DMSP Performance

ALICE IN WASTELAND





6th April 2023

CONTENT

()

3 4

5

8 9

2

INTRODUCTION

Team members		
Research		
Concept		

SOUND

Initial sound ideas	
Difficulties	
Developing the performance-Owen McDonnell	
Why Ableton-Owen McDonnell	
Maggie Liu's contributions	

VISUALS

Part 1: Content- Shruti Sundar	15
Part 1: Developing the performance-Shruti Sundar	16
Part 2: Content- Vibha Jayaram	17
Part 2: Developing the performance- Vibha Jayaram	18
Monster design- Xu Yi	20
Brush Making in garbage form- Xu Yi	21
Texture production- Xu Yi	22
Animation bone binding- Xu Yi	23
Difficulties encountered- Xu Yi	24
Video Process- Xu Yi	25

PERFORMANCE

Stage design and site planning	27
Performance day	28
Challenges with visuals	29
Challenges with sound	31
Thoughts	32

INTERVIEW

Audience feedback	33
Important links	34
References	35

Sound

Visuals

Performance

Shruti Sundar

Visual Artist

Performed the first part starting from nature to the polluted world. Also helped finalize the concept and participated in designing 'our stage' among other things.

Vibha Jayaram

Visual Artist

Performed the second part continuing from Shruti's rabbit hole and merging with Xu Yi's garbage monster. Suggested the idea of 'Alice in Wonderland', aided concept generations, and added installations to the space.

YI XU

Visual Artist

Responsible for the monster theme design of our project, including character design, modeling, mapping, bone binding, animation.

Team members

Owen McDonnell

Sound Designer

I helped put together a soundtrack with Maggie using only authentic recordings of various waste objects. I also helped the visual designers get their Vizzie patches up and running and was there to troubleshoot any issues along the way.

Maggie Liu

Sound Designer

In charge of recording of garbage as samples of note and creating compositions with them. This included background music, including acoustic and synth music pieces. Also suggested the idea of 'Pollution', and added installations to the space. Visuals

Performance

Interview

Research

The use of plastics and other non-biodegradable materials holds a large part of our daily lives. Though there is a common understanding and knowledge of the effects of solid waste disposal and its environmental implications, we studied a few research papers to learn the current situation of pollution, and what can be done to avoid adverse effects in the future.

Currently, there is a large production and usage of plastics which isn't sustainable due to the finite capacity for waste disposal. The waste generated in the first decade of this century is likely to exceed that of the entire previous century.

With the alarming increase in pollution, proper waste management practices is important and needs to be established by authorities, and society as a whole needs to work together to address this issue.

The phrase - 'Reduce, Reuse & Recycle' should be followed and not remain merely as a phrase. Both articles highlight the urgent need for action and emphasize sustainable practices.

With this understanding, we altered our narrative to be presented in a loop.

4

Sound

Visuals

Performance

Concept

We originally had two separate ideas of 'Alice in wonderland', and 'Pollution'which were combined to form 'Alice in Wasteland'. This follows the audience (who are supposedly Alice) who walk through from the real world-as it gets polluted-into an apocalyptic fantasy wasteland that is facing the consequences of pollution. The aim of our performance was to inform the audience about pollution using satire. The audience would walk through a space we designed as they watched and listened to visuals and audio that we mixed live.



Interview



""Maggie and I wanted to create a soundtrack that made the live visuals even more sensational. The goal was to make what the audience saw even more engaging by supplementing it with a vibrant sonic dimension.""- Owen McDonnell

<u>Sound</u>

Visuals

Initial sound ideas

- by Owen McDonnell

 Initially, it was agreed to begin by writing some 2-4 bar loops in a chosen key (F minor) that could be layered together later on. This would allow us to work separately and then bring our work together later. This proved very successful—see audio samples #1 and 2.

Link to audio sample #1 - Maggie's initial demo Link to audio sample #2 - Owen's initial demo

We knew that the visual storyline consisted of natural landscapes, urban cityscapes, material pollution, and finally, a plastic monster. We wanted to mimic this transition from pure, natural beauty to an environment infected by plastic. We therefore thought of beginning with some kind of traditional orchestral score to represent the organic visuals then gradually introduce sounds of plastic to mimic the infestation of material waste. See audio sample #3 for an example of the sound recorded from rustling/crinkling a plastic bag.

Link to audio sample #3 - plastic bag

Performance

Interview

 Then, we ended up creating what was later dubbed, "plastic techno." Essentially, all of the percussion (including the kick drum!) was made out of sampled recordings of plastic bottles. As an example, listen to audio samples #4 and 5. The first is a selection of the raw recording of crinkling the plastic bottle; the second turns slices of that recording into a rhythmic percussion loop.

Link to audio sample #4 - raw recording of bottle Link to audio sample #5 - bottle as percussion

I was very proud of this, and I thought that it served as an authentic contribution to the project. To accompany the visual introduction of a plastic monster, I began exploring different ways to manipulate that same sampled recording of the plastic bottle from earlier. While having the sample play continuously, I adjusted the pitch of the sample and its start position within the entire recording – doing so yields a sound that resembles some kind of plastic entity eating and chewing! See audio sample #6.

Link to audio sample #6 - monster eating

Sound



Difficulty: a note by the sound designers

"One of the difficulties that both Maggie and I, Owen, encountered during this project was that it is very difficult to begin with a soundtrack if you don't know what the visuals are. Sound is such an abstract art, so that it becomes very challenging to just begin designing with no storyline/trajectory to follow. Obviously, in the media world, the video is often finalized before sound design begins. But this was still a unique challenge that was a good learning experience. We basically had the entire group agree in abstract on a trajectory. So even if we didn't know exactly what the shots would be and how long they would be, we knew that we were going to see natural landscapes first, then city, etc. That gave Maggie and I enough to work with on some initial ideas. Then, as the visuals progressed, Vibha, Shruti and Yi sent over the actual clips."-Owen McDonnell

<u>Sound</u>

Developing the performance

- by Owen McDonnell

For my role in the performance, I decided to use an Evolution U-CONTROL UC-33 MIDI controller. I know I only wanted dials and faders, and this had 22 dials and 9 faders, so that seemed plenty. After much toying around, I decided that I needed only a few dials to control just a small handful of effects. The performance isn't that long (~10 min), and when performing, I think it's better to make do with fewer controls rather than being overwhelmed by many possibilities.



I then realized that the only other kind of 'control' I need is that of volume for each of the 15 tracks (+1 for the master track). This is because my performance essentially involved launching clips in sequential order but then fine-tuning the volume of all of them. This provided me with significant control over what kind of sonic canvas was being created during the performance.

<u>Sound</u>

Visuals

Performance

Interview

Developing the performance contd... - by Owen McDonnell

Since the MIDI controller was just a bunch of unlabeled dials and faders, I found it useful to create and reference an Excel spreadsheet with the assignments:

25	26	27	28	29	30	31	32	
sunrise	distortion	grain	grain nitch	reverb		monster -	monster - loop	
open	dry/wet	dry/wet	grain pitch	dry/wet		pitch	length	
17	18	19	20	21	22	23	24	
sunrise trk vol								
9	10	11	12	13	14	15	16	
birds	ocean	bins		perc	kick	t2	t4	
1	2	3	4	5	6	7	8	
wind	city	rustle	crinkle	thick	t1	t3	monster	master

For the effects, I chose to use only Ableton's stock effects, solely to minimize the potential for my laptop crashing. I had one dial controlling a distortion effect, 2 more dials controlling a pitch warping effect, and a final dial controlling a reverb. These were all on the master track.





For the actual performance, I also labeled the dials and faders using white electrical tape and a marker (see above). Crucially helpful!:

Why Ableton?

"Maggie had never used Ableton Live before, but I suggested we try it anyway, primarily because (i) Ableton's Session View makes for very smooth live performance of short clips, and (ii) using Ableton's *Link* function, we would be able to run our sessions in sync with the same clock.

The Link function worked flawlessly. It initially didn't work over the University Wi-Fi (eduroam), but it worked over a computer-to-computer network that I created on my laptop. There were never any bugs with the Link function and I would absolutely use it again for a future performance.

Below is a screenshot of my Ableton project's Session View. During initial rehearsals, I had way more clips ready to launch than was necessary; I soon realized that it would make for a smoother performance if I whittled down the selection.

So I basically had one clip per track that was ready to launch, and everything was in order from left to right: beginning with the sunrise open sound on track one, then natural ambient sounds (e.g. birds), then urban sounds (e.g. traffic), then plastic textures, then plastic techno (blue = percussion, green = tonal content), then ending with the monster chewing sound in purple all the way to the right."-Owen McDonnell



			2443.5
	-Initrodit	ction	
-			
	1000		
	C5		
_			
_			
1			
	C4		1000000
	100		
_			
-			
	0.2		
	05		

Mengru Liu's contributions

Sound

• Recording of garbage including glass bottles, plastic bottles, shopping bags, metal cans, plastic boxes, and AirPods case.

Visuals

- Compositions made up with the recordings of the garbage recordings as samples of note.
- Compositions for background music, including acoustic and synth music pieces Using garage band, protools and ableton live as daw, midi keyboard as the control during performance

大钢琴

Performance

Google drive link

For the natural to pollution part:

I use violin, viola, cello and piano for the music piece here, which basically form a small chamber orchestra. These original and classical instruments could be a nice choice to express the tranquility and harmony of natural without the interruption from human beings and, more importantly, the garbage, chaos and damage coming along with us. When it comes to the scene of the city, including the streets with noises and the waste in the park, I chose organ to express the vibe. The organ, to me, could often plays a good role in balancing the mechanical and natural. It is not an electrical instruments obviously, but the resonance and the metal tone describe the polluted but still realistic world of human beings well, cause the instruments like piano would be too natural and peaceful, while the synth music pieces are supposed to join in the antasy part. The final scene of the first part is dropping into the rabbit whole, from here I started to use synth music since it is the beginning of the fantasy wasteland.

Interview

<u>Sound</u>

Mengru Liu's contributions contd...

The fantasy part:

"This also starts with the dizziness of dropped into the rabbit whole, still using the synth sound effect to express the progress of dropping. The following part is combined with the refuse processing plant, noise video of tv and floating plastic bags. I put the composition made by garbage samples here to respond the visual scene of waste in real life. According to the classification of waste by https://www.gov.uk/how-to-classify-different-types-of-waste/electronic-andelectrical-equipment, I chose the most common wastes in daily life, including packaging waste, recyclables, electronic and electrical equipment, as the recording materials. When it comes to the real fantasy of jelly mushroom, vortex and the table of the mad hat, the synth music piece here could be described as weird but it's still enjoyable. However, when the garbage monster appears, the music piece here, still made by synthesizers, becomes a bit unbearable to show the danger of the monster and also works as a reminder for the audience, that the waste we created would cause an unaffordable consequence as well. I intended to make the music here and the very first orchestra music the same structure and chords, to make a smooth transition from the fantasy world to the last reminder and also a possible new start for the next beginning."-Maggie



<u>Visuals</u>

Performance

Interview



The three of us wanted to create visuals that were slightly psychedelic, fantasy like, fictional, and colourful.

Sound

<u>Visuals</u>

Performance

Interview

PART 1: NATURE GETTING POLLUTED

by Shruti Sundar

The videos I gathered were of nature and pollution. I start with a generic sunrise that changes into a bird's eye view of a forest to the mountains with a beach. I wanted the audience to feel calm and see sites they are familiar with. From here I transitioned to a cityscape. I should've added visuals that had more vehicles and people but showed one that was rather a calm city road with a few cars. I then began adding pollution videos and these would crossfade with the nature visuals. In short, I move from nature to cityscape, pollution in the cityscape to pollution in nature. Finally, end with us (the group) looking down a hole and it begins to spiral. This is where my part ends.

These videos used were stock videos taken from online sources, I would've liked to film a few visuals in the city but unfortunately, never had the time. I did ask around for any aesthetic nature videos among my friends and peers but failed to receive any suitable ones. It was also interesting to learn that we use portrait mode to capture moments over landscape these days and that's mainly due to social media.

Sound

Visuals

Interview

Developing the performance - by Shruti Sundar

We were introduced to Vizzie (Max) during the course, where this was all possible and it seemed rather straightforward.

I started the first patch by adding video players, multiple effects, and loadbang commands for all of them. But unfortunately, I notice a considerable decrease in the speed of my laptop as I was working. The file crashed multiple times and I was starting to question my laptop's GPU (which could run Unity, Blender, and Photoshop at the same time!).

It was during our rehearsal on the 27th of March 2023, that Jules pointed out that having too many players with loadbang for all of them is causing the issues. He told me to simplify it and have a maximum of four players.







So, I opened a new patch, and began the process again. This time I kept it as simple as possible and had just enough effects. I added three movie folders: one for nature, one for pollution, and another for glitches and effects. I added three effects so that I can follow consistency through the performance. Using a MIDI controller to change these effects was very effective and made the whole process a lot more easier and smoother.

Sound

<u>Visuals</u>

Performance

Content - by Vibha Jayaram

Interview

PART 2: WASTELAND

-1

The narrative approach is that the viewers, or 'Alice', goes from the real world to a dystopian parallel wonderland filled with polluted wastes. She does so by falling through a rabbit hole into a world that has been destructed by plastic wastes. The narrative approach within the wasteland follows a particular order. The adjustment period, where there is a trance like transition from the real world to the parallel world (Created using the webcam and kaleidoscope). This is followed by the explorative period where Alice sees the bio mutated houses and jellyfish(or jellybirds) made of plastic bags(This is a subtle reference to plastic that looks like jellyfish that is eaten by turtles, causing death). She also sees the dining room scene similar to the movie, except it is in a barren wasteland.

The final period is when Alice runs out of time (as shown by the pendulum stop watches) and it is the frabjous day (the garbage monster reveal day). Like in the movie, she faces the jabberwocky or the garbage monster, but unlike the movie, to slay it, she must travel back to the real world and make conscious choices when it comes to waste management. (as stated in the epilogue of the performance).

Sound

<u>Visuals</u>

Performance

Developing the performance - by Vibha Jayaram

My work included the second half of the performance merging with Xu Yi's garbage monster. For that I mostly relied on Midjourney AI and videos from Pexels. I used Max MSP's Vizzie for creating the visuals, and broke it down into two patches for better system performance. This was connected to a MIDI controller. I used load bangs and movie folders within my patches. Since I was using a MIDI controller, the integer positions of the mixfaders only acted as a reference. I used a short throw projector on a back projecting white screen for the performance. Additionally, Owen and I shot some videos on his camera using a set we created using materials we sourced from ECA free store.

The beginning and end of my performance had to merge with Shruti's visual and narrative approach. Since we were building something that formed a loop, we decided to loop the rabbit holes, which were a perfect way to break and remix the visuals. Hence, we had a rabbit hole at the beginning, and at the part where the garbage monster began forming and at the end of the performance



(I was trying to create a psychedelic transition into garbage land using kaleidoscopic effects and a camera (IPEVO documentation camera)

Sound

<u>Visuals</u>

Performance

Interview

Developing the performance contd... - by Vibha Jayaram



P.S I work better with chaos, so although my patches look messy, with practice, I knew exactly which slider controlled which mixer.

I had to effectively make Vizzie patches that could run on my system without crashing, so I used movie folders as per the professor's guidance. Unfortunately, I had to use two patches and switch between them during the performance. This was because I wanted specific effects on specific videos, and if combined, my system started crashing.

This caused a little trickiness, because I then had to switch seamlessly between patches midperformance. Each time we practiced, I had to come up with a slightly different way to switch between patches seamlessly, and quickly turn the midi controllers to their set positions on time when the second patch started playing.

But in the finale, I think I was able to manage this quite well, and I was happy with the performance.



Monster design

– Xu Yi

Because monster characters are not in conventional form, such as some mechanical models. So I prefer to use zbrush instead of maya for modeling. Although I have some experience in avatar modeling and can grasp the shape of the model, the model built in the early stage looks very weak and weak. The feeling of garbage piled out. So I went to watch some videos of human body modeling, as well as learning including body sculpture. I found that there is a very key point between this and my early learning of sketching, which is the learning of human bones and muscles. If the muscles or bones are in the wrong position, the garbage monster will look powerless. At the beginning, I didn't pile up the garbage, because I was afraid that the garbage pile would be very bloated again. So first determine the basic character core. The learning of skeletal muscles includes shaping. It took me nearly three weeks to refer to the book "Bridgmans life drawing". Many skeletal muscles will be drawn according to this book, such as calves. The soleus muscle on the muscle can be highlighted, and some muscles can not be drawn.

Sound

<u>Visuals</u>

Projects

Brush making in garbage form

Since the garbage monster is composed of hundreds of pieces of garbage, it would take a lot of time to model each piece of garbage one by one, so I first sculpted about 30 pieces of garbage in ZBrush, And make it into a brush, so that the model can be selected and drawn directly on the surface of the garbage monster. This will also solve the problem of texture. The same model appears in the same scene and only occupies the position of one texture, which will reduce post-texturing and rendering times.

When stacking garbage monsters, another problem that needs to be considered is that if they are all made up of small garbage, it will not be able to perfectly display the character image designed at the beginning, so in the later modification, reduce the muscle at the key position The appearance of small garbage was replaced by large garbage bags. Unfortunately, this ingenuity also left a hidden danger for subsequent animations









Sound

Visuals

Performance

Interview

Process

Texture production xu Yi

Textures are mostly made in Photoshop and Substance Painter. /Like some small plastic bottles, I would go online and find some highresolution scanned floor plans for reference and draw them. Drawing, processing, stitching in Photoshop. After the color map is obtained, it is imported into SP again for texture rendering, roughness, reflection and other related textures. The main part of the monster directly makes 6 related textures for different materials in SP. Also, to save production in the nodes after rendering, all the small junk textures are drawn on the same UV surface.







Sound

Model

<u>Visuals</u>

Performance

Interview





Animation bone binding- xu Yi

When I was learning to control the skeleton of the monster, I learned about inverse dynamics and forward dynamics in 3D animation. Forward kinematics is very desirable for creating detailed circular motions, as it requires a direct setup of each joint rotation of the Junk Monster. Inverse kinematics is very desirable for creating direct target motion because it only needs to set the final joint in the joint chain to reach the position and the direction of motion. When positioning the joint chain, each joint is rotated individually. For example, in order for a chain of joints to reach a specific position in space, each joint in the key chain must be rotated individually. To do this, the parent joint of the joint chain is rotated first, then the next joint, and so on down the joint chain. Among them, I often make mistakes about the parent-child joints, but this can be done through repeated tests to understand whether the position of the joint is at the position of the parent or the position of the child, so this part of the expression may not be clear. When animating bones using forward kinematics, Maya adds joint rotations starting at the root joint, then the root joint's children, and down the bone hierarchy



Due to the complexity of the monster model, to ensure smooth joint movement when animating curves, multiple joints were created close to each other (using short bones). Especially in the creation of the monster's foot bones, this is a very complicated system for me. I need to observe the position of the human body's foothold, and then create the controller for the feet. For example, when lifting the foot bones upwards, When walking forward or backward, the feet move back and forth alternately, and the pelvis is always located in the center of the two feet in the front-back direction, which is often easy to control mistakes.

Sound

<u>Visuals</u>

Performance

Interview

Difficulties encountered - Xu Yi

When the controller can control the movement of the bones, the bones and the monster model need to be bound. I tried this part for nearly 2 whole nights, and repeatedly tested a command. Because the model is complicated, I am not sure which command has the problem. Can keep trying. Because the monster model is composed of a lot of garbage, and secondly, when creating the model, it did not consider the subsequent need for animation, so the model is not as standardized as in the video teaching. For example, when making it, there is no standard T pose. Going back to zbrush to modify, I am afraid that some parts will stretch, so I can only try to bind first. If the binding is not successful, I will return to the original point at last. So 2 has repeatedly reported errors throughout the night, which is very tormenting, which makes me almost want to give up. It always appears that the skeleton is animating, and the controller can control the skeleton, but the monster's body does not move. At first I thought it was a problem with the controller settings. I found a simple character model on the Internet and tested it. Finally, I found that the model is actually difficult to skin. At the same time, the model had stretching problems. In order to avoid this problem, at the same time in the model It needs to set a lot of blocks to describe the volume of the model, such as the position of the chest, to avoid the extrusion of this part.



Sound

<u>Visuals</u>

Performance

Interview

Video process - Xu Yi

During the test model movement stage, the walking movements of the group members were filmed in real scene. I used the live video and my model seed to put it into the AI system for simulation, but unfortunately, the garbage monster can indeed appear in the video walking, but it does not restore the level of detail of the monster model. If the Al video can repair or upgrade this function in the future, after the bones are bound, the model seeds can be replaced with the characters shot in real scene. But because the final effect is not as good as the modeled character, after discussion, there is no replacement, otherwise the video can be made for a longer time, and there is no need to adjust the dynamics of the model frame by frame.

,,,,,,,,,,,,



Innovative attempts of Al technology

video

Sound

Visuals

<u>Performance</u>

Interview







We were all very excited about the audio and video of the live performance, and our mentors and friends all gave us great encouragement. Even though there were some accidents, fortunately, we solved them well and made a complete performance.

Visuals

Interview

Stage design and planning

Initially, we had thought of using West Court at ECA to showcase our performance, but we soon changed it to the Atrium in Alison House. The main reason is the already existing truss support that can be used to hang screens and partitions.



We decided to use the central space and with the help of the truss tie the screens. We weren't able to establish a clear walk around within the room as planned before, but the audience does move from screen 1 to 2 as they move from my (Shruti) part to Vibha and Yi Xu's part.

As seen, the audience enters the atrium and would first notice a black screen in front followed by the screen to the left. This is where part 1 is performed. The audience then moves through the gap and faces screen 2 to the right where the second half is performed. We were able to create an S-shaped movement pattern but a circle or a loop would've been more interesting as it would relate to our narrative and the audience would have an entrance/exit.

The digital designers sat behind their respective screens and the sound designers were in the corner of the S-shape. This way they could see both the screens and the audience.

Regarding the speaker setup, we decided to place 1 Mackie SRM450 on the ground tilted up 45 degrees behind each of the 2 screens. This placement allowed us to have sound emitting only out of the speaker behind screen 1 during the first half, and then, when the audience move to the second viewing area, we panned all of the sound to the speaker behind screen 2. This ushered in the audience effectively and was a creative use of a simple stereo setup. We also placed a Genelec 7060 subwoofer at the middle-left of the performance space. Since the low frequencies emitted by them are omnidirectional, we knew it didn't matter where the subwoofer was located or the direction it faced – we just put it roughly in the center of the room in order to emit an added 'thump', and it worked brilliantly!

Mengru and Vibha did some set designing by creating a boundary with plastic waste and even added some small lights which enhanced the stage.

Sound

Visuals

Performance

Interview

Performance Day

The set up session began on around 1pm. We hung the two screens and the black curtain as planned. Mengru and Vibha had many instantaneous ideas on the performance day to build monsters out of the garbage we had gathered, such as plastic bags, metal cans, bottles and fluffy wire. They made 'little mutant garbage monsters' lined up to set the boundary between the second screen and the music/sound effect control panel just in case someone would step on the mic stands and wires. They tied up bags on the entrance to give more character to the installation space. These decorations were also used as instructions, such as the bottle with arrow shows the direction that the audience should go between the two screen. However, because of how dark it was, these details weren't entirely visible. Mengru had the idea to add candle lights to the monsters we made which made them more visible.





Behind the two screens were placed the two separated TPYE speakers and also two Sony short throw projectors on the table. A small pico projector was also placed behind the second screen for the garbage monster for the fantasy scene.

We finished setting up around 2:15pm, then dealt with some technical malfunctions until 3.15 (which will be discussed in the following pages).

During the performance, the pico projector that was supposed to guide the audience didn't work and Owen had to tell the audience to walk to the next zone. Also, when the final scene of the warning words showed up, the audience seemed not aware until we told them that's the end. We were a little frustrated with the imperfections, but Jules gave us some advice including changing the direction of the sound to guide the audience into the next zone, and also connected the ending and beginning together. The second performance worked much better. Since we were using stereo speakers, Owen and Maggie just changed the panning of the direction as the guidance, and Vibha also put the beginning scene of the sunrise after the last warning words.

Overall, despite the technical surprises, we were quite satisfied with how the final performance panned out.

Sound

Visuals

Performance

Interview



Challenges with visuals

Around 2:30pm while testing, the Sony short throw projector for the fantasy scene began malfunctioning and began to project a blank screen. When we tried to fix that, it progressively got worse. Later Jules and Andrew came and help us to solve the collapsing problem, but the logo 'Sony' just stuck on the screen and no one in the room knew how to fix that. We made an urgent decision to combine the monster and the background scene together, and play the visuals from one projector (Xu Yi's) instead of two which took quite a few minutes.

We were planning to make a formal performance without the audience, however since it was close to the show time we just did a quick test.

Shruti was supposed to project garbage floating around Xu Yi's garbage animations) onto the ground in a way of directing the audience from the first scene to the second scene. First, the lpad failed to open, then the Pico projector did not work. Both of these functioned well during rehearsal. Owen had to tell the audience to walk to the next zone.

"I learnt two things working on this performance. I learnt that one should always check if the tech is working first and then set up the space second.

I also learnt that something will always go wrong and it's crucial to have a backup. " - Vibha Jayaram

Visuals

Challenges with visuals contd...

The image (right) is the max patch Shruti made with all the effects she wanted to use. The three folders contain the three different visual aids she needed - nature, pollution, and glitch effects. All these worked well during rehearsal and practice sessions. But, twenty minutes before we had to perform, Vizzie (max) crashed thrice. She was able to restart it twice but it continued to crash and by this time the audience had already gathered and we were running a few minutes late.

Shruti was very confused as to why it was crashing now when she'd been working with this the same way for the past week. She realized then that she did add a new video, rather a large file into one of the folders during the one rehearsal we had and Vizzie did not like that. She quickly removed that video and reopened the software and added the folders again. The performance finally began.



"The first show we had may have not been our best, lot of nerves and too many errors, which was probably visible. I felt I was too worried about moving between visuals that I lost out on the effects and glitches I wanted to add."- Shruti Sundar

We received some good constructive criticism and encouragement, and we went again. As Jules said, the second time was much better! For the second round, Shruti says, "I was able to create more effects and make the visuals more chaotic, and thanks to Vibha who at the end of her performance added the sunrise and we synced up, completing the loop. No garbage was projected onto the floor, but that was a lesson learned."

Sound

Visuals

Performance

Interview

Challenges with sound

For Owen, there were some technical difficulties associated with the visual equipment that delayed the initial performance. (Visual equipment seems to be much more finicky than sound equipment.) During the first performance, he was mostly focused on just getting sound out of the speakers and making sure nothing broke. He thinks it was an adequate run, but certainly a bit tame. Jules and Andrew provided some feedback after that first run; and then we went for another while incorporating that feedback. "I personally focused on driving the sound effects to '11', e.g. really pushing the dynamic range, making weird things weirder, incorporating more drastic effects such as pitch shifting, etc. I therefore got a lot more personally out of the second performance–I felt like I was actually expressing something and that I was freely playing an instrument rather than following some kind of script.

One particular idea from Jules that we incorporated was having the soundtrack only play in one speaker (the one next to the first screen) during the first part of the performance; then, in order to usher in the audience from that area to the next area next to Vibha's screen for the second part, Maggie and I panned all the sound to that other speaker. I believe this was quite effective and a good practical use of a simple stereo setup"-Owen recounts

Sound

Visuals

Performance

Interview

Thoughts

Lessons learned

#1 It takes a lot of time to get a group to commit to an idea.

It took our group well past halfway through the semester to get to a point where we could actually practice something. All of us kept coming up with new what-if's, e.g. what if we included this? What if we tried this instead?

In retrospect, it would have been better to simply commit to an earlier idea and have something to practice—even if at the time we felt that it was not a fantastic idea. This is because the point is that we needed to practice, practice, practice in order to make progress—you really have no idea how something like this (an audiovisual performance) is going to go when talking about it abstractly, and you only find out once you put the idea into practice. For this reason, in retrospect, we think our group would have benefitted from a self-imposed hierarchy. Since no one group member was in charge of making creative decisions, this allowed us to lollygag for weeks on all those what-if's mentioned above. We think we should have decided to have one person in particular be the creative director-someone who would have final say on whether we continue with a certain idea. This would have established commitment at a much earlier point.

#2 An audiovisual performance is more engaging if the sound and visuals are synced to a significantly precise degree.

Our performance basically consisted of long, wide shots of various scenes and then a soundtrack that supplemented it. We think it would have been much more engaging for the audience if there had been specific visual effects that were tied to some kind of audio effect (e.g. visual pixelation tied to audio bit-crushing). Maggie and Owen were able to model some of the visual effects in real-time with audio effects, but it was far from a precise relationship. "I just think that if you are going to have an audiovisual performance, the audience needs to be made aware that there is some kind of audio of audio visual machine at work in front of them, rather than two discrete sound and visual machines." Owen states.

Sound

Visuals

Performance

Interview

Audience feedback:

Really en joyed the potonian a apecially the second run trough. I'd want to see score of everything? More hoisiness, shore afitchines. More public of ellede. More 'milsich 'as set dressing. The bogning & we of sound to divid attention could give you a way to create that as an installation fiece.

troben

Amazing performance! Loved the way the narrative felt smooth between both parts of the m space.

The second time you could see feel more impact with the sound and video. the glitches in the end of the first part give a great ending of making you feel uncomfortable of whats to come. It was anesome! The sootage for the singe segment coulding been better, i.e heanier trogsic. The music in the second segment was smithing! overall I rearry enjoy ed the experience;

Very immersive and makes you think! Loved the imagory and intense sand! Absolutely amazing! Well done guys! The second round felt a lot smoother in transitions visually and avoibly. For the trash monster, it would be cool to see it further animated. i.e. being hunched over with more fluidity in the arms/ less to emphasise strength locight in movement.

This was AWBOME "

.....

Important links:

Performance:

https://www.youtube.com/watch?v=D4CSJ-46BLw

Detailed process (blogs):

https://blogs.ed.ac.uk/dmsp-performance23/category/aiw-blog/ (For more detailed production details, please read group member personal report)

Alice in Wasteland

A walk through live performance, By ECA digital & sound design students.

Thursday, 3:15 pm, Atrium, Alison House, EH8 9DF

Project References

- Thompson, R.C. et al. (2009) 'Plastics, the environment and human health: current consensus and future trends', Philosophical Transactions of the Royal Society B: Biological Sciences, 364(1526), pp. 2153–2166. Available at: https://doi.org/10.1098/rstb.2009.0053.
- Abdel-Shafy, H.I. and Mansour, M.S.M. (2018) 'Solid waste issue: Sources, composition, disposal, recycling, and valorization', Egyptian Journal of Petroleum, 27(4), pp. 1275–1290. Available at: https://doi.org/10.1016/j.ejpe.2018.07.003.
- Esquivel, R. (no date) Images of lines and pattern in blurred setting pexels, Pexels. Available at: https://www.pexels.com/video/images-of-lines-and-pattern-in-blurred-setting-3259919/ (Accessed: March 21, 2023).
- Vasilevich, E. (no date) Motion background pexels, Pexels. Available at: https://www.pexels.com/video/motion-background-7101965/ (Accessed: March 21, 2023).
- Fisk, T. (no date) A hill of waste materials pexels, Pexels. Available at: https://www.pexels.com/video/a-hill-of-waste-materials-3186590/ (Accessed: March 21, 2023).
- Ehlers, M. (no date) Blue jellyfish in sea pexels, Pexels. Available at: https://www.pexels.com/video/blue-jellyfish-in-sea-13195056/ (Accessed: March 21, 2023).
- Vidal, D. (no date) Black and white glitch effect pexels, Pexels. Available at: https://www.pexels.com/video/black-and-white-glitch-effect-8482843/ (Accessed: March 21, 2023).

- www.ableton.com. (n.d.). Ableton Link: Connect music making apps with Ableton Live | Ableton. (online) Available at: https://www.ableton.com/en/link/. (Accessed: March 27th, 2023)
- 100+ Free Pollution & Environment Videos, HD & 4K Clips Pixabay (no date). Available at: https://pixabay.com/videos/search/pollution/ (Accessed: 23 April 2023).
- Pollution Videos, Download The BEST Free 4k Stock Video Footage & Pollution HD Video Clips (no date). Available at: https://www.pexels.com/search/videos/pollution/ (Accessed: 23 April 2023).
- Nature Videos, Download The BEST Free 4k Stock Video Footage & Nature HD Video Clips (no date). Available at: https://www.pexels.com/search/videos/nature/ (Accessed: 23 April 2023).
- Trash pile on the street on a sunny day Free Stock Video (no date). Available at: https://mixkit.co/free-stock-video/trash-pile-on-the-street-on-a-sunny-day-25552/ (Accessed: 23 April 2023).
- Download plastic trash littering the ocean shore. Concept of Ocean Rubbish And Pollution Environmental problem for free (no date) Vecteezy. Available at: https://www.vecteezy.com/video/21199882-plastic-trash-littering-the-ocean-shore-concept-ofocean-rubbish-and-pollution-environmental-problem (Accessed: 23 April 2023).
- Lee, H.J. and Chen, Z., 1985. Determination of 3D human body postures from a single view. Comput er Vision, Graphics, and Image Processing, 30(2), pp.148-168. Available at: https://www.sciencedirect.com/science/article/pii/0734189X85900945 /. (Accessed : March 5, 2023)
- Roberts, S. (2012). Character animation fundamentals: developing skills for 2D and 3D character animation. CRC Press. Available at: https://books.google.co.uk/books?hl=zhCN&lr=&id=k4bOAwAAQBAJ&oi=fnd&pg=PP1&dq=3D+c haracter+animation+maya&ots=6aXb1qNuoz&sig=zlVFzXgNJqu946S38vOXpXyeBt8#v=onepage& g=3D%20character%20animation%20maya&f=false /. (Accessed: March 5,2023)
- Maraffi, C. (2003). Maya character creation: modeling and animation controls. New Riders. Available at:

https://books.google.co.uk/books?hl=zhCN&lr=&id=1GE6YbntJrQC&oi=fnd&pg=PR13&dq=3D+ch aracter+animation+maya&ots=Jd71ToLU6W&sig=I3I_9hhPImE7K8VLRLGQsMkCfHc#v=onepage&q =3D%20character%20animation%20maya&f=false/. (Accessed: March 5,2023)

- Quintero, L. (no date) An animated video pexels, Pexels. Available at: https://www.pexels.com/video/an-animated-video-4990243/ (Accessed: March 21, 2023).
- Midjourney. Available at: https://discord.com/invite/midjourney (Accessed: April 17, 2023).

Thanks For Watching!