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INTO THE WOODS

Tim Frost reviews the sound development for Stephen Sondheim's new musical

The new Steven Sondheim musical, 'Into the Woods' opened recently at the Pheonix Theatre. Having only ever been performed before in the US, the show in the UK is a totally new project with everyone from director to sound designers starting from scratch.

Instead of looking to see what was done to the sound, I decided to follow the sound designer and system suppliers, Autograph, through the project from start to finish. Over a period of five months tabs were kept on the way the sound was planned and put together, with all the changes, planned and unplanned, that occured.

May 1990 Mac Plans and Fighting for Position

One of the first appointments by the production team was Andrew Bruce as sound designer, and his first job was to go through the script with a fine tooth comb. Autograph co-director Julian Beech explained: "Once we know we are designing a show — in other words we have the contract — Andrew will plan the design to the point where it can be costed in terms of what we have to buy and rental costs. Then it goes back to the producer for a second contract negotiation which usually happens the following week." Once the costing has been agreed, Andrew Bruce verifies all the details of the project.

From the script, and by talking to the director, he gets a feel for the overall type of sound reinforcement needed — whether it is going to be heavy rock, or as with Into the Woods, a light touch, to aid clarity and allow the insertion of a large number of sound effects. To get an idea of the radio mic needs, he details every character, what they do and when they are on stage. He then looks at all the requirements for effects: what needs to be recorded, where special speakers have to be positioned, and so on. This is all in addition to the basic sound system design.

Having read the script, Bruce explained his impression of the show. "In Into the Woods Sondheim uses basically a chamber orchestra. His style is very intelligent and needs minimal reinforcement, and from that point of view it will not be difficult to run.

"The show interweaves various well-known fairy tales. In the first act everyone lives happily ever after, and in the second act it all goes wrong. The interesting aspect for the sound team is that this particular production relies heavily on sound effects. So you have effects that reinforce people's ideas of fairytales; harps that sing, giant's houses falling down, and birds that talk.

"I also work through the script to see how many characters there are and how many are on stage at the same time, and then the minimum number of radio mics we need. With Into the Woods, there are very few times where a transmitter can be used for two jobs. The only opportunity in this play is where the wolf becomes a prince, so in all there will be 17 mics needed. In the last weeks of rehearsal though, the radio mic operator will check these flow charts to see that the actors do actually go off stage when expected to, and that the mic count is OK."

The orchestra for the production is acoustic apart from an electric piano and a keyboard. At this stage Bruce has assigned 19 channels to the band and the plan is to put the band in one section of the desk and the vocals on a separate section under automated VCA control. The effects will be controlled on a specially commissioned eight channel automated fader/matrix unit.

As sound designer, Andrew Bruce's job is to present the producers with what is and isn't possible, together with the basic options. On Into the Woods, two different ways of dealing with the heavy effects workload presented themselves. "I explained to the producers that they had two options; either they had two people to mix the show, one for the music and one for the sound effects, or one person to mix the lot with an automated sound effects system that once it was set up was capable of doing everything on its own."

The producers decided on the automation option. Bruce has now split the control section, entirely separating the effects from the rest of the system and commissioned Out Board Electronics to build the eight channel fader matrix package that he needs to do the job. All the equipment plans are printed out on several working diagrams. These are all produced on an Apple Macintosh computer which gives Bruce the speed, flexibility and accuracy that he needs, and would be simply too time-consuming to do by hand.

Bruce explained: "We have computer-produced working diagrams on how it's all put together, with details such as the number of

The Cadac Console in sitú for the production of Follies is identical to that used on Into the Woods.

multicores we need. When we worked on 'Les Miserables' all over the world, I had to do drawings for every show. The drawing for the London show was done with paper and pen, and it took a week. When we went into the theatre everything changed, but I never did get round to changing the drawings.

"When I got to the US for the Broadway version of 'Les Mizz' I found that the Mac was very popular over there so I bought one, and developed a master drawing system. Now with all the basic elements prepared, doing a new version of the plans is only about a day's work, and it also forces me to think exactly how the system is put together and what is needed."

The next logical step is the decision on speaker positions, and Bruce has to meet with the rest of the creative team to decide exactly what goes where. "The day of the meeting is quite significant, because I have to get my loudspeaker positions, and I have to fight very hard for them. The designers avowed intent is to hide everything possible. But we have only so many places that we can put loudspeakers where they will be effective and if they say 'you can't do that, they have to go somewhere else,' you have to say no. I have to point out that I have to work in the space too, and supply sound effects exactly where they are needed."

What sort of noise does a giant falling out of a beanstalk make?

Two months later and the contract has arrived with Autograph. It should have been there a lot earlier but it somehow got forgotten. Far from being upset, Julian Beech was happy that they were one of the very first people the producers had contacted for availability and that it was assumed from the start that they were going to be doing the sound design without hanging around for the contracts to be signed.

Andrew Bruce had prepared his detailed plans and Julian Beech had calculated how much it was all going to cost. The contracts for Autograph as sound designers and Autograph as equipment supplier are completely separate. Beech simply sees his job as one of costing Andrew Bruce's plans out, and making the occasional suggestion if something looks as though it might be unnecessarily expen-

sive. "If the job was from an outside designer we wouldn't have any control, except that if something was going to be costly we would go back to him and discuss it. Of course, the producers are not obliged to use us to supply the system, even though we have done the design. They have an obligation to protect their investors by going for the best deal, but normally we are cheaper on our own designs because we have control of it."

At this stage Bruce has been to see the set for the first time, which generated a few surprises. "The meeting with the designer went so-so. He is not fabulously used to musicals and the things that we need to have. He had a very open mind though — although when he sees things like speakers in the flesh, it might be a different matter.

"The meeting where the set was presented to us and everyone else connected with the show, was quite interesting. The New York set was pantomime-ish, with painted cloths. This director has commissioned a set that is like a Victorian drawing room with a perfectly semi-circular cyclorama which is a hard wall with lots of doors."

This curved solid wall created major problems (or opportunities depending which way you look at it) for the sound designer. As the set was to be well lit there was no possibility of cutting holes for effects speakers and covering them with gauze. Bruce was busily discussing the possibilities of hiding speakers at floor level or tucking them behind some of the dozens of doors, large and small, that are in the set.

But the curved solid set opened up an alternative possibility. "We knew we were going to have to be quite clever about any effects that needed to come from the stage. Being a hard semi circle, the set will act as a hard reflector so that it allows me, with I think a reasonable chance of success, to bounce everything off this hard surface using a forward, centrally placed speaker pointed at the set rather than the audience. The area above the stage is packed with other equipment, a lot of which must have free passage past the speakers. I have managed to book only two places in the flies to hang these speakers in order to bounce sound off the wall."

Not content with trying the impossible in the set itself, Autograph were preparing to locate sound inside the 'pantomime' cow, hen and baby. The cow is to be more or less full size and to be fully automated so that it can move, kneel, blink, crap and fall over dead. As well as all this, the idea is to place a VHF radio mic receiver with a little amp and speaker inside the body so that its moos and dying scream can come directly from the animal. The mini sound system had already been developed and is now with the prop builder to see how it can be fitted in.

Meanwhile, upstairs at the Autograph office, sound engineer Nick Gilpin was busily working in the studio, preparing the sound effects tracks on the DAR SoundStation. They had just taken delivery of a new library of digital CD effects which were proving very useful but Gilpin was using them as elements rather than simply lifting them complete. "As a matter of principle you should never rely 100% on effects disks. We put effects together from discs, tapes and sounds we record here and use the SoundStation to assemble them. It takes around two hours to do an average effect, but it can take up to a day. The SoundStation hasn't changed how quickly we do each effect, but it has vastly improved the quality in every sense."

One of the most intractable problems, especially on a fantasy show is interpreting the stage directions and turning them into sound. An aeroplane going overhead is one thing, but the death shriek of a giant hitting the ground with several ton of beanstalk in tow is another. Gilpin supplies effects to the director to see if he is on the right lines, which he normally is. If changes need to be made, the individual elements of the Sound-Station can be altered without having to go back to the beginning and do it all over again. I left Nick Gilpin manufacturing some very unpleasant noises.

Vari-UMs and welding the dead cow

Five months from our first meeting we were in the Phoenix after the first set of previews. How closely had the plans matched reality and why were two men attacking the cow with oxy-acetylene torches?

After the development of the special radio PA system, it turned out that the cow MK I

Part of the semi-circular Cyclorama set designed by Richard Hudson.

Into the Woods interweaves various well-known fairy tales, pictured above, Julia Mckenzie as the Witch and Jacqueline Dankwort as Cinderella.

was simply too heavy and had to be completely re-thought. The MK II, operated by levers and without internal sound, was doing a stirling job; although failing to drop down dead on command, hence the on-stage modifications.

So with one good idea out the window I checked with Andrew Bruce what else had changed? "As the radio system had to be cut, we were then able to re-think those effects in a way that was quite useful.

"We now have two Meyer MSL3s on each corner downstage, bouncing off the set, and we have a single central Ultra Monitor mounted on one of the electrics bars. We commissioned somebody to build a motorised hanging frame, so we now remotely move the Ultra Monitor so that it can adopt six positions around the stage. We call it our Vari-UM and it is being used all the time. It gives some directivity; you can definitely tell the difference between left, right and centre. In this particular case it has proved invaluable, it allows us to use one speaker to do five jobs and we can even get effects on the move."

The desk position at the rear of the stalls is very compact, with the CADAC in two sections as planned, with the main section for the vocals and the side section for the orchestra. To the left of the main desk are the effects which are coming from an expanded Akai S1000 sampler with an external disk drive, an RDAT and the Out Board Electronics automated mixer/matrix. Bruce explained that they had one unforeseen problem with the Out Board unit: "When we commissioned it, we ignored the fact that we were using a lot more effects than for, say, Miss Saigon. When
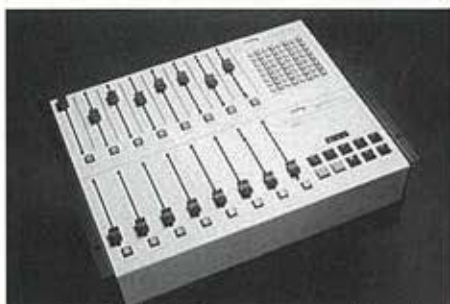
Out Board Electronics were commissioned to build an automated sound effects console.

we got up to cue 49 out of 60, we simply ran out of memory. The chaps who built it, responded very quickly and doubled the memory size."

A second newly developed feature of the system was a custom written software package to control the effects cues. "The software is our own and we have chosen this route because it is a lot more user-friendly and tells us more of what we need to know. A lot of these features stem from the fact that the software designer has operated a lighting board for several years — a lot of features we need for audio cues have been common on lighting boards for years."

The sound has been designed to allow the actor's voice to project over the sound system, so that the voice quality remains 'natural' for the majority of the time. This requires the actors to speak at a reasonably consistent level. If their voice drops too much, then the reinforced sound predominates, changing the character of the sound. Andrew Bruce has to co-ordinate with the actors to help them achieve good sound.

Fortunately they are generally very open to suggestions and help, so this is not as tricky as it might first seem.

The end result of this work is a show that has opened to almost universal approval. No-one commented about how good the sound was though. And in the theatre, that indicates that Autograph achieved their main aim to produce transparent sound reinforcement and appropriate effects — despite a continuing and fairly typical run of changes.