

Edinburgh University

School of Arts, Culture & Environment

PORTFOLIO OF COMPOSITIONS

SUBMITTED FOR THE DEGREE OF PhD

“An exploration of musical composition and sound production
in the context of cross-disciplinary performance”

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Included Materials:

1. "Angkor Journey"	CD Audio	74'00	2001
Cambodian Soundscape			
2. "The Road"	DVD PAL	50'00	2001
Live Multimedia Performance			
3. "Who Owns Jack Kerouac?"	DVD PAL	120"	2002
Feature Documentary Film			
4. "Who Owns Jack Kerouac?"	CD Audio	40'30	2002
Original Feature Film Soundtrack			
5. "Show"	DVD PAL	15'00	2004
Sound piece for Choreography			
6. "H ₂ O"	DVD PAL	34'00	2005
Mozaic for Projector, Musicians and 6 Speakers			
7. "Animations 2001-2002"	DVD PAL	30'00	2001 - 2002
3 Short Animation films			
8. "Collaborations/Productions 2001- 2004"	CD Audio	36'30	2001 - 2004
Various songs and sound Projects			

Introduction

Growing up in a non-musical family, the type of music I first encountered was popular music. My early interest in music therefore came from listening to recordings where the quality of the sound forms an essential part of the listening experience. I was also fascinated by the sounds and music I heard in the cinema.

As my curiosity developed I gradually became more interested in many other areas of music making and musical styles, experimenting with sounds at any given opportunity.

I embarked on this PhD in October 2000 having just completed an Honours Degree in Music at Dartington College of Arts, Devon. During that period of study, I became acquainted with various studio techniques, using both analogue and digital equipment. I felt I had found an adequate territory in which to express my musical creativity. I was therefore very interested in continuing to explore the potential offered by musical technology and to broaden my skills as a music maker, recording artist and producer.

My aim for this research was to develop my knowledge of technology, developing recording techniques in order to reproduce the sounds I had grown up with as well as discovering new sonic possibilities in the process.

I also conceived this PhD as an opportunity to explore cross-disciplinary practices, with the idea of developing collaborations with artists working in other media.

I hope to present, with the works included in this portfolio, a clear illustration of the path I have undertaken during the last five years.

Angkor Journey

This is the result of several recording trips across Cambodia spanning over 3 years (1998-2001). Although work on this project had started before my period of research at Edinburgh University, it provides this Portfolio with an appropriate starting point for several reasons:

First, it features some of my very first attempts at using digital technology to produce and edit sound. Secondly, the experience surrounding this project affected my practice as a composer, in the way I perceive sound and music making all together.

The aim of this recording was to expose a Western audience to a culture whose roots have been damaged by a civil war and the 30 years of hardship following it. It was also an attempt at providing the Khmer people with a reference to their culture through sounds, music and poetry. UNESCO estimates that 80% of the Khmer heritage was wiped out during the Khmer Rouge regime. Many young Cambodians have lost touch with many forms of their own culture including music. I worked on this project with Khmer musicians and friends, trying as much as possible to respect the identity of their original culture.

The vision behind this project was to create a sonic film which would take its listener through a journey to the heart of Cambodian culture. There are only 2 pieces which I freely composed here: "Sna Dai Boppeak" (Track 2 on the CD), an evocation of the great Angkor Empire (9th-13th Century) and "Along The Siem Reap River" (Track 26). The album is also in a way an assemblage-composition, evolving through traditional music, environmental sounds and spoken words.

Created on a shoe-string budget, those recordings were made using a Sony portable Minidisc recorder and a small electret condenser microphone (Sony ECM-MS907). The editing and mastering was done in a PC laptop using Steinberg's Nuendo. I took the final session from Siem Reap to Bangkok in Thailand where 5000 copies were pressed in September 2001. The profits of the sales have profited Cambodian musicians and families through an organisation called: "Les Artisans d' Angkor" which assisted its distribution.

Having sold all the copies, I was unable to include the original CD for submission and instead of attempting to reproduce the original booklet, I have preferred to include the original notes here:

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Cambodia can be said to be one of the countries in the world where music was and mostly still is present at every important stage of its people's lives. Different musical ensembles with their own unique repertoires are used for every specific special occasion: celebrating the birth of a child, the passage from childhood to manhood, the promotion of good health, the avoidance of dangers in life, weddings, religious festivals, the repulsion of bad spirits, boxing and martial arts, dances, theatre and funerals. Music in Khmer life is present from the cradle to the grave.

Yet there is a contradiction. Music and musicians in Cambodia are as misunderstood and undervalued as they are essential to the society.

Musical events, instruments and ensembles are well presented in stone sculptures found in Angkor Wat and Bayon temples. Also, old stone inscriptions tell us of thousands of musicians and dancers who were dedicated to each and every temple ever built.

In modern time up until the late sixties, the Royal family upheld the tradition of supporting music and dances. Yet, even during that time, the gulf between music performers and music users was quite wide. Although the standard of musical performance was very high, very little was done in the way to educate musicians, let alone the people, in the understanding of what Khmer music is and how the music and the musicians should be valued. The result was that music performers-the people providing a service-ended up in a different stratum of society than the people who paid for this service.

By the late sixties, Cambodia seemed to move in the right direction: all genres of music were recorded on magnetic tapes and often released on gramophone records. Some important traditional pieces were notated and the University of Fine Arts was created. Unfortunately, this progress came too late. When, in the late sixties, Cambodia was caught up in the Indochina war and by 1975 finally fell under the power of the Khmer Rouge, everything seemed to have reached an end. In 1979, Cambodia emerged from complete destruction and the government of the time made considerable effort to bring music and dance back to life. Many artists and musicians were gathered together under the auspices of the Ministry of Fine Arts and Culture. The Faculty of Fine Arts was reopened with new intakes of students. Although nobody knows exactly how much of the Khmer musical heritage has been lost during those dark years, it was obvious that the arts were in a much worst state than there were in the late sixties.

The arts did not totally die, however. Khmer music and dance have survived thanks to the effort of the Khmer people who initially provided the society again with at least basic

services for main celebrations such as weddings, health rituals and religious festivals. Some say that the arts survived because of the important role they play within society. Khmer people need music and dance, and most of all music in order to live their daily life to the full.

So, little by little things gradually return to normal: Wedding music, Pin Peat and Mahori music ensembles are very much in demand again in the present day. Some individuals, NGOs and Khmer traditional institutions such as Buddhist pagodas have responded to these rising demands by offering support and training in the traditional arts. However, a lot more needs to be done in order to secure the survival of traditional music:

The musical repertoire must be archived both through notation and recording of all the pieces still remembered by surviving great masters. This knowledge must be transferred to new generations of musicians both through the teaching of the repertoire and the construction and reconstruction of traditional instruments. Also, scholarly research must be undertaken in order to establish a better understanding of the music itself as well as its relation to society. It was late to save the music as it was in the late sixties but we should not be late to save what is left of it now!

Um Mongkol
West Roluos, Siem Reap
September 2001

The Khmer without any doubts possess one of the finest Art traditions in the world. Similarly, a truly unique voice can be found through the country's music, one that reveals the true essence and identity of the Khmer people, and one that is still largely unknown to the rest of the world.

Rather than drawing a systematic panorama of all remaining traditional musical forms, we aim through this collection of recordings to take the listener on a journey into the heart of the Cambodian people. "Angkor journey" is a soundscape, a poem set to music, an acoustic travel reportage. It is the portrait of a land as it is today.

Jean-David Caillouët

1.Slek solo.

Slek: Chanda

You are hearing the sound of an ordinary tree leaf (Slek in Khmer). The musician blows into a folded leaf, placed between his lips, to improvise a short romantic tune.

2.Sna Dai Boppeak Boroh.

Voice: Nu Sinath

In this poem, sung in traditional theatrical style, the beauty of Cambodia and its heritage are described. The poem ends by an invitation to the listeners to help and preserve the Khmer heritage.

Art of the Khmer Ancestors

Siem Reap, My Land, Paradise of many monuments.

Splendid Land of Angkor, ancestral homeland.

Working together, as One, our ancestors created this, it is our inheritance, our life, our joy.

This beautiful land, inhabited by Angels and Apsaras.

To know this Land is to free all worries. The only desire is to spend a lifetime here, in the heart of this land.

We, the Khmer people, find our life and joy in this land.

Please! Help us preserve it for eternity!

3.Morning Birds.

This sound of the birdcalls is typically what you will hear very early in the morning around the temples of Angkor.

4.Tep Thida.

Children of the Krousar Thmey Pin Peat ensemble, Siem Reap.

Krousar Thmey (New Family) is a NGO in Siem Reap which trains children in the traditional arts. This sweet performance by children provides a sense of hope and pride to the people of Cambodia.

5.Cowbells.

If you are lucky, while trekking in temple lawns, you will hear this typical Cambodian countryside sound: cow bells ringing. Cowbells may be made of wood, bamboo or cast metal.

6.Lom Neang.

Ksae Diew solo: Prum Kosal

The performer is one of the few young musicians from the Faculty of Fine Arts in Phnom Penh who can play now, probably the oldest and most difficult musical instrument in Cambodia, the Ksae Diew. The instrument is made up of a cut pear-shaped gourd resonance box and a fretless bow-shaped fingerboard with a single bronze string. The string length is controlled by the left hand fingers, plucked and damped at the same time by the right hand fingers in order to produce harmonic sounds of various pitches. The drone is provided by regular beats of plucked open string. The tune being, performed in solo, is a very old traditional wedding piece called "Lom Neang"(to console her). Ksae Diew figures both in Angkor Wat and Bayon bas-relief sculptures.

7.Cowboys and Cows.

Looking after cows is probably the only farm chore, which demands a full time participation of children in a family. Some children may even have to give up their

education to tend the animals. However, they do fully enjoy their spare time and open-air life while they look after their cows.

8.Sarikakeo suite.

This is an open-air performance by three musicians in Angkor Wat of a suite of four lively children folk tunes: Sarikakeo (the Minor Bird), Sat Rumpe (the Seagull), Samse Sonaleka (a Cham tune) and happy Ya (a corrupted pronunciation of the English “Happy New Year”).

The instruments played are: a Tro Sao (a treble two-stringed fiddle), a Khloy (a tin whistle like bamboo flute) and a Skor Day (a hand drum).

9. Sampew Thoy.

*Old Wedding Music ensemble.
Faculty of Fine Arts, Phnom Penh*

Yon Theara: Tro Khmer
Yim Sichot: Pey Or (Pey Praboh)
Prum Kosal: Ksae Diew
Tuy Sovannara: Tro Ou
Ing Vanna: Chapey Dang Veng
Soy Sareth: Skor Day
Proeung Pruon: Skor Day

Sampew Thoy means “The Junk Departs”. It is somehow a melancholic farewell tune to be played during the procession of the bridegroom leaving his own home towards the bride home where he will remain, in Khmer tradition, after the wedding.

The tune is here performed by a now rare wedding music ensemble called “Wong Phleng Khmer” or “Wong Phleng Kar Boran”(Khmer Music ensemble or Old Wedding Music ensemble) of the Faculty of Fine Arts in Phnom Penh.

The ensemble consists of a Tro Khmer (a three-stringed fiddle), a Pey Or also called a Pey Praboh (a double reed oboe), a Ksae Diew (a single-stringed lute, see also track 6), a Tro Ou (a two-stringed bass fiddle), a Chapey Dang Weng (a long necked lute) and two Skor Day (hand drums).

10. Preah Khan.

The sound of the jungle around Preah Khan temple in a late afternoon.

11.Sneng Call.

Sneng: Yim Sichot

The Sneng (a horn) is a rustic Khmer solo instrument made with cow or buffalo horns. The sounds are produced by blowing into a metal mouthpiece on the pointed end of the horn whereby the pitches are controlled by blocking the hollow ends of the horn with the fingers of both hands. It is now a rare sound to be heard only inside a concert hall.

12. Night time in Angkor Thom. (Monks walk)

13. Lament.

Voice: Phlong Rithy.

This is an extract from a traditional play. The lament of a dead woman:

*This way forward, nothing but death and moans.
Oh dear me nothing but nothing bones
If I die on this land
My spirit in the hands of my Rishi Master
Will be surely saved and healed*

*But here I am, drowned in water
Deep deep water
I'm food for the fish
And they'll eat me down to nothing
Down to nothing*

14. Khmer Krang Pka.

Mahori ensemble. Faculty of Fine Arts, Phnom Penh.

Proeung Pruon: Roneat Ek.
Kong: Roneat Thung.
Mao Phoeung: Roneat Dek
Ing Vanna: Takhe.
Yon Theara: Tro Sao.
Prum Kosal: Tro Ou.
Tuy Sovannara: Tro Thom
Keo Dorivan: Khloy
Soy Sareth: Thon Rumanea.

This is a Khmer traditional composition in Khmer style called “Khmer Krang Pka” (Khmer making “garland”). It is performed by yet another Khmer ensemble called “Wong Phleng Mahori”(Mahori ensemble) which consists of three xylophones called “Roneat Ek”, “Roneat Thung” and “Roneat Dek”, a plucked three-stringed floor zither called “Takhe”, three two-stringed fiddles called “Tro Sao”, “Tro Ou” and “Tro Thom”, two bamboo flutes “Khloy Thom” and “Khloy Toch”, a set of two drums called “Thon Rumanea” and a small pair of cymbals called “Chhing”.

15. Drum Call to prayer.

16. Morning Chants. (Preah Sarng Tuk).

17. Khmer Plom Slek.

Spean Kaek Pin Peat ensemble, Siem Reap:

Em Uom: Roneat Ek.
Phuon Pheap: Roneat Thung.
Phuon Phon: Roneat Dek.
Morgn Mien: Kong Thom.
Phuon Phay: Kong Toch.
Seng Norn: Sralay Nai.
Khum Khom: Sralay Nork

Soeurn Sam: Skor Thom, Chhing.
Em Eam: Sampho.

“Khmer Plom Sleak” (Khmer blowing leaf, see also track 1), also known as “Khmer Pey Keo” (Khmer Glass Oboe), is a very lively Khmer style composition rendered here by a Pin Peat ensemble, the Spean Kaek Pin Peat ensemble in Siem Reap. This ensemble consists of the same three Roneats found in the Mahori ensemble (described in track 12). However, the fiddles are replaced by two sets of gong circles called “Kong Wong Thom” and “Kong Wong Toch”, whereas the Khloy is being replaced two quadruple reed oboes called “Sralay Nay” and “Sralay Nork” and finally the “Thon Rumanea” are replaced by two sets of drums called the “Sampho”(a two-sided horizontal drum) and the “Skor Thom” (a pair of two kettle drums). It is to be noted also that this ensemble differs from its counterpart in Phnom Penh by the fact it uses two Sralays.

18. Khmer Boxing.

Recorded in the New Olympic Stadium, Phnom Penh.

Khmer boxing must be accompanied by a special ensemble called “Wong Phleng Pradal” (Boxing Music ensemble). The ensemble requires a kind of oboe called “Sralay Chwea”(Javanese oboe) or “Sralay Klong Khaek” and a pair of “Skor Chwea”(Javanese drums) or also called “Skor Klong Kheak”. However, here a “Sralay Nai” and a “Sampho” are being heard instead of the Sralay Chwea and the Skor Chwea.

19. Chhay Yam.

Department of Fine Arts, Phnom Penh.

Chhay Yam is an ensemble of “Skor Chay Yam”(Long Drums), as many as one can afford to have, playing together with a “Kong” (Gong) and a “Chhap” (a pair of medium size cymbals). This ensemble is used to entertain the crowd during religious festivals. The players are expected to dance and play in a funny sort of way.

20. Radio Broadcasting-excerpt 1.

21. Children singing.

22. Chaw Dork

Khim and Khloy duet, Faculty of Fine Arts, Phnom Penh.

Yon Theara: Khim
Keo Dorivan: Khloy Toch.

This rendering of a very popular traditional piece, “Chaw Dork”, is an excellent achievement of the two best young Khim (a cymbalom) and Holy players in the country.

Both players are given the opportunity to show their improvisation skills in the solo sections.

23. Bandet Kbon Leng.

Tro Sao solo: Phaing Roeun.

“Bandet Kbon Leng” means “floating the raft”. This piece, performed in solo on a Tro Sao (two-stringed fiddle), is both sweet and melancholic, a longing for a carefree life like floating on a raft.

24. Tonle Sap.

25. Bampe.

Voice: Nu Sinath.

Lullaby

It's midnight now

My darling

don't make your mother sad

please don't cry

my darling

Go to sleep, my darling,

mother will stay here and look after you close by without fail.

She will stay and watch you sleep

Until the morning wakes

Please go to sleep my clever child.

Go to sleep my clever darling

Please go to sleep, your father has not returned from the field yet.

Sleep little one, your Daddy's in the field.

On his return, We will have fresh vegetables for mother to cook tasty food for us.

Please go to sleep my darling child

26. Waterwheel-along the Siem Reap river into the lake.

27. Soriya Igeac Tngay.

Tro Sao solo : Um Saem.

This traditional tune describes herds of wild buffalo grazing in the heat of the late afternoon sun. All is peaceful, all is calm under the late afternoon sun of Cambodia.



This collection of recordings has generated interest in Khmer Music and selections of the CD have since been used in various short films and documentaries.

The Road

I first met Jack Shea at a poetry reading early in May 2001. I was impressed by his voice and intrigued by a poem he read that night about Jan Kerouac. Unaware that Kerouac had a daughter, I went to Jack to find out more. It turned out that he was working on a film about the beats, Jack Kerouac and more precisely his daughter Jan.

I asked Jack if he'd be interested in working on a performance based on footage from his recent trip across America, using Poetry and live music. I called Joel Sanderson with whom I had been working on several projects prior to this one. I had been experimenting with samples from his cello taken from a recording session we had worked on together a week before and knew his improvisational capabilities would combine with Jack's very well. I had also just started discovering a new piece of Software called Reason designed by the Swedish company Propellerhead. Originally created as an all in one virtual studio with an orientation towards dance music, the package struck me as a very efficient live tool with very immediate MIDI accessibility.

We decided to edit a 50 minute version of the film he was working on using narrative scenes as well as long road shots, and atmospheric sequences which we would then be able to accompany with music and words.

Once the edit was completed, I started experimenting with the cello samples feeding them into various devices within Reason. I came up with various loops, drone textures. I started mapping out patches and assigning parameters to midi controllers mainly on my Nord Lead synthesizer. I would like to stress at this point that these were my very first steps in the world of MIDI and Sampling having never explored this aspect of music technology before hand. I was however already very familiar with most of the devices replicated in a virtual forms in Reason and was extremely interested in its capabilities to recreate analogue sounds through virtual instruments. This was emerging technology at the time and it felt very exciting to be able to layer sounds with such ease.

80 % of the material used came from the cello apart from the kalimba samples and sine waves used in the " Skyway section" or the programmed drum beats in the "New York" section. There are also a few samples from old Hollywood movies thrown in here and there. But the overall emphasis remains on the cello as an attempt to create a lot with very little, and provide homogeneity between the electronics and the only acoustic instrument used.

I wrote a few melodies for the cello and Jack wrote many poems which he then gradually edited down and modified during our rehearsals. Most of the music and content of the performance was then organised through discussions and experiments during those rehearsals. Most of the cues came from the film. The film was the fixed timeline we worked to. We would either find visual cues to tell us when to move into the next section or create a musical system that could carry on building up until the next cut appeared on the screen.

The cello melodies used are very short and simple but leave plenty of room for interpretation and improvisation. They also sound very effective against the sampled electronic textures.

Garden of Eden Theme:



(DVD Chapter :The Road Awakes)

This is the first theme to appear during the performance. A deceptively naïve melody which introduces the dramatic content of the show through its high sustained notes played against a heavy drone.

Road Theme:



(DVD Chapter: On The Road)

This is the main theme. A cliché line based on a simple arpeggio in C Major.

This theme reappears many times during the performance. For instance, during the "In the Beginning" section, it is played very softly against a shifted tonic D, moving to a Dorian mode:



(DVD Chapter: In The Beginning)

It is then used again for the intro to the "City At Night" section where it is now played in D Minor:



(DVD Chapter: In The City At Night)

These are only starting points for Joel Sanderson who is then free to expand, paraphrase and improvise around those melodies. I modify the sound of his cello throughout the performance, using delay pedals & a reverb Unit aiming at a wide and cinematic feel. But the main solo instrument really is the voice, not only providing narrative content, but also creating repetitive rhythms almost in the form of an Indian Mantra. During the performance I mix the sound of the actual film with that of Jack's voice and Joel's cello as well as my own musical contribution, keeping total control over the overall balance and texture of the mix.

"The Road" was only performed three times but it certainly opened up the door to an entirely new approach in my musical practice and the way I compose music; creating systems around simple structures within which performers can improvise, explore and invent.

“Who Owns Jack Kerouac?”

We then took those techniques one step further as we started work on the “Who Owns Jack Kerouac?” film in August 2001. This took us to Andorra La Vella where Jack was editing the film. The editing suite was located in a building which had once been used as a bank, then a zoo before becoming a film production company called “Imagina”. The only equipment available to me for recording were my PC lap top with a Motu 828 sound card, Steinberg’s Nuendo Audio and Midi workstation and a Rhode NT1 microphone. We started experimenting with the acoustics of the building, settling on an ideal spot for recording the cello: a completely sealed room which used to be the safe of the bank.

The idea was to spend 2 weeks working simultaneously on the film and the music, hoping that ideas would bounce from both sources.

This took us to many different musical places, from the upbeat track created for the New York section (Chapter “America Raps” on The Kerouac DVD) to the opening theme (“Father’s Theme” on the “Who Owns Jack Kerouac?” CD). The main challenge was to create music that would enhance the dramatic character of the film and fit various sequences in terms of length and content.

The work was then carried on back in Edinburgh throughout the Month of October and November once I had returned from Cambodia after completing the “Angkor Journey” CD. The film kept evolving during re-edit. It became more and more apparent that too many elements were being included obstructing the main narrative lines of the documentary. Many good sequences which were a direct development from the original performance in terms of music, poetry and visuals were gradually dropped from the final edit.

This was a very steep learning curve on my side; not only it was my first attempt at scoring a full length feature film, it was also my first attempt at creating a cinematic sound. I learnt a lot of tricks about production techniques. The most successful track from a production perspective is the opening track “Father’s theme” in which I aimed to imitate a classic Hollywood soundtrack. I wrote the theme, sequenced it and then Joel overdubbed all the parts on his

cello. I then edited and mixed everything in Pro Tools using a combination of Waves Plugins and a Lexicon Reverb Unit.

The recording process was also very collaborative, allowing Joel to react to the possibilities offered by technology to transform the sound of his cello through layering, looping and processing. An example of this can be found on the track "Ending Ocean" (Track 15) which was arranged and produced quickly with Joel playing through Reverb Plugins. The sound being produced first and the performer responding to the final output.

I have included here the DVD of the final edit of "Who Owns Jack Kerouac?" as well as an CD of Audio selection of pieces that were either used or not under the name of "Who Owns Jack Kerouac? Original Feature Film Soundtrack".

Show

This is the most recent example of a series of collaborations with London-based choreographer Joanne Fong. I was commissioned by the Snag Project, a contemporary dance company based in London, to write music for a new choreography entitled 'Show'.

The piece deals with the ideas of isolation, loneliness and claustrophobia in the urban world. Darren Ellis and Pari Naderi share an isolated and intimate space: a black box revealed through tiny gaps. The enclosure creates an almost filmic viewpoint, close up and fragmented, with the viewer able to choose their own perspective on this intimate study. The audience walks around peeping in through the openings as they pass.

The sounds travelling around the space represent urban noise, chaos and the muffled distant echoes of neighbouring flats.

The source material originates mostly from old gramophone samples, which give the overall texture a dusty feel. This adds to the expressionist character of the piece.

Contrary to pieces Joanne and I had worked on previously, a more flexible approach was adopted with 'Show'. In earlier projects the sounds were carefully designed to a precise timeline to follow the choreographed movements but this time we decided to conduct an experiment, discussing the feel and emotions of the piece without working on specific time based details. This helped create an impression of tension between an exterior urban world and an inner isolated life within the box while complementing the emotional struggle of the performers.

The edit presented here is assembled out of two rehearsal takes. As a result, various parts of the choreography coincide with the music at different points in time. This demonstrates what happened during the nights where the routine varied from one performance to the other as the performers were allowed to improvise with the structure of the choreography. I personally felt the experiment worked well, with situations occurring which couldn't have been planned and allowed for more interesting coincidences to appear, illustrating unplanned synchronicity between sound and movement.

The sound during the performance was diffused through 4 speakers and I mastered the sound at the Chlore studio for optimal effect. I wrote the piece using Reason's samplers and filters and editing was conducted in Ableton Live and Pro Tools.

"Show" was premiered in July 2004 at the Chlore studios of the Royal Opera House in London where it was performed again last July.

H₂O

Mozaic for projector, Musicians & 6 Speakers.

With 'H₂O', I wanted to present the listener with a tapestry of sonic textures and musical styles, a kind of film music where the film accompanies the music, enhancing rather than dominating.

In the same way as DJ's recombine preexisting recordings from many available sources to create a new fusions of styles, I also wanted to see how I could assemble different fragments into some kind of coherent whole. Thus, 'H₂O' is a collage where I assemble various visuals and musical pictures, flicking through instrumental snapshots, electronic textures and moving pictures.

The Mozaic idea comes from the fact that the piece consists of many fragments and only once those fragments are assembled does the larger picture appears.

The piece also explores the idea of collage in a performance context, interweaving prerecorded sounds, live generated electronics, acoustic scores to a backing track and visuals and leaving room for improvisation.

Here is a map showing how the piece is constructed:

(●=non occurring ◇= occurring)

	Womb	Sol	Human	Light	Distance	Dissolving	Snake Bite	Aqua	Language	Motion	Motion 2	Sol Reprise
Live Acoustic Ensemble	●	◇	●	◇	●	●	◇	◇	●	●	◇	◇
Live Electronics	◇	●	◇	◇	●	●	◇	◇	◇	●	◇	◇
Projection	◇	●	◇	◇	◇	◇	◇	◇	◇	◇	◇	◇
Pre-recorded Sounds Running with Film Track	◇	●	●	●	◇	◇	◇	◇	◇	◇	◇	◇
Timeline:	0'00	5'07	6'54	9'00	9'21	12'39	13'31	17'10	25'00	27'32	28'36	30'15

The prerecorded track runs along with the film and is either used to enhance the live music by providing very light resonant sounds ('Aqua'), to provide a Rhythmic foundation ('Snake Bite' & 'Sol Reprise') or smooth out transitions between pieces ('Light', 'Dissolving').

With 'H₂O'. I found an opportunity for exploring visuals through digital manipulation. I have always maintained a strong interest for Visual Arts and films. My main background being as an artist. I was very interested in developing my skills further by applying my visual ideas to technology. The material used here comes from various sources. The naked suits in 'Human' were originally part of a short film 'Conference Square' by Erin McGuire, for which I wrote the music. I was interested in re-using this footage in a different context and by filtering the colours I made it into more of a 2 dimensional image. All the other material was shot by myself. The shots using natural occurring patterns were filmed during various trips to the Scottish Highlands ('Aqua', 'Motion'). The visuals were then edited and processed keeping in mind the circular screen on which they would eventually be projected.

The software used for editing and processing was Final Cut Pro with additional effects created in Arkaos VJ (now an M-Audio product) which allowed me to create opacity layers pretty much in the same way as what can be achieved with still images using Photoshop. Arkaos also allows for moving images and filters to be assigned to MIDI triggers. I did explore the potential of this technology, sequencing images to sounds and synchronising audio filters to visual ones. I then decided to return to a simpler route and create a linear film instead but this period of exploration influenced the final piece. Examples of the work conducted in Arkaos can be found in the introduction to 'Aqua' or in the superimposed lights at the end of 'Language'.

The visual aspect is kept very simple, the idea being of creating a gallery of flowing abstract chapters loosely depicting the patterns and phases of life.

H₂O also offered the opportunity to write music for Zizu, an ensemble I have been performing with since 2002 and whose line-up is myself on guitar, Marion Kenny on flute, Kim-Ho Ip on the Yang-Chin (a Chinese hammered dulcimer) and Joel Sanderson on Cello. Zizu normally plays a mixture of re-arranged Chinese traditional music and original compositions. I was interested to see how I could combine the sound of this acoustic ensemble with electronics. The music was written with those musicians in mind, knowing the sound they produce as well as the kind of improvisational ideas they might generate as a reaction to certain triggers put in place.

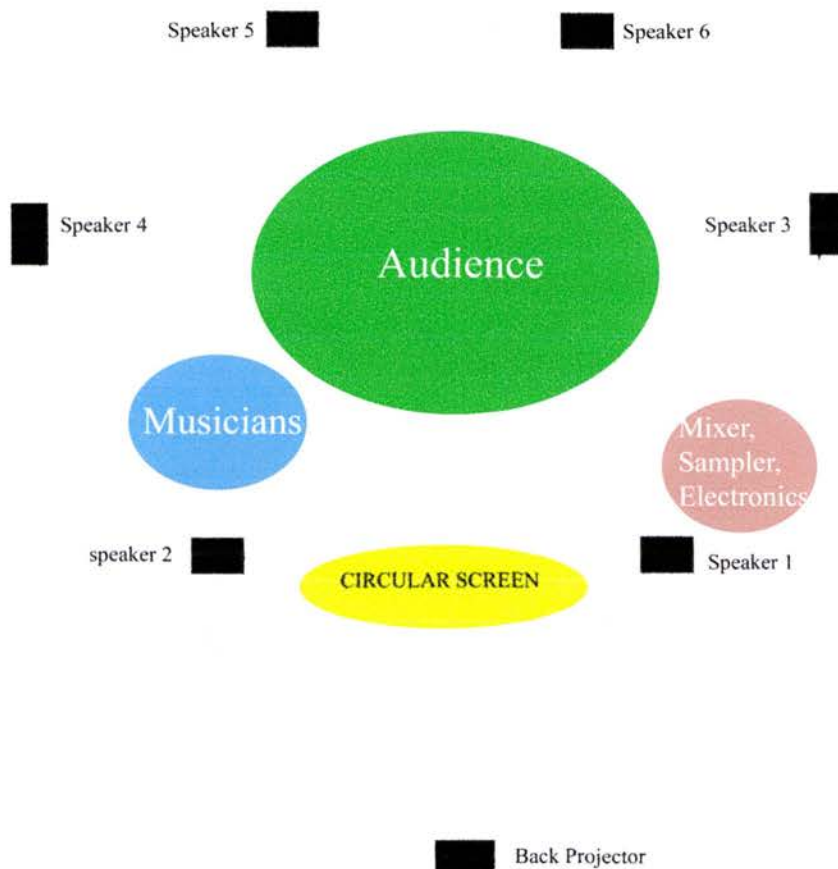
I worked with samples from Marion's flute, trying not only to capture the sound of her instrument but also characteristics of her playing style and musical personality. I processed some of those sounds using convolution algorithms in soundhack ('Aqua' and the middle section of 'Sol-Repise'). I also used samples from Kim's Yang Chin for percussion effects such as the ones displayed in the introduction to 'Snake Bite'.

I conceived the piece with the performance venue in mind (St Cecilia's Hall), knowing the natural reverberation of the room's acoustic would help blend the electronic sounds with the acoustic sounds.

The sounds of the instruments were also subtly altered via my laptop to help fuse the sequenced material with the live performance.

I opted for a 6 channel presentation which allowed for 3 dimensional experiments.

Here is the layout used for this show:



The multichannel set up is used in a fairly sparse manner. The rear Channel mainly used for delays and reverbs to project the acoustic instrument into the space. Channels 3 and 4 enhance the dry signal while 1 & 2 provide the main signal.

I use various loops made of cells triggered from the sequencing software Ableton Live. Each of those cells is played through its own individual channels and assigned to one of the six outputs on the soundcard, the signal being sent to the respective speaker. The 16 channels in 'Live' are controlled with the help of a Kenton Control Freak MIDI controller. The section making use of those loops were designed directly for this 6 channel set up with the idea of surrounding the audience with rhythmic patterns. The most obvious example can be found in the main section of 'Aqua' where nylon guitar loops phase in and out of each other and in 'Human' where various words come in and out from any of the six positions within the room.

I used two sets of Samplers in Reason with 4 patches assigned to 4 MIDI channels. The outputs of the Sampler are routed to those six outputs again allowing me to design spatial images. For example, the introduction to 'Aqua' make use of various convolved flute phrases which are then projected in groups of 3 stereo pairs. I also make use of stereo LFOs to provide the sounds with further movement. The DVD included here cannot unfortunately reproduce the 3 dimensional aspect of the piece.

Other areas explored are the transposition of studio techniques to a live context. Thus in the first part of 'Sol Reprise', The trio plays to a backing track which already consists of the parts on the score which have been treated and mixed quite low within the rhythm track. This helps in creating a bigger sound while retaining the live element.

The second part of the opening section 'Womb' consists of recordings of a rehearsal of 'Sol', the section that follows. Those recordings were processed in Soundhack, then edited together and provide an abstract resonance to the music about to be played acoustically.

I also explore the potential of the MIDI guitar using a Godin ACS instrument which not only provides a very convincing nylon tone, but allows me to navigate through MIDI channels to trigger virtual synths in Reason ('Snake Bite') ('Sol Reprise') or to double an acoustically played part with light synth pads sent to the rear channels ('Distance').

H₂O

Scores

SOL I.

Flute *molto rubato*

Yang-Qin

Cello

a tempo

Rhythm enters [n. n. n.]

roll.

Flute *rubato (dreamlike)*

Yang-Qin

Cello

nylon guitar *free arpeggio*

Distance

Handwritten musical score for the piece "Distance". The score is arranged in four systems, each with four staves. The instruments are labeled on the left: Flute (Fl.), Violin (Viol.), Cello (Cello), and Double Bass (Double Bass). The music is written in a key signature of one flat (B-flat) and a common time signature (C). The score includes various musical notations such as notes, rests, slurs, and dynamic markings like *p* (piano) and *mp* (mezzo-piano). The first system includes the instruction "1st time" and a *p* dynamic marking. The second system includes a *p* dynamic marking. The third system includes a *p* dynamic marking. The fourth system includes a *p* dynamic marking. The score is written in a clear, legible hand.

Handwritten musical score system 1, consisting of three staves. The top staff features a melodic line with eighth and sixteenth notes. The middle and bottom staves provide harmonic accompaniment with eighth-note patterns. The system concludes with a fermata over a final chord.

Handwritten musical score system 2, consisting of three staves. The top staff continues the melodic line with various note values and rests. The accompaniment in the lower staves remains consistent with the first system.

Handwritten musical score system 3, consisting of three staves. This system introduces a more complex melodic line in the top staff, featuring longer note values and ties. The accompaniment continues to support the melody.

Handwritten musical score system 4, consisting of three staves. The top staff features a melodic line with a dynamic marking of *p.* (piano). The system ends with a double bar line.

Handwritten musical score for a piano piece, consisting of two systems of three staves each. The first system has six measures, and the second system has six measures. The music features a melody in the upper voice and accompaniment in the lower voices.

(repeat 3 times)

Handwritten musical score for a piano piece, consisting of one system of three staves with four measures. The music features a melody in the upper voice and accompaniment in the lower voices.

Snake Bite.

Flute
Yang-Qin
Cello
Sampler

pp
pp
pp
delay rear channels

add lib
add lib in same direction
add lib in opposite direction

Detailed description: This system contains four staves. The Flute staff has a treble clef and contains a sequence of notes with dynamic markings *pp*, *ff*, and *pp*, and a handwritten instruction "add lib" at the end. The Yang-Qin staff has a treble clef and contains a sequence of notes with dynamic markings *pp*, *f*, and *pp*, and a handwritten instruction "add lib in same direction" at the end. The Cello staff has a bass clef and contains a sequence of notes with dynamic markings *pp*, *f*, and *pp*, and a handwritten instruction "add lib in opposite direction" at the end. The Sampler staff has a treble clef and contains a sequence of notes with a handwritten instruction "delay rear channels" at the beginning.

after cue

Flute
Midi guitar
Yang-Qin
Cello

Detailed description: This system contains four staves. The Flute staff has a treble clef and contains a sequence of notes. The Midi guitar staff has a treble clef and contains a sequence of notes. The Yang-Qin staff has a treble clef and contains a sequence of notes with dynamic markings *pp*, *f*, and *pp*. The Cello staff has a bass clef and contains a sequence of notes with dynamic markings *pp*, *f*, and *pp*.

Detailed description: This system contains four staves. The top three staves (Flute, Midi guitar, Yang-Qin) have treble clefs and contain a sequence of notes. The bottom staff (Cello) has a bass clef and contains a sequence of notes with dynamic markings *pp*, *f*, and *pp*.

♩

add lib. then repeat ♩ after cue.

Aqua

[on cue] ♩ = 109

Handwritten musical score for the first system. It consists of three staves: a vocal line in the treble clef and two piano accompaniment lines in the bass clef. The key signature has two sharps (F# and C#). The tempo is marked as ♩ = 109. The score includes dynamic markings such as *p* (piano) and *f* (forte), and a performance instruction "add lib..." (ad libitum). The music features a vocal melody with long, sweeping lines and piano accompaniment with chords and moving lines.

Handwritten musical score for the second system, continuing the vocal and piano parts from the first system. It maintains the same key signature and tempo. The vocal line continues with a melodic phrase, and the piano accompaniment provides harmonic support with chords and arpeggiated figures.

Handwritten musical score for the third system. The vocal line has several rests, while the piano accompaniment continues with a steady rhythmic pattern. The system concludes with a few notes in both parts.

Handwritten musical score for the fourth system. The piano accompaniment features a prominent sixteenth-note arpeggiated figure in the right hand, marked *pp* (pianissimo). The vocal line enters with a melodic phrase, marked *mp* (mezzo-piano). The system ends with a final chord in the piano and a note in the vocal line.

Handwritten musical score for the first system, consisting of three staves (treble, alto, and bass clefs). The music includes various notes, rests, and dynamic markings such as *mp* and *expressivo*. A trill is marked with a '3' in the final measure.

Handwritten musical score for the second system, continuing from the first. It features three staves (treble, alto, and bass clefs). The music includes notes, rests, and dynamic markings such as *pp* and *add lib...*. Trills are marked with '3' in the first two measures.

Motion 2

Flute *A^b sus4*

Yang Qin *pp*

after cue: *pp*

A sus4

slightly faster

B^b sus4

faster

A sus

gradually rhythmic

Sol-(Reprise)

Flute
MIDI guitar
Yang Qin
Cello

-D min - 23 bars -

repeat 11 - 18

[Coda] rubato-

Flute

Yang-an

Cello

Nylon guitar

Free arpeggiated

“An exploration of musical composition and sound production in the context of cross-disciplinary performance”

There are two main lines of research running at the core of this portfolio. The first concerns itself with the possible interactions between acoustic instruments and electronically produced sounds through the applications of music technology. The second is an exploration of musical composition in collaboration with other art forms with an emphasis on live performance.

The following paper is a reflection on the cross disciplinary aspect of some of the live performances documented in this portfolio. I will attempt to explain why I decided to explore this new area and the concepts involved in the creative process, and I will also look at the outcome of those performance pieces.

As a composer, using the tools available in the recording studio as a major element of my musical vocabulary, I am often presented with a challenge when trying to bring my work to an audience. Music carefully produced with the use of technology and designed to be listened to in the comfort of a living room rarely transfers well to a performance situation

with only speakers as performers. Let's take electro-acoustic music as an example: the 'Cinema for the Ears' aesthetic is devoid of visual presentation, letting the audience members' imagination create their own instead. Thus, the notion of performance in the context of electro-acoustic diffusion concerts has been fairly reduced. This is certainly part of the appeal of the genre but is there a way to bring more performability to those kind of works?

The software revolution has made it possible to replicate most of the recording studio devices while creating many new powerful creative tools to such an extent that the laptop computer has now become an almost self-sufficient performance tool; a very portable and convenient one. Interfaces are improving quickly, making it possible for the musician to interact with software programs in a very precise manner, allowing a very high degree of control over the shape, colour and timbre of the sounds produced. According to Brian Eno: "*a computer program should always allow you to continue working in the physical world that that activity suggests*"¹ and much progress has been made in recent years to make this possible. However, there is still visually little for an audience to engage with at a laptop music performance; the connection between what is visible on stage and the sounds produced

¹ Brian Eno/**Strategies for making sense**

From **The Wire**, Issue 139, September 1995, conducted by Paul Schütze.
http://music.hyperreal.org/artists/brian_eno/interviews/wire95.html

being far from obvious if compared to a performance involving traditional acoustic instruments. *“The whole physical experience is what you make things with. Anyone who works with any tactile art form knows this. And with any tactile instrument.”*² The visual-physical experience is also what the audience relates to the most, Frank J Oteri mentions *“We're such a visually-oriented society and sometimes we have to overcome that. I always get upset when people say things like, "Oh, I went to see a concert last night"”*³ but one could argue that one solution to this problem would be to find something for them to look at.

MIDI Instruments and various types of sensors that translate movements into sounds do offer efficient performance solutions but electronic music of a more abstract nature seems to demand other alternatives for the visual representation of the sonic complexity it exhibits. It is perhaps an issue inherent in the way music traditionally produced in a studio is created, its sounds being the result of too many processes to find an adequate physical representation in a live context. If the portable computer has resolved the problem of bringing live complex sounds to audiences it still lacks the directness that electronic music performers would desire:

² Ibid

³ American Music Center Web Editor **FRANK J. OTERI** in conversation with Meredith Monk

<http://www.newmusicbox.org/page.nmbx?id=12fp04>

*“Working with dancers, I’ve felt something of a similar envy: the distance between self-expression and physical action is a short one. But if your PowerBook is your instrument, artistic gratification through dynamic force is usually not the most practical way to get the sound you want”*⁴

It is therefore out of this questioning process about the performance aspect of electronically produced music joined with a strong interest in the possibilities of cross-art performance that I embarked on a series of live-experiments; attempting to explore alternatives to the ‘loudspeaker orchestra’.

The wealth of new possibilities offered to the composer who mixes his music with other media provides a fertile ground for experimentation; allowing many limiting factors to dissipate while setting up an entire new set of creative challenges and questions:

What happens when we bring sounds to a performance space? How does the performance context influence the way the music is produced? In what ways do visual elements inform the compositional process? How does this affect the audience’s perception of the music?

⁴ sound artist **Roddy Schrock**: Laptop Music For Beginners
<http://www.newmusicbox.org/article.nmbx?id=4187>

The added dimensions of performers and visuals bring a certain presence to the music and sounds emerging from speakers. Are we allowing the audience to engage with the sounds on a deeper level by providing visual stimulation and a human element?

Which are the parallels between sounds and visuals and what happens when we transfer technical principles between art forms? Which are the creative possibilities offered by synchronism and asynchronism between audio-visual?

The first performance piece presented here is 'The Road'. The seventy-four minute long experience it takes us through is in many ways similar to that of the showing of a film in a traditional cinema. The audience sits in front of a screen and is taken on a journey, follows a narrative story, gets involved with a number of characters and enjoys visual elements supported by sounds. There is one point where this experience differs: the music and many of the sounds enhancing the film are being performed live. The narrative aspect is equally divided between what happens on the projection and the live spoken words.

The film provides linearity and a frame for the performers to work in. It dictates set lengths for each of the musical parts as well as signalling cues for transitions. It sets parameters for mood, tempo and emotional content. As video artist Beryl Korot once commented about her collaboration with American composer Steve Reich on their video opera 'Three Tales': "*One of the things that interested Steve in my work early on was that I was very conscious of video as a time-based medium.*"⁵ The techniques available to film makers in order to edit cut and splice images over a time line are similar in nature to the ones used by composers to organise musical ideas: "*If you are conscious of literally physically being able to create rhythm and time relationships with the images then you are working in the territory of a composer.*"⁶ In the performance of 'The Road' there are moments where entire sections of music are cut straight after a long build up to coincide with the transition to the following scene on the film. This common technique is totally acceptable in a cinema context but a similar process applied to music performed without its corresponding visuals would suffer from a lack of justification. The limits imposed by the film allow the composer to free himself from structural decisions while focusing

⁵ Two Conversations About Three Tales By Robert Wilder Blue
<http://www.usoperaweb.com/2002/september/threetales.htm>

⁶ Ibid

on other parameters. Australian composer and sound designer Philip Samartzis writes:

“Generally it is the narrative function of film music that I find intriguing which is quite different to the structures informing popular or classical music built on statement, repetition and resolution. Instead film music is often modular, concise and unresolved”⁷

The music finds itself liberated in its cinematic role, enabled to explore textures and affecting the audience’s emotions while passing almost unnoticed. This new context influences the composition process as well as the way in which the audience perceives the music.

There is only one acoustic instrument present in the performance of ‘The Road’. The cellist, Joel Sanderson, brings an element of presence to the otherwise pre-recorded source material which originates in great proportion from his cello. His presence on stage somehow gives the sampled and treated sounds a credibility that the speakers alone could not achieve. Similarly, the live spoken words create a level of intimacy emphasising the

⁷ An Interview with composer and sound designer Philip Samartzis
http://www.rarefrequency.com/2006/08/sound_narrative_1.html

feeling of copresence that links performers and spectators. While the presence of live performers adds realism to the electronically produced soundtrack it could also be argued that the interposition of electronic media diminishes the impact the performers have over the audience.

Talking about American aural-visual pioneer Laurie Anderson whose blend of storytelling, visuals and electronic music can easily be connected to the piece discussed here, Craig Owens comments:

*“While the media literally magnify her presence, they also strip it from her. Her work thus extends and amplifies the feeling of estrangement that overcomes the performer who submits to a mechanical or electronic device: the film actor or recording artist.”*⁸

It is very much a two way process where the performative presence heightens the experience and the *technological aids--the film camera, sound recording--augment but also attenuate the body's presence and immediacy*⁹

Live music to film obviously isn't new. The entire catalogue from the silent film era was always presented with live accompaniment until

⁸ Owens, Craig. "Amplifications: Laurie Anderson." *Art in America* 69.3 (1981): 120-23.

⁹ Postmodern culture: **Laurie Anderson's Telepresence** by **Eu Jin Chua**
<http://www3.iath.virginia.edu/pmc/current.issue/16.2chua.html>

technology developed and made it possible for sound to be synchronised. The genre was revived during the last twenty years with people as varied as American guitarist Bill Frisell performing original live music for Buster Keaton's classics or Philip Glass re-scoring Jean Cocteau's "La Belle et la Bête" as a performance piece. Philip Glass comments: "*The point of this exercise is that it introduces the possibility of interpretation, which doesn't exist in conventional film viewing*".¹⁰ These new versions present a new take on this old art and form reinstate the idea of live performance in a cinema setting. They also explore synchronisation techniques that had for long only taken place in recording studios. Musicians are playing a carefully timed score or improvising music to follow and enhance very specific actions visible on the screen.

The music in 'The Road' oscillates between synchronism and asynchronism, at times running parallel with the action in the film and at other times taking over the narration and relegating the image to the background. Looking at his collaboration with composer Philip Glass on a series of films using music as the main narrative element, director Godfrey Reggio comments:

¹⁰ Working Glass Man: Philip Glass By Al Weisel
The Bulletin, December 14, 1999, 96-97

“All of the foreground plot characterisation is removed - the music becomes the equivalent of the narration and that is an enormous opportunity...music portends a direct communion to the soul of the listener. It doesn't go through metaphor. It is direct.”¹¹

Similar ideas can be found in the work of film director Andrei Tarkovsky as author Andrea Truppin writes:

“He probes sound's ability to function both literally - attached to an object - and abstractly - independent of any recognizable source. In these films, sound moves beyond its traditional role as secondary support for the image, at times surpassing the visual in its ability to convey certain types of meaning.”¹²

This is relevant in the context of the performance of ‘The Road’ which was conceived as a multimedia piece from the start, involving music, speech and moving image, accommodating spaces for each to come forward, to interact with each other and blend into one cohesive whole. It is this interplay which allows the audience to

¹¹ Interview with Godfrey Reggio commenting on 25 years working with sound and image in collaboration with Philip Glass
<http://www.allaboutjazz.com/php/article.php?id=703>

¹² **Andrea Truppin** in **Sound Theory Sound Practice**, page 243
ed. Rich Altman, 1992, Routledge, New York

*“travel smoothly through multiple and equally weighted layers of experience. These layers flow simultaneously through one another without the rigid hierarchy that separates most filmic world into "reality" and "fantasy"... Meaning is produced as much through the synergisms of narrative and formal elements, both aural and visual, as through the audience efforts to establish coherence among these elements.”*¹³

The second performance piece “Show” is at once a contemporary dance performance, an installation and a multi channel diffusion concert. The sounds are projected through four speakers placed one in each of the corners of the room. The performers are located in a dark box fitted with lights which are constantly and gradually evolving. Each of the spectators is free to experience the music and choreography in their own unique way as they choose their own angle of perception while walking in the dark space. The choreography provides the focal point around which the audience gravitate like mosquitoes in search for light.

Describing the work of the American choreographer Mark Morris, the comic book artist Jeffrey Brown notes: *“Morris carefully places his*

¹³ Ibid

dancers on the stage, like a series of framed paintings. In fact, at one point, the dancers literally freeze, emphasizing the visual element of the dance.”¹⁴

The two dimensional aspect here is further enhanced by the openings on the box that create a frame around the dancers. Among all the art forms, dance is probably the best suited to expressing the notion of here and now but the artificial boundary created here aims to alienate this. The audience is allowed to come closer to the performers than they normally would but the performers act as if they are completely isolated. The experience is similar to looking at a cinema screen really close, or a to a real life slideshow.

The sounds travelling around the room shape an imaginary urban world, cold, disconnected and suggesting various layers of distance around the audience. David Bordwell writes:

“One characteristic of sound is the possibility of suggesting the sound perspective. This is a sense of spatial distance and location analogous to the cues for visual depth and volume which we get with visual perspective.”¹⁵

¹⁴ Mark Morris-Online newshour

http://www.pbs.org/newshour/bb/entertainment/markmorris/morris_3-23.html

¹⁵ Edited excerpts from David Bordwell's & Kristin Thompson's "Sound in Cinema" in FILM ART - an introduction

Thus the abstract soundscape created for “Show” uses the possibilities offered by spatialisation to open up the space and create an illusion. It paints a large expressionistic landscape in the dark space and through the spectator’s minds. Video artist Bill Viola comments:

*“So sound is really space, it's a sense that exists all around us, you hear things behind you that you can't see and in my mind when I work I really have felt the limitation of the camera and therefore have always recorded simultaneous sound and picture, which you can do with video as opposed to film, it's a part of the same machine, as a way to get this larger field of experience into the recording itself”*¹⁶

The spatialisation used in the performance of “Show” thus establishes a three-dimensional sonic landscape which, through the contrast it establishes, further alienates the performers, and this contributes to the expressing of their anxiety. Later on the tension in the music recedes, enhancing the feeling of peace regained displayed in the choreography. The sound and the choreography work on the same intentional level throughout

<http://www.filmsound.org/filmart/bordwell2.htm>

¹⁶ Transcript of the John Tusa Interview with video artist Bill Viola

http://www.bbc.co.uk/radio3/johntusainterview/viola_transcript.shtml

the piece. Describing how his pieces come into shape, choreographer Mark Morris explains:

"I always start with a piece of music... but I'm figuring out in my mind what makes that particular piece work. So my intention is to say through dancing exactly what I think is being said through music."¹⁷

In the case of 'Show', choreographer Joanne Fong and myself worked very closely to ensure that the emotions contained in the sounds coincided with the imagined world of the performers. The deliberate lack of synchronism between choreography and music helps further enhance the separation between the inner world in which the performers evolve and the abstract oppressive world that surrounds them. In a similar fashion, choreographer Merce Cunningham often described his collaborative efforts with John Cage as codependent:

"We don't hear the music until the night before -- the dancers do not dance to the music. The music is made quite separate, much like sight and sound -- they merely coexist. It's more like Fuller's term "synergy," where two energies, quite separate, get together and they produce something that no one

¹⁷ Choreographer Mark Morris tests the limits of modern dance/ Online Newshour http://www.pbs.org/newshour/bb/entertainment/markmorris/morris_3-23.html

*realized was going to happen until they came together, and then something happens”*¹⁸

Cunningham pioneered the idea that dance doesn't need to be made to music but that both could have a coexistence. Together with John Cage, he achieved that through applying the use of chance procedures, such as the I Ching, to the creative process. The choreographer describes the separation of music and dance as a "liberation", as something that brings "equality", a way of opening up possibilities: *“At one point when we got together, I did something I thought was a very strong movement. And there was no sound at all, but right after it came this sound. And that was a small revelation.”*¹⁹

The last performance piece I would like to discuss here is entitled “H₂O”. It is a mixed media performance work which explores the boundaries between various modes of performance and presentation. The piece makes use of a variety of audio and digital technologies in the form of audio sampling, manipulation and editing of sound and image as well as sound diffusion and visual projection. It also explores the possibilities of

¹⁸ The Salon Interview/Merce Cunningham-I Like to make steps
<http://www.salon.com/weekly/interview960722.html>

¹⁹ **Chance encounters/** Merce Cunningham & John Cage - Guardian unlimited
<http://arts.guardian.co.uk/features/story/0,,1873526,00.html>

assimilation between amplified acoustic instruments and electronically produced sounds. It is in all senses a hybrid performance,

A lot of the source material used for the electronic part of the piece originates from samples of the instruments included in the live performance. Through the sampling process, not only are musical characteristics of the instruments captured, but the individual musical personalities of the musicians as well. According to Plunderphonics pioneer John Oswald: “ *A sampler, in essence a recording, transforming instrument, is simultaneously a documenting device and a creative device.*”²⁰ The sampling idea is very much at the centre of the creation of the piece. A sampler, like a movie camera, captures moments and plays them back. The captured materials can then be re-organised and presented in a totally new context. However, as in all recording, they remain two-dimensional images; representations of actions which have already happened. Although we are allowed to relive those instants, the presence they contain is pale in contrast to the directness of that of real-time actions happening in front of one’s eyes.

Through the creative manipulation of these materials, a feeling of real-time life is revived. The use of samples in ‘H₂O’ constantly plays with

²⁰ **"Plunderphonics, or Audio Piracy as a Compositional Prerogative"**

- as presented by John Oswald to the Wired Society Electro-Acoustic Conference in Toronto in 1985.

<http://www.plunderphonics.com/xhtml/xplunder.html>

this idea of captured presence against presence-in-the-moment. Flautist Marion Kenny responds and interacts with musical images of herself as I recombine and modify recorded fragments of her playing, suggesting new musical possibilities. Similarly, the end of the introductory part ('Womb') is a modified image based on a recording of the next section ('Sol'), which is just about to be played live. That music has been pre-recorded and altered, with a blurred rendition being projected through the speakers before the original material is acoustically performed in the most present manner in front of the audience. This is analogous to a film shot, where the camera would focus on the reflected image of an object in a pond before zooming out and revealing the object of the reflection.

The images projected go through a similar process. A series of visual loops are altered with the aid of a video sampler, abstract rendition appearing on the projection first until the original source material gradually reveals itself to the audience.

These ideas emerge out of a search for the assimilation of the new tools offered by technology with our more conventional and well known acoustic instruments; an intention to involve "*technologies that are part of*

*the culture, samplers in music or video and computers, what we call the folk tools of our time*²¹

The assimilation of acoustic-human and electronic-machine elements presents many conflicts, each of those worlds struggling to coexist but as expressed by Karlheinz Stockhausen, “*Electronic and vocal / instrumental music belong both to our possibilities to develop our soul and spirit through listening.*”²²

In H₂O, the assimilation between disparate elements is made possible by a series of interactions. The first one takes place between the acoustic instruments and electronic sounds with the two sources being amplified via the same route and merged together with the help of production techniques such as the use of reverbs and delays. Another interaction can be traced in the interplay of textures, colours and brightness between prepared audio and edited visual material. There is also interaction between the visuals and the live material performed, where instrumentalists find inspiration for their improvisation in the images projected and through doing this become almost

²¹ Beryl Korot in Two Conversations About Three Tales By Robert Wilder Blue
<http://www.usoperaweb.com/2002/september/threetales.htm>

²² Karlheinz Stockhausen/ Interview for the Guardian(5. 10. 2005)
<http://www.stockhausen.org/questions-for-K-stockhausen.pdf>

spectators themselves participating in a sort of communal experience with the audience.

This experience is further aided by the sonic spatialisation which creates further levels of intimacy as every audience member is immersed within the three dimensional sonic image. Describing her mixed media work 'An Opera of Clouds' Dr Christine McCombe explains: *"The means of electronically projecting sound and image into a particular space has enabled me to create an immersive performance experience which engages directly with the imagination of the audience"*²³

The idea of spatialisation isn't new. Composers, including Karlheinz Stockhausen and Iannis Xenakis, were forging immersive environments using multi channel systems in performance and exhibition settings already half a century ago. However despite the potential this technology offers it is seldom found in the context of live-performance. As Brian Eno describes: *"Because the music comes from lots of points in space, you are very aware of the three dimensionality of it. You are very aware of music as a spatial event...It is a really different way of hearing music when you hear it as a sort of sound sculpture."*²⁴ This principle is very much in use

²³ Dr Christine McCombe: "An Opera of Clouds : Time and Space in mixed media performance" eprints.qut.edu.au/archive/00000294/01/Mccombe_opera_conf.PDF

²⁴ Brian interviewed by Biba Kopf, from *The Wire* Issue 195, May 2000

in 'H₂O' and also adds plasticity to the projected visuals. The experimental film pioneer Walter Ruttmann used to describe his abstract films as 'visual music', *seeking to achieve a similar physical experience in visuals as in music*,²⁵ the same aim is present throughout the multi sensory piece documented here. The visuals are at times slowed down to the point of becoming static pictures, losing their synchronous relationship with the sounds they juxtapose but allowing the spectator to find new meanings within them through their sonic interpretation. As noted by the Swiss painter Paul Klee:

*“Musical works have the advantage of being taken up again in the sequence in which they were conceived, and on repeated hearing the disadvantage of being tiring because of the evenness of the impression they make”*²⁶

The dimensions of Time and Space, Sound and Image establish synaesthetic relationships that fully engage the spectator's senses.

http://music.hyperreal.org/artists/brian_eno/interviews/wire00a.html

²⁵ Walter Ruttmann, p. 40-42. *Experimental Animation*, R. Russett and C. Starr, Da Capo Press 1976

²⁶ Paul Klee, Tagebuch Nr. 1081, quoted from Christian Geelhaar, «Moderne Malerei und Musik der Klassik – eine Parallele», in: Paul Klee. *Das Werk der Jahre 1919–1933. Gemälde, Handzeichnungen, Druckgraphik*, Museum Ludwig, Cologne, 1979, pp. 31–44, here p. 37. http://www.medienkunstnetz.de/themes/image-sound_relations/sounding_image/12/

Hence, “ *The ability to manipulate the associative properties of sound, to recontextualise and mobilise these “aural objects” allows to tap into the imagination of the listener and create a virtual world with a variety of layers of meaning and significance.*” ²⁷

The modern composer lives in a world that witnesses an accelerating fusion of cultures, a world where old traditions blend with new technologies, where the opportunities for re-inventing and re-combining are virtually endless. Technological progress has brought us tools that make it possible for today’s musicians, artists, dancers, poets, actors or writers to interact with each other’s media in ways that were never before possible, Dieter Daniels questions:

“But when video data are combined with audio data, and vice versa, at the touch of a button, can we say that technology has surmounted all the genre boundaries, and can we see the multi-media universal work of art as something we can take for granted?” ²⁸

²⁷ Dr Christine McCombe: “An Opera of Clouds : Time and Space in mixed media performance” eprints.qut.edu.au/archive/00000294/01/Mccombe_opera_conf.PDF

²⁸ Sound & Vision in Avantgarde & Mainstream
Dieter Daniels

http://www.medienkunstnetz.de/themes/image-sound_relations/sound_vision/1/

Or could we furthermore argue that the sum of the parts in multimedia works more often interferes with the purity of the individual parts rather than enhancing them? Combining, through sound and image, two completely different physical phenomena:

“There is only one place in the world where light and sound affect each other mutually in a way that goes well beyond any technology or physics: in human perception.”

There is a dimension to human nature which constantly needs to explore new grounds, winning and losing battles in the process, as Michel Chion writes: *“An art does not advance solely on the strength of the successes but equally through experiments and failure. Nothing in these hybrid experiments is without merit.”*²⁹

Can we think that those experiments will only be short lived, a sort of passing phase where artists feel the need to feature the available equipment *“or is it more reasonable to regard the use of intermedia as an irreversible historical innovation, more comparable, for example, to the*

²⁹ Michel Chion Opera Films from La Musique au cinema
“Film Music. History, Theory, Practice” Edited by Claudia Gorbman and Warren M.Sherk. A Film Music Society Publication.

*development of instrumental music than, for example, to the development of romanticism?*³⁰

I would like to think that we are extremely fortunate to witness and be able take part in this emerging genre of new forms of mixed media performance, *“an artform that is thriving in the first years of the twentyfirst century, but that has yet to receive a name.”*³¹

³⁰ **Synesthesia and Intersenses: Intermedia**
by Dick Higgins with an Appendix by Hannah Higgins

http://www.ubu.com/papers/higgins_intermedia.html

³¹ Packet, Kila. ‘Pop Matters Music’

<http://www.popmatters.com/music/concerts/r/reich-steve-021019.shtml>

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Appendix:

Throughout the last four years I have maintained a very active life as a performer, producer and music maker. I thought it would be interesting to include examples of some of these other projects as they are to my mind entirely connected to the work included within the core of this portfolio and also often provided a platform for learning and exploring technology.

Animations 2001-2002.

The first set of examples comes in the form of a DVD that illustrates some of my collaborations with animators at Edinburgh College Of Arts. Those short films were often dressed up with sound and music in a very short time to meet submission deadlines once the laborious process of assembling 24 frames per second to complete the animation was over and a copy of the film was in my hands.

The films always arrived completely silent, and I would discuss the sonic content to be created with the animators who would generally give me complete freedom on the musical side. I enjoyed working on those films, each of them calling for its own complete soundworld. It is satisfying to work to set parameters and to try and bring coherence and continuity to those short stories through the structure of the musical ideas. For example, The main theme used in "Wild Thing" reoccurs in many different styles (The story is meant to cover a period ranging from the mid sixties to the early seventies). It is sometimes a real challenge to fit a melody to the exact duration of a scene. I do feel that working within such fixed parameters allow for a lot of creative freedom in other areas. Having to enhance the style and character of those films was also very exciting and took me to musical places I wouldn't have explored otherwise.

It is really fascinating to see those films come to life as sounds are gradually added. The sound design aspect was probably the most time consuming but also the most satisfying aspect of the work.

Collaborations / Productions 2001-2004

1. Suburban Home. (Caillouët) 2004 1'00
Guitar: JD Caillouët
Double Bass: Joel Sanderson
Trumpet: Marcus Britton
2. Tracy & I. (Caillouët) 2003 0'10
3. Girl On a String. (Sutherland) 2001 4'27
Tracy Island:
Lead vocal: Tony King
Bass: Sy
Guitar & Programing: Jim Sutherland.
Keyboards: JD Caillouët
Backing Vocals: JD Caillouët, Joel Sanderson, Paul Balingal.
Recorded & Produced by Jim Sutherland
4. AM. 0'47
5. Death Machine. 2001 5'13
Music: JD Caillouët
Words: Jack Shea.

Vocals: Jack Shea
Cello: Joel Sanderson.
Programing, Bass & Guitars: JD Caillouët
6. Broken Gallery. 2003 4'51
7. FM. 2'28
8. Alice. (Hills/ Caillouët/ Sanderson) 2003 4'58
Vocals: Stephanie Hills
Cello, Double bass, vocals: Jello Sanderson
Guitars, lap steel, electric bass, keyboards & percussions: JD Caillouët
Drums: Ian Stoddart
9. Five Years. (Hills/ Caillouët/ Sanderson) 2003 3'26
Stephanie Hills: vocals
Cello: Jello Sanderson
Portuguese Guitar, lap steel, electric bass & Melodica:
JD Caillouët
Drums: Ian Stoddart

10. Laban. (Caillouët) 2003 2'26

11. Zambra (excerpt) (Jimenez, Leprevost, Abad) 2002 2'48

Performed by Ojos De Brujos:

Guitar: Jamon Jimenez

Bass: Juan Lu Leprevost

Percussion: Xavi Turull

Drums: Sergio Ramos

Mandolin: Antonio Restucci

Vocals: Marina "La Canillas"

Vocals & Percussion: Maxwell Wright

Scratching: Panko

Recorded & Produced by JD Caillouët & Carlos Jaramillo

12. Bolero X. (Caillouët) 2002 3'52

All Tracks Recorded & Produced by JD Caillouët unless indicated.

With 'Suburban Home' (Track 1), I was asked to write a one minute piece that would sound like a Django Reinhardt tune (the director couldn't afford the rights). In the short film bearing the same name this tune is played from an old gramophone record and I tried to reproduce this kind of sonority. This is yet another example of a shorter project produced quickly (a few hours from writing to posting the CD!) and using technology in a slightly 'retro' way but serving a purpose.

'Tracy & I' (Track 2) is the shortest piece I've ever written and was commissioned as a 10 second jingle to introduce a new soap opera about ethnic minorities in suburban London to be aired on Channel Four. The brief said to make it catchy while introducing the multicultural element. I wrote this in one evening but they eventually rejected it.

'Girl On a string' (Track 3) is one of many collaborations with Scottish producer Jim Sutherland. During my first year in Scotland, Jim, myself and other colleagues set up "The Electronic Music Club", an experimental platform where local electronic musician's various electronic 'antiques' would come to life next to laptops and emerging technologies, fusing the old with the new. The band Tracy Island would normally open the night performing a theatrical mixture of electro pop. 'Girl on a String' features the band at its most FM friendly stage, yet

ironically the backing vocals on this track were recorded through an old Fire Brigade speaker!

While working on the 'Who Owns Jack Kerouac?' project, myself and Jack Shea attempted to write modern protest songs. The war in Afghanistan had just started and we felt that artists and musicians should be commenting. 'The Death Machine' track was one of such songs produced in a satirical rock manner with an underlying reference to the theatre of Brecht.

I have included two other examples of my collaborations with choreographer Joanne Fong: 'Broken Gallery' (Track 6) and 'Laban' (Track 10) which were conceived for a piece performed at the Laban Centre, London in May 2003.

I have included two tracks by the Edinburgh based songwriting cabaret outlet which performs under the name of Wondelica. 'Alice' (Track 8), although a very easy song to perform on stage was somehow difficult to bring to life on this recording. My intention was to expand on the sound of the trio and to locate some of the production ideas in a period reminiscent of the late sixties and early seventies. Obtaining this sound using digital technology proved challenging but a valuable learning experience.

Five Years (Track 9) is a straight forward cabaret song and features more engineering and production efforts on my side.

Those songs were recorded in a cottage in Perthshire using a Pro Tools Le system and explore the potential of the home studio to its fullest.

"Zambra" (Track 11) is one song I helped develop while working with the Spanish band "Ojos de Brujo" in Barcelona during the first part of 2002. All of the takes were captured on a sixteen track reel-to-reel Tascam machine and I assisted the recording, exploring the layered voices idea, taking full advantage of tape saturation and compressors available in the studio. I also collaborated with DJ Panko during those sessions, revisiting old flamenco recordings through scratching and other manipulations. I was unfortunately unable to assist the mixing and the final result is somehow less adventurous than I had originally hoped for. The band went on to win the BBC World music Awards in the European category in 2004.

The closing track "Bolero X" was originally commissioned as part of a tribute CD in homage to the filmmaker Stanley Kubrick. My contribution is an atmospheric loop based piece inspired by the film 2001: A Space Odyssey. This track was produced in a PC laptop running Steinberg's Nuendo with Reason on Sampling and looping duties.

In conclusion...

As I look back over the last five years, having been involved in a wide range of musical activities and having witnessed, explored and made use of fast-blossoming technologies, I feel I have gained many useful skills as a composer. Through the knowledge and understanding of some of the many production techniques now available, my musical vocabulary finds itself enlarged and enriched.

The path has been at times confused, the potential offered by technology being overwhelming with too many possibilities obstructing the vision. We live in a world saturated with information and justifying the creation of new work is often challenging.

Throughout this rather organic process, I have visited many places, going back to my roots within popular culture as well as exploring territories new to me, in attempting to blend the old with the new.

I feel my enthusiasm for music making has never been stronger and believe that my practice will continue to develop around works involving multimedia. I hope to create more opportunities for using sounds, words and images with the help of technology to produce work that can contribute to the benefit of society.

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Declaration

I declare that this portfolio was composed by myself, that the work contained herein is my own, except where explicitly stated in the text, and that this work has not been submitted for any other degree or professional qualification except as specified.

Jean-David Caillouët