A Theater of Ideas

Steve Reich and Beryl Korot on Three Tales

interviewed by David Allenby - 2002

How did the idea for Three Tales first come about?

SR When *The Cave* premiered in 1993 its first commissioner, Dr Klaus Peter Kehr of the Vienna Festival, asked if we'd ever thought about doing a piece about the twentieth century. One of the things that came to mind very quickly was that the twentieth century had been more driven by technology than almost any other human endeavor. This wouldn't create a music theater piece in itself – we needed some events, some signposts from the early, middle and late parts of the century that would be emblematic of the period and its technology.

Hindenburg came to mind rather rapidly. It signaled the end of a failed technology when the airship exploded and crashed in New Jersey in 1937. It was also the first major disaster captured on film. The image of an enormous hydrogen filled zeppelin, with huge swastikas on its tail fins, flying over Manhattan and bursting into flames in New Jersey just before World War II, was unforgettable.

The atom bomb was in many ways the emblematic technology of the century. For the first time we'd created a technology with which we could destroy the planet. Hiroshima and Nagasaki seemed overly well documented. We settled instead on the tests at Bikini, which were between '46 and '52, signaling the end of World War II and the start of the Cold War. It brought together the most ultra-sophisticated hi-tech known to man at that time and some of the least technological human life on the face of the Earth – the Bikini people of the Marshall Islands in the Pacific.

For the third tale we were originally going to use the explosion of the Challenger spacecraft, but we soon felt this was one disaster too many for the piece. Then in 1997 Dolly the sheep was cloned and we both took one look at each other and said "That's it!" It's a totally different technology, growing out of medicine and biology, and pointing to what life might be like for the rest of the twenty-first century.

BK Also, in contrast to the first two acts, "Dolly" is looking within, to ourselves, to the impact of technology on our own physical bodies. And it symbolized the whole range of issues now brought about by technology to impact on our bodies, not only by manipulating the basic blueprint of that body, but by actually bringing technology into our bodies.

How did your personal experiences with technology feed back into your creative work?

BK Even in the early 1970s, when I first started working in the genre of multiple channels, I looked to the ancient technology of the hand loom for ideas on how to program multiple channels of video. The loom was after all the most ancient of programming tools and held out very useful ideas to me of how to think about programming multiple images. I have always liked the tension between working with a modern technology and thinking about the older tools which preceded it and learning from those tools. The impact of media on the social and cultural environment in which we live was the focus of a magazine I co-edited in 1970 called *Radical Software*. That double-edged sword of the gains and losses of each new technology that we incorporate into our lives is one of the subtexts to *Three Tales*.

SR When I first began working with tape in the 60s nothing seemed more interesting than gradually changing the phase relations between two identical tape loops. This produced *Its Gonna Rain* and *Come Out.* Rather quickly I felt that if this were something only for machines, it wasn't worthwhile pursuing. I then discovered, to my amazement, that I could produce that gradual change of phase with myself and another musician playing two pianos, which led to *Piano Phase*. Phasing itself is really just a variation of canonic technique where the rhythmic distance between two or more voices is flexible. While the electronics suggested something, it was the connection to living musical tradition

that made that suggestion fruitful and worthwhile. Right now I am obviously attracted to making music with digital samplers to playback speech and sound recordings as part of a video opera and at the same time I have no interest in using synthesizers to substitute for traditional instruments. I also find that after working with technology, as in *Three Tales*, I then need to compose a piece or two, or more, just for acoustic instruments and voices.

Do you see any contradiction in using sophisticated audio and video technology to question the role of technology? Is *Three Tales* advising us to turn away from technology?

SR No, to both questions. If you want to know, for example, about a certain kind of car or a certain kind of medical procedure, you go to someone who can tell you what's good about them and what's not so good. You don't take advice from someone who knows nothing about them or has no experience with them. This piece needed artists who had feelings about technology based on years of experience.

In terms of being anti-technology, Beryl and I use and enjoy the technology necessary to make this work and have used it before in The Cave. Computers, video tape, samplers, and so on are all part of our culture. They are what is used to make our folk music - rock and roll. It would be strange if artists didn't use this technology for music theater.

What we *are* exploring, are differing human attitudes to technology. In *Hindenburg* and *Bikini* one senses the unqualified faith in 'the march of progress' that typified those periods. Then in *Dolly,* the audience sees and hears scientists themselves, and all with very different attitudes towards what they are doing. People then draw their own conclusions about the character and intent of these scientists and one religious figure.

BK It used to take hundreds of years for a technology to develop and have an impact. Now it takes decades, or less (think about the internet). When tools develop and become upgraded so quickly, offer so much accessibility, their physical and social impact on our lives is transformative, and we have very little say over this impact. Is this part of our evolution? Are we in control? Can we be? Have we ever been? Bill Joy suggests we have no brakes. Adin Steinsaltz says "The sin of Adam, in eating...He was too hasty."

"He was too hasty." What does that mean?

SR The idea that Adam was too hasty comes from the Zohar, the central book of Jewish mysticism. The Torah makes no mention of which fruit Adam and Eve ate. The apple is never mentioned anywhere in the tradition. The Talmud suggests three possibilities; a fig, a grape or wheat. The fig has clear sexual implications, the grape leads to wine which can alter consciousness and wheat is the cornerstone of agriculture which made possible cities and eventually all our other technologies. Adam and Eve were created on the sixth day and the Zohar says they ate the fruit just two hours before sundown when the Sabbath begins. If they had waited they would have been able to bless the Sabbath with wine, then bread and then enjoy making love, which is particularly encouraged on the Sabbath. The forbidden fruit would have been permitted when the context was right.

What are the differences between the technologies employed in The Cave and Three Tales?

BK The differences are enormous. Within two or three years of completing *The Cave* it became possible to get a computer and work with programs that could combine photography, film, video and drawing, all within a single frame. *Three Tales* exists on a single screen, unlike *The Cave* where the complexities came from the relationships between the images and the timings of the images on five different screens. It's still mind boggling to me that an artist can work at a computer, import the raw materials for the work, and then transfer the finished work to a tape deck sitting next to the computer, and hand it to a projectionist as a finished product for performance. You can make a work with considerably powerful tools at your disposal, sitting at home working alone.

There are also techniques I developed in the course of the work to create distance from the documentary source material. For instance, in *Bikini* I turned the live film footage of the islanders into photographic stills, made these stills painterly and then animated them at a different frame rate from

the usual 30 frames per second. It creates a very different feeling from usual slow motion and places the documentary material in a new context, which is the intent throughout the work.

SR. In *The Cave,* as in *Different Trains,* I followed the speech exactly – as they spoke, so I wrote. The result, because there are a lot of short speech samples, was a constant changing of key and of tempo which makes it, particularly in *The Cave,* difficult to play and often lacking in rhythmic momentum. In *Three Tales* I thought OK - *prima la musica.* Musical concerns (as opposed to samples) would predominate and the sound samples would be altered to fit the music. This allows the musicians to work up some momentum in one tempo over a longer period of time as in most of my other pieces. It also allows me to control the overall harmonic movement of the music and make the samples fit that. This is particularly appropriate in this piece which, particularly in *Dolly*, deals with how we are beginning to alter our bodies using technology.

I also use two new techniques that I originally thought about in the 1960s, but have only recently become technically possible. The first is what I call slow motion sound, which is slowing down a speaker or other sound without changing pitch or timbre. The second is the equivalent of freeze frame in film. While one of the interviewees is speaking on videotape I make an extension of a single vowel in time so that it becomes a kind of audible vapor trail and, in fact, becomes part of the harmony. This also means that what the interviewee was speaking about, the thought itself, becomes extended, along with the vowel, into what follows, which is of course an intensification of something that happens with speech and ideas in our lives.

Following performances of *Hindenburg* as an individual work in 1998, you've made some changes.

SR Yes, *Hindenburg* was originally five scenes, now it's four. The second scene was about General Hindenburg himself, leading up to Hitler and the burning of the books. It was just too laborious and heavy-handed, so we chucked it . The following short scene, called *Nibelung Zeppelin*, is a musical reworking of the hammering Wagner leitmotif from *The Ring* while you're watching the German workers in 1935 building the zeppelin in Frederikshaven. The music takes the Nibelung leitmotif from Wagner's *Das Rheingold* and uses it as a repeating pattern played against itself in canonic variations. Wagner's dominant pedal harmony (transposed from Bb minor to F minor) is also maintained and extended in length. At the end you see the enormous finished Zeppelin, huge swastikas on its tail fins, a show piece for Nazi Germany which, in many ways, realized Wagner's also a tightening up in the first scene, so all in all *Hindenburg* went down from 24 to 16 minutes.

BK Just to diverge slightly, when Steve was thinking of the reworking of Wagner's leitmotif, I was thinking of the Judson Dance Troupe of the 1960's. I'd been watching the archival material of the workers building the *Hindenburg* that I'd gathered at the National Archive in College Park, Maryland. What struck me was the incredible gracefulness and dance like quality of the workers in their everyday activities, especially several of the workmen climbing and walking on the scaffolding. So I masked these out of the original footage, frame by frame, and set them to the music. You have a conjoining here of two of the most unlikely influences, and I think it's one of the high points of the work.

Moving on to *Bikini*, how do you make connections between the atom bomb tests and the Biblical stories of the creation of humans and the Garden of Eden?

SR The chief reporter for the New York Times who was stationed at Bikini during the tests writes about seeing a huge tree - a Tree of Knowledge - with alpha particle and beta particle fruits. The atom bomb was the device whereby mankind could destroy the planet and that conjured up religious imagery. The physicist Robert Oppenheimer quoted the Bahagva Gita about how we had become like Shiva, able to destroy worlds. We decided to present parts of our own Biblical tradition which deal with the creation of humans as a way of gaining a bit more perspective on the situation. There are, in fact, two stories. The first is the one that many people know, describing how G-d created Man and Woman at the same time and gave them dominion over the birds and beasts and everything on the face of the earth. If you read some social critics nowadays you'll find them using that to beat us Westerners over the head - of course we're going to rape the earth, because Genesis tells us we

were given dominion over everything. Unfortunately, those critics ignore the fact that the text goes on and there is a second retelling of the story.

BK These two creation stories in Genesis describe two types of human beings which are aspects of all of us to different degrees. In the first story man and woman are created together and achieve dominion over the earth and its creatures. In the second, man is made from the dust of the earth, woman from his rib. They are placed in the Garden of Eden 'to serve it and to keep it' - a more humble type of human being. In the events that combined to create the situation at Bikini in 1946, the man of dominion came upon humble man and asked (or rather told) him to make a sacrifice of their homeland for the sake of all mankind. The Bikinians are a paradigm for the plight of displaced people, past and present, to return to their homeland. These two aspects of humankind represent an ongoing struggle, both internally within a single human being, and also between nations.

SR We do have dominion, and therefore responsibility, whether we like it or not, yet at the same time we get sick, we die,we doubt ourselves, we don't really understand our significance in the universe - and that's not because of a lack of scientific knowledge.

Turning to *Dolly*, the cloned sheep, we're brought up to the end of the century.

SR Cloning is emblematic of the many biological procedures and digital devices by which we are now beginning to manipulate the human body. The possibilities are endless and the question arises whether we are the right beings for the job. *Dolly* meditates on this and the religious background from which we came.

In Dolly, one of the interviewees says, "Its a religious war, its a war between religions". What is he referring to?

SR Well, unfortunately, some people thought he was referring to the conflict between the creationists versus Darwin starting almost one hundred years ago. In fact he was referring to 'Darwinism' itself becoming a kind of scientific religion that purports to explain absolutely everything, versus any kind of spiritual outlook on the world be it Judaic, Christian, Islamic, Hindu, Buddhist, Taoist or any other.

For me, and for many others, there is no conceivable contradiction between religion and science. Science investigates the nature of the physical world. Religion investigates how we should act as human beings. If I say something scientifically, like 'This book weighs one pound' we can put the book on the scale and find out if that is true or false. If I say, 'Natural laws are the expression of G-d's will' there is nothing conceivable that will ever prove or disprove this. I'm not looking for evidence. I'm expressing an attitude that implies life is sacred.

With Dolly's dominance of 'talking heads' we seem closer to a theatrical world of human characters. But what sort of theater are we talking about here?

BK Our private subtitle to this work is "Two Tales and a Talk." It's a theater of ideas. As with *The Cave*, we used a very tiny percent of the overall recorded material. Some truly terrific interview material did not make it into the final cut. Sometimes the presentation of the ideas wasn't what we wanted, or didn't fit with the other answers we were editing. Sometimes someone might have given us fantastic answers but if that person didn't deliver the words in a certain way, or look convincing when delivering those words, then they didn't make it into our final cut. So in a way the interviewees are being cast like actors. The video provides both the visual action and the theatrical set, which in performance is underscored or subtly elaborated on by Nick Mangano, stage director, Matt Frey, lighting designer and Anita Yavitch, costume designer. The performers are fairly static and iconographic, but add a live presence that both extends into live space and supports what is on the screen. This is not theater with a capital 'T' trying to be a classic form of opera or drama. The theater is really there to serve the video and music.

SR The main theatrical action is on the screen. The singers act as a kind of chorus, reflecting on the action on screen. Each of the three acts not only looks and sounds like it's historical period, each is formally organized quite differently to comment on that period. *Hindenburg* is in four scenes with short pauses between them in a more or less conventional way you might have found at that time. *Bikini*, as

Beryl originally conceived it, is in three image/music 'blocks' which are each repeated three times as a kind of meditation with a coda at the end. There are no pauses. *Dolly* is much harder to diagram formally. It is non-stop with certain kinds of material recurring in no clearly discernible pattern. Musically one might say Dolly was a kind of free rondo. The forms of each act reflect the historical period they describe.

In regards to the 'talking heads' in Dolly, we picked interviewees who are important scientists at places like MIT and Oxford. They are very accomplished in their field and they are 'doers' talking about their activities and theories. It is clear from the onset that they are very different personalities, and their characters reveal themselves more and more as the piece progresses. The speech melodies of these eminent scientists provide dramatic revelation through utterance. One can observe different attitudes within this scientific community through the way they present things and perhaps most significantly by their capacity for humility.

Having completed *Three Tales*, will the work influence your future plans?

BK In the 1980's I left video behind to paint. As I've mentioned, after *The Cave*, by 1996, I was able for the first time to combine many different elements, film/photography/video/text within a single frame instead of working in the multiple channel form which I'd been doing since the early 1970's. In working on *Three Tales*, with a single image comprised of many different sources, there were many ideas that occurred to me, or briefly appeared, that I was not able to develop because of the needs of this particular work. I look forward to developing these visual ideas, creating much shorter, more visually intense works, which I think of as video paintings.

SR First off, I need to compose some purely musical pieces which is what I did after *The Cave* and after composing *Hindenburg*. This is a kind of working rhythm that I've developed recently that feels right and that keeps my energy up. Music theater, then pure music, then back to music theater. We'll see. I think the use of sampling and video in opera and music theater is clearly growing. It's simply an honest expression of the life we are living now. 'Timeless' music theater has in fact always reflected its time and its place.