



James Hannigan

Music for the games market has progressed dramatically in complexity and has even pioneered techniques that have trickled down to other disciplines. **KEVIN HILTON** talks to James Hannigan about the benefits of a musical education, the differences between film and games, his equipment preferences and why, even in a technology-led field such as games, the equipment should never take over.

THE COMPUTER GAMES industry is now such a massive moneymaking business that it has managed to shake off the image from its early days of being dominated by nerds and obsessives. Despite this, the perception remains that few serious artists would want to become involved with something as frivolous as games. Composer James Hannigan is an example of a serious minded professional who not only continues to work in the sector but who is also helping to develop new techniques and push music for computer games beyond being just a disposable background element.

During the early 1990s Hannigan wrote music for a variety of media but became increasingly interested in the potential of interactive entertainment. He began composing for games while still at university and broke his studies to work full time at Electronic Arts. This was in 1995, when digital audio for games was still in its infancy. In 1997 Hannigan returned to freelance work, which included a flirtation with sound design for film. This earned him a 1999 Golden Reel Award nomination for his work on *Lost in Space* but even so he turned his attention back to games.

Since then Hannigan has formed his own production company, Post Linear Creations, and last year received a BAFTA Games Award nomination for the music on

Republic: The Revolution. Working out of an office/studio suite at Pinewood Studios in Buckinghamshire, Hannigan is currently composing music for the game spin-off from the upcoming *Catwoman* film, which is a joint production between Warner Bros and EA. Aside from his practical composition work, Hannigan is writing a series of articles on music for games with Stephen Deutsch, professor of music design at Bournemouth University and head music tutor at the National Film and Television School.

You started out studying music in a formal environment. Was this a good grounding for writing for the games industry, which has the image of being informal and unconventional?

It was useful up to a point to have a basic rudimentary background in music but I am a believer in not doing what everyone else is doing. A good music education enables you to work with other people but the textbook side might not ultimately be that useful. That's maybe because there is very little in music that doesn't happen as part of an industry and you need to realise that if you are going to make a living in music. Music changed during the last century: we saw more use of technology and less use of traditional skills relating to musical notation.

What were the advantages of going to work full time at Electronic Arts, rather than freelancing and remaining independent at the beginning of your career?

It was important because I was thrown into an office environment and was creating music that I wouldn't have necessarily listened to for enjoyment. There was a house approach and I had to work to the same rules as anyone else there. As a games composer you're something of a jack of all trades, working in any style that fits the project. In recent times we've seen the use of freelance composers has crept into the business but whatever their status, people are chosen because they are good. It's a competitive business but there is the opportunity for people to establish their own style and sound. Despite that, games composers are still a little anonymous and are expected to do what they're given. I've found that I have had to develop a certain discipline — not just working to deadlines but also working with styles that I had little interest in.

Did your time at EA give you an introduction to working in a recording studio?

Being in a studio environment means that you have access to technology that you wouldn't have had. Even if the equipment I've been working with has

been minimal I've still been encountering engineers on a day to day basis and that keeps you in touch with what is going on.

How is the studio you now work in equipped?

It's fairly minimal in terms of recording. I inherited two rooms from Richard [Joseph] that were concrete shells but they gave us an environment in which to work for our day to day needs. If I need to record anything that is more sophisticated or involved or to mix tracks, I'll go to a commercial studio and work with an engineer. But I have enough technology at Pinewood to get to a certain point and the experience I've gained as something of a jack of all trades has helped.

When I was at EA I used Pro Tools and we went through every version of it during my time there. Because so much of games development is PC-based it seemed sensible to use the PC as my platform. I'm not into the PC versus Mac debate; I see technology as a means to an end. The technology should be the servant to the creative. I used Nuendo for a while and Cubase SX has been very useful, as it is totally PC and MIDI, almost a one-stop system for music. I like Vegas as well; it's very democratic in the way you can mix and match. As far as hardware is concerned I like the openendedness of the PC platform. With so much recorded music going into the system I don't need the facilities of higher-end track-laying tools. And because I'm only working with music and am not concerned with sound effects, I can create a sophisticated enough mix within the PC most of the time.

What equipment do you have working with the PC?

I have an O2R for inputs and mixing and some bits and pieces of outboard gear, although that side of things is slowly becoming more and more PC-based. I've kept three Kurzweil K2500s, with the big inboard unit as the controller working with two rack-mounted units. A reason I still use the K2500s is that they have wonderful DSP.

Even though I am more PC-based these days I don't like to do everything on the computer, so I have some other sound sources. What I can do now, because of hard disk, is use many sources, which is not so easy



Images Courtesy Elixir Studios/Eidos

James Hannigan began formal music studies at university but decided that the amount of the work he was doing for music libraries was at odds with the course. He dropped out of college in 1995 to take a job as an in-house composer at games giant Electronic Arts and stayed with the company for around two years. From there he went freelance, joining former EA colleague Richard Joseph at his office and studio suite at Pinewood film studios. When Joseph took a full-time job at Elixir Studios, Hannigan stayed on at Pinewood and from there has scored and recorded music for numerous games for different publishers. Among his credits are Freelancer, Brute Force (both Digital Anvil/Microsoft), Grand Prix 4 (Infogames) and Theme Park World/Sim Theme Park (Bullfrog Productions), for which he, Richard Joseph and Nick Laviers of EA won a BAFTA Games Award for music in 2000.

to do in an analogue environment. I've got a Wardorf Microwave XT analogue outboard sampler, an Eventide DSP4000 signal processor and a few obscure mono synthesisers.

In what circumstances do you go to outside facilities?

I tend to go to studios when I need to record natural sounds, which I don't record here. Among the studios I use are Angel and AIR and I've worked with

orchestras at studios in Eastern Europe. That's where we see the other side of the games industry. In general, budgets for music are not tremendously high, so you have to look for the cheaper options, but for some games, particularly the movie licences like Harry Potter and James Bond, the money is there to record very good orchestras.

What is your approach to music for games?

I try to keep the sound organic and transparent. If you look at any music that lasts the test of time, it isn't reliant on technology. Technology is a vehicle and I tend to steer clear of technology-based music. There is a danger for any technology-based industry to max out on the technical side of things and as a result what is made with it becomes stale after a few years. I think that can be seen in films with effects made using CGI (computer generated imagery). They can look silly, so what are you left with? It's the same with music. In the 1980s so much was made using the Yamaha DX7 and it soon started to sound dated. It's not good to give music that kind of identity. We should use technology but keep the music as natural sounding as possible. I don't want people to hear my music and think they are saying, 'I like that sound sweep.'

I've nothing against music technology but I don't want to draw attention to it. In my case it's more difficult because games are driven by technology. When digital audio came into the field we had the opportunity to play anything back and get away from relying on basic loops. But the ability to stream became something of a novelty as it gave the opportunity to play back the most grandiose themes. The games industry is just about coming through that now. They've done the big orchestral thing, with 120 players in a recording studio making soundtracks for top-end games, and now there is a more considered approach.

How important is surround sound to a games soundtrack?

It's another selling point and we've been through the same over-the-top stage with it as we did with music playback in general. It has to be regarded as an art form. There is a parallel with what is happening in the games market now and what went on with films during the 1940s. At that time the film industry had sound and they learned they had to think about how music and sound function with the pictures, rather than just blowing people away. At one time music would run through almost the whole of a film, without any real relation to what was happening on screen. That happened because sound and music in movies were still a novelty at one time.

I see the development of games music in the same way. There has been the assumption that anything that works in films will work in games. It does for a while but people want to move beyond what is the norm. It's a question of imagination. If you're too wrapped up in the technology, you won't see the bigger picture. The production tools and techniques of track-laying that we've been using were imported from music recording and the film business. But sound for albums and film is linear, the composer is creating a coherent piece of work. It is hard to say there is a distinct line between the sound design and the music in films. That's a requirement of the medium: the music doesn't have to be continuous. This goes against the way games work because games are not linear. Because of that, games were more reliant

on techniques like looping. In the future we'll probably see new tools designed specifically for the games medium but for the time being we have to use what is available in a new way.

Are there any projects you've worked on where you managed to develop new techniques from old?

Republic: the Revolution [a power building game published by Eidos and developed by Elixir Studios] came out very interesting in the music sense. I was able to work with the programmers at Elixir to create a unique playback system that was an automated means of triggering music and deciding what to play back. A lot of music in games tends to be disconnected from what is going on, so I worked with the programmer to create different layers of music. The music changes depending on how well the player is doing. If they achieve a certain goal, the music reflects that. The aim of the game is rise to power and I wanted the music to play a narrative role in that.

Republic is what is known as a God game, in that the players are creating a narrative for themselves and they are part of an unfolding story. Because of that the music has a very different function; it participates in the play and different sequences are triggered by different events. The demands on writing music for games change in relation to the way the game itself is written. One can't write very long phrases for games, or at least it can't be done easily. It's more about the transitions and what happens in between. What that forces you to do is think about music in more sonic terms, not in terms of harmonic progressions.

We're now seeing a move away from relying so heavily on loops. The use of loops probably did come about through the development of music and sound for games, during the days of early synthesizers. Looping is a technique to extend music indefinitely and I'm fairly sure its use filtered into other forms of music from games. Now the industry is trying to move away from loops because it obviously isn't the best way to extend pieces of music.

Now the move is towards having different versions of a piece that are spliced randomly into the soundtrack. The aim is to create enough variations without the music becoming repetitive. Most people play a game for a few hours at a time, so as a composer I have to work with the programmer to come up with the best way to arrange the content. ■

