

Concepts of audio-visual composition in my own work

As a composition student in the 1960s I was eager to explore as much as I could about as many different genres and styles of music as possible. This included classical music, serialism, avant-garde, minimalism, *musique concrète* and electronic music, but also ethnic and folk musics and jazz. One of my earliest interests was the combination of sound and image, explored initially through interactive installations involving live and taped video, photographs, slide projections, live electronics, and so on. Some involved light-dependent resistors controlling analog oscillators so that projected images modulated live electronic music, for I was seeking ways to bring aural and visual images close together.

Later, in the 1980s, when personal computers became available and MIDI had been established as a means of communication between computer-based instruments, I wrote programs that created images from music, or used MIDI controllers to modulate existing video images – by, for example, changing colours, or distorting shapes, or applying prepared video effects.

These experiments depended, of course, on current technology, which was changing and developing all the time – as, of course, it still is. More particularly they depended on the technology that was *available* i.e. cheap enough for me, or for the Electronic Music Studio I ran at the Sydney Conservatorium of Music, to be able to afford. Early experiments used Moog and VCS3 analog synthesizers. Later on, in the 1980s, I was able to use a Fairlight Computer Musical Instrument – the Fairlight CMI – and its video counterpart, the Fairlight CVI, or Computer Video Instrument.

I was interested in applying musical concepts of rhythm, colour, density, and so on, to images, and in integrating these with music. A musical rhythm, for example, would be combined with a contrapuntal visual rhythm. Music of rich tone colour would be combined with rich visual colours. Or, in contrast, with bland pastel colours. What was the effect of these sequences? How did the meaning of a passage of music – as far as one could articulate or feel it – change when displayed simultaneously with a visual passage acting in unison, or contrapuntally in terms of, say, duration, colour, location, and/or density? What differences were there in the audience's response? These were complex questions that I could only answer intuitively – perhaps one day someone will research them in the same way that Muzak researched people's emotional and physical responses to different kinds of music. But I hope not: the last thing I want to see is a practical manual on how to control people through the audio-visual medium. That is something for the propagandist. As an artist I want to set up a rich labyrinth of emotive possibilities through which the listener/viewer can find her own path.

In the course of experimenting with technology, I discovered, as many other composers did, that, firstly, it was very difficult to devise a system that was reliable enough to use effectively in public performance. This was not necessarily a bad thing, for sometimes the unexpected results obtained were highly desirable. On too many occasions, however, they were undesirable, or – worse – there were no results at all. One defective lead could kill the whole performance. Secondly, one had to move and set up an enormous amount of equipment, some of it very heavy. Thirdly, it was very difficult for others to perform the pieces, for if they were technologically savvy enough, the odds were that the equipment they had was not the specific equipment the piece required. After a while, these frustrations led one to fantasize about pencils, and manuscript paper, and returning to music for simple wooden flutes.

In the 70s I created, with others, performance events that used 360 degree slide and film projections along with dancers, actors, live photography and video, and so on. While exciting, it ultimately proved frustrating to know that there were images being projected behind your head that you couldn't see. Even using multiple screens at the front of the hall was frustrating, for you still had to move your head and it was impossible to see everything. This was not so much a problem when using abstract images, but by then I was tiring of abstraction and wanted to deal

with images from the real world. This was partly because I'd become something of an activist concerned with various political and humanitarian issues. The most important of these, for me, was the 1975 invasion by Indonesia of East Timor, a tiny Portuguese colony very close to Australia.

At first I did what other activists did: I attended demonstrations and wrote letters to newspapers and politicians. My life was going in two separate directions: I was doing what I could to bring about political change in order to stop the blatant human rights abuse being perpetrated on innocent civilians – beatings, torture, rape, killings, the theft of their property and the exploitation of their natural resources – while at the same time I was composing abstract music that seemed a million miles away from the very real needs of real people. Looking back, it was inevitable that these two strands would come together. By then I'd realized that as a composer the best way for me to create effective music that other people found moving – music that primarily appealed to people's emotions rather than to their intellect – was to respond very directly to my own emotions, to what moved *me*. The suffering of the people of East Timor led me to create audio-visual pieces about their plight. If those pieces helped in the push for a positive change to the situation – which, in their small way, they did – then perhaps they would have a useful social function, whatever their artistic value.

For my first Timor piece – “Kdadalak (For the Children of Timor)”, for prepared piano, percussion, tape & images, 1977; photography by Penny Tweedie) – I used a slide projector system with six projectors on three screens. Several performances later, in Hong Kong, Sydney and Tokyo, Penny and I came up with a version minus the live musicians and that used just two projectors on one screen. This was less spectacular but more focused and effective. It was also far easier to present. Later on I did pieces using nine computer-controlled projectors on one screen. This was a powerful system, but the amount of equipment needed to show the pieces was staggering, resulting in the pieces receiving just a handful of performances. It was not until personal computers became powerful enough, and data projectors were cheap enough, that I was able to do away with bulky slide projectors forever and do everything with the system I'm using now: a laptop computer (Apple Macintosh) plugged into a stereo sound system and an LCD projector. In some way it's inferior to using slide projectors: the resolution of the images, for example, doesn't come close to that of film, and only very expensive data projectors have a really good digital black. But I'm prepared to trade in these qualities for the ease of performance, and increased performance opportunities, that the current system offers. After all, what practical use is an audio-visual piece, especially one designed to bring attention to a particular human crisis, if it can only be seen/heard by a handful of people?

In the past few years I've been presenting concerts with Australian clarinetist Ros Dunlop, our repertoire including the Timor pieces “X”, for clarinet & computer (1999, the title referring to East Timorese resistance leader and, now, President, Xanana Gusmao); “Welcome to the Hotel Turismo”, for bass clarinet (originally cello) & computer (2000); and “Tekee Tokee Tomak”, for clarinet & computer (2003, after East Timor had finally won its independence). Other pieces include “Merry-Go-Round”, for clarinet (originally clarinet & cello) & computer (2002), about Afghanistan; “Weapons of Mass Distortion”, for clarinet & computer (2003, about the official use of propaganda, doublespeak, lies etc, especially those that led to the invasion of Iraq by the so-called “Coalition of the Willing”); and “Papua Merdeka”, for bass clarinet & computer (2005, about the plight of the West Papuan people). We are able to carry with us most of the necessary equipment, needing the venue to supply just a stereo sound system and screen.

In these pieces I've moved on from normal compositional concepts. While I try to make them work as artistic creations, they must also impart information about the real world, hopefully inspiring their audience to think about a particular situation and to find out more. To that extent they have a documentary aspect. Although they mostly use still images, texts etc, they have a filmic quality. But the music, especially when a live performer is used, plays a more important role than it does in most films, for it is composed in conjunction with the sequencing of the images. It sometimes uses spoken and sung texts, and concrete sounds, as well as acoustic and electronic sounds, sometimes supporting the images, at others working in counterpoint to them, or supplying a contrasting line of thought. It is mostly not music with accompanying images, or images with a soundtrack, but an audio-visual whole composed with all elements – colour, rhythm, density, dynamics, and so on, in both sound and image – in mind.

I'm often accused of making propaganda for a particular political point of view. I reject this, for these pieces have nothing in common with propaganda (repetition, disinformation etc.). They leave the audience in no doubt as to where my sympathies in a specific situation lie, but they make few assertions, preferring to raise issues and promote discussion. Some critics claim that politics and music should not mix, a view I wish I could share. But humanitarian crises and politics are inextricably linked – one cannot deal with one without involving the other – and music is, in various ways, inherently political. In creating an audio-visual piece stimulated by the plight of the people of West Papua, for example, one has to deal with the politics that led to that situation; in choosing to compose that piece rather than an abstract orchestral piece, say, one is making a political choice: create a piece that can go anywhere – from a village in East Timor to an art gallery in Chicago – or go with the musical *status quo*, which is often used to support the political *status quo*.

Looking back, the audio-visual pieces I'm doing now are the result of eclectic tastes, a variety of interests, many years of experiments, powerful and relatively inexpensive new technology, and a steady artistic evolution from my days as a student. I've tried to follow my own path – as all artists must – refusing to bend to the dictates of either academe or the market place. One can do no more. Or less.

Santrauka

Audiovizualinio komponavimo koncepcijos mano kūryboje

Audiovizualinio komponavimo koncepcijas tyrinėju jau nuo studijų laikų aštuntojo dešimtmečio pradžioje. Nors ir kuriu muziką kinui bei videofilmams, mane dėl įvairių priežasčių labiau domina nejudantys, o ne judantys vaizdai.

Tinkamos technologijos pasiūla (atvirkščiai proporcinga jos kainai) yra pagrindinis faktorius, renkantis ir įkūnijant savo kūryboje tam tikrą audiovizualinę koncepciją. Pradėjęs nuo vieno ar poros skaidrių projektorių, palaipsniui perėjau prie devynių kompiuteriu valdomų projektorių naudojimo viename ekrane. Šiandien viską kuriu portatyviniu kompiuteriu, o atlikimui naudoju duomenų projektorių.

Visi ligšioliniai mano audiovizualiniai kūriniai pasakoja apie tikrus dalykus ir įvykius, pvz., apie Rytų Timoro gyventojų padėtį po 1975 m., kai šią šalį okupavo Indonezija. Pranešime aptariami šios kūrybos srities, kurią galima būtų pavadinti „politine multimedija“, politiniai ir kitokie aspektai, demonstruojamos pagrindinės koncepcijos, kaip pavyzdžiai paimti tokie kūriniai, kaip „Weapons of Mass Distortion“ (Masinio iškraipymo ginklai) klarnetui ir kompiuteriui (2003) ir naujas kūrinys apie padėtį Papua-Naujojoje Gvinėjoje. Pabaigoje nagrinėjama, kaip technologijų tobulinimas galėtų paveikti audiovizualinį komponavimą.