

Percussion in an Electronic Environment

Amelia Elisa Puga Iglesias

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DVD: The submitted works.

'B IS FOR BICYCLE'

'LIKE A RADIO'

'WHAT THE WATER FEELS LIKE TO THE FISHES'

'BEARS, OR SOMETHING JUST AS BAD'

Introduction

This essay is an account of the process of making work for a new percussion/software performance environment. Submitted along with the supporting text are DVD documents of the four main pieces of work, which are presented here as medium-specific 'versions' of the pieces - i.e. edited specifically for DVD replay rather than as 'neutral' documentation. The text is a supporting statement, much of which is autobiographical and 'personal' in tone as it is an account of the process of the work, and my responses to a number of key stimuli - the experience of urbanness, representations and accounts of mental illness, childhood and memory, physicality etc. - which are recurring concerns in my work.

Early Research

I approached this project as an orchestral percussionist/multi-instrumentalist with a background in visual art. The main focus of my undergraduate degree was in composition/performance, and I began the MMus with a deep interest in performing works for percussion, but also in animation, film, photography, painting and drawing. During the early stages of this project I explored the improvised/indeterminate music I had studied during my BA. I continued to practice my instrument, and engaged in some group improvising for performance. Later I revisited the soundtrack I created for my final BA project. At first I explored the possibility of making short animations or films, investigating the software options and making some preliminary paintings and drawings with the intention of producing a body of work based around them. I later moved away from this idea towards a more performance-based approach to audio-visual composition. Although I was certain that I wanted to work with image, I found the idea of limiting my self to film-making constricting and wanted to explore real-time composition/improvisation using sounds and image. I decided to aim to create an audio/visual instrument for live performance, and since I was a percussionist it made sense to begin designing an audio-visual drum kit.

Having reached this point in my research (i.e. having decided that I wanted to design a percussive/visual instrument) I had to think carefully about the functionality I wanted the instrument to have. In order to be able to make any decisions about instrument design, I had to make some basic decisions about what kind of work I wanted to make using it. There were so many possibilities that I realised I had to limit myself in order to be able to get anything done. I needed to operate within a loosely defined conceptual framework, so I set myself some rules/goals. I thought it would be best to approach the project as someone whose job was merely to experiment – to play, to look and to listen. These things have value in and of themselves, but I wanted to achieve them in a meaningful way. I wanted to be challenged by the tasks I set myself, as much as I wanted them to challenge those who experienced them. I wanted my work to stir and arouse feeling in people, but by asking questions, not by trying to give answers. Most importantly of all I decided to treat the project as a long term one, accepting that two years was a short time in which to achieve my ambitions for the project and resolving to try to experiment with as many different ideas as possible.

I decided I wanted to make distinct pieces with improvised elements, rather than entirely improvised sets. To begin with, I wanted to focus on producing work for performance in a live concert situation. I set about searching for suitable material to use – reading books, watching films, taking photographs, and filming short movie clips.

Drumming

My starting point for the design of the instrument was to sit down and think about how I drum. I wanted to better understand my own performing style so that I could build an instrument specific to my needs. In order to do this I compared my own playing with other peoples playing, trying to isolate characteristics and traits which were recognisably 'ours'. I found it was useful to think about a player's personality in terms of a profile of habits, physicality and creativity which could be separated in to distinct categories.

Technique:

Proper technique is a drummer's means to fluency. Based around the very simple principles of grip and posture, it allows one to reproduce sounds and patterns accurately and quickly with as little physical effort as possible. Drummers acquire good technique through the practice of rudiments (short hand to hand patterns which can be repeated endlessly in a cycle and build up strength). Classically-trained drummers build up a vast mental library of these rudiments. They are physically very satisfying to play and as a result of this drummers often fall in to performance habits that are instantly recognisable (for instance I never grow tired of 'Swiss army' triplets). A drummer's bias towards certain micro-patterns in their vocabulary and away from others characterises their playing.

Feel:

When I talk about 'feel' I am talking about a drummer's intuitive knowledge of where to place the beat. Most drummers (and musicians) can beat time accurately, but a good one will be able to 'push' or 'pull' a pattern slightly in and out of time imaginatively to create tension. Controlling what is sometimes referred to as the 'internal dynamics' of a pattern (the relative dynamic of each drum or part of a pattern) a drummer will subtly emphasise a certain element - perhaps every second bass drum beat - to create a certain feel or flavour. In this way a drummer's technical skill is balanced with their creativity: their personality shapes the mood and the energy of the music they play.

Touch:

Perhaps the most difficult of these ideas to explain is the concept of touch, which is very closely related to feel. By touch I refer to the bodily element of a person's playing. This includes their physical control over their instrument (aided by good technique) but also their sensitivity, and capacity to judge what is needed in a situation and produce an appropriate tone, at an appropriate dynamic. Just as players have a library of rhythmic ideas and habits, so too do they form habits of body. A person's playing is characterised by these subtle idiosyncratic movements/gestures and by the choices they make in terms of weight and placement of stroke.

Timbre:

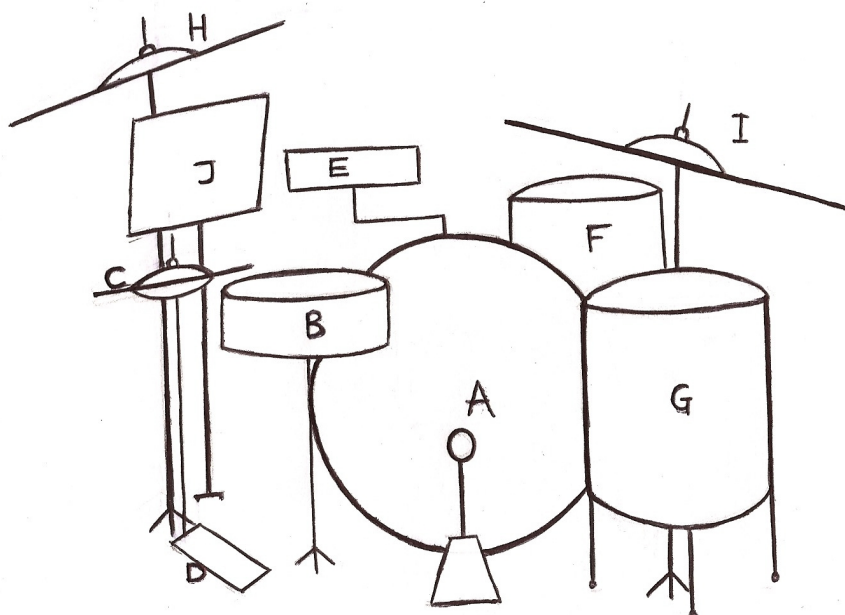
Drummers have a lot of control over the sounds they produce and use. Using combinations of different playing techniques, beaters, tunings, and of course, drums and cymbals, almost any dynamic shading or tonal colouring is achievable. There is a culture among drummers of obsessively hunting down and collecting specific sounds, a sort of quest for the holy grail of cymbals/snare drums, with some players going as far as to bury cymbals in their garden to try to achieve 'that sound'. I am definitely a collector by nature – and I believe this was a hugely important factor to consider during design of my instrument and works for it. I wanted to be able to keep adding to my collection of sounds.

A modular instrument

A drum kit is, as its name suggests, a modular instrument and thus one of the most customisable. More than with any other thing that I play, if I sit down at someone else's drum kit I feel lost: nothing is where I need it to be. If I pick up another person's trumpet or saxophone, the mouthpiece

might feel a little alien to me or the reed harder or softer than I am used to but I feel my face adjusting to that almost of its own accord. The keys are in the usual place and I find that I don't have to think very hard to find and play a note. Sitting at a stranger's drum kit however, I find myself at a distinct disadvantage. Of course I can still play something, but I am not happy – a bit like when you get in to someone else's car and have to spend a few minutes fiddling with the mirrors and adjusting the seat. Playing the drums is very physical – all of the required movements are ingrained into our 'muscle memory'. Players carefully consider where to lay things out relative to their function and frequency of use. Things which are played most often are closest to hand, for instance:

Fig 1



Hierarchy of use/function

A – Bass drum:

I use the Bass drum to mark time; to let people know where '1' is (or to deliberately mask it). It is the bottom most layer. I consider it the base element of any pattern I create which I add on to or build around.

B - Snare drum:

As a classically trained percussionist, the main activity of my playing is centred around the snare drum. Its function in basic patterns is the opposite of the bass drum – I use it to mark subdivisions. In terms of hierarchy it is paired with the bass drum at the bottom. It is not uncommon for me to play rhythms using only the bass drum and snare. often a focal point during solo's or breaks, and sometimes played by itself.

I – Ride /C – Hi-hat:

The Hi Hat and ride share a function (I very rarely play both at the same time) I sometimes use them to accent an event, but mostly they are a mid-layer of activity, adding depth to skeleton bass drum/snare drum grooves.

D – Hi-hat foot:

A layer within a layer - can alter the sound of Hi-hats so used imaginatively can pick out certain sub-divisions to create very intricate patterns; a lot of the time it is not in use.

E – Auxiliary percussion:

This is a space in my kit which I reserve for what I call “Auxiliary” instruments which vary

depending on the kind of music I'm playing and the mood I'm in. Sometimes I have mounted cowbells or a tambourine, other times home-made instruments (a piece of wire stretched across a plank and amplified for example) and things that I find and I like the sound of. This keeps things interesting for me, but their function is mostly decorative and of surface importance.

F – Toms:

For the music I play which is mostly beat-based, I rarely use my toms which is why I normally only bring one. I use them as a rhythmic ornament, another surface layer to my pattern texture.

G - “ ^ ”

H - crash:

The top most layer. I use crashes to inject splashes of colour in to my playing.

J: music stand :

For notation/scores/performance instructions. Not really an instrument but still worthy of note as it is an integral part of my kit.

I wanted to build an instrument specific to my needs that allowed me to access the percussive knowledge I'd spent time collecting. I wanted to be able to play it in a drum-like way, to be able to improvise using an already existing vocabulary of ideas. Having identified the function of each part of my kit I wanted to try to map audio visual functionality on to certain parts of it so that I could trigger visual events in a musical way, using my pre-existing ideas about pattern, repetition, phrasing, rhythm, and colour. I also wanted to improve upon the design of a conventional drum kit by expanding both the range of sounds available to choose from. As a multi instrumentalist I am often frustrated by the fact that I can only play one thing at a time, and I wanted to be able to include every possible timbre and tone, and so I decided also build the ability to trigger audio samples alongside any acoustic sounds and visual samples/ processing.

Patch Design and Mapping

After discussion with colleagues it seemed that using Max/MSP to design a custom patch was the best way forward. I enlisted the help of programmer John Bowers who programmed the patch for me from detailed instructions which I gave him. I spent some time experimenting with Dj-style midi controllers but decided I wanted to organise my playing interface and auxiliary percussion in a drum kit-like way. I opted use a pre-existing midi drum kit to control my patch. This was the most robust and gig-able option. I reasoned that I could always build and add DIY triggers to complement these at a later stage should I feel I needed them.

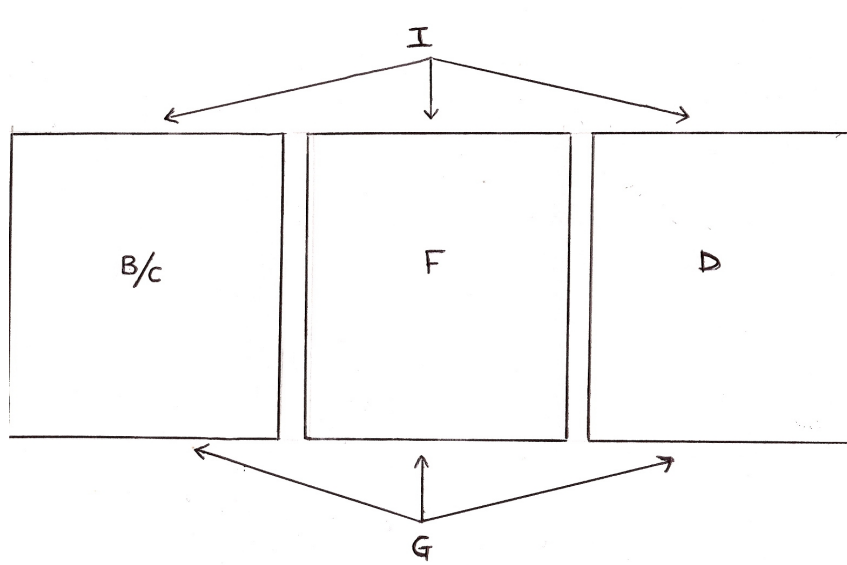
I had already given some thought to the kinds of functionality I wanted to include. I knew that I wanted to work with moving images and still images, and that I wanted to include pre-prepared audio as well as live audio. I was very aware at this point that I would be limited (at least initially) to a '5 piece' layout, as is standard design for off-the-shelf midi drum kits, so I wanted to ensure that there were enough kinds of options available to keep the result interesting. I didn't want to assign any midi triggers to traditional 'drum' duties as I could add acoustic percussion to supplement it.

Specifically, I decided to use:

- Video (playable forwards/backwards)
- Opaque block colour 'overlays'
- Audio samples selected randomly from a buffer
- Audio samples triggered in a sequence

I thought about how I might display this information, and decided to go with a triptych format, with video assigned to the left and right panels, stills in the centre panel, and colour overlays affecting all three simultaneously. Additionally, I wanted to include an option for displaying the same movie

clip/still image across all three panels at once, and a way of returning to a black screen or neutral position.



I: colour overlay

B/C: video forwards/backwards

D: video

F: stills

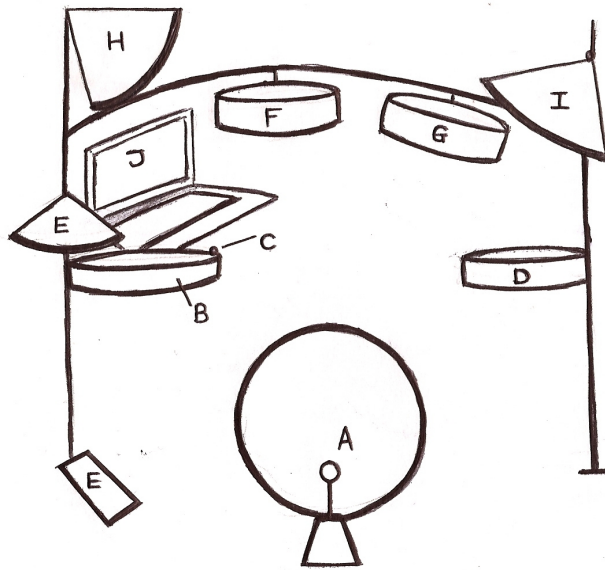
G: display video/still across all three panels/black screen

I wanted to achieve the right balance in the work I made between composition and improvisation. I tried to control this at a design level by separating samples in to different groups with different roles/functions; and assigning each group its own trigger or 'drum'. This way, I could decide to select samples from these buffers randomly, but I still maintained a degree of control over this as I would know something about the image or sound I triggered in advance of playing it because similar sounds and images were stored together. I also decided to trigger a 'skeleton core' of ideas in sequence during each piece, so that there was a pre-determined structure and time frame for each piece.

Mapping

I then thought about how I might map these on to existing drums. I wanted to be able to improvise using the new audio functions in a drum like way – to be able to access my learned drum knowledge, and muscle memory/gesture/habits. I wanted to be able to trigger visual events in a musical way, and so I tried to position each trigger on the kit intelligently. Their orientation needed to make physical sense to me so I could reach for the various elements instinctively, and I spent some time thinking about this, eventually settling with the following layout:

Fig 2



A – Bass drum: (marks time/bottom most layer/base element of patterns created)

A-sounds – These were the sounds that I would trigger in sequence in my pieces. skeleton ideas; they formed the non negotiable base of each work, the element that would be exactly the same each time.

E – Hi hat: (mid layer/texture, adds depth to skeleton groove)

E – sounds; samples accorded a hi hat -like level of importance, a middle texture, selected at random from the buffer of 'E' sounds.

B – Snare drum:(main playing activity centred around snare drum)

visual partner to the bass drum. Another base level component; though the clips are selected randomly, they form a key component of the work.

C – Snare drum rim: (“^”)

F – 2nd Snare drum/auxiliary percussion: (focal point for solo's)

scrolls through stills - takes on the compositional role of a second snare or auxiliary perc - used for solo material/decoration. makes sense played on its own for non pattern based improvisation or breaks.

D – Tom:(ornament)

triggers video clips on the right hand side. An extra level of decoration - used as an extra texture for when three different things are up on screen.

H -Ride :(mid layer/texture, adds depth to skeleton groove)

H-sounds; “ “ e-sounds.

I - Crash :(splashes of colour)

a literal translation of this function – triggers an opaque coloured wash which is displayed across all three screens simultaneously and fades to nothing, at a similar rate of decay to a real life crash cymbal.

G- free space; (sometimes nothing here as mostly use single tom)

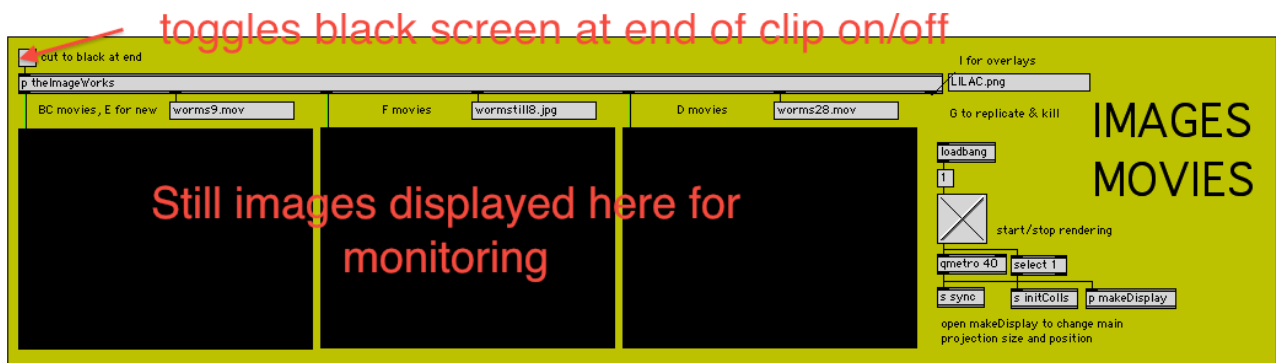
puts up any visual information across all three screens then returns to black at second stroke.

Once I had everything set up and ready to test, I found that I had to go through a process of learning to play the instrument. Knowing where to reach to trigger certain events came very naturally, but I had to fight the temptation to play everything all the time. Working to understand the kit, I experimented with different combinations of images, movies, still and sounds, learning how to set up different ideas, create and resolve tensions, and neutralise situations that didn't work/create a space to move on to something different, or a stillness from which to invite potential collaborators to lead. During this time I discovered unintended behaviours in the instrument, some of which I liked and some of which were obstacles (for instance, every so often a still image, or the very last frame in a video clip would get stuck 'on', and I discovered that to get rid of these all I had to do was put them up across all three screens and hit the G trigger again which returned everything to black screen: a strategy I found quite agreeable since it was a neutral position from which to start again. I found that I had a tendency to devise performance strategies to get around these problems, rather than ironing them out at a design level. On reflection, I realise now that this would make it difficult for a stranger to 'play' the kit as he or she would have to go through a similar process of internalising these difficult behaviours

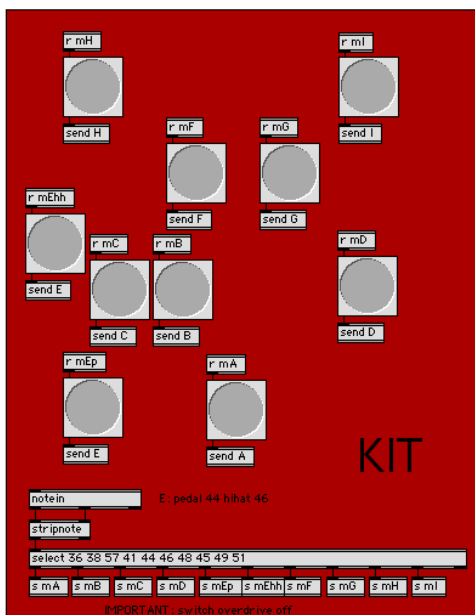
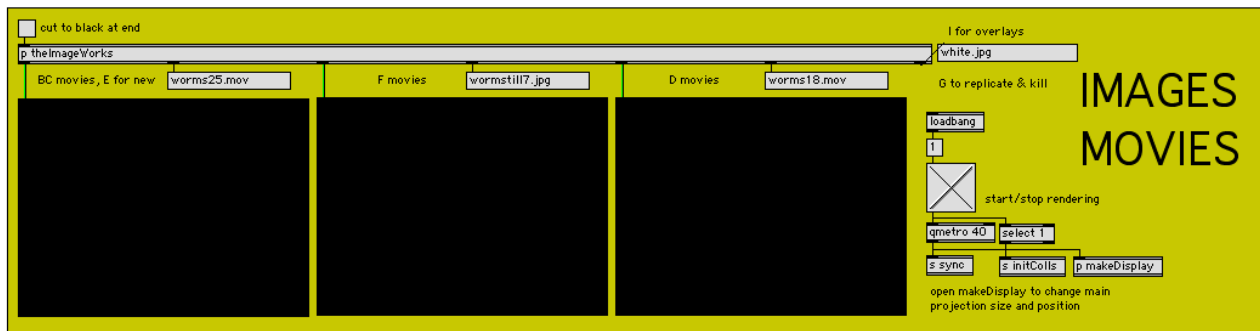
Alongside designing the instrument I was also collecting material for the first piece which I used during testing. I chose to do so because I wanted to use material that was relevant, so that I could imagine playing the kit in a real situation and make intelligent decisions about its design. However, I was also very aware of the fact that I wanted to create many different kinds of work, and tried to think as much as possible outside of that first piece so as not to limit my options too much, although inevitably, this occurred to some extent. In the beginning the main problems I had were due to double-triggering, and cross-talk between the triggers. I tried to adjust this at a hardware level but the problem was so persistent that the patch had to be modified to get around it. Solving this was made complicated by the fact that the selection of some samples was truly random, meaning it was hard to tell when something was double-triggering and when it was just being selected twice in a row by chance.¹

Very early on I decided to make a change to the way movie clips were triggered. Initially I had designed the patch so that they had to play to the end before another could be selected. In practice I found this very limiting, so a change was made to the function of the E trigger which allowed skipping through video clips at any point during their playback. Later I added polyphony. In the first version of the patch, scrolling through H/E sounds was very jarring. To improve this I changed the patch to allow me to layer the samples over one another. I also added the possibility of attaching sounds to the movie clips.

1 See 'Bears or Something just as Bad' – 1:30; same image selected twice or double triggering?



2



3

3 Patch with polyphony added; with adjustable numeric values for cross fading

Bears, or Something just as Bad.

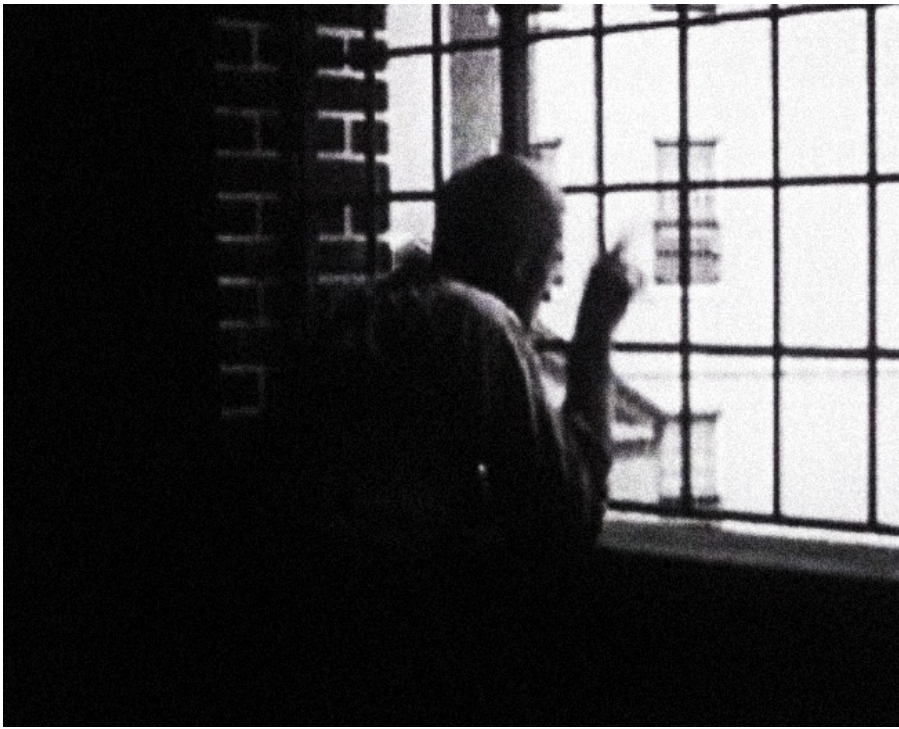
'Bears' was the first work I made for AV drums. The idea for it came from this passage which is taken from the book I was reading at the time:

“I dropped back till I was walking beside McMurphy and I wanted to tell him not to fret about it, that nothing could be done, because I could see there was some thought he was worrying over in his mind like a dog worries at a hole he don't know what's down, one voice saying, Dog, that hole is none of your affair – it's too big and and too black and there's a spoor all over the place says bears or something just as bad. And some other voice coming like a sharp whisper out of way back in his breed , not a smart voice, nothing cagey about it, saying sic'im dog, sic'im!” (Kesey, 1962)

The novel is set in a mental institution in 50's America. Having had personal experiences of the kind dealt with in the novel, I was deeply interested in exploring the psychological and social landscape of this time. I didn't want to make any overtly political statements. Instead I wanted to speak more broadly about fear, anxiety and the unseen and inevitable danger so beautifully expressed in this passage.

At this stage I wasn't sure whether I wanted to use text in the piece or not. I set about searching for some images that matched the tone of the writing and was very lucky to come across the 50's medical documentary footage of American 'catatonic' patients from a mental institution online. I knew I wanted to work with it straight away. At first, I found it very difficult to watch. In the footage the patients who are blindfolded (I never managed to find out why but I guessed that it might be an attempt to protect their identity) are coldly manipulated in to different physical positions by 'professionals' in white coats in what appears to be a visual cataloguing of their (symptoms) illnesses. I felt a mixture of horror and fascination at watching it, and it took me a long time to unpick how I felt about it and decide how best to use it.

To begin with I was a little overwhelmed with the quantity of material and decisions I needed to make. I spent a long time familiarizing myself with it, at first watching through and then looping sections, breaking it down in to shorter clips until I could separate individual characters. Feeling as if I wanted to get to know each of those people, I printed off stills which I put up around my house and in my workspace. I stopped scrutinising and instead let my study become a background activity. I lived with their image over a few months and gradually grew accustomed to each of their faces. During this period of looking and sorting I experimented with different combinations, taking pictures down, only to put them back up again, arranging and re-arranging. After a time it seemed that certain (images) spoke to me: I was particularly taken with the image which I started to refer to as “man standing by the window”. It seemed so loaded with meaning – there was a time when it was constantly on my mind.



In this way, making decisions about what to use felt natural. Certain images, sequences, and faces seemed to fit very well together and after a time I started to view them as a working set, discarding things I felt didn't fit.

I studied their expressions, their gestures, their movement, and after a while, I realised that that *was* the piece, that I would have to develop a language of movement, and turn it in to a dance – exploiting the physicality of the footage.

During this selection process I was also making significant progress with John in designing and testing my patch. My knowledge of its functionality must unconsciously have influenced choices I made about the piece, but the material itself must also have influenced the way that I built the patch. I am sure that I must have designed and implemented certain functionalities with specific imagined moments in the rapidly forming piece in mind. So in a way, 'bears' is the patch, and the patch is 'bears'. For instance; I built in random washes of colour⁴ in the knowledge that the footage for this piece was black and white,⁵ and I specifically included the 'play movie clip forwards'/'play movie clip backwards' functions to help me choreograph movements in real time⁶ where as the triptych format which predated the discovery of the footage and the 'stop motion snare drum' I believe influenced my choice of stills.

Perhaps the most difficult problem I faced was the moral one, of trying to use the material sensitively. Essentially, I was trying to make something ugly in to something beautiful. I was dealing with the image of people who had suffered cruel and dehumanising treatment, and trying to choreograph their coping rituals. In doing so, I felt a weight of responsibility.

The first sounds I prepared to use in the piece were samples (from a Channel 4 documentary called 'Baby Bible-bashers') of a small child shouting these words:

4 See 'Bears or Something just as Bad' – 2:02

5 See 'Bears or Something just as Bad' - 1:34

6 See 'Bears or Something just as Bad' - 3:35

“we think it's because they don't want em” -
“and we don't know why but they do it”
“we think its because they don't want em”
“they kill children in here”
“this is the devil, what you're doing”⁷

Taken from a documentary about child preachers which I had been watching at the time, these are samples of a young western American child talking about abortion. I didn't want to say anything specific about abortion but the dislocated words worked in this context, and since the accent belonged to the place/time, it seemed to fit well.

I wanted to keep the sound world centred around percussion, to showcase the sounds that I love. I already had an idea of the kinds of sounds I thought would fit. I wanted to create a tension, and an engulfing depth. I recorded myself playing several instruments and experimented with different playing techniques. I ended up mostly using recordings of timpani played with brushes to produce scratchy, metallic sounds.⁸ These needed almost no processing. I coupled them with samples of a very large orchestral bass drum with a fiberskin⁹ head, which I pitch-shifted into a smothering rumble, and some bowed Chinese cymbals. I had a very specific idea of the kind of pace I wanted the piece to have. I wanted it to feel like clenching and unclenching fists, or like biting your nails. I recorded a series of gradually speeding up/slowing down tapping and clapping noises.¹⁰

Most things slotted in to place very easily. I very quickly gathered a set of sounds and pictures which I wanted to use, but then had to think very carefully about form. I knew I wanted certain things to be out of my control. I wanted the piece to be slightly different every time. But I also wanted each piece to be distinct, and to be recognisable. During early tests of the kit with this material loaded, I experimented by giving myself certain playing tasks. At first I just sat down to play with no agenda whatsoever, feeling my way around the kit and the material, learning what was possible, and what was possible to re-create. I took notes of the kind of behaviours I fell in to, the early habits I was forming. I liked putting up three stills and flicking through them for instance. I learned that the 'stop motion snare drum' I had designed worked best displayed on its own in the middle panel with very little sound in the background. I enjoyed the tension I could create by doing very little, triggering a sound and taking my time to put up any image at all. I also discovered all the little 'accidental' behaviours which I hadn't anticipated - some of which I enjoyed and exploited and some of which I had to devise strategies to cope with. I found it was possible to create environments that were very still, or very busy.

I enjoyed the feeling of exploring and I wanted to build this in to the form. However, I wanted the piece to have a defined beginning and end, and to be able to develop ideas. I also wanted there to be some very rhythmic elements to contrast with what I was already beginning to refer to as the 'middle' section which was very elastic. I cut up some recordings of my playing Darabuka/Rototoms and devised a slowly developing, very 'tribal' percussive end section to resolve what I hoped would be a very exploratory, searching middle section.¹¹ Lastly I composed an introduction which I hoped would set up the piece nicely, featuring sounds from the same recording session as the ending which would be triggered with space to 'answer' some of the calls on acoustic instruments live.

In practice it was hard to achieve the right balance between the live and sampled sounds. I wanted the overall volume to be much louder than was possible because I had to keep it down to a level above which the Rototoms could be clearly heard, as I wanted there to be some ambiguity between the live and sampled percussive sounds. Other performance concerns included a distracting clicking when striking the trigger pads¹² which frustratingly I was able to do nothing about and problems to do with the positioning of the kit on stage. I had to position myself at the side of the stage at a side

7 See 'bears or something just as bad' - 2:34

8 See 'bears or something just as bad' - 2:46

9 Fiberskin is a sort of imitation renaissance drum head, with a very unique sound.

10 See 'bears or something just as bad' - 0:49

11 See 'bears or something just as bad' - 6:49

12 See 'bears or something just as bad' - 0:55

angle so as to be able to see the projection without having my back to the audience which meant I missed out on some of my sounds that were panned.



13

The practicality of replicating the sampled sounds for my call and answer section meant that it was necessary to use Rototoms (which had a tendency to de-tune during use) instead of Darabuka live so that I could play with sticks and trigger samples at the same time.¹⁴

13 Side positioning on stage

14 See 'Bears or Something just as Bad' – 7:10



15

Like a Radio

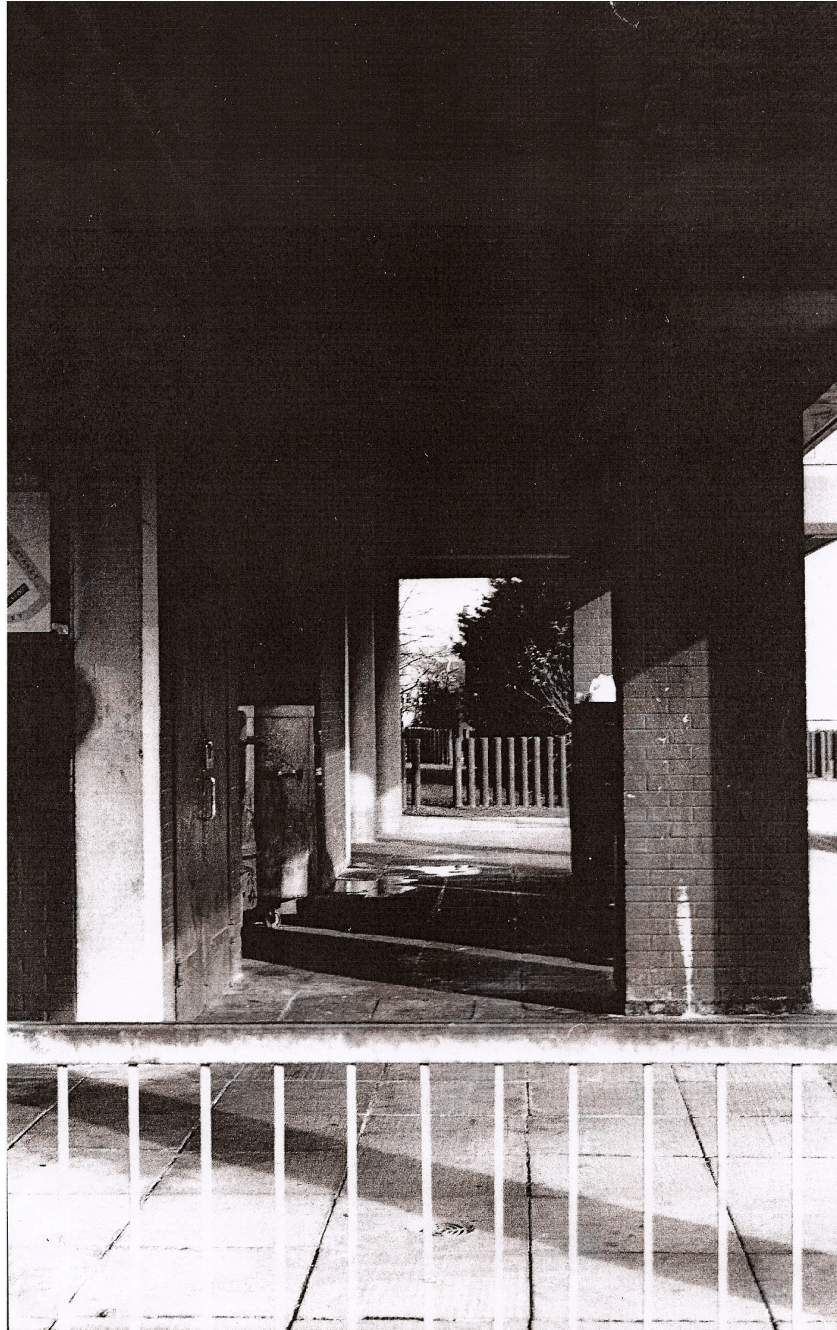
Once I had performed 'Bears' and decided to move on to something new, I came across the line “like a radio stuck on permanent scan” ¹⁶during my reading. This struck a chord. I engage in music-making and listening from the perspective of a Londoner where I am surrounded by noise at all times. I have always been interested in field recording and urban geography and decided to use this opportunity to make a piece about the London where I grew up and live. I wanted to reflect upon my experience of this place, to explore the vast spaces I inhabit and study the sounds and the sights that are so much a part of my life. I wanted somehow to project a part of my experience; to offer some insight into how I look and hear. I had no specific message in mind. I wanted instead to build a sort of meditation around my time and my place, and the spaces I inhabit. In the piece I wanted to talk about home.

¹⁵ Kit set up for 'worms'

¹⁶ Slouka, Mark, 2004

'Listening for silence; Notes on the oral life' in Cox, C & Warner, D (eds.) *Audio culture* (Continuum, 2004)

I wanted to explore the ideas of inside versus outside space, and movement versus stillness. My early research was visual, and centred around collecting photographs and video clips of places that interested me and had personal meaning.







From a young age I have always been fascinated by the London underground and by London overland and Bus networks, as they have been an important part of my life. I joined the photography society at UEA and printed pictures I had taken of tube trains, tunnels, buses, various streets and places which were important to me – the housing estate where I grew up, and other large buildings, streets and waterways. As before I found that it helped me enormously to pin up these pictures whilst deciding how to proceed. I then set about documenting my aural experience, making numerous field recordings during various comings and goings on trips home. With space at such a premium in the city, I am often forced to retreat in to my own imagined space.

"The world draws tighter, borders collapse, the public and the private bleed and intermix" (Slouka, 2004)

To cope with this I find myself existing in my own imagined worlds, which are a controlled mix aesthetically, of things happening inside and things happening outside. I thought again about my dependence on mobile listening and recording devices to construct these worlds (a topic I seem to return to often) about my ability and my need to dislocate sounds from their sources, to create spaces within spaces. In the piece, I wanted to explore this middle ground between inside and outside, to take the idea one step further in providing the opportunity for somebody else to inhabit this imagined space.

I wanted to explore these in relation to movement, in terms of rushing/being still. The saddest aspect of urban living is that your time always seems to belong to somebody else. Whether I am hurrying to make train connections to get to work on time or visiting a friend at the week end it always seems as if every second counts and I feel like I am in a race. Even at the weekend I have to control my movements relative to other people in a hurry. Like everybody I value the times when I don't need to rush, and living in London you are afforded very few opportunities to enjoy such feelings. I find that they are attached to certain times and places (such as the early morning journey back to the suburbs on the way home from a rave, or catching the first bus to the airport) and that they have their own very beautiful sounds. Experiencing this rare stillness I find is like closing your eyes. I wanted to inject this feeling in to the piece.

Being awake when most people are asleep provides me an opportunity to hear things I would otherwise miss. It is a chance for me to take my headphones off, to listen to the noise of the city stripped back to just its essential operations, those which permeate to the core of our existence.

"There is no oral equivalent for the eyelid, we hear in our sleep" (Slouka, 2004)

I collected field recordings of the low frequency rumbles of light traffic, the engine of the night bus. The squeaking brakes of the waste collection truck. There is a definite rhythm and a pace to this time, and I often think of it in terms of a heartbeat.²⁰ I went in to the studio to try and translate this in to percussion somehow, and experimented with various rhythms played with timpani mallets at the very edge and in the centre of the orchestral bass drum over the top of my field recordings. I was very pleased with these early results, and began tentatively to sketch out idea for what became the beginning section of the piece where I would play an arrangement of field recordings followed by a bass drum improvisation.

At the same time, I explored the idea of a radio being 'stuck on permanent scan' literally, by making hours and hours worth of recordings of sweeps through the various frequencies of an old transistor radio (including some very beautiful static) and then sorting through them to cut and keep interesting moments, some of which I ended up using. I also trawled the internet for other peoples recordings of radio traffic, and came across an amazing recording of a conversation over walkie talkie from which I was able to isolate the phrase "I'm enjoying the great outdoors. It's amazing." which I also used. Originally I had planned to use my own photographs alongside video clips that I

²⁰ See 'Like a Radio' - introduction

had shot myself, but I found it was difficult to get good quality footage with a cheap camera (much more so than with still photographs) and also difficult to develop a coherent visual language using multiple sources. All my footage seemed a bit contrived, there were hardly any shots that didn't have people knowingly staring in to the camera in them. Out of frustration I started to trawl the internet to try and find something suitable and came across a documented walk around London which I then went on to use. As before, I took great pains over the editing and selection of the footage. I processed it heavily, changing the speed, colour, (I used blues and greens) contrast and introducing lots of noise. I then chopped the film up in to tiny segments which I composited in to a few separate fragments with different moods, leading the eye to focus on various powerful images which I then isolated to use as stills for the piece. By the time I had finished with it I had something almost unrecognisable from the source, which I was very pleased with.

By this point, I had some pictures, some video clips, some field recordings, and some drum sounds. The piece was beginning to take shape and I had some ideas about how it should be, but a lot of decisions yet to make about its form too. I decided I wanted to be like opening your eyes, then closing your eyes, then opening them. Like breathing in and out. I planned a very delicate, meditative beginning section which were modelled on my early improvisations and featured very concentrated, composed segments of layered field recordings with orchestral bass drum, which I would answer with a short bass drum improvisation over a sequence of images in a dialogue with the dancer. I followed each of these with a short pause and black screen. I then developed those concentrated segments in to a longer, busier section that I wanted to be a platform for a very frantic and active improvisation from the dancer, in contrast to the first half of the piece. I re-recorded some of my bass drum ideas in to a very tribal, repetitive motif which gradually grew louder as well as faster. I realised that what I was making was a kind of song. I recorded a guitar melody which I layered over the top of this, adding warmth and depth to it. It would have been nice to have someone play it live, but I was very stretched for time and money so I had to settle for triggering it myself.

Incorporating a dancer was a natural progression from "Bears". The piece itself is as much about movement around a space as it is the about space itself, and I imagined that using a 3-D element would make would breathe life in to the piece. Having no background in dance it took a lot of research to try and find a style that I thought would work in this context. I met with a few ballet/street dancers with no success. Finally I had the good fortune to meet Katy Ryan from Kadam Dance Company, whose combination of classical Indian and contemporary style seemed to work very well. More than anything, Katy seemed to understand what I was trying to do. I talked with her about my vision for the piece, explaining how I imagined we would interact with each other (as bass drum player and dancer improvising a dialogue) and respond to what happened on screen, and gave her some very loose performance instructions. We walked it through once, with me pointing out sections that were still relative to other sections that were busier, and had a very quick rehearsal before the performance. I wanted to keep it as improvised as possible.

I am pleased with the end result, but recognise that much of its success is due to good luck. I appreciate now how fortunate I was to find Katy. Had I chosen a dancer who was less intuitively aware of my intentions for the project I might have struggled to convey my ideas with so little background knowledge of dance vocabulary. I realise now that I need to develop a proper system for notating instructions to performers I might want to work with.

I think that the composition of the piece is strong, but in hindsight I wish I had taken more risk. I found that throughout the entire project I was resisting the temptation to make a film (and at times failed to do so). There was not enough room built in to this idea for me to make mistakes, and therefore for me to surprise myself. The conversation between the dancer and myself was very one sided (my lines were very rehearsed). This ensemble has much potential though, and perhaps in the future, with more time and some sort of budget, it can be achieved.



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What the Water feels like to the Fishes

After “B Is for Bicycle”, I continued to explore the theme of childhood, but in a lighter way. I wanted to make a piece about child-like looking, about imagining. All of my other works were very serious and dark, and I wanted to balance this with a work that celebrated the opposite of those things, and to create a fictional space, an imaginary world. I decided I wanted to try and collaborate with an animator. This seemed like the perfect project in which to do so, I was already toying with some ideas (water colour sketchy) so I made some drawings and looked to make contact with somebody suitable. At the same time I collected and read as many children's stories as I could get my hands on. (I already owned a large collection of picture books, an outside interest of mine) I thought about working with the text and images from a favourite story of mine, “The Red Tree”.



22

and I roughed out some ideas for this. In the end I decided against this as the story had a very defined, linear narrative which I felt I didn't want to tamper with. I could have sequenced something, but I felt with "B is for Bicycle" I had already crossed a kind of line: I wanted to make something which used the kit more to its full potential. Later I was lucky to stumble across a wonderful short story by Dave Eggers, an extract of which I have included below:

"Like the fur of a chinchilla. Like the cleanest tooth. Yes, the fishes say, this is what it feels like. People always ask the fishes, 'what does the water feel like to you?' and the fishes are always happy to oblige. Like feathers are to other feathers, they say. Like powder touching ash. When the fishes tell us these things, we begin to understand. We begin to think we know what the water feels like to the fishes. But it's not always like fur and ash and the cleanest tooth. At night, they say, water can be different. At night, when it's very cold, water can be like the tongue of a cat. At night, when it's very cold, the water is like cracked glass. Or honey. Or forgiveness, they say, ha ha." (Eggers, 2004)

I couldn't believe my luck. I wanted to use this imagery of touch, of sensation. I isolated the following phrases:

Like the cleanest tooth
Like feathers are to other feathers
Like powder touching ash

22 The Red Tree – Shaun Tan

23

Like cracked glass
Or honey
Or forgiveness.

and used them as the building blocks for the piece. I imagined the sentences bouncing on the screen, and roughed out some ideas for how this could be animated, trying out different colours and fonts. While trying to track down an animator, I concentrated on the sounds. I wanted to create a space modelled on the text. I thought about how I could bring the world of the story to life; and decided to move away from the rhythmic, driving forces of the other pieces to something more melodic, relaxed, and fluid. I composed and recorded myself playing some very simple chordal passages for various tuned percussion instruments which I layered over sounds of dripping water, splashes, laughter, and different human voices to create an environment that was very still.

Still searching for an animator, I sourced some videos of running water to play with. By the time I had made contact with Rob Wicksteed, I had grown quite attached to them and I asked him to incorporate them in to his animations. We talked about my ideas for the piece and I sent him some of the sounds, my drawings and the story. We agreed on the bouncing sentences idea, and also on a goldfish sequence modelled on some of my drawings/paintings. He then put together some wonderful animations and film clips which I asked him to make a few changes to and then immediately started to use.

This was my favourite piece to play as it was the most organic sounding, and I was able to incorporate lots of live percussion. My set up included all of my favourite cymbals, some toms, and an acoustic snare drum (with the snare off) which I played with brushes. I'm not sure that it would have worked very well live however, as what I was playing was very quiet and delicate.²³ I had to turn the projector off as some of it couldn't be heard over the noise it made. Ideally I would have liked to be able to play more of the (tuned) percussion sounds live (as with the other pieces) but unfortunately it would have been physically impossible. Looking back on the piece I regret not involving Rob in the decision making more. By the time I managed to contact him I had very firm ideas about what I wanted – In future I would like to work with an animator in a more even partnership.

This was the simplest piece to make and to play, but in some ways I think it worked the best. From an audience's point of view, the fact that all of the sounds being triggered were percussive, together with the very rhythmic placement of each stroke and the live acoustic percussion meant that their expectation of what an audio-visual drum kit should look and sound like was more fulfilled than with other pieces where there was ambiguity between what was being played and what was being sampled. When I play this piece again, I think I will simplify it still further and remove the animated feathers/fish/still images leaving only the bouncing sentences.

23 See 'What the Water feels like to the Fishes' - 6:42 for delicate acoustic improvisation



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Future work

In the time frame of this degree I've only just begun to tap into the potential of the instrument. The more I play it, the more ideas I have for it and I view it as a project which is in its infancy rather than a finished entity. I hope both to refine the instrument's interface to make playing it more intuitive, and to extend its capability to enable me to perform music which is more diverse, more complex, and more flexible, so that I can interact better with other people in future performing situations.

Beyond this I intend to substantially alter the way I perform/make music with the instrument. Where previously I have concentrated on making or composing short pieces, each with a fairly rigidly defined form, in the future I am going to model my performances on my 'DJ-ing' sets. Outside of the current project I have been experimenting with banks of short samples which I trigger with various midi interfaces, composing slowly evolving pieces in real time. My vision for AV drums is that in future, I will be able to perform in this way, drawing from a massive bank of samples (such that I will not instantly recognise every sound) as a DJ would, being able to decide what is appropriate to play right at the very last moment, and freed to take more risks during performance. I suspect that to be able to implement this, I will need to make the interface much more sophisticated, perhaps introducing a loop function, or real time sampling capability. Ideally, I would also like to be able to execute complex real-time processing, though I suspect I am a way away from this. I hope that in time, the nature of my performances will become less controlled, and more organic making me better able to interact with others, and more flexible. I would like to be able to just 'turn up' to a gig not knowing who else might be playing and join in. Initially I plan to introduce faders to control the volume of independent movie clips combined with buttons to toggle

their audio tracks on/off, as well as some sort of graphic feedback for the audio clips (e.g waveform) to enable me to anticipate basic things about samples which I may not recognise when scrolling through them `e.g sudden changes in dynamic, approximate length, etc). I anticipate that to be able to cope with a large library of samples, I will need to spend time devising a meaningful cataloguing system, perhaps a more sophisticated version of what already exists, where samples are divided in to distinct categories.

I see my job in the future more as a gatherer of information, a searcher, to collect samples for my instrument. I want to build environments from things that I see and hear everyday. Working on this project I have tried to push myself to be open in my approach to composition, but I've learnt that what I am instinctively drawn to are slow, gradually-developing improvisations based around repetition and pattern. I've learnt to value these things in themselves and I envisage my future work to be along these lines. I want to continue to explore urban geography and urbanness. As I travel around I will try to collect and gather as much material as possible. I also envisage a move away from an AV drumkit, to an AV instrument station, where a more diverse selection of sounds are imaginatively incorporated in to the set up. This will inevitably involve working with as many different people as possible, and initially I will approach Kadam Dance Company, as well as the animators I have made contact with in the course of these projects. I would also like to set up performances specific to particular spaces/places, including the Jerwood Kiln Studio of the newly opened Hoffman Building at Snape Maltings (Aldeburgh).

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Appendix

Appendix a) : 'B is for Bicycle'

'B is for Bicycle' Is included here as an example of a process exercise rather than a full work. A description of this process follows. The patch and media for the piece are included on the data DVD.

B is for Bicycle

My early research for this piece centred around family photographs. A friend sent me a very precious picture of my self as a small child riding a bicycle that I had thought lost, which got me thinking about childhood and about youth. To begin with I started off by digging out and going through all the boxes of family photographs, particularly the ones of my sisters and I as young children and then those I could find of my parents, aunts and uncles as children. I started putting to one side all the 'occasion' photographs. My cousins christening, blowing out the candles on my first birthday cake, my first day at school. I thought about how life is reduce-able in terms of these memorable events or markers, how looking back at a year or a lifetime it is easy to concentrate our memories in this way. I became very interested in potential. I thought about newly born babies – how we often think of them in terms of the life that lays ahead of them, and how we tend to frame that life in terms of these markers. I noticed how the 'bad' occasions were not photographed, or marked in a similar way. It seems somehow inappropriate to document pain, though it is an inevitable part of life. I wanted to make a piece about this 'elephant at a christening', the unacknowledged potential for a person to experience bad as well as good things in their lifetime.

The first thing I did was to think about sourcing images. I thought about using my own family photographs. I wanted to use images that told very clear, instant stories. Obviously all of my own photographs were very loaded with personal meaning for me and I found it difficult to differentiate between them, so I switched to using pictures of strangers from the internet. I knew that I wanted the piece to be short, and its message very clear in a matter of fact sort of way. I thought about how I might create a visual language that would deliver this message. I wanted to speak specifically about potential, and for the piece to be forward looking, and so it made sense to continue along the theme of childhood. This way I would also be able to exploit the sugary, colourful imagery and sounds of childhood to put across a very serious idea, which seemed to fit. I decided to design an 'occasion memory' version of the children's pictorial ABC (often used in classrooms to teach reading) which included negative potential life outcomes as well as positive ones. (and neutral ones). This is what I settled on:

A is for astronaut	Y is for yo yo
B is for bicycle	Z is for zebra
C is for cat	
D is for desk	
E is for exam	
F is for funeral	
G is for goal	
H is for hospital	
I is for iPod	
J is for jumper	
K is for kiss	
L is for leaf	

M is for mother
N is for nuclear
O is for ocean
P is for police
Q is for queue
R is for roller-coaster
S is for sub machine gun
T is for terrorist
U is for uniform
V is for Volvo
W is fr wedding
X is for xylophone

For the video component I sourced some clips of babies laughing and crying. I experimented layering them over a music box recording.²⁵ I processed the music box recording, chopping it up a bit and then stretching parts of it, and inserting long pauses so that it became very tentative and delicate, suspending certain notes.²⁶ I found when paired with the clip of the children laughing²⁷ It was very easy to watch, but when played against the clip of the children crying²⁸ it resulted in a very nervous, almost threatening tension – exactly what I wanted. For the main body of the piece I wanted to create something that was more rhythmic, but referenced the stretching/squashing of the earlier music box samples. I experimented with recordings of various ratchets and ratchet-y sounding noises, eventually settling on the sound of the rear hub/rear-wheel spokes of one of my bicycles which I brought in to the studio to record in a controlled environment. Around this I composed a very simple percussive framework, inside which I could present my ABC. I introduced it in the middle of the piece²⁹, and developed it at the end.³⁰ I also had fun recording various children's toys which I used as decorative textural elements. The end result was quite grotesque, but nonetheless I felt I achieved what I set out to do.

Although very simple, this is the most composed of all my pieces, and when it came to documenting it I realised that there was no need to film me playing it. Since there was no additional percussion it worked best as a purely AV piece, or film. We recorded me “playing in” the piece so to speak. In some ways this was a shame, as I didn't really use the kit to its full potential, but it did make me think about how I might present compositions in future. I would like to explore compositions that are experienced on DVD so to speak, and are less performance dependent/based.

25 See 'B is for Bicycle' - 0:20

26 See 'B is for Bicycle' – 4:17

27 See 'B is for Bicycle'- 1:32

28 See 'B is for Bicycle' – 3:31

29 See 'B is for bicycle' - 2:16

30 See 'B is for bicycle' – 4:29

Appendix B) Initial instrument Specification

AV drums design specification

Video/still images to be displayed in tryptic format

Audio samples/video/still images to be stored in buffers and selected randomly (true random)

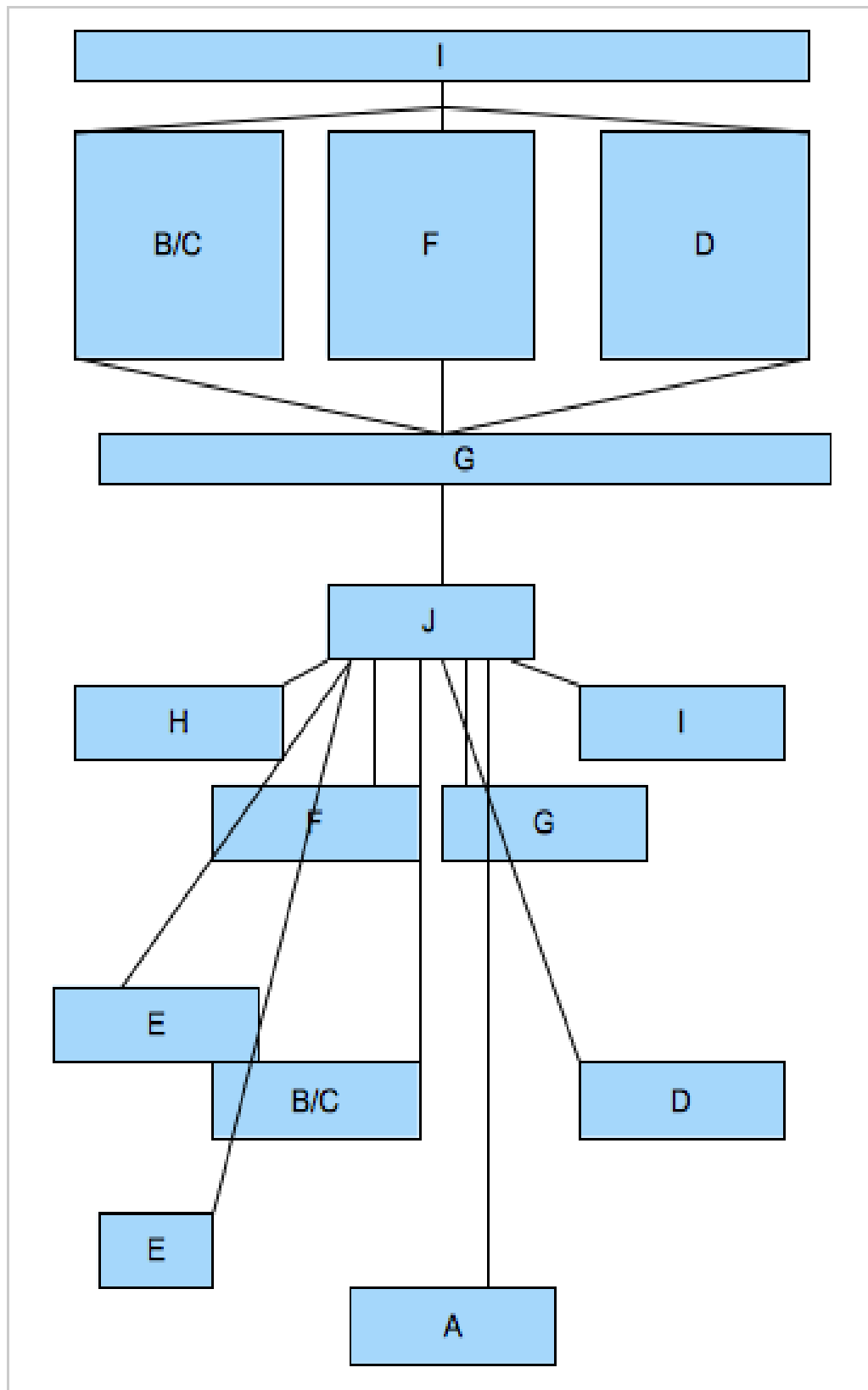
Capability to trigger samples in sequence if required

All samples triggered via midi controller

visual feedback integrated in to GUI to be displayed on monitor

Containers:

- I – colour overlay
- B/C – video playable forwards/backwards (B = forwards, C = backwards) displayed on left hand panel
- F – Still image displayed on middle panel
- D – video displayed on right hand panel
- G – Displays videos across all panels simultaneously/cuts to black screen on second trigger
- H – sounds triggered at random
- E – sounds triggered at random
- A – sounds triggered in sequence
- J – visual feedback



Toggles cutting to black at end of clips on/off

Stills/images displayed here for monitoring

File name Displayed here

Colour of overlay Displayed here

Buttons flash when corresponding midi trigger is played

File name displayed here

Faders to Adjust levels of A,E, H and F sounds

Faders to Adjust master levels

Polyphony function added – point at which samples are cross faded can be set for each channel (A, E, F, H sounds)