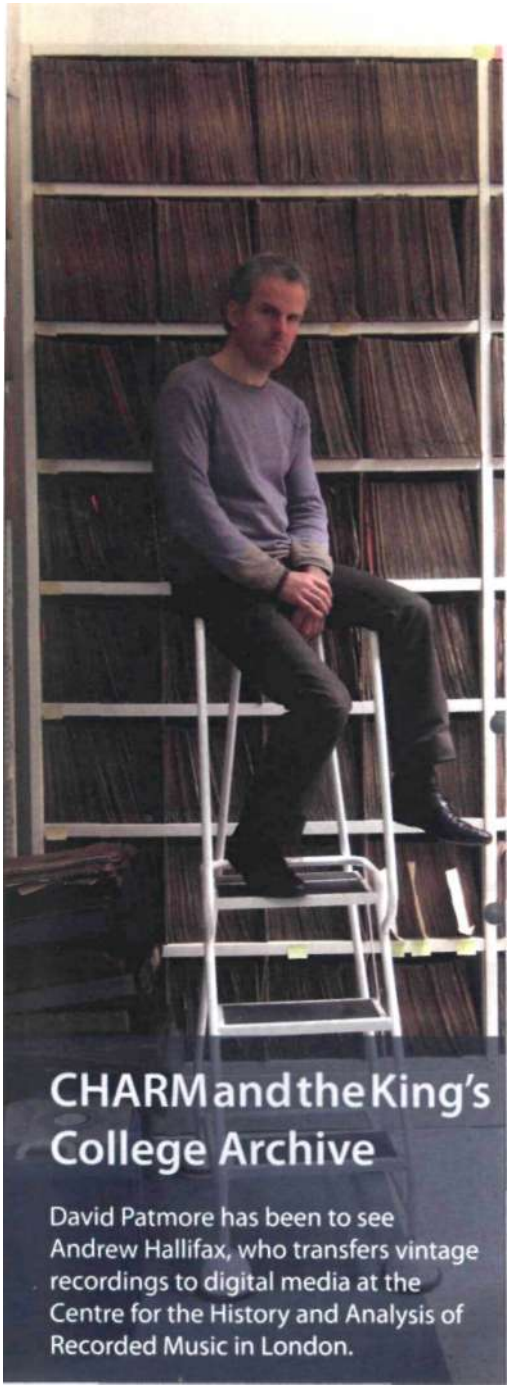

CHARM and the King's College Archive

David Patmore has been to see Andrew Hallifax, who transfers vintage recordings to digital media at the Centre for the History and Analysis of Recorded Music in London.

I recently met Andrew Hallifax, a freelance recording engineer and head of transfer engineering at CHARM, based at King's College, London. First of all I asked Andrew how he became involved in recording.

"I did a music degree at the University of East Anglia between 1984 and 1987. Already at that time I had the idea that I wanted to be a classical music recording engineer. The trigger had been a BBC programme about its Radiophonic Workshop, which I heard on the radio probably before I was even a teenager - there was something very, very compelling about it. And the strange thing is that I have at least two other colleagues who both heard that same programme at the same time to the same effect! I didn't want to be a composer - although I did some studies in electro-acoustic composition at East Anglia - what I wanted to do was to record. The course at UEA was a straight music degree, but at the same time I was aware that Trygg Tryggvason was on the staff and that he was teaching recording in the music department. Trygg had started the University's own record label with Peter Aston. In fact the whole set-up was very special and I think unique. I don't know of anywhere now, apart from the Tonmeister course at Surrey University, where recording is taught to musicians as a primarily musical rather than a technical endeavour. Teaching recording to musicians, who often have no technical background at all, was quite special, and this was something that Trygg did extremely well. He was a remarkable teacher. Given that it was a tiny music department, with probably no more than about 40 students all told at any one time, the number whom he taught and who now work professionally in the recording industry is quite astonishing. Sadly he was made redundant and the course was abandoned just after I graduated in 1987.

"Trygg was aware that I was interested in recording - I'd helped him with one or two freelance jobs while I was there - and the day I graduated he asked me to help him with a session in London. So I drove him down and acted as tea boy and general dogsbody, the way everyone does who starts in the business. And it seems now as though we never went back from London. We were working flat out all the time - it was astonishing, and I ended up working with him for ten years! For

the first couple of years, in the height of the CD boom in the late 1980s, we were actively recording on location six days a week, non-stop. It was mainly classical music with a lot of orchestral repertoire, working for labels such as Pickwick, Classics for Pleasure, and chamber music for Hyperion, ASV and Chandos - we were working for most of the classical labels of that time.

An ideal apprenticeship

"I feel hugely privileged that I was able to work with Trygg and to have had what I regard as an ideal apprenticeship. I firmly believe that the way one learns to do this job is not by reading textbooks, but through direct experience, and learning by listening. It's really a process of 'enculturation' - you have to be there in the sessions, learning to think and to hear the way an engineer does. It's not easy: the first sessions that you do on your own are frankly terrifying. And of course it's never the same twice; every session is entirely unique. Gradually you build enough confidence in your own abilities to manage what comes along and to cope. And eventually you do get to the point where, as well as one ever does, you know what you are doing - or at least, the terrain becomes familiar. So that's how I started!

"While I was with Trygg I was doing other things when time allowed. Even before I'd graduated I'd been supplementing my student grant by working weekends for Ben Turner at Finesplice, learning basic post-production skills, which was a tremendously valuable experience. Trygg had enough equipment to allow us both to work simultaneously on different sessions, so gradually I began doing my own projects. But as the CD boom started to slow down in the 1990s, so did work gradually die away, and by the end of the 1990s, it had slowed to a trickle.

"For a while I lived on a houseboat moored near Richmond and looked after Petersham Church, which, over the years, was used to make many hundreds - possibly thousands - of recordings. It had a beautiful acoustic but is sadly now lost to recording. Some time later I decided to go and live in France. I moved to Paris, which I love and which these days is a brief, inexpensive train journey from London. So I was fortunate enough still to be able to manage a reasonable amount of freelance work in London and other parts of the UK. I'd be back here probably twice a month on average.

"As soon as CHARM started, in 2004, I followed its development with interest, and so when it advertised for a transfer engineer, I was in there like a shot, and fortunately got the job here at King's, starting work during 2007. And now we've expanded further with the recruitment of Martin Haskell who used to be an engineer at Decca and ASV, and we have a grant to create a sound archive of British and Irish Musicians who recorded on 78s" [sec *CRC* Autumn issue, page 8 - *Ed.]*.

Transfer techniques

I then asked Andrew how he carried out his transfer work. "Well, the main point is that I'm free of many of the constraints that commercial release imposes on engineers. Apart from sets comprising multiple sides, each disc for me is a unique transfer job: I'm not obliged to match the tonal characteristics or the surface noise to any other disc, whereas an engineer transferring for release on CD needs to ensure that there are no disconcerting disjunctions in either the musical or sonic content or in the disc's surface noise. Nor do I need to tailor the recordings for the contemporary market or for modern listeners, which I think is quite significant. I aim instead to reveal the tonal and musical balance recorded at the time and to restore that as faithfully as possible, which is where, I believe my experience of session recording and of acoustic spaces becomes important. CHARM's aim is to liberate as many as possible of the vast numbers of 78s which King's College has in its own archive. This is built on the acquisition some years ago of duplicates from the old BBC gramophone library. Our intention is ultimately to put these transfers up on the web - for students, historians of performance and in fact anyone who is interested, so that they can listen to what up until now have been lost performances, in many instances. We're trying as far as it is practical to avoid duplicating what is already on CD and to concentrate on artists who might now be less well known but who may nevertheless have been extremely influential in their day, which in terms of performance practice is clearly quite significant. I aim to transfer around ten sides a day, which as

anyone doing this work for a commercial company will tell you is quite a rapid rate.

"The actual process of transfer is quite straightforward. Where I have a choice, I'll select the best copy available of a particular disc, and fortunately in quite a few instances we have duplicates. Then I'll clean it with our Keith Monks machine. Another point to bear in mind is that because our archive is based on what had been a working collection, quite a lot of our records show signs of wear, and unfortunately some are cracked or broken. Once the record has been cleaned, it's on to the turntable, and I select an appropriate stylus. We have nine or ten of these, all supplied by the Expert Stylus Company. Then I establish what I think is the correct pitch with the aid of a variable speed control, custom-built by Roger Beardsley, before using Ted Kendall's invaluable Front End pre-amplifier to establish what I believe to be the most appropriate equalisation curve from the many different ones that 78rpm recording engineers and companies used. I also record a flat, unequalised copy for archive purposes. I think it's important that the equalisation is carried out in the analogue domain and there's really nothing better suited to the purpose; the Front End offers unparalleled flexibility, precision and audio transparency.

"Once I've got the equalisation sorted out, I'll then run the recording through Cedar for de-clicking and de-crackling, before recording the digital file on a Sequoia workstation. I'll take out any really obtrusive cracks and pops that Cedar has been unable to deal with, using various software plug-ins such as Algorithmix Renovator and Sequoia's proprietary spectral cleaning - and that's about it! Once the process of transfer has been completed, the finished file is stored digitally in a number of different formats and locations - in our archive for future uploading, on a network drive for safety, and on DVD for more immediate use by researchers working perhaps on current projects, such as the study of the performance of Schubert songs on record."

The recording engineer's role

Our discussion then turned back to the role of the recording engineer, a subject on which Andrew has some lively comments to make. "I'm fascinated by the way people have a need to regard recorded performance as a means of either capturing real performance or documenting it. Either of the words 'capturing' or 'documenting' have recendy made me question what happens in a recording studio, and the extent to which it can be seen as 'documenting' and "capturing'. I began to wonder whether it was really possible for people observing recording sessions to discover what is actually going on, and even whether the people engaged in recording ever really stand aside from the enterprise in which they're engaged to reflect on the nature and essence of their practices. After all, almost everything that happens in a recording session that is of real interest is entirely invisible - it's going on inside people's heads! It's all in their perceptions, that in turn inform intuitive responses. You can watch what everyone is doing and listen to what they are saying - producer, engineer, and musician - but all of this bears only a tangential relation to what develops. Part of the process of enculturation, to which I referred earlier, is the development of an unspoken, common understanding.

"This is especially true when the same producers and engineers work closely together, and when a company, such as Decca, has a very strong recording

house style'. The interesting thing is that those working in these environments in the past probably couldn't have explained it to those wanting to learn about it, any better than we can explain it now. But that was one of the benefits of the old-fashioned apprentice system; it was a process of imbibing understanding more than acquiring information.

"So I wondered whether I could dig into my own experience and bring some of this out for those people who obviously want to understand what's happening in recording sessions, but who are to some extent blocked because it's not observable, even though they believe it to be observable. For instance, photographs of sessions and details of the equipment used, and so forth, are all a comparatively small part of what conspires to make a recording what it is. What we should be after, I believe, are the tacit understandings and inherent precepts bound up in the craft.

"For instance, almost all the Decca orchestral recordings would have used the Decca tree, but beyond that, those of Kenneth Wilkinson, for instance, are generally accepted as being different and special from those recordings made by his colleagues. So I've developed this idea of the engineer as a 'beguiling stylist', that is a person who applies particular ideas about sound, perhaps at times even without consciously thinking about it, because it's the outcome of many factors, such as apprenticeship, direct experience - be it with popular or classical music - and the idea of the kind of sound that they want to hear. The engineer is after all able to devise a sound that, within certain parameters, he wants to hear."

The producer's job

I asked Andrew for his views on the relationship with the producer. "So much about what happens in recordings is about personalities. Of course it's very important that people work with those with whom they can communicate well. Music is about communication, and the producer needs to be able to communicate at a very high level - between the musicians on the one hand, and the production team on the other. In essence they have to create very rapidly an environment in which people can communicate both ideas and music. In my view the producer's job in part is to create that environment, which in turn allows the musicians to create something pertaining to a performance."

Following on from this I asked Andrew about his views on the increasing homogenisation of the sound of orchestral recordings, with the use of artificial reverberation that give an attractive and appropriately atmospheric sound. "It's unfortunate that so few really fine acoustics are available for recording today. So it's not surprising that engineers turn to artifice in order to supplement acoustics that are less than flattering. We all do it from time to time - probably because we're aware that in its heyday the record industry led the public to expect the glorious acoustics of Vienna's Musikverein and Amsterdam's Concertgebouw. Unfortunately though, it isn't possible to replace the natural acoustic resonance, only to disguise it. Digital reverb is a contrivance that simulates real reverberation, but however realistic the reverb might at first sound it isn't real and its initial impressiveness begins to pall with growing familiarity. Even modern convolution reverb that uses impulse responses to model real spaces is artifice.

"I personally don't like artificial reverberation because it tends to stylise everything in much the same way, submerging the uniqueness of a particular acoustic space beneath a superficially attractive sheen. One of the things I like about very old 78rpm recordings is that in some cases you can still make out the sound of the room, and the reality of that is terrifically engaging. It's as though you're transported to a particular room on a particular occasion where you're party to a real live performance." CRC