



Recording Fantasia 2000

Sixty years after Disney's most controversial cartoon made it onto the big screen, the studio has released the long overdue follow-up. Richard Buskin talks with some of the key figures in the recording and post production processes.

Fantasia, Walt Disney's eight-part fusion of music and animation, has always divided opinion. Premiering in 1940, the initially disappointing box office returns appeared to confirm that the general public were just as disinterested as the music buffs – who found images of hippos and alligators dancing along to classical works vulgar and tawdry. Performed by the Philadelphia Orchestra and conducted by Leopold Stokowski, the music was also edited down in order to match the popular entertainment medium – thus further alienating the purists. Nevertheless, many of the sequences – notably *The Sorcerer's Apprentice* (starring Mickey Mouse) – have gained popularity with age, while the film itself was also notable for its innovative use of multi-channel stereophonic sound.

At the time, Disney envisaged his classical spectacular as a permanent work-in-progress – with each successive re-release it would combine some new sequences with a few old favourites. However, perhaps due to the mixed reception, this never happened. In fact, it was more than half a century later that Walt's nephew, Roy E. Disney, would initiate a sequel. At that point, during the early 1990s, the concept was to retain *The Sorcerer's Apprentice*, *Nutcracker* and *Dance of the Hours*, and devise several new sequences. Numerous ideas were considered, most were discarded, but in the summer of 1993, under the auspices of the film's producer, Don Ernst, the formula was put in place. And, after settling upon the peerless combination of maestro James Levine conducting the Chicago Symphony Orchestra with Jay Saks as producer, work began on Ottorino Respighi's *Pines of Rome*.

Hendel Butoy was to direct the animation while the music was recorded at Chicago's oversized, but acoustically rewarding, Medina Temple.

Throughout the rest of the decade, as digital technology evolved from 16- to 24-bit, more and more new sequences were devised. *Nutcracker* and *Dance of the Hours* were discarded, and the feature took on the working title of *Fantasia '97*... which, in light of its current name, gives you some idea as to how much overschedule this project eventually ran. Indeed, the animated realisation of George Gershwin's *Rhapsody in Blue*, which had originally been conceived as a totally independent Disney short, was incorporated into the film as late as 1998.

As for *The Sorcerer's Apprentice*, the original tracks had been transferred from optical to four-track mag tape during the early '50s, and it was this which engineers at Sony in New York had to work with. Given the sonic noise treatment, the tracks were basically put in alignment as much as possible in order to eliminate the inherent phasiness. Consequently, while this segment is audibly not cut from the same cloth as the rest of the picture, it still stands up as one of the stronger pieces.

So, was it all worth it? In a word, yes. Once again the classical pieces have been edited down, and, as with the predecessor, the marrying of music and animated images is sometimes perplexing, but more often endearing. Overall, *Fantasia 2000* is first-rate entertainment. What's more, in keeping with Disney's nose for innovation, *Fantasia 2000* has been released in I-MAX six-channel surround – the first animated feature to do so. The I-MAX version provides the eclectic imagery with (quite literally) more depth than ever before. Some classical aficionados may echo the stuffy opinions of their own predecessors, yet this film is a worthy successor to what is now widely regarded as a groundbreaking movie.

Jay Saks – Music Producer

A record producer ordinarily helps to arrange the music and attempts to coax the best performance out of the artist, but in the case of classical recordings much of this work is taken care of by the conductor. Therefore, the producer largely serves as a second pair of ears to monitor everything that is going on, and this, for the most part, was the role fulfilled by Jay Saks in conjunction with maestro James Levine for *Fantasia 2000*.

Jay Saks: “Theoretically, you wouldn’t need a producer if the players sat down, performed one take through from start to end, and it was perfect. However, that just never happens. There again, another reason for my involvement was because there would be a room full of people from Disney in various capacities, and rather than have half a dozen of them trying to communicate with the conductor all at once – and not speaking the classical music lingo – they often need somebody to act as their interpreter and go-between.

“Right from the start the Disney people knew that this was going to be a long-term project, but I don’t think they ever knew that it was going to be this long-term. Our original release date was specified as 1996, and then it crept later and later. Pieces were added and subtracted as we went along, and recording sessions were scheduled intermittently between 1993 and 1997. These sessions were pretty straightforward. Levine knew very clearly what the animators wanted – they had shown him all of the storyboards and he therefore knew the purpose of each piece of music and how it fit into the film.

“The musicians, on the other hand, weren’t probably as aware of all that. Occasionally, Levine would mention the animators vision to them if he thought it would enhance their performance of a certain section, but I’m sure none of the musicians had the slightest notion that *Pines of Rome* would be about whales! You know, these musicians are notoriously hard-boiled. They have a standard they want to uphold, they don’t tolerate fools, and they all feel very dignified and so on. But, at the same time, I think they were also very conscious of their contribution to what could be an historic film. For them it all comes down to ‘should we do it fast or slow, loud or soft?’ and ‘Can I phrase it this way?’, without so much knowing that Mickey Mouse is going to grin or the whale is going to break through the ice at that point. They just played the tunes, so to speak, and they played them very well.”

Shawn Murphy – Music Recording Engineer

In addition to recording the music, Murphy made the final mix for film and CD, and then handed the results over to head re-recording mixer Terry Porter for integration with the interstitial material.

Shawn Murphy: “In terms of the technology, we actually thought ahead a little bit. During the time that we started making the recordings, Sony Classical in New York had a system of bit-splitting to acquire firstly 20-bit and then 24-bit resolution on a multitrack machine. I’d already used that system on some recordings that I had done for them, and so I asked them if it would be possible to utilise it for *Fantasia*, and they said, ‘Okay’. Originally it was only eight tracks of bit-splits, so eight tracks wound up taking 16 tracks of a Sony 3348, and we therefore had 40 tracks available to us – 32 16-bit tracks and eight 20-bit tracks on the first few sessions, and then 24-bit tracks later on. As a result, all of our main mics – which is really the bulk of what you hear – are all 20- or 24-bit original material. It was just one of those happy events that we were able to get a high resolution system together that early, because that was quite some time before any normal bit-splitter or hardware existed anywhere in the world.”

Another consideration was the ability, following Jay Saks’ and Ken Hahn’s own editorial work, to put things in a format that would facilitate the remixing and dubbing of the musical material further down the road.

Shawn Murphy: “Even in ‘93 and ‘94 we didn’t know what the release format would be. It was prior to SDDS, Dolby Digital was still in its infancy, and DTS had just come in with Jurassic Park. So, we knew it was probably going to be a 5.1 mix, whereas the I-MAX thing of course came in very late and we didn’t really make much allowance for that. Had I known about I-MAX a lot earlier I don’t think the main pick-up would have been much different, but I probably would have asked for some additional isolation on things which, at least on the storyboards, were looking to have height information.”

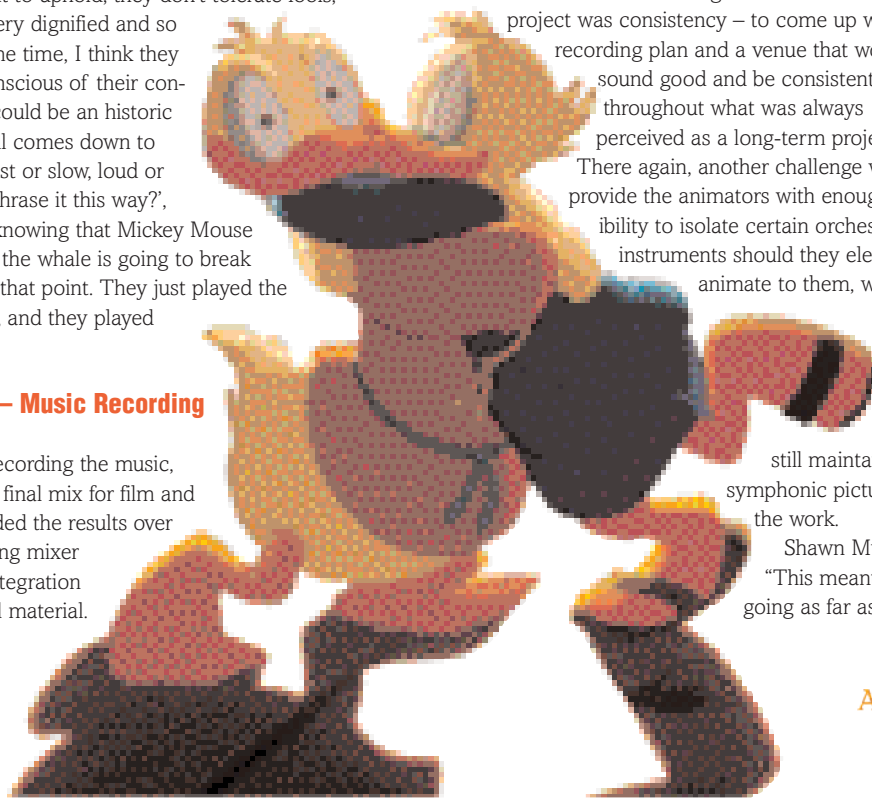
(This being due to the fact that the principal sonic difference between I-MAX and 5.1 is the addition of a top speaker, often referred to as the ‘Voice of God’.)

One of the other main challenges of the *Fantasia 2000* project was consistency – to come up with a recording plan and a venue that would sound good and be consistent throughout what was always perceived as a long-term project.

There again, another challenge was to provide the animators with enough flexibility to isolate certain orchestral instruments should they elect to animate to them, while

still maintaining a symphonic picture of the work.

Shawn Murphy: “This meant not going as far as the



The Running Order

1) Ludwig Van Beethoven's Symphony No.5, directed by Pixote Hunt, is set to abstract images of butterflies dancing.

2) Ottorino Respighi's Pines of Rome, directed by Hendel Butoy, is somewhat confusingly matched with flying whales.

3) George Gershwin's Rhapsody in Blue, directed by Eric Goldberg, is set in jazz age Manhattan and utilises the linear style of legendary caricaturist, Al Hirschfield.

4) Dmitri Shostakovich's Piano Concerto No.2, Allegro, Opus 102 ('The Tin Soldier'), directed by Hendel Butoy, draws inspiration from sketches created in the 1940s by a Disney story artist who was working on an adaptation of a Hans Christian Andersen fairytale.

5) Camille Saint-Saën's Carnival of the Animals Finale, directed by Eric Goldberg, attempts to answer the age-old question, 'What would happen if you gave a yo-yo to a bunch of flamingos?'

6) Paul Dukas' The Sorcerer's Apprentice, as directed by James Algar, was the genesis for the original Fantasia back in 1937.

7) Sir Edward Elgar's Pomp and Circumstance – Marches No. 1, 2, 3 & 4, directed by Francis Glevas, provides accompaniment to Donald Duck as he assists Noah in leading animal couples onto the ark, only to panic when he becomes separated from his own better half, Daisy.

8) Igor Stravinsky's Firebird Suite – 1919 Version, directed by Paul and Gaëtan Brizzi, has its theme of death and rebirth somewhat puzzlingly represented by an elk and sprite who revitalise a forest after it is ravaged by fire.

The guest stars who introduce

original Fantasia in terms of instrument isolation, but to just have the ability – through careful seating and placement – to emphasise things if need be.

"Knowing we were going to be working long-term on this film, we did very careful paperwork right from the start. Our sampling rates were all 44.1k, based on NTSC video, and that was carried throughout the project on the mixdowns and so forth.

"The mic placement was very Decca tree-like. We had the standard spacing on Neumann M50s over the podium, about three-metre spacing on the outriggers, everything running at a height – depending on the piece – of between 10 to 11 feet. Very, very traditional, with a pair of surround mics up in the balconies."

Not so straightforward were recording sessions for the *Fantasia 2000* CD, which saw James Levine conducting the Philharmonia at Air Lyndhurst in London, when Abbey Road was unavailable.

Shawn Murphy: "Those were a struggle. The room was just much too small, about a third of the size of Abbey Road's Studio One. In one case we had as many as 118 musicians crammed into what I consider to be a 60-man room. I couldn't get anyone to adequately acknowledge that the acoustical energy we were generating in that close setting was not going to be a good thing, and sure enough I wound up having to use mostly close mics on those recordings. I really couldn't go to the room mics because there was just too much congestion and not the clarity that we would have liked. I objected all along – I objected to the size of the orchestra and I objected to the venue – but overall I have to say that the results weren't that bad."

Ken Hahn – Digital Editor

Ken Hahn is co-owner of Sync Sound, a high-end TV and film post facility in New York. Hahn manned the AMS Neve Logic II controls inside Studio B at Sync Sound for the 48-track to 48-track digital editing of the music.

Ken Hahn: "Our editing system is unique, in that it is all timecode based – we don't use the Sony system, it's one that we developed ourselves. We use Adam Smith synchronisers, but all of the front-end synchronising and editing is our own. The system produces an edit list that we can refer back to if anything needs to be redone or restructured. It transpired that with *Fantasia 2000* there were a number of times when people wanted to modify things, so it came in really handy.

"After Jay Saks had selected the best material for us to edit, we had a complete cast of





Theo Gluck: Director of Foreign Post Production

Disney animation directors, producers and animators here to verify that not only was the material musically correct but that it also worked for them. We were dealing with a couple of complete takes and a lot of pick-ups to make things more in line with the animators' vision, so it was very much a co-operative effort. Everything was so well planned – it had to be. So it really was a matter of executing the plan and working on things until we got them right.

“As for the 16-, 20- and 24-bit recordings, I would defy anyone to hear the difference. I know I would be hard pressed. Maybe in the right places, and only doing an A/B test, but you're not going to be sitting there saying, 'Oh yes, this is 16-bit, and this is 24-bit.

“Shawn Murphy made really dynamic, rich recordings, and so it was tremendous to be working with great music performed by the best musicians and captured with such wonderful sound.”

Theo Gluck – Director: Foreign Post-Production, Disney Character Voices International

Given that five-year-old kids don't cope too well with subtitles, all of Disney's classic animation films undergo foreign language dubbing for overseas territories. *Tarzan*, for example, was released in 33 different languages. *Fantasia 2000*, on the other hand, with its proportionally larger adult audience, has undergone more subtitling. Yet, even the highly specialised I-MAX version is being released in 14 different languages.

Theo Gluck: “In theory, aside from the dialogue, all audiences get the same thing. We strive to match all of the treatments for the dialogue

stem. On *Fantasia 2000* where the interstitial characters were dubbed for certain foreign territories, all of the mixing was done at Disney after we had consulted with [head re-recording mixer] Terry Porter about how he had treated the material on his own dialogue stem. In fact, as a reference, we also ran with a copy of Terry's dialogue stem directly from his master.”

Sound effects were kept to a bare minimum in *Fantasia 2000*, and played a minor role in Gluck's work this time around.

Theo Gluck: “This was not as complex as a normal feature. Our biggest concern was making sure that all of our transfers maintained the integrity of the music. With this in mind, we cloned off original masters and punched into the clones in order to keep the nuances and impact of the original mix both for the I-MAX release and the 35mm version.”

As usual, the foreign language dubs were all recorded in their respective territories with local artists under the auspices of Disney's regional representatives. Nevertheless, as seen and heard in the I-MAX version, these did present a somewhat unusual challenge.

Theo Gluck: “James Earl Jones is a wonderfully expressive man and he has an incredible speaking voice, but his very expressive mouth can be problematic when he's 20 feet tall and speaking Cantonese! Therefore, ensuring that everyone nailed their recordings in sync was one of the keys to making this project happen.”

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