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Thank you for agreeing to share your thoughts with the Sonic Arts Network. I wonder if you could give me a brief history of yourself, a resumé if you like.

Well, I studied first with Fritz Krammer who taught me musicology at the Manhattan School of Music. I took piano lessons and classes in species counterpoint and 18th century counterpoint. I studied abstract rules from the Ludus Tonalis and wrote imitations of all the pieces that I was playing. I also studied with Darius Milhaud. I was writing instrumental works at that time. Then I stopped being a 'serious' musician.

In what sense?

I played rock 'n' roll and folk music. The r 'n' r, folk and blues bands introduced me to technology whilst at Harvard College during the years 1965 through 1969. I learnt technology, but more how to simplify things. In classical music one is taught how to make things complex. I then moved to San Francisco doing all sorts of work but always playing. I had many jobs. Being a concientious objector meant taking alternative employment. Eventually I got an offer to go back to San Francisco to play with a rock group but at the same time was asked to audition at the Conservatory initially as a pianist, but I hear the standard of the pianists whilst walking down the hall and think "No, I am a composer", go home, write a bunch of pieces and spend a year there, studying with John Adams who was incidentally at Harvard with me. This is where I first got into synthesizers. I started to build things. I went to Berkeley for post-graduate work and ended up at Stanford then IRCAM and eventually Rensselaer Polytechnic Institute.

A vast experience in many different areas then?

Yes, a classical training and a firm technological background but the classical training is 'part of me'.

How does this influence the music you write?

I think in terms of counterpoint. Whether with a sampler, as in the older pieces I am playing tonight, or other devices I think in terms of layers, shapes and cadences. More recently I have been working with ensembles. I've written a piece for chamber orchestra and video. The big challenge with the new technologies is in integrating the electronic sounds themselves, the control of the electronic sounds and the thinking behind it all. Working with samples that are long enough to be recognisable as musical phrases breaks the paradigm of gesture equals note.

As I've seen from your rehearsal, the gestures you do make are reflected in other areas, such as a sense of force and a sense of density. Is this true?

Yes, I think in terms of counterpoint not just of note against note but phrase against phrase. The Robert Johnson Sampler was my first piece with this method, sampling Mozart, but I realised that I had spent just as much time listening to Robert Johnson as listening to Mozart so that is just as viably my musical heritage.

So tell me about your work at IRCAM. When were you there?

Right at the beginning, 1977 to 1979.

Composing?

No, as part of the technology deal from Stanford. IRCAM offered work helping get the system set up with PDP-10, PDP-11's and MUSIC 10, some of the first work with which turned into the 4X machine but which was originally the 4B and 4C machine when I was playing with it.

The thing about IRCAM was there was an Hegalian sense of dialectic forces driving music history which I think is wrong. It's about what people do, not what historians write about. The basic understanding was that IRCAM was part of THE tradition of serious music. They develop general purpose tools which require a lot of support such as technicians for code to make them run. IRCAM is really important. It does the kind of research that gives us the tools we have today. My experience at IRCAM helped me define what I've done since then. I am most interested in live performance. I love to perform.

Tell me about tonight's performance. Will you be improvising?

Yes. In my mind there is an UR-shape for a piece but the finer details are worked out in performance. I know these solo pieces really well. I have recently been doing a set of songs about the Bosnian conflict with myself, two singers, a percussionist and video. In that piece also the singers' parts are written out, but they are rock 'n' roll singers and if they get off on something they change it. The percussionist is basically a jazz drummer and I never know what he's going to do. That's good for me because I don't have to know what I have to do either.

You have visited the festival of electroacoustic music at City University and now you are at The University of Birmingham. Have you enjoyed the visit?

Yes. I just did a piece with the Gamelan in London. They have Sundanese tuning but the piece was originally written with Javenese tuning. It's called Re-Rebong. I went in to hear it and it was quite different. I studied Balanese shadow puppet music after IRCAM. Balinese chamber music is really interesting. You have four players in two pairs doubling each other tuned with beats between them. Re-Rebong was a piece that took off from there.

What have you been working on recently?

A piece for chamber orchestra, video, two singers, amplified sounds and processing. It's all real-time processing. Also an Air Drum piece that is called Persistence of the Claves based on traditional rhythmic patterns, the basic beat for some African music. So with that piece I explore different rhythmic possibilities and play samples from Latin America. Whilst that is happening, someone comes up and scans me with a camcorder, so you get large ear-lobes etc.

Similar to some of the video images in "Last Garden" of Richard Povall that I saw recently?

Yes.

So, tell me about Rensselaer Polytechnic Institute.

Shortly after I arrived, they gave me $15,000 to buy audio equipment. We now have well over half a million dollars worth of audio equipment/video gear. I have been in charge of putting it together. But also we have an ad hoc, group vision that has worked well so far.
There was myself and the video maker, John Sturgeon. We ran undergrad courses in music and video. What we wanted, to make our lives more interesting, would be to teach graduate students who knew what they wanted to do with their lives. Initially we had the idea of putting music and video together because we had done some collaborative work and were impressed by the closeness of our ideas about form, structure and time. Both at a deep and technical level we found common points. We drew up a curriculum list. John thought people should be painters and I thought people should be classically trained musicians. But we are extremely flexible and we have been inventing the rules more or less as we go along. We have half and half video artists and musicians.

As I understand it, if you enroll as a musician you get training in video art and vice versa?

Exactly.

We exploit the idea that there is electronic media but you don't need to feel the boundaries that have been traditionally perceived. It requires a different stance, different perspectives. I have learnt much from the students, from what they do as well as from teaching them.

I heard you have been working with La Monte Young?

No, I have been renting an apartment from him. It's been fascinating. His work is about a whole different perception of time. I like that. It expands the boundaries of perception. My musical material wasn't bounded by the classical part of my education. Anything that shows me where my boundaries are artificial thereby making me grow, is interesting.

From what I hear and see I think that Rensselaer is expanding the boundaries for the artists working there.

I do too. It's pushing them in a number of ways. As it's cross-disciplinary, people are forced to think of their work from a number of perspectives. Rethink things. Musical performance involving people who are video artists changes the meaning/context. Our values in terms of education are simple but interesting - non academic but very practical. There is continuity, but we are still inventing the programme. The most important thing about the students is their art work. The only way to make yourself into an artist is to continue making art. Not by sitting over books.

On a sort of technical level, tell me something about your set-up at RPI.

Well, our music studio is MIDI plus ProTools. We have off line video 0.75 inch. You can bring video into the music studio and audio into the video studio on a basic level but then we also have an integrated studio. It's basically an exact clone of the music studio plus a compatible high end video system. Then you can work simultaneously to complete the project. On top of this we have what we call the graduate student 'play-pen' called the iEAR space, for projects that involve interaction. We have a complete set of audio/visual gear that is in flight cases and moves. This includes a sound system, video projection and camcorders. It is a lot of equipment, not all top-of-the-range, but all brought within a collaborative framework. Look at our situation. We have all these things to do. We can make something that is perfect and superb and probably very specific or we can get something that works. That's one of the differences between us and IRCAM, Stanford and MIT. Their emphasis is on cutting edge equipment. Ours is off-the-shelf. Using things for very interesting purposes, often not the original purpose.

Such as the powerglove?

Yes, but you have to remember that the activity at RPI is not just what you see myself and Richard Povall doing here. There is also a very strong video unit directed by Brenda Miller. She involves the

community in her work, a recent piece she did was called Witness to the Future. It's in a sort of documentary style. She went around the country to people who have been affected by chemical and nuclear pollution showing life from their perspective. She has done similar kinds of works with children in local schools. The students have taken this up and developed it a lot. The students also produce a weekly hour long television programme called "hour-iEAR" which we transmit to a large part of the north-east... at least 300,000 viewers. We put together interactive satellite broadcasts for example: we invite artists in to the studios and do something which we broadcast but ask the audience to participate in via the phone lines, to sing or play instruments over the air. Brenda has been the driving force behind the project but it is all done by the graduate students. We have just hired a new person to work on high end computer graphics and animation. She is just beginning to set up her system.

That all sounds very impressive. If you have so much technology and ideas that emanate from RPI, how easy is it to get performances out of town, abroad even. Do you think that concert organisers get put-off when told to get or expect lots of electronic equipment or as in our case, provide transformers to convert your equipment to our voltage rating?

No, not really because I am working with technology that many people have access to. My songs about Bosnia are being played in New York tonight. For tonight's concert, the technology is on stage because I play it, it is my instrument.

Do you think it is partly the problem with the interface that its communication with the black box is not sufficient to enable the black box to exist off stage. I am increasingly of the opinion that one needs to provide blatantly obvious correlations between sound and gesture otherwise it is pointless having the equipment on stage and from that, pointless doing it live.

Not at all. Playing musical technology is the same as playing an acoustic instrument. The interface changes all the time but the black box does not always change with it. When I am playing the keyboard, I always have two pedals, that control different aspects of sound and performance. I can play them without thinking about them. I really think that it is important to have performers on stage, but having said that, the idea of making the diffusing of tape music a performance art is really exciting.

Thank you. It sounds like the Institute and its work are going to become even more exciting in the future.

For further information on the graduate program in electronic arts at Rensselaer Polytechnic Institute, email curley@rpi.edu