

PC Zone Interview with Ian Bell

Date: Wed, 5 Jun 2002 20:15 +0100 (BST)
From: ian@bell@clara.co.uk (Ian Bell)
Subject: Re: PC Zone magazine
To: onlineeditor@pczone.co.uk

What came first, the partnership or the idea? How did the idea for Elite come about and how did you and David Braben meet?

The idea was sort of around and obvious in our circle. David was developing 3D graphics on an Acorn Atom. Peter Irvin who had just written 2D spacegame "Starship Command" was talking about writing a 3D one. I met David at dinner at Jesus College as undergraduates.

How did you get into games development and what had you worked on prior to Elite?

I wrote games as a hobby on a range of early machines. First published game was "Reversi", the "Free Fall".

Do you consider the period you were developing Elite a special time, or was it a complete nightmare?

It was fun. I was in the first and second years of a maths degree and in the first year particularly i was keeping up with the work really easily so had plenty of free time.

Did you ever think, either before or during development, that you might have bitten off more than you could chew?

No. Once feasibility of graphics was established it all went fairly well. The problem was having too little room to do what we wanted, not that what we wanted was too hard,

Today's games go through a lengthy pre-production and design process before work is done on programming. How different was it back in 1983/84 - did you just get stuck in and hope for the best?

Yes. We discussed and planned a little but pretty much just wrote the code.

How long did it take to complete Elite and what were the milestones you reached along the way?

Getting some ships rotating and flying was the prime milestone. After that, things just slotted in.

What influenced you more in those early days; other games, sci-fi films/books, or the technical challenge? How many times did you watch Hitchhikers and 2001: Space Odyssey during development?

I can't remember listening to HHGTTG or seeing 2001 during development but they were certainly influences. I read Larry Niven, Harry Harrison and Keith Laumer as a kid.

Developing a freeform game is pretty radical these days, more so back in 1983/84? Why did you go down such a route - what was wrong with another Defender clone?

Clones are boring.

It's hard to imagine fitting such a game into just a few KB of memory? What were the technical difficulties you faced and how easy was it to overcome them?

It was lack of RAM all the way. It was the cassette version that was hard, the BBC disk version had bags of room in comparison. I would have been possible to do a complete rewrite and save a lot of memory but that would have taken too long so we had to refine endlessly on a small scale. Wasting hours staring at code trying to find byte savings. It meant the code was pretty sound though.

At the time only text adventures boasted the same depth of backstory. How did the idea for the story, The Dark Wheel, come about? What involvement did you have with the story and how important do you think it was to the success of the game?

I think it helped the game, but the game would have been big without it. Rob pretty much did his own thing with "Dark Wheel". Acornsoft commissioned him, a novella was their idea. I mentioned to Rob that I usually found the grizzled veteran guiding the novice heroes far more interesting than the heroes themselves in such works.

Even the manual was quite radical. How did Robert Holdstock become involved and did he have any influence on the actual game? [[I don't suppose you have Robert Holdstock's email address?]]

I can't remember him having any influence on the core game. Some of the stuff added to Disk Elite attempted to implement his fiction but not very much. "Rock hermits" - ships hidden inside asteroids - was a very nice idea, since it slotted into the framework so well, and that came from him.

Did you consider Elite to be ground-breaking while you were working on it?

Yes.

How do you view the game today? Are you proud or do you ever wish people would just shut up about it and let you get on with new projects?

I'm proud of it. I like hearing how much of an effect it had on people's lives. That's partly why I'm so concerned about modern adrenaline snuff fest computer games. Games effect kids' minds.

What do you wish you had been able to include in the original game that had to be removed during development?

Nothing had to be removed during development that I can recall. Everything survived into the disk version that we wanted to keep. I was sad to have no mining and so few ships in the cassette version and in my view the secret missions, though few, did round the disk version out nicely. There was no music in the BBC versions of course but users can usually choose their own music.

What input did you have on the various conversions that were made? What was your favourite version and why?

I had very little input on the conversions we did not do ourselves. My favourite version is NES Elite. I like the icon strip control replacing the keyboard. It was finely polished and technically by far the most challenging hardware.

How do you view the PC version of Elite? What was your particular role on that particular version and how do you think it stands against the others, gameplay-wise?

We were not involved, which was probably a mistake. At the time I felt that such a game was bound to be implementable easily on such powerful machines and it would be best to just let the programmers who know the machine get the most from it. I've not played PC Elite much. I don't like playing other people's conversions. It's a real pity the first PC version wasn't speed governed. I don't really want to get into comparing the conversions. With my website I've tried to keep every version available via emulation so people can pick their own favourite and recapture their own childhood.

Why is it, do you think, that no-one has managed to better Elite? What games today would you consider to be closest in spirit to the game and what space combat/trading games are you a fan of or are looking forward to?

I've not looked at games much and certainly no space games except just recently when I checked out the demo for Iwar and thought it was somewhat lacking. Why has no one bettered it? Because good game design is not easy I suspect. Perhaps the companies concerned should have spent less money on pregen videos and employed me as a gameplay consultant.

Space combat games are dying breed these days. Why do you think this is and where do you think the future for the genre lies?

It has a future definitely. There are attractors out there in gamespace waiting to be found. I think publishers are locked into a market dynamic that is more likely to produce dross than quality. Breakthroughs need vision and vision is seldom quantifiable. It's a matter of faith, not greed. There is a certain moral responsibility of organisations with high capital to speculate on blue skies stuff – because if they don't who will? - but they seldom do. Society only really works if people seek to contribute to it rather than just seeking to benefit /from/ it.

How did you feel when Elite was finished; tired, depressed, elated.? Did you have any idea about this monster you created?

It was never really finished because one version followed another. Publication was a worry because that was the big responsibility to provide final bugfree code. Which we didn't because the first disk release had asteroids disabled [my bug] and consequently more traders.

When did you find out about how successful the game was? How did you feel about that? What was the feedback like at the time?

The reviews were all ecstatic so we knew we'd made it creatively, which was important to us. We were very pleased to have made so much money so quickly, though by today's standards it was modest wealth. Feedback was almost all positive apart from some maliciously gleeful crackers. Some people objected to the unrealism of dust-not-stars and massively fast planet rotations but that didn't bother me at all since i knew realism would have played worse.

After Elite, how difficult was it for you - creatively - to pick yourself up and get on with a sequel? Did you even want to do a sequel?

Oh yes. We were fully underway on 6502 Elite 2 and contrary to recent public allegations by certain parties i put a lot of work into that. Only when it became clear that 6502 was not the future and we had to jump to 68000 did I bail.

You've had a very public bust-up with Davidsince, but looking back do you think that without the other, Elite would have ever been the game that it was? What was it that you both brought to the project that made it special? What were your respective strengths and weaknesses and the roles that you each had?

David was a competent and industrious coder. He was also more "business minded" as the saying goes. We were both creative individuals and both became expert in BBC 6502. He was coming at programming from an electronics direction and was stronger on hardware issues. I came at it from a mathematical direction and handled most of the speed critical stuff.

What one aesthetic or technical achievement in Elite are you most proud of?

NES Elite's selftiming productive code and other mechanisms to provide vector graphics on a sprite machine is my favourite code achievement. Aesthetically, the BBC Elite rotating Cobra III title page. That one image defined the game for me.

How do you view the subsequent Elite sequels?

I've not played them. What i've heard is not good, though i respect the attempt to simulate the real physical universe i think it was a mistake.

What have you been up to since Elite (it's been a while, I know)? What was the brief for Elite Plus and what was your input as to it's design? Is there anything you'd like to have added but couldn't? Where there any technical difficulties working on Elite Plus? How do you view Elite Plus today and the Elite series as a whole?

See above re PC Elite.

Why is it, do you think, that no-one has managed to better Elite? What games today would you consider to be closest in spirit to the game and what space combat/trading games are you a fan of or are looking forward to?

Why has no one bettered it? I don't know because given the resources others have, i am sure *i* could. It may be the publisher dynamic i mentioned previously. I don't follow the genre at all beyond checking out the unofficial Elite versions. I want to keep a clear perspective incase i do a follow up space game.

ian b - www.ibell.co.uk

Bits Interview with Ian Bell + David Braben

<http://www.channel4.com/bits/bitslater35elite1.htm>
webposted 21/12/00

Is it possible to blow up a space station?
(Andrew Brain)

David Braben: No. It would have had too many repercussions in the game – but it would also have taken more memory!

Ian Bell: The intention was to disallow it and I think it **was** impossible on the 6502 versions. Bugs may exist in other versions.

**Just how in Sam Hill did you manage to cram an entire universe in to the archaic, 64K, claustrophobic cubbyhole that was the BBC model B!?!
(Rob)**

DB: The BBC only had 32K, and 16K of that was normally needed for the screen. We designed a special screen mode for "Elite" that only used 10K, so we had a massive 22K to play with. The game was written in assembly language (which is much more efficient than today's C++). Also the galaxies were not stored, they were generated from 'pseudo random' data. There's more info on this on our website.

IB: There was 32K available for the cassette version, and 6K of that went for screenmap. As is now widely known, the game universe was generated from simple rules applied to a single seed value rather than stored. We spent a lot of time compacting the code.

If you achieved the ranking of Elite you got a code that you sent off the makers of the game. How many players do you know of reached Elite status?

DB: Huge numbers. In the office in which they were being dealt with, the postcard competition entry forms were mostly from people who had reached 'Elite', and they were piled high to the ceiling all around the room, but I don't know the figures.

IB: I don't know how many reached Elite. If I can find out I'll add this to the FAQ on my Elite website at www.ibell.co.uk/elite.

**In the manuals, it mentioned Generation or Sleeper ships traveling between the stars. Was this just a wind up or where there actual ships in the game?
(Jon Lunn)**

DB: The manual and stories (written by Rob Holdstock) did a lot of scene-setting that was independent of the game, and it did mention Generation Ships, Rock Hermits and a few other things. We added Rock Hermits to some of the later versions, but Generation Ships never existed.

IB: Tall tales in the playground were/are part of the game's mystique. The answer to your question is "Yes".

Will we see Elite on a mobile phone in the near future?

DB: You never know!

IB: I hope so.

Do you play many modern games? And if so, what is your favourite? Do you have a vast collection of every space sim and subconsciously rate it against Elite?

DB: I do tend to look at other space sims, and I suppose can't avoid comparing them against the Elite series. I do play modern games, but I find the majority not to be very compelling. Some games are great in multi-player, but the last game I really enjoyed and spent many hours on was Zelda.

IB: No. The last game I played was Doom. I don't keep track of the spacesim genre.

Do you look at the many Elite related sites out there? If so do you have any favourites?
(Matt Dibb)

DB: I do occasionally read (and post) to alt.fan.elite – the USENET newsgroup, and recognise Matt's name from there. It is great to see all the Elite and Frontier sites that people have lovingly crafted.

IB: I browse them sometimes. I prefer the pure Elite sites without Frontier elements.

When the game originally came out on Acornsoft it appeared to be the bastard child of two earlier hits on the label - David's earlier Starship Command (The energy bank system is similar) and Geoff "GP3" Crammond's wireframe Spitfire sim The Aviator. Come on, admit it - was Geoff's game at least a partial inspiration for Elite 1.0?
(Mike Auber)

DB: "Starship Command" was written by Peter Irvin, not myself, and "Elite" was largely complete when I first saw "Aviator". I don't think the "Starship Command" energy bank system was particularly inspirational – it is only a bar graph, after all, and I used a similar system in my 3D space game "Fighter" – a precursor to "Elite" – before "Starship Command" was written. The explosions in "Starship Command" were definitely inspirational, though, as was the very important idea of only having 256 pixels across the render area to make rendering faster – though we did take this a step further by reprogramming the display.

IB: "Starship Command" was by Peter Irvin. An artful game that I played a lot. I was aware of the strong energy bar similarity but it was the best way on that machine to convey an energy level. We first saw Aviator when Elite was nearing completion, it in no way "inspired" Elite.

Do you think that it would still be possible for just two people to create a hit game?

DB: Yes, "Rollercoaster Tycoon", written by Chris Sawyer together with a graphics artist was the best selling game in the USA in 1999.

IB: Yes. If they take a road less trodden.

Are the best games ones that have an element of depth to them?

DB: I think depth is important, but 'best' is very much a personal, subjective thing. It is usually the intangible properties of a game that make it appeal to me I think, and a consistent immersive world is what is needed to draw me in, at least. This is why I liked Zelda.

IB: "Best" is subjective. I think depth is important, but many deeply superficial things are extremely popular so perhaps I'm mistaken.

To you ever think that you could top Elite?

DB:
Yes.

IB: That's the plan.

Why do you think that Elite is the only old game that ranks alongside very recent releases like Final Fantasy VII and Zelda 64?

DB: "Elite" has a place in people's hearts, as I think it was the first game that people played continuously for a long period of time; it was the first game where you could identify with your character. It was one of the first to use saved positions to preserve your character over a long period of time, and it was perhaps the first game not to have a score.

IB: A good 3D combat system combined with a core simplicity of design.

Looking back, was Elite the future of computer games?

DB: Very definitely yes. Interestingly it was a hard game to get published. We were told by, for example Thorn EMI, that they were not interested as people wanted a game that typically took 3 minutes to play through, that had a score, that had multiple lives. They thought people would not be bothered with saved positions, that the game was far too complicated – but these turned out to be its strengths.

IB: No. It broke new ground is all. We don't yet know the future of computer games.

How would the game have been different without the technical limitations of the time?

DB: A difficult question. Clearly it would have had more content, more missions, better graphics – the list is endless – indeed the development may have been endless. 'More' is not always a good thing, so it is difficult to say. A more important issue is what would the competition have been like – and would the game have stood out so well if the competition also was without technical limitations?

IB: That is impossible to say. The technical limitations defined it.

How do you still rate Elite and are you bored of talking about it?

DB: I think "Elite" has stood the test of time, particularly as it was so different to its contemporaries. There is a factor which irritates me sometimes, though. Many people recount features of "Frontier" (the first sequel to "Elite") and describe them as coming from "Elite" – the criminal records, for example. One magazine last year (I think) even had a picture of "Frontier" captioned as if it was from "Elite", but I suppose it is no big deal! The basic concept behind the "Elite" series of games is sound, and we are working on a further sequel at the moment, so no, I'm not bored of "Elite"!

IB: I'm not familiar enough with modern games to rate it comparatively. If it does stand up that's as much an indictment of modern game design as it is testament to our work. I'm not bored of talking about it. It seems to have given a lot of people a lot of pleasure and that's what game design is all about.

Bits would like to thank David and Ian for their kind support for this interview.