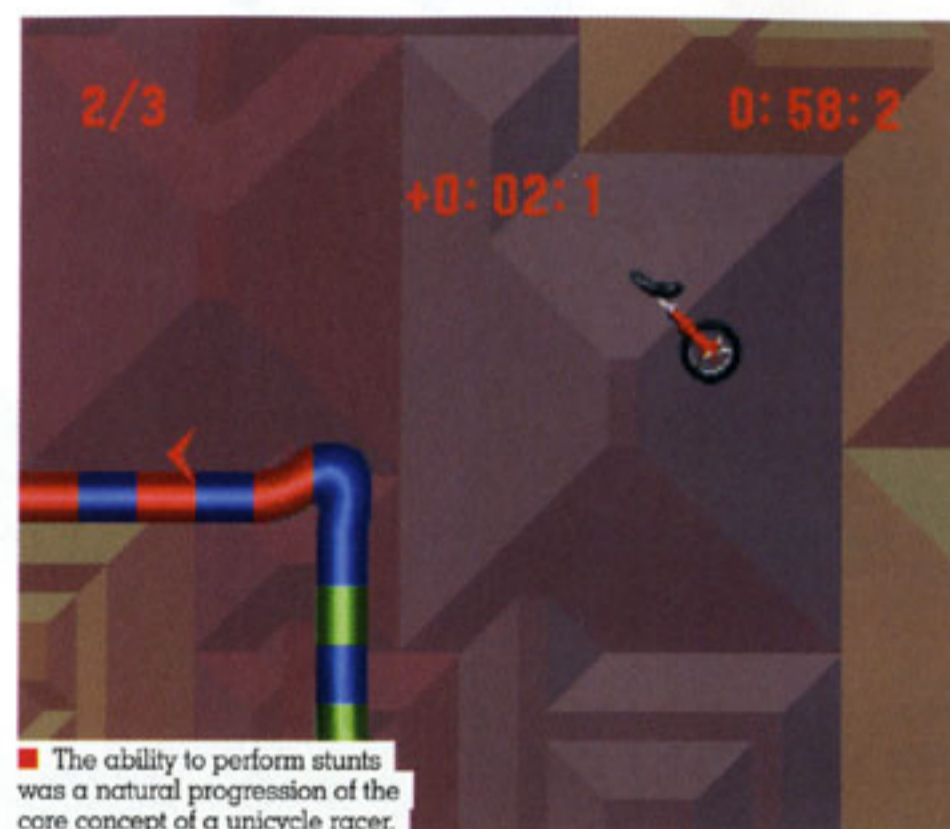
▲ *Unirally* is the purest gameplay experience on the SNES, in my opinion. It's so simple and yet so playable. Split-screen racing with a mate can't be beat, and yes, I rate it higher than any *Mario Kart* or *Street Fighter* game. The 'stunts to go faster' mechanic is really brilliant, there is a risk-versus-reward attached to it, so if you don't land the trick, you're slowed down. With just a bit of practice you can make the unicycle go so fast that even the incredibly fast scrolling can't keep up – a serious rush. It's a game of its time too – nail a trick and with a message that you're 'rad' or 'stellar'. Quite funny nowadays

put additional pressure on the designers. "Although the in-game unicycle was probably no more than about 32 pixels high, the source 3D geometry had every detail present and correct," recalls Graham. "Even the threads of the screws inside the unicycle frame were modelled."

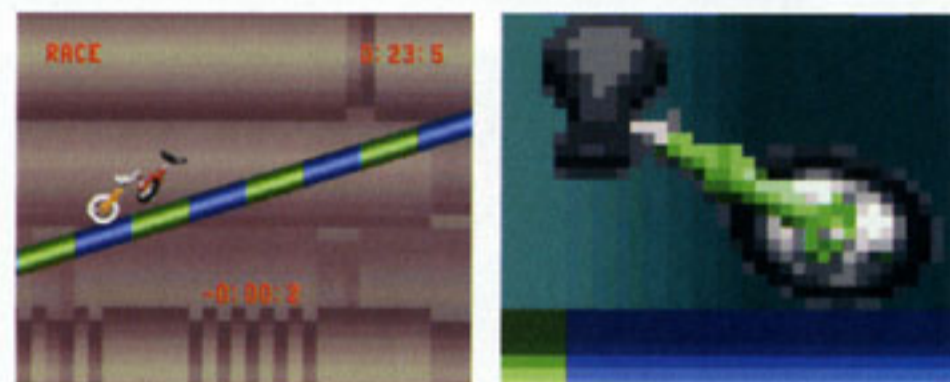
Creating the unicycle characters was only one part of the puzzle. It was also vital to ensure that the animation was smooth and packed with character, and this is what caused headaches. "It's not a 3D model in the game, but a series of 2D images of the 3D unicycle in all the potential positions," explains Graham. "When you consider that the unicycle can tilt and stretch with speed, the saddle can move, it can flip with various stunts and that, for most or those positions, there needed to be 16 versions for the different pedal positions (they go round and round as they should), it was a data management challenge to say the least. I remember seeing the unicycle frames all printed out on A0 paper and there were hundreds and hundreds of frames."

Given the level of realism the team wanted to achieve, they felt it was their duty to at least investigate the inner-workings of the subject matter. "Since it was a unicycle game, we thought the team should learn how to unicycle," chuckles Graham. "However, the only 'safe' place to practice was the main corridor of the office. After the game was complete, the walls of that corridor were absolutely filthy and dented from all those sweaty near death experiences on the unicycle. I'm not sure anyone mastered it properly. I certainly never came close."

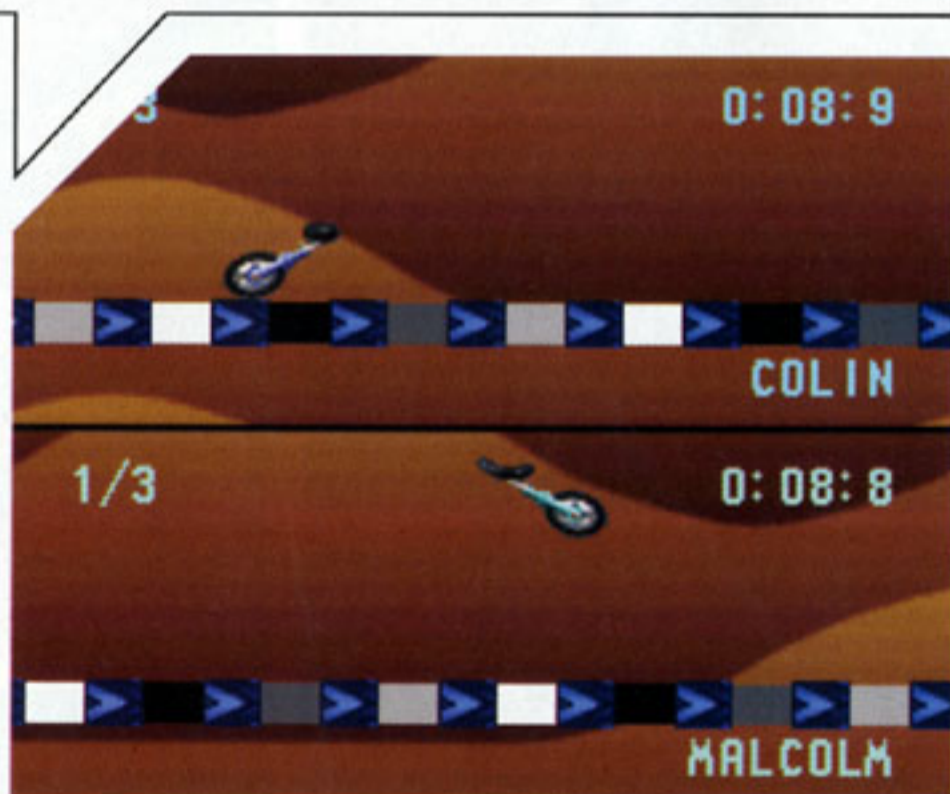
With such extensive research ensuring that the racing portion of the game was suitably perfected, the team started to tinker with the core concept and implemented the unique idea of performing stunts. "I think it was a natural evolution of the game," recalls Mike Dailly, another key member of the *Unirally* team. There was an early stumbling block, however. "The obvious stunts are just spinning in the various axes," explains Innes. "The others - like 'head bounce' - are the only things we could think of. To be honest, there's not much else you can do with a unicycle. If you notice, in the game there's a blank space in the Mega Stunt menu, which is where we ran out of ideas. Apparently, people were phoning up Nintendo helplines and refusing to believe there was nothing there."



The ability to perform stunts was a natural progression of the core concept of a unicycle racer.



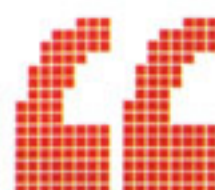
THE TEAM LEARNED TO UNICYCLE. I'M NOT SURE ANYONE MASTERED IT PROPERLY



>. A GAMING EVOLUTION

Unirally manages to bring to mind Sonic's level design as well as his astonishing sense of speed.

Despite a 3D landscape and 'hip' concept, the stunt-based gameplay harks back to Tony Hawk's Pro Street.



What They Said...



DMA have demonstrated their tremendous skill through *Unirally*, proving that you don't need some half-baked superhero to make a game great. *Unirally* is pure, crazy, head-spinning, gut-wrenching excitement incarnate

Paul Davies, NMS issue 29 February 1995



Separated at birth? This is the unicycle from Pixar's animated short *Red's Dream* that caused all the legal trouble.

Then there was the small matter of the two-player split-screen mode - a feature many exalted as the crowning glory of the game and a facet of *Unirally* that was actually on the cards fairly early in the development period. "I think it was always heading that way - the team really enjoyed racing each other," remarks Dailly. "Usually if a team play the game in their spare time, then you're on to a winner." Graham agrees: "It's a great two-player game and this was helped a lot by the stunt reward system - something that, at the time, had not really been done to my knowledge. Forcing players to pull aerial flips and rolls to win a race really makes the game." Innes concurs: "We definitely pushed

the competitive aspect. The scope for single-player storyline was inherently limited by virtue of it being a racing game. I remember we had a high-score table going from pretty much the first point we had the game running. A lot of thought went into the statistics tracking because we knew the Americans liked that kind of thing." With so much love and care being poured into *Unirally* it's unsurprising that DMA actually struggled to fit the code onto the cartridge, as Innes recalls: "There was something like 4 bytes free at the end of it all."

During development, Innes discovered that the DMA team had inadvertently created a rather unique and robust copy protection system, the effects of which are still being felt today. "Instead of burning EEPROMs for our test cartridges, we used to use a disc copy device because it was so much faster," he remembers. "On one occasion, we sent one of these images off to Nintendo so they could see our progress, but it didn't work. After some investigation it turned out that we had accidentally stumbled upon a method to determine whether the game was running off a proper cartridge, as opposed to some other device. I used this information to implement an anti-piracy measure that was so successful that this is the only game I've had real trouble getting to run on an emulator."

Some other aspects of *Unirally*'s development were equally unexpected and yet endlessly amusing. "I remember writing the swearword censor for the player names so that people couldn't put offensive stuff on in-store demo copies," continues Innes. "I sent an email round the team requesting offensive word lists and got a few back that I hadn't heard before. Martin Good - who worked on the animations - was particularly helpful in this regard, submitting some of the most awful words that I have been trying to forget ever since."

The negative perceptions expressed by some when the game was first showcased were soundly put to rest when *Unirally* eventually arrived at retail. As the team at DMA had hoped, it was rightly recognised as an exhilarating combination

of speed and stunt work, pre-dating the delicious trick-based mechanics of *Tony Hawk's Pro Skater* by some margin. Reviews were almost unanimously ecstatic and the long-term success of the title seemed assured. However, ominous rumblings were emanating from the offices of Pixar Animation Studios, producers of Disney-marketed hits such as *Toy Story* and *The Incredibles*. Although back then the company had yet to achieve the worldwide fame they now enjoy, they were still brave enough to take Nintendo on over what they perceived to be wholesale theft of one of their ideas.

The problem centred on the Pixar animated short *Red's Dream* - produced in 1987 - which featured a cute little unicycle not entirely dissimilar to the ones seen in *Unirally*. Pixar accused DMA of copying the idea and promptly sued. Although the DMA team were obviously aware of the short film, plagiarism is something that Dailly refutes to this day: "We modelled the unicycle exactly, based on a real life unicycle. The problem with Pixar was that they seemed to think that any computer-generated

unicycle was owned by them. They took footage from *Red's Dream* and compared it to *Unirally* and the unicycles were virtually the same. This isn't a big surprise as there are not a lot of ways you can bring life to a unicycle without looking like the one Pixar did. The judge [...] agreed. While it was a unicycle, and did look similar, I think he should have looked at the game as a whole. If he had, then he would have noticed that the game was a completely different environment, and the 'character' of the unicycle just wasn't the same."

With the court case lost, Nintendo had to stop production of further *Unirally* cartridges. "The deal was that Nintendo wouldn't make any more carts so *Unirally* only sold the 300,000 initial run," remembers Dailly. What could have been a promising franchise

was stopped in its tracks. "I do recall some speculation about a 3D version," comments Innes. "But that was more of a thought experiment as to how it would be implemented, I don't think there was every any serious consideration. Of course, any thought of a sequel was quashed by the whole Pixar affair." Dailly is still clearly bemused by the whole scenario. "It would be like someone making a game about a

pen, and Biro claiming ownership over anything to do with pens. At the end of the day, we modelled a real unicycle and it came out the way it did." Interestingly, *Unirally* has recently been earmarked for release on Nintendo Wii's Virtual Console download service. Perhaps the passage of time has softened Pixar's resolve to see the game buried forever, but whatever the outcome it's high time that this tragically neglected game - an unfortunate and undeserving victim of corporate pettiness - is given a new lease of life.



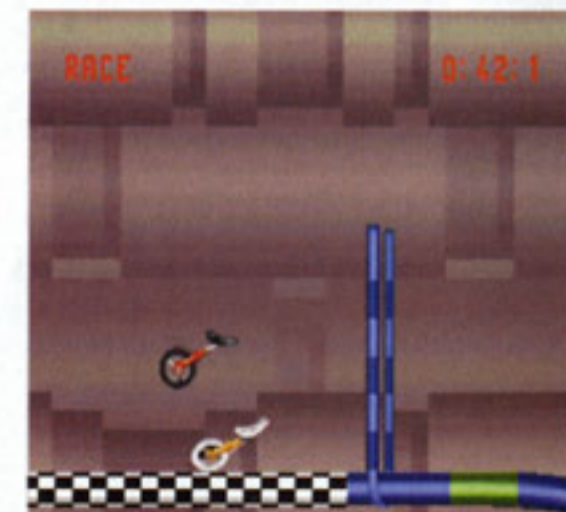
PROGRAMMER Mike Dailly



ARTIST Robbie Graham

Manual Dexterity

ONE OF THE most memorable aspects of *Unirally* was undoubtedly the innovative user manual. Penned by DMA Design's in-house writer, Steve Hammond, the booklet was refreshingly irreverent and zany, standing in stark contrast to the sanitised instruction manuals of the era. "We were all surprised that Nintendo went for it," Hammond admits. "It wasn't like any of the other manuals out there and I was pleased that this got recognised at the time. I'm not entirely certain where the style came from, though my own sense of humour was pretty dry and sarcastic. Of course, I had to do that while also conveying useful information." Despite his work being admired by many gamers, Hammond found it easy to keep his feet firmly on the ground. "My total royalty cheques for *Unirally* amounted to something like 17 quid. I think I bought pizza. The pioneers of the videogame industry bought Ferraris and swimming pools with the proceeds of their games. I bought ham and pineapple toppings with extra barbecue sauce on a crispy base."



Still screenshots don't really do this game justice - the speed is nothing short of incredible.