

Eamonn Harte - Advanced Play Design - Folio 2

Link To Reflective Video : <https://youtu.be/HXAkAjeJ8Wc>

Week 1 - Play and Self

Response : <https://aetheriun2.neocities.org/>

MAGI post : <https://magistudio.net/work/apd-week-1-play-and-self-7e9849>

Teams post : <https://teams.microsoft.com/...>



Theme

When thinking about the theme of Play and Self, my first thought was about self image, and I considered making something with portraits, and trying to use an AI text to image application to create images that -could- be of me, by feeding it more and more detailed text descriptions as inputs. The results didn't feel very interesting or playful however, so I spent a bit more time thinking about the theme. I started thinking about the way that people present themselves online vs offline, which led me to start thinking about the personal data that people create through the use of social media. I decided I wanted to use the data that I could pull from my personal twitter, which I've had since I was a teenager, and have used extensively since my early 20s, and try to use that data to generate new text.

Method

I requested an archive of my personal data from Twitter. Part of this archive was a json file that had all 60,000 tweets I've made, as well as all the associated metadata. I only wanted the full_text component of each tweet, so I followed a tutorial for importing this json data into Microsoft Excel, and filtering out the data I didn't need. I also removed all the text for tweets

that I had retweeted, ones that were direct replies to other people, or ones that contained any hyperlinks, which cut my dataset down to 17,000 lines of tweets, which I saved as a text file. I then did some research into RiTa.js, which is a Javascript library for language processing and text generation, which I haven't used before. I was able to find a code example that used both RiTa.js and P5.JS (a coding framework I'm more familiar with) that created markov chains from source texts on mouse click, and displayed the result as text on the screen. I incorporated the tweets file as a source text, and then adjusted some of markov chain generation variables until I was getting lines of text I was happy with (where the sentences being generated weren't entirely nonsensical, but I couldn't see entire tweets just being generated verbatim). With the text generation working, I started to think about how I wanted to present it. Because the source text was all things that I've said online, I thought it would be fun to have me "speak" the text. I changed the background of the sketch to be Twitter blue, and stylized the text so it would look like it was appearing in a speech bubble. I then looked at some pose references for character sprites in visual novels, and took a series of photos of myself recreating the poses. I removed the background from these photos, and then added the cutout figures into the P5.JS sketch, so that each time a new line of text is generated a different pose is displayed on the screen.

Context

My response uses markov chains to algorithmically generate new combinations of text from the corpus of my twitter archive, but the process of using existing text as a base to generate new work is one that predates the use of computers. Earlier related practices include the cut-up technique used by Dadaist writers and poets such as Tristan Tsara, where 'texts derived from existing writing or printed sheets that are then dissembled or cut up at random and reassembled to create a new text.' (Flanagan, 2009), or the diastic (or spelling-through) technique pioneered by Jackson Mac Low as a composition method for writing poetry, using a source text and a seed phrase (Hartman, 1996).

The use of my own personal text for this process makes my response a type of solitary play (Sutton-Smith, 2001) as it relates to writing, reading, and journaling. When viewing the output of the sketch, part of the humour and fun of it was seeing the recognizable snippets of text mashed together in unexpected ways.

While developing the sketch and thinking about how I would present it, I was drawn to Darius Kazemi's 'Quantity' talk from the 2014 Eyeo Festival, where he outlines a framework of templated authorship, random input, and a framing context, for producing procedurally generated content that doesn't become boring for the viewer. With my sketch I already had the text template and the random input, and this framework pushed me to polish the visuals further than merely displaying text on the screen.

Reflection

Overall I'm pretty happy with my response this week. Using tweets as a data set to generate more tweets isn't a particularly unique concept (hence the proliferation of e_books style bot accounts) but I think my presentation of the generated text is a lot of fun, and I enjoyed experimenting with a new coding framework.

References

- Flanagan, M., 2009. *Critical Play*. Cambridge: MIT Press.
- Hartman, CO 1996, *Virtual Muse : Experiments in Computer Poetry*, Wesleyan University Press, Middletown, CT. 06459. Available from: ProQuest Ebook Central. [27 August 2022].
- Kazemi, D., 2014. *Quantity - EYEO Festival 2014 talk*. [video] Available at: <<https://vimeo.com/112289364>> [Accessed 27 August 2022].
- Sutton-Smith, B., 2001. *The Ambiguity of Play*. Cambridge, Harvard University Press.

Week 2 - Play and Time

Response : <https://aetheriun.itch.io/apdweek2?password=APDWeek2>

Documentation : https://youtu.be/_gJAzGzbt3w

MAGI post : <https://magistudio.net/work/apd-week-2-play-and-time-627504>

Teams post : <https://teams.microsoft.com/...>



Theme

I started off this week with the triangle word-cloud exercise, noting down words and ideas relating to the themes of Play, Time and my own creative practice. I very specifically wanted to avoid ideas relating to the passage of time and day / night cycles, as I explored these in a similar themed week for CPS, and I wanted to vary up my response.

I found I was drawn to the ideas of loops, rounds and repetition. I was reminded of the idea of 10 second games, a theme that has been used in multiple game jams and game-a-week challenges (Like [this](#) one by Firepit Collective, modelled after [this](#) RMIT class syllabus from 2017), where the extreme time constraint means that the games have simple mechanics, and the enjoyment comes from the race against the clock, and the satisfaction of improving over multiple play-throughs. A good example of a game made under these constraints is 'Morning Makeup Madness' by Jenny Jiao Hsia, where the player has 10 seconds to apply makeup to a virtual avatar, and get graded on the results.

I decided I wanted to use the 10 second time limitation, and make a game that was designed to be played in rounds, with the difficulty gradually increasing each round, that also tracked and displayed the players score, to encourage replay-ability.

Method

For the response I made a 2D game in Unity, where the player controls a bee using their mouse. The goal of the game is to collect every flower on the screen before the timer runs out. When the player collects every flower on the screen they progress a level, which increases the size of the playable area, and the number of flowers that spawn into the scene. If the 10 second timer runs out, the player is shown their high score, and given the option to restart the game from level 1.

Context

This is the most traditionally game-y of my responses so far, with its focus on mechanics, timers and scores. This means it ties in very well with the idea of ludic or rule based play, where the player operates within a structured system of play (Caillois, 1961). It also fits very neatly into the 'difficulty' and "competition' categories of the Pleasures of Play framework, where the enjoyment of the experience comes from increasing the difficulty, or the completion of a set task or goal (Costello & Edmonds, 2007).

Reflection

I had trouble deciding on what I should make for this week's response, even after I'd settled on the idea of making a 10 second game. Once I came up with the idea of a bee collecting pollen though, the ideas flowed pretty quickly. I also realised that I'm getting a lot more comfortable using Unity, as I was able to develop the prototype, including the majority of the scripting, without having to look up pre-existing tutorials or examples.

References

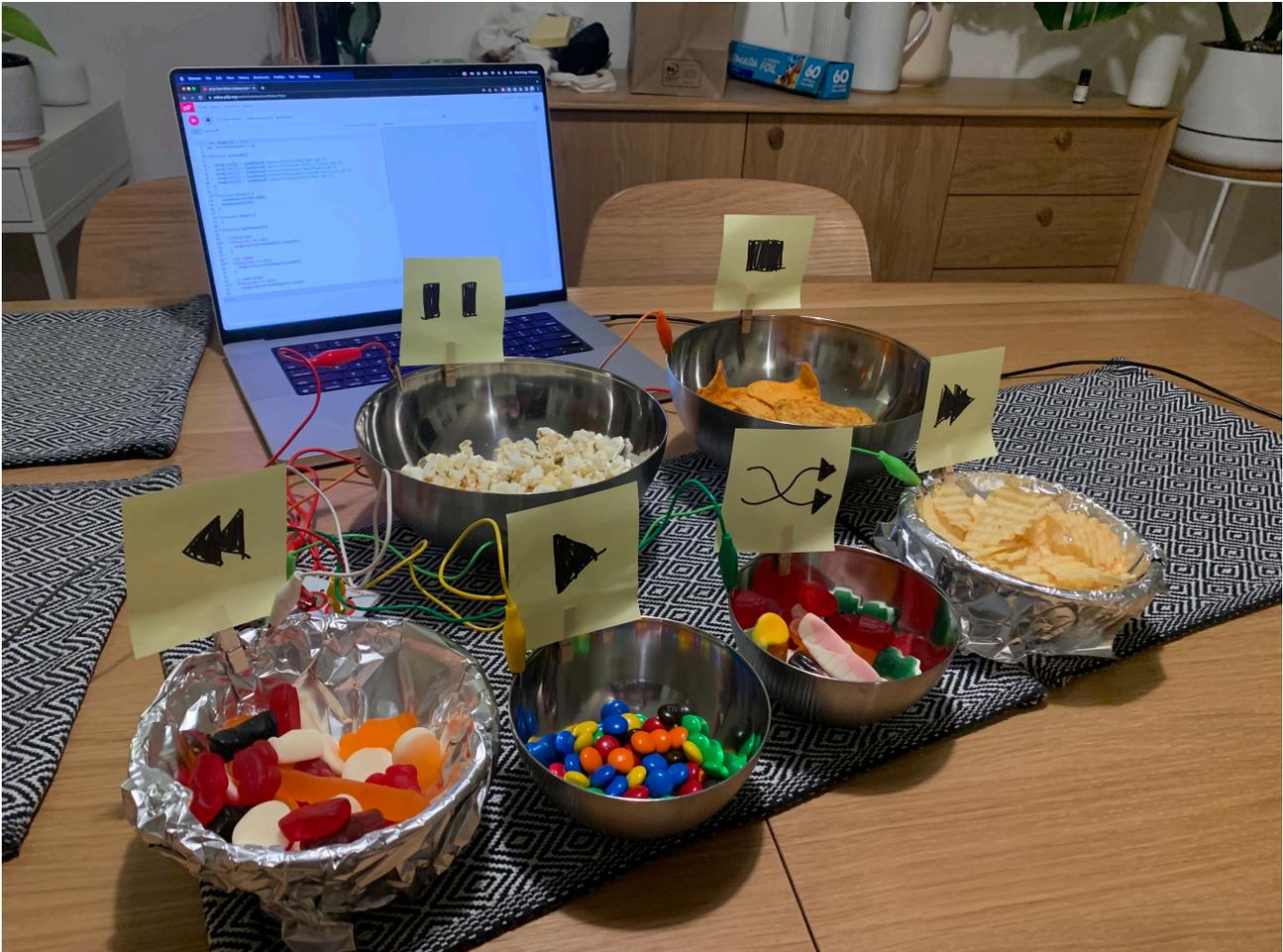
Caillois, R., 1961. "*Man, Play and Games*". Chicago: University of Illinois Press.
Costello, B. and Edmonds, E., 2007. "*A study in play, pleasure and interaction design*". In: *Designing Pleasurable Products And Interfaces*. [online] ACM, pp.76-91. Available at: <<https://dl-acm-org.ezproxy.lib.rmit.edu.au/doi/abs/10.1145/1314161.1314168>> [Accessed 26 August 2022].

Week 3 - Play and Object

Documentation : <https://youtube.com/shorts/YTs3xTobBYs>

MAGI post : <https://magistudio.net/work/apd-week-3-play-and-object-c35760>

Teams post : [https://teams.microsoft.com/...](https://teams.microsoft.com/)



Theme

I wanted to branch out from my regular digital / web based practice, and try to make a physical object that could be interacted with, because I believed it was more in tune with the theme, and would be a good exercise for me.

I took inspiration from the [chindogu](#), or 'un-useless', inventions of Kenji Kawakami, which are objects that are made to serve a purpose, but are so silly and impractical that they're almost useless. Prominent examples are the butter stick, the umbrella shoes, and the eye drop glasses. I was also inspired by the creations of [Simone Giertz](#), who builds 'shitty' robots to help mundane tasks, with intentionally humorous results.

The scenario I developed is this. You're chilling out, listening to music and eating some snacks. You want to change the song, but you don't want to get your greasy food fingers all over your phone/computer/music system. Enter the DJ Snack Station, where the serving bowls double as the controls for the music!

Method

My first step was to plan out the list of functions that I wanted /needed. As well as having the options to play / pause / stop the music, I decided I wanted to be able to play the next song, play the previous song, and to shuffle the playlist.

After this I spent time familiarising myself with the Makey Makey kit. I read through some of the information / tutorials on their website, and did some tests to make sure the kit I had was working as it should be.

I wrote the code in the P5.JS web editor. I loaded a small amount of mp3 files into my 'playlist' array, and then tested out that I could play the sound files in the sketch (just using the .play() and .stop() functions on mousePressed and keyPressed respectively. Satisfied it was working, I coded each function I wanted in turn, while assigning them to a specific input event; left mouse button to play music, spacebar to pause, up arrow to stop playback, left arrow to play the previous song in the array and right to play the next song, and finally down to shuffle the playlist array.

Once this was all working it was time to test it out with the Makey Makey. I made placeholder buttons using squares of folded aluminium foil, each labelled so I knew what button did what. During testing I realised that the Make Make's up/down/left/right arrows were being read as the WASD keys in the P5.JS sketch, so I had to quickly adjust my code to correct the error. At this point the code and the Make Makey were working exactly as I wanted them to.

Once I had acquired the correct props (snacks) I recreated the Makey Makey set up using the metal / aluminium foil covered mixing bowls in place of the foil squares, with little signs indicating what each bowl did attached to them via wooden pegs.

Context

Because my production this week was inspired by chindogu, the exercise ties into the Rhetoric of Frivolity (Sutton-Smith, 2001). Part of the joy I derived from the production of the object was due to its impractical, whimsical nature. I was making something that was designed to be silly, and that felt freeing.

My response also has elements of performance play (Sutton-Smith, 2001) in it. While not a musical instrument, my response takes inspiration from the act of DJing, and requires the user to move their body in order to interact with the different controls, and to affect the music that the object is playing. This link between play and music is also explored by Johan Huizinga, who comments on the use of the term 'playing' to describe the act of manipulating a musical instrument across multiple languages and cultures, regarding the bond between music and play as 'indissoluble' (Huizinga, 1949).

Reflection

I made exactly what I set out to make, a physical object that fulfils a purpose in a silly and impractical way. I really enjoyed using the Makey Makey kit, it was really easy to work with and just integrated into the P5.JS almost without any additional effort. I'm also liking using P5.JS for these responses because it's just such an easy coding language to prototype with to get quick results. One thing I could have improved upon was my documentation of the response. In the videos I recorded the sound was barely audible, even though it was such an important component of the response itself, which made it hard to tell what was happening. This is something I need to keep in mind in the future when creating and documenting physical work.

References

- Huizinga, J., 1949. "*Homo Ludens : A Study of the Play-Element in Culture*". Abingdon: Routledge, pp.158-163.
- Sutton-Smith, B., 2001. "*The Ambiguity of Play*". Cambridge, Harvard University Press.

Week 4 - Play and Place

Response : <https://aetheriun.itch.io/apdweek4?password=APDWeek4>

MAGI post : <https://magistudio.net/work/apd-week-4-play-and-place-b5810e>

Teams post : <https://teams.microsoft.com/...>

Sometimes, when it's late at night, and I cannot sleep for the thoughts
that whirl in my head,

I go for a walk.

Theme

My initial plan for this week's response was to attempt my own *dérive*, using *AutoFlaneur* to help ease myself into the process of the exploration. I then intended to document this journey (using photos / videos / sound recordings and notes) and then from this documentation try to develop a creative response, potentially one that used geolocation tags, and would require a player to retrace my journey to view it in its entirety.

Unfortunately between work and some other large time commitments the past week, I was unable to find a suitable chunk of time to spend on this exploration, and found myself running out of time to complete the response.

I decided to rethink my approach to the theme, and find another way of exploring ideas of place. I was drawn to creative works that explore both physical locations, but also the memories and associations that these places have for the artist. In particular I was drawn to *Terracotta* by Olivia Hanes, and *I Am Still Here* by Cecile Richards, both of which were attempts at processing the thoughts and emotions the artists were experiencing during Melbourne's extended lockdown. I was also inspired by *The Next Train To Depart*, by Tegan Webb, which similarly explores a range of memories through the physical spaces they are embedded in, symbolically linked by Melbourne's train network.

Method

For this week's response I wrote a short piece of hypertext fiction using Twine, chronicling a solitary late night walk, pieced together from memories of many different walks and experiences. The piece explores both the physical locations that the character wanders through, as well as the memories and thoughts that these places evoke. There are moments where the narrative branches, with a major choice at the beginning splitting the narrative into two halves, but most of the piece is relatively linear. I wanted to use the hyperlinks to make the story more spatial, with each location that the character passes through being a separate moment that the reader experiences.

Context

The final iteration of my response takes the form of solitary play and imaginative play (Sutton-Smith, 2001). I drew from the memories of the different places I've lived, and the time that I've spent walking, jogging, and wandering through suburban landscapes, and amalgamated them to create a fictionalised narrative. This act of reflecting on my memories during the process of writing this piece of fiction also made it a type of contemplative play (Johnson, 2020), relating to meditation practices, including meditative walks.

Reflection

I'm not overly happy with this week's response. I was very excited by the idea of practising *dérive*, and using the experience as a basis for a creative work, so not being able to commit to this process due to time constraints was frustrating.

I went with a piece of Twine fiction because it felt achievable with the time that I had left, but I don't think it's a particularly strong response. I struggled with balancing the tone of the text, between describing the physical location the character was exploring, the emotive experiences that they were having, and the interactive components. This is a problem I've had in previous attempts at using Twine, and I'm unsure if this is something that can be overtime with more time spent planning and structuring the piece before beginning to write the passages within the engine, or if my writing style isn't suited to the form.

I also wonder if maybe Twine was the wrong medium for this particular exploration. Perhaps if I had tried to tell this little story in a more visual medium, possibly using Bitsy to create a little pixel world for a player to explore, the tone of the writing would feel less muddled, as I would have been able to focus entirely on the interior monologue of the character.

References

- Johnson, S., 2020. "*Play as a Contemplative Practice*". [online] In Search of a New Eden. Available at: <<https://newedenministry.com/2020/09/06/play-as-a-contemplative-practice/>> [Accessed 25 August 2022].
- Sutton-Smith, B., 2001. "*The Ambiguity of Play*". Cambridge, Harvard University Press.

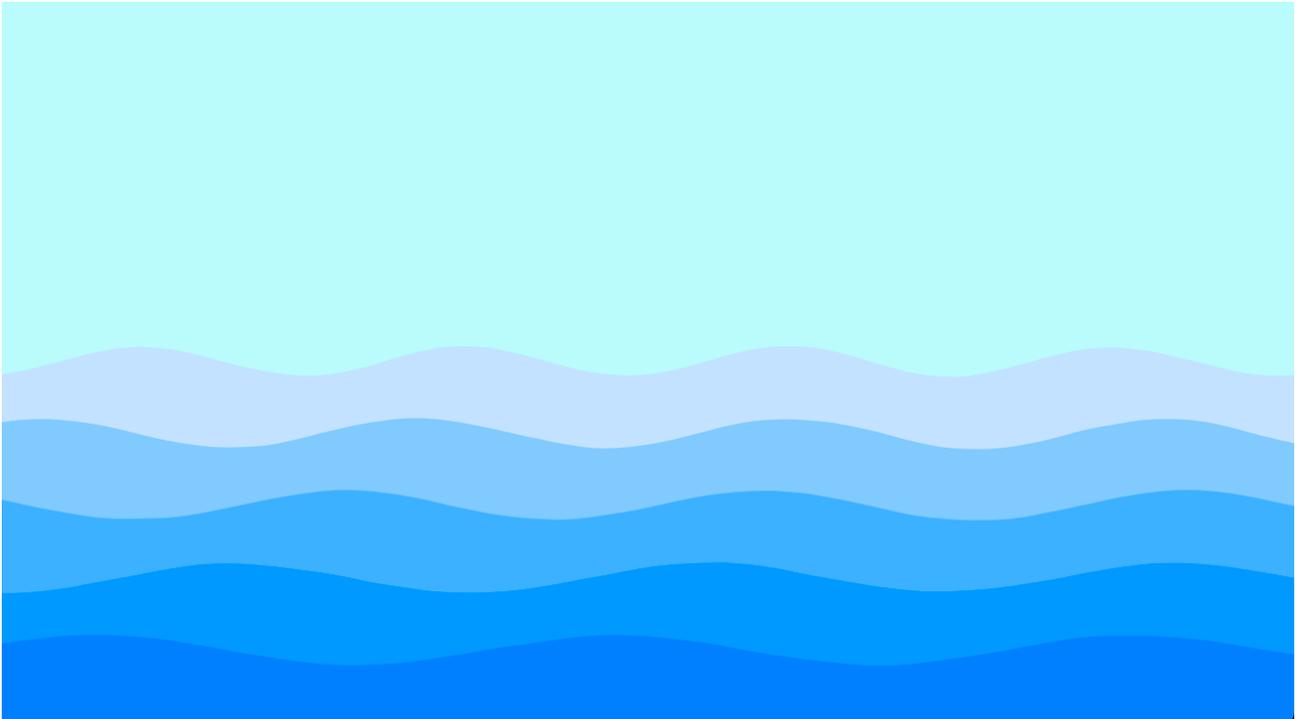
Week 5 - Play and Forces

Response : <https://openprocessing.org/sketch/1630594>

Documentation : https://youtu.be/_axuGfu7kuc

MAGI post : <https://magistudio.net/work/apd-week-5-play-and-forces-b8a15f>

Teams post : <https://teams.microsoft.com/...>



Theme

For this week's response I was interested in the idea of using external data to drive an interactive experience. My initial thought was to try and use data sourced from the City of Melbourne public data sets to create a creative response, but I quickly realised I didn't have enough of an understanding of the data sets to use them.

Changing gears, I decided to use my Arduino kit, which came with a variety of sensors. I thought it would be interesting to take data readings from the sensors and import those into Processing, and use them to control a sketch in some way. I've never interfaced between Arduino and Processing in this way before so it would be an interesting challenge.

Method

I experimented with the sensors that I had in my kit. I tried out a LDR / Photo-resistor with some sample code, but was unable to get usable readings from it. I next tried an Ultrasonic sensor that detects distance, which I was able to get working, though the readings were a bit inconsistent, even after I applied some smoothing algorithms to the output. The ultrasonic sensor uses echolocation to return the distance (in cm) to anything in its sensor range, which is approximately 2cm - 4m.

I then found example projects that connected the ultrasonic sensor to a Processing sketch, using the Processing sketch to write the sensor data as text. I then edited this example to create a sketch that displayed an ellipse that's size was dependent on the sensor readings, and then another where the sensor readings were used to control the hue value of the ellipse's colour.

Happy with my progress using the sensor data, I started to think about the content of my sketch. I decided that I wanted to create visuals that started off gentle and stable, and become more chaotic as somebody approached the sensor. I decided to recycle some code I had from a previous (unfinished) creative project, that used Perlin noise and sine waves to create a 2D

ocean scape, and use that in conjunction with the sensor data to create a seascape that transitions from being serene to being stormy, based on the viewer's proximity. This code was written in P5.JS however, so I had to convert it back into desktop Processing, which took a fair bit of time.

Context

Because my response evolved through a process of tinkering; taking stock of the materials that I had at hand, testing their capabilities, and seeing what I could produce using them, I consider the process of making for this week's response to be an act of constructive play (Christie & Johnsen, 1987).

My response this week is a prototype of what could be staged as a larger interactive installation. Audience participation with this installation would evoke the Pleasure of Discovery (Costello & Edmonds, 2007), as I hope that audiences discovering how their bodies and presence affects the state of the artwork would evoke surprise, interest and joy.

Reflection

I'm pretty happy with how the Processing sketch turned out. I do think there isn't a clear enough link between the sensor that I'm using to get the readings, and the content of the processing sketch. For the stormy sea sketch, it might make more sense to have used a light sensor, so that reducing the light reaching the sensor would change the scene, or else using a rainfall / water sensor, so that when the sensor detected water it would change.

Another issue was with the readings that I was receiving from the sensor. Even after applying smoothing algorithms to the data being received it was jumpy, and would make the sketch 'stormy' even when nothing was in range of the sensor. If I wanted to take this idea of using proximity based input further, I would probably want to invest in a more reliable sensor, or perhaps use a Kinect, rather than an Arduino, for sourcing the proximity data.

References

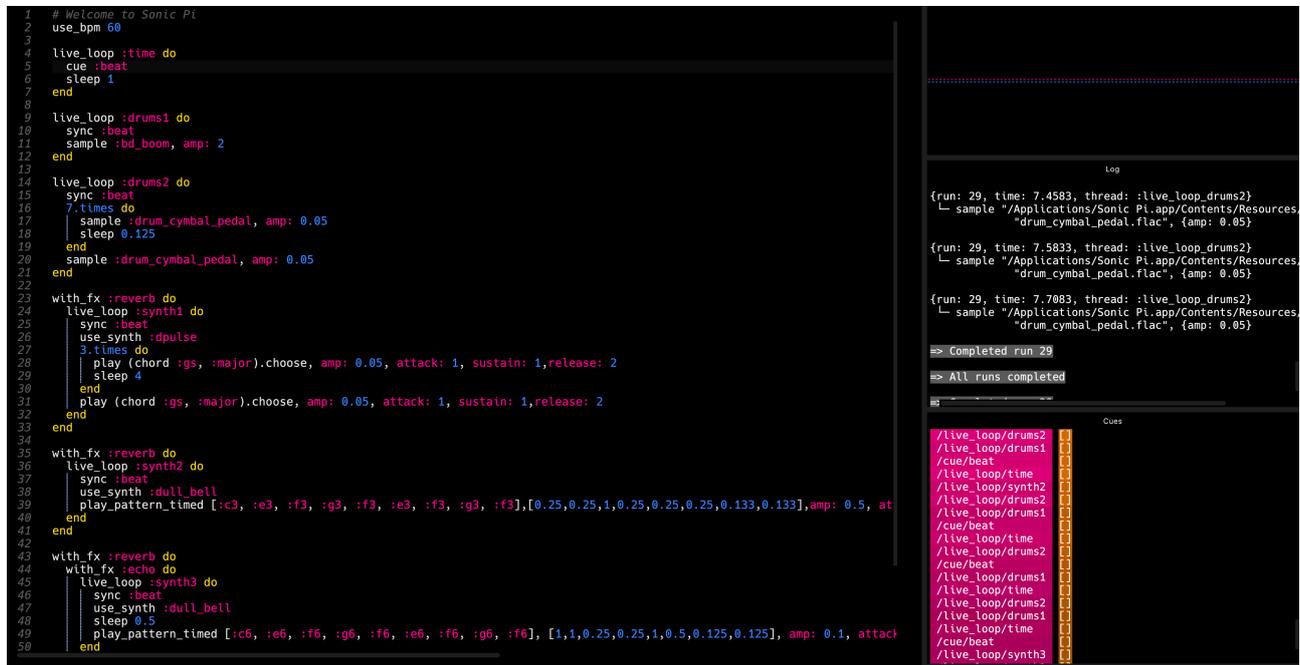
- Christie, J F. and Johnsen, E P., 1987. "*Reconceptualizing Constructive Play: A Review of the Empirical Literature*". Merrill-Palmer Quarterly, Vol. 33(4), pp.439-452.
- Costello, B. and Edmonds, E., 2007. "*A study in play, pleasure and interaction design*". In: Designing Pleasurable Products And Interfaces. [online] ACM, pp.76-91. Available at: <<https://dl-acm-org.ezproxy.lib.rmit.edu.au/doi/abs/10.1145/1314161.1314168>> [Accessed 26 August 2022].

Week 7 - Play and Sound

Documentation : <https://youtu.be/GizDozSYoOg>

MAGI post : <https://magistudio.net/work/apd-week-7-play-and-sound-75214b>

Teams post : <https://teams.microsoft.com/...>



The image shows a screenshot of the Sonic Pi software interface. On the left, the code editor displays a script for a live performance. The code includes a tempo setting of 60 bpm, a live loop for a beat, and two live loops for drums (drums1 and drums2). It also features three synth parts: a chord progression, a dull bell, and a patterned sequence. The code is as follows:

```
1 # Welcome to Sonic Pi
2 use_bpm 60
3
4 live_loop :time do
5   cue :beat
6   sleep 1
7 end
8
9 live_loop :drums1 do
10  sync :beat
11  sample :bd_boom, amp: 2
12 end
13
14 live_loop :drums2 do
15  sync :beat
16  7.times do
17    sample :drum_cymbal_pedal, amp: 0.05
18    sleep 0.125
19  end
20  sample :drum_cymbal_pedal, amp: 0.05
21 end
22
23 with_fx :reverb do
24  live_loop :synth1 do
25    sync :beat
26    use_synth :dpulse
27    3.times do
28      play (chord :gs, :major).choose, amp: 0.05, attack: 1, sustain: 1, release: 2
29    end
30    sleep 4
31  end
32  play (chord :gs, :major).choose, amp: 0.05, attack: 1, sustain: 1, release: 2
33 end
34
35 with_fx :reverb do
36  live_loop :synth2 do
37    sync :beat
38    use_synth :dull_bell
39    play_pattern_timed [:c3, :e3, :f3, :g3, :f3, :e3, :f3, :g3, :f3], [0.25, 0.25, 1, 0.25, 0.25, 0.25, 0.25, 0.133, 0.133], amp: 0.5, at
40  end
41 end
42
43 with_fx :reverb do
44  with_fx :echo do
45    live_loop :synth3 do
46      sync :beat
47      use_synth :dull_bell
48      sleep 0.5
49      play_pattern_timed [:c6, :e6, :f6, :g6, :f6, :e6, :f6, :g6, :f6], [1, 1, 0.25, 0.25, 1, 0.5, 0.125, 0.125], amp: 0.1, attack
50    end
41 end
```

On the right, the terminal window shows the execution log, including timestamps and thread information for the live loops. Below the terminal, a 'Cues' window displays a list of cues with their corresponding MIDI notes and durations, such as /live_loop/time, /live_loop/synth2, /live_loop/drums2, /live_loop/drums1, /cue/beat, /live_loop/time, /live_loop/drums2, /cue/beat, /live_loop/drums1, /live_loop/time, /live_loop/drums2, /live_loop/drums1, /live_loop/time, /cue/beat, and /live_loop/synth3.

Theme :

I had a hard time getting started for this week's exercise. Sound is an area that I don't have a lot of confidence working with, and I struggled to come up with an idea to work on. My initial vague idea was to create some audio reactive visuals, and find ways of expressing sound visually. Additionally, because 3 / 5 of my previous responses were created using P5.JS / Processing, I wanted to push myself to use a different medium for this response. I spent a while looking into both Touch Designer, and Pure Data, two programs I haven't used before, to see if I might be able to use either for my response, but wasn't confident enough that I would be able to use them for something interesting, rather than just recreating an example / following a tutorial.

It was at this point that I came across [Sonic Pi](#), a coding environment for coding audio, as well as [this](#) video of a live coding performance, and [this](#) TED talk by Alex McLean about Algoraves, and algorithmic dance culture. I was really inspired by the idea of coding as a performance, and so I decided I wanted to program a song using Sonic Pi, and record the process.

Method :

I spend some time trying to learn the basics of Sonic Pi, reading through the [getting started tutorial](#) on the project's website, and testing out the examples given, as well reading through notes from a [creative coding workshop](#) that used the software.

I realised that the challenging part of the exercise would be the music composition, as it's not something I have any knowledge of. I spent a little bit of time listening to some instrumental / ambient music pieces, and took notes about how the songs were built up with different sounds and instruments.

I then spent a bit of time exploring the in-built synths, samples, and sound effects, trying to build loops that I would be able to layer together to create my composition.

Once I was happy with the loops that I'd made, and had worked out a rough order that I would code the song in, I set up for the final recording. I recorded my computer screen, as well as recorded the audio being produced by the program, so that once I was finished I could sync the audio and video together, to create a record of the process.

Context :

Being inspired by algoraves, and the techniques of live-coding (McLean, 2017) my response took on elements of performance play (Sutton-Smith, 2001), as the practice derives from creating music for an audience and improvising and responding to the reactions of a live crowd. My response didn't have this audience aspect, but I was still inspired to record the real time process of writing the code and building up my song element by element, rather than simply recording the completed song.

The process of learning to use Sonic Pi as a coding environment was also an important part of my response. The time I spent exploring the synths, samples and effects, and experimenting with how they could be used and layered together to create music, was a form a constructive play (Christie and Johnsen, 1987), as I was working with my base components, and working out how to combine them into a larger, more creative whole, through a process of tinkering. This also somewhat ties into the Theory of Loose Parts (Nichols, 1971), though the environment that offered me the variety of components and space to be creative in was a digital IDE, and not a physical space.

Reflection :

I'm glad that I went with using Sonic Pi for my response, even though it was further out of my comfort zone than making something in P5.JS would have been. I enjoyed the process of exploring the software, and playing around with the in-built samples to see what I could use, and just the time I spent editing lines of code to see what the result would be on the audio I was listening to, even though I think that my final response is quite basic.

Though I was inspired by algoraves and live coding, I don't think I quite recreated the process. I don't have enough of an understanding of music theory to be comfortable improvising, so my response doesn't have that element, even though in his talks Alex McLean highlights that as an important part of the practice.

References :

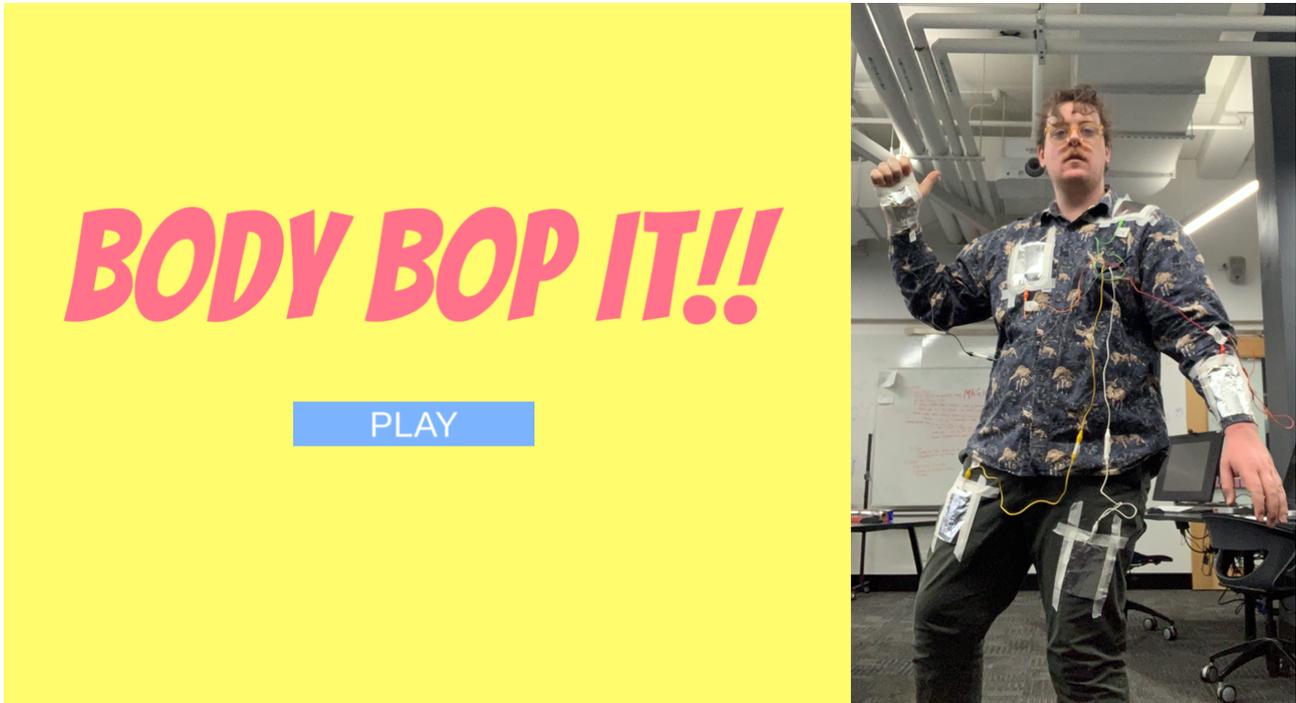
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- Nichols, S., 1971. "*Theory of Loose Parts : How Not to Treat Children,*" Landscape Architecture, 62, pp. 30–34.
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Week 8 - Play and Body

Documentation : <https://youtu.be/89jTmGEW4Sg>

MAGI post : <https://magistudio.net/work/apd-week-8-play-and-body-166d34>

Teams post : <https://teams.microsoft.com/...>



Theme :

My first instinct with the theme of Play and Body was to try and make a game that heavily involves the use of the players limbs to play the game. My initial idea, which I discussed with Uyen after the weeks presentation, was to somehow place sensors on a person's hands and legs, and then write a program that randomises combinations of limbs, and the player would have to make a connection between the limbs within a time frame to get a point, and making the wrong connection or missing a connection 3 times would result in the player losing the game.

My primary inspirations for this week's response are the party game [Twister](#), which randomises the positions that the player has to place their body in, using a large floor mat, and the kids toy [Bop It!](#), which randomly gives a task to the player with a narrow time frame to complete it, where the goal is to get the highest score possible. I was also inspired by the (now unavailable) app / game [Pretzel Pocket](#), by game designer Tim Snowden, which was an intimate co-op body contortion game that required players to connect randomised body parts with each other.

Method :

I decided to use the Makey Makey to create the body sensors. This did require one limb to be the 'ground' on the board to make the circuit, so it would have to always be the same limb connecting with a random other body part. I considered getting around this by instead using an Arduino, connected to a set of digital microswitches, which would allow for more varied connections, but this seemed it would be more impractical and fragile in terms of wiring connections together. Because I decided to stick with the Makey Makey, I altered my idea from having the game generate a random limb combination to generating a random target body part that the player would have to connect the 'ground' limb to. I decided to use my right hand as ground / the playing hand, and then use my left hand, left leg, right leg, chest, and neck (initially meant to be the back of the neck, but it ended up being more of the shoulder in the final demo) as the targets.

I built the game in Unity. I first tested the Makey Makey with Unity, assigning each limb a button using the default button maps, to make sure I could get them working. I then programmed the game, incorporating a timer, a score tracker, and life metre that would deplete when a connection was missed or if an incorrect connection was made. I also included a start screen and a game over screen, that displayed the final score, and gave the player the option to replay.

Finally I set up to record a demo of the game with the Makey Makey controller. I used alligator clips (chained together when I needed extra length) to connect the Makey Makey buttons to pads of aluminium foil that I attached to the target body parts, and played a couple rounds of the game, while recording video of myself playing, and screen recording the Unity game.

Context :

Being a game that is heavily structured, with rules and scores, my response this week would come under the category of ludic play (Caillois, 1961), as an experience that is very intentionally designed. The emphasis on playing to achieve a high score also places this response firmly within the Competition category of the Pleasures of Play Framework (Costello & Edmonds, 2007), which focuses on 'the enjoyment one experiences from trying to achieve a defined goal'.

The assembly of my response, to play-test and document the game, also ties into the Rhetorics of Frivolity (Sutton-Smith, 2001). My response is incredibly impractical, with no way to get around the mess of wires that it required to hook the player up to the computer, but that impracticality was half of the fun. I liked making a response that was supposed to be silly.

Reflection :

The game didn't quite work the way that I had intended it to. I realised pretty quickly that the sensors couldn't be touching my actual body, as my body would be conductive, and it would just read all the switches as being pressed at all times. I ended up using masking tape to attach the foil squares to my clothing. This wasn't a good enough solution, and I found the program constantly thought I was pressing multiple buttons, causing me to quickly lose points / the game. This was improved slightly when I removed the 'ground' pad from my hand, and just began touching the end of the alligator clip to the target pad, but this didn't entirely solve the problem, and wasn't as satisfying a way to play. I think perhaps if I had used electrical tape to connect everything instead of masking tape, as well as attaching the foil targets to a non-conductive material, like cardboard or plastic, before attaching those to my clothes, it would have worked a little better.

The game is also incredibly impractical. Having to have the Makey Makey and all the targets on my body meant that I was covered in wire, and could only take a couple of steps away from the computer running the program, without risking pulling out the cords and losing power / connection, which means it's not a user friendly prototype

Finally, I think that the game would have benefitted from an audio cue as to what body part was the current target, rather than just visual. This could have been as simple as voice recordings that played when the target changed, and wouldn't have been difficult to implement had I thought of it sooner. It also would have made it clearer what was happening in the video documentation of the exercise.

References :

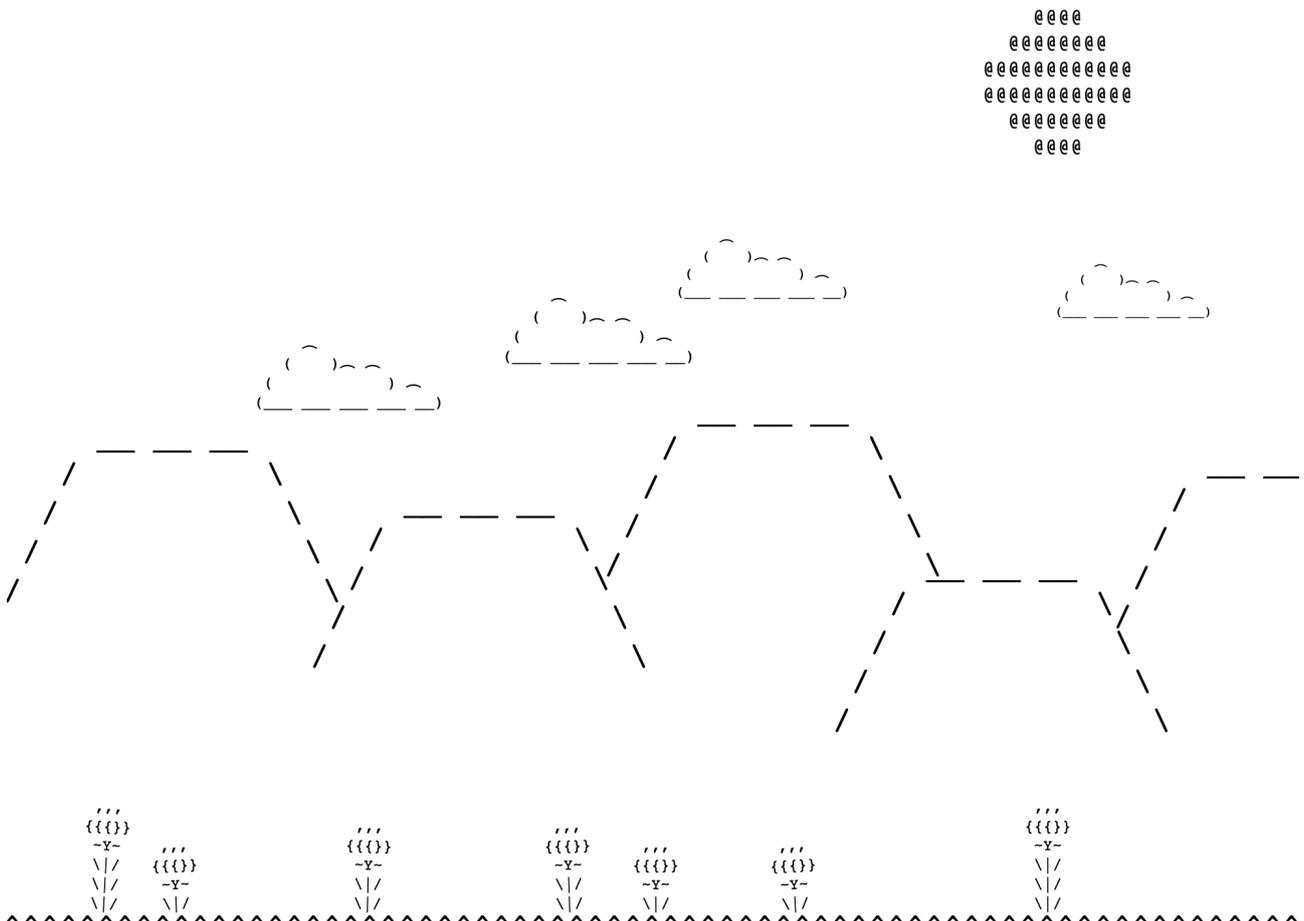
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- Sutton-Smith, B., 2001. "*The Ambiguity of Play*". Cambridge, Harvard University Press.

Week 9 - Play and Abstraction

Response : <https://playand-abstraction-sketch.glitch.me/>

MAGI post : <https://magistudio.net/work/apd-week-9-play-and-abstraction-8>

Teams post : <https://teams.microsoft.com/...>



Theme :

So far this theme has been the one that I've struggled with the most to come up with an idea for. I understand abstraction as a process of distilling things down to only the most essential elements needed to convey the meaning, but I was unsure how to apply this to creating an interesting creative response. I started off trying out the triangle word cloud exercise to try and tease out connections from my ideas about play, my practice, and the words we generated as a class.

During her presentation on the theme, Luna shared the short animation [Symbols](#), an abstract animation that is made up of symbols and text characters. This got me thinking about ASCII art, which uses letters and text characters to form images, both simple and complex. I was reminded of the [tiny star field](#) twitter bot, made by Everest Pipkin, as well as the [infinite deserts](#) bot, which both use ASCII characters and negative space to generate little landscapes in each tweet. This line of thought also reminded me of the game ['If We Were Allowed To Visit'](#), by game developer Ian MacLarty and poet Gemma Mahadeo, which is an explorable 3D environment, where objects in the environment contain poems and fragments of text. What is visible in the viewport is flattened every frame into a concrete poem, and displayed as text on a white background.

I decided that I wanted to create a piece of code art using P5.JS that creates a landscape and renders it as text on the page, that is able to simulate slight movement, similar to a cinemagraph.

Method :

My first step was to list a few elements that I could have in the scene, with some potential notes about how they could move / animate. I then thumb-nailed a few potential landscape compositions. Once I had an idea for the composition, I opened up a text editor, and spent some time playing around, trying to create the elements that I wanted in my scene; clouds, the sun, hills, a grassy ground, and flowers, using basic characters.

Once I was happy with the pieces of ascii art, I added line break characters to the end of each line of the art, so I could make them a single string.

I then moved into P5.JS so I could start coding my sketch. I created each type of object as a custom object / class in P5.JS, with a constructor that would take 3 int values, for the x position, the y position, and the font size. Each object also had a string value, which took the string of characters that would make up the shape, as well as any other variables each object would need.

I then wrote a display function for each class, that would take the x and y position and use it to create a text object, displaying the string of text. For the objects I wanted to move (ie the clouds across the sky, or the flowers swaying in the breeze) I then wrote movement functions that would calculate changes in the variables for each object every frame.

With my custom classes made, I then set about creating my composition, creating as many of each type of object as I needed, and arranging them across the canvas.

Context :

My response evolved through a process of tinkering (Pang, 2009) as I was experimenting with merging an art form I'm unfamiliar with, ASCII art, with a medium I'm more comfortable with, P5.JS. I would also describe the process as a type of constructive play (Christie & Johnsen, 1987) as I was taking smaller components, strings of text characters and code fragments, and combining and re-using them to create my larger, final composition.

Reflection :

As stated, this was thus far the hardest theme for me to start making a response for. I felt like I understood the theme but I struggled to apply it to my own creative practice.

I'm fairly content with how my response turned out. Visually it's very basic, I'm unused to making ascii art and I found browsing lists of characters trying to find ones for me to use a little overwhelming, so I mostly stuck with default / basic characters, though I think being simple isn't a bad thing.

One thing I will note is that I could have coded the piece better. I was pretty happy with my approach to use custom classes for each object, but when putting together the composition I was hard coding the position and size of each object. This means that the size of the sketch doesn't scale to suit different screen sizes. It would have been a better approach to have those variables depend on the screen height / width, so that the sketch would be more responsive. I also feel like I could have added more variety into the piece, maybe by having multiple types of flowers / clouds / hills designs, and maybe had them generated randomly every time the sketch was loaded.

References :

Christie, J F. and Johnsen, E P., 1987. "*Reconceptualizing Constructive Play: A Review of the Empirical Literature*". Merrill-Palmer Quarterly, Vol. 33(4), pp.439-452.

Pang, A.S.-K., 2009 "*Tinkering To The Future*," Vodaphone Receiver, issue #22. 29 May.

Week 10 - Play and Nature

Response : https://picrew.me/image_maker/1780817

MAGI post : <https://magistudio.net/work/apd-week-10-play-and-nature-8>

Teams post : <https://teams.microsoft.com/...>



Theme :

My first instinct with the theme of Play and Nature was to create a response that somehow incorporated physical / natural materials, but I initially wasn't quite sure how to go about this. I considered making a 2D game in Unity, using photographs or scans of natural elements as the visual assets, but I struggled to come up with a concept or mechanics to work with.

My other idea was to make an avatar builder on picrew.me. Traditionally these avatar builders are used for anime style / illustrated works, but there are a couple more unconventional ones, like this '[Plasticine Picrew](#)' that uses a combination of photos of plasticine sculptures, and illustrated elements. I thought I could make an image maker that used photographs of leaves, rocks and twigs, so the user could build a collage style face. This idea definitely took inspiration from Helen Kwok's [Found Faces Generator](#), as well as Holland Kerr and Amber Stacey's [Spontaneous Stop Motions from Nature](#) video. I was also inspired by [Soupe Opéra](#), a stop motion animation series that shows fruit and vegetables being dissembled and recombined to create a variety of animals and objects, as well as by depictions of [The Green Man](#), a mythological figure that appears to be constructed from leaves.

Method :

My first step was to spend a bit of time researching picrew.me, and how the avatar builder worked for the creators. The website is in Japanese and the automatic in-browser translations

weren't reliable, but I was able to find a few forum posts and youtube videos that explained the process. I also made a quick sketch to work out what components I would need to construct the face.

My next step was to take my photographs. I walked from the studio to the Carlton Gardens, where I spent approximately an hour wandering around taking photos, before returning to campus. Initially I felt very self conscious, thinking about how strange I must look, stopping to take photos of leaves and twigs on the pavement, but after a while I got more comfortable, and actually really enjoyed the experience. I decided that I didn't want to damage any of the plants, so if a leaf or flower had already fallen I would pick it up and move it to a better spot to photograph, otherwise I would do my best to take pictures as the plant was.

Then I had to remove the backgrounds from the images, so I would only have the subject as a transparent png. This was the most tedious / arduous part of the process. I tried using some automated tools like Adobe Express and remove.bg, but found their interfaces clunky, and they weren't suited to processing a large amount of images. I resorted to using Photoshop and one of the studio Cintiq tablets, using the quick selection tool when the subject of the photo was distinct enough, and the lasso tool when it wasn't, and removed the background from the images one by one.

I then sorted the images by features they could be used for; the base head, eyes, eyebrows, nose, mouth, ears and hair. Once sorted, I set about resizing and cropping the images so I could upload them to the relevant layer of the avatar builder.

Context :

For the gathering of the photographs and materials to construct my response, I was engaged in solitary play (Sutton-Smith, 2001), as well as paida, or free play (Caillois, 1981). Though I was there to take photographs to use as assets in my response, my exploration of the gardens was loose and unstructured. I only stopped and returned to the studio when I was worried about getting a sunburn for staying out too much longer. I believe this was also an act of *dérive* (Debord, 1956), as I was drawn in by the features of the landscape around me, and my route around the gardens was winding and circuitous, driven by instinct rather than a plan.

My final response was inspired by collage, and the cut-up and reassembly techniques employed by Dadaist and Surrealist artists (Flanagan, 2009). There's also a connection to the Theory of Loose Parts (Nichols, 1971), as the response encourages the user to assemble smaller components (in this case photographs of leaves, rocks and flowers), to create a larger image.

Reflection :

I'm very happy with how my response turned out. Up until I had the parts all imported into the avatar builder, I wasn't sure if the faces would turn out the way I had been envisioning them, so I was ecstatic when I got to see the first face emerge from the generator.

I enjoyed the process of collecting the photographs to use as assets immensely. I don't spend a lot of time outdoors, and when I do it's usually when I'm either exercising or travelling, so to be outdoors in a more unstructured way felt very freeing.

The process of cutting out each image was incredibly dull, and felt a bit like wasted time even if I am happy with the final results, but I'm not sure of any way that the task could have been avoided, seeing as I found the automated tools didn't give me results that I was happy with

References :

Caillois, R., 1961. *Man, Play and Games*. Chicago: University of Illinois Press.

Debord, G., 1958 *Theory of the Dérive*, Internationale Situationniste, #2.

Flanagan, M., 2009. *Critical Play*. Cambridge: MIT Press.

Nichols, S., 1971. *Theory of Loose Parts : How Not to Treat Children*, Landscape Architecture, vol 62, pp. 30–34.

Sutton-Smith, B., 2001. *The Ambiguity of Play*. Cambridge, Harvard University Press.

\Week 11 - Play and Stillness

Response : <https://aetheriun.itch.io/apdweek11?password=apdweek11>

MAGI post : <https://magistudio.net/work/apd-week-11-play-and-stillness-f1c2a2>

Teams post : <https://teams.microsoft.com/...>



Theme :

My first thought when thinking about the concept of stillness was mindfulness and meditation apps, as well as productivity apps like [Forest](#) or [Virtual Cottage](#), which try to encourage people to put aside technology like phones and computers, at least temporarily. While I think these are good touchstones, it wasn't necessarily the direction I was interested in taking my response. I next thought about the idle game [Viridi](#), as well as the game [April 10th](#), made as part of the [Meditations](#) project. Both of these games revolve around tending to plants, in a calm, low stakes environment, which require small, infrequent interactions from the player.

I liked the idea of making a little game that encourages player interaction with an environment, but doesn't require it. A world that exists autonomously of the player, and so can also just be enjoyed passively as a retreat from 'real life'.

Thinking more about this, I decided to create a digital diorama that had elements that could be interacted with, but would otherwise evoke a feeling of calm and relaxation.

Though I'd decided on my concept, I struggled to settle on a setting for the scene. I started and gave up on making a 2D Vector styled courtyard scene with birds, and a 3D low poly forest scene. I finally settled on the idea of a 2D forest scene, with the visual style and colour palette inspired by the game [Mutazione](#)

Method :

I first drafted my composition for the scene in my notebook.. Once I had a rough idea of what I wanted, I spent time in Illustrator, building up the scene one asset at a time, so I would both have assets I could export to Unity, as well as create a reference to follow when I was building the scene inside of the game engine.

Once my assets were exported, and I had created the scene in Unity, including coding some subtle movement, I turned to sound. I knew that I wanted a mix of both natural sounds, as well as a relaxing music track. The ambient forest soundscape I sourced from the [BBC Archive](#), and the music track I found on [Pixabay](#). I also found a mix of water splashing sound effects on

Pixabay ([1](#), [2](#), [3](#)), and a longer rustling leaves effect that I trimmed into multiple smaller snippets ([1](#)).

I coded an audio manager following [this](#) Brackeys tutorial, and set it up with all my audio tracks. I set the ambient soundscape and the music track to loop continuously, and then coded the splashing and rustling sound effects to play when the user clicks on the pond and bushes respectively. I also added particle systems to simulate splashing water and falling leaves, and had these instantiated through the same piece of code that played the sound effects. For a final touch, I added a script that would instantiate a flower on the forest floor, if the player went for more than 30 seconds without clicking, to give players a different reward for their stillness.

Context :

The goal of my response this week was to encourage contemplative play (Bennet, 2012), by creating a small interactive scene designed through both the visual and sonic elements to inspire peacefulness and relaxation. This also ties into aspects of zen games (Bogost, 2007), which talk about games 'without scores, time limits, or other obstacles to create stress-free experiences', and slow gaming (Remesal, 2020) which is concerned with 'games that encourage us to relate to the environment by taking our time, without too many plans or goals'. My response also has elements of emergent play (Costello & Edmonds, 2009), because of the way the game environment responds to the way the player interacts with it. The game rewards both users who actively engage with the environment, as well as users who engage with the environment in a more passive way.

Reflection :

This is the last APD theme, and so I wanted to make sure I ended the semester with a strong response. I think this contributed to my indecision when it came to choosing a setting and developing the composition for my scene. I wanted it to be good, and so when it wasn't shaping up to my initial idea, I kept moving on to something else.

I'm thrilled with how my response turned out. I'm glad I decided to focus on using sound and audio cues to create the mood I wanted in the pieces, because it's so much more effective than the visuals would have been on their own. I'm also pretty proud of how my assets turned out, even though they're simple, because illustration is something that I'm not as confident with as I am with coding / writing.

I felt like I could have kept adding small details to this piece (I wanted to have more varied sound effects for if the player clicked on the trees and the tufts of grass / flowers, and I wanted to add a shake to the bushes and grasses on click), but after my false starts I'd already spent several days working on the response, and I was worried about it becoming too overproduced, especially since I wanted it to be a simple scene.

References :

Bennett, C. (2012) "*Journey' and the rewards of contemplative gaming*", Geekout. CNN. Available at: <https://geekout.blogs.cnn.com/2012/03/09/journey-and-the-rewards-of-contemplative-gaming/> (Accessed: October 14, 2022).

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Remesal, V.N., 2020. "*Playable introspection and calm. Notes on slow gaming*", Presura. Available at: <http://www.presura.es/blog/2020/03/21/introspeccion-y-calma-jugables-notas-sobre-el-slow-gaming/> (Accessed: October 14, 2022).

Final Reflections

Over the past 12 weeks, Advanced Play Design has not only given me the drive and inspiration to produce a collection of responses that I'm immensely proud of, but it's also pushed me to examine what I consider playfulness to be, and how I think the act of play applies to my creative practice.

When approaching each week's theme and my response, I really tried to vary things up, and to experiment with different game engines, coding frameworks, mediums, and physical materials. This meant that an overarching theme of my production across the semester was my engagement with Constructive Play and the process of Tinkering. I experimented with the tools at hand, and just tried to see what I could use them to produce, given my current skill set and level of understanding.

I also found myself frequently engaging in Solitary Play, both because of the time I spent alone working on my responses, which often drew from my memories and experiences, but also because I was primarily developing prototypes of single player interactive pieces.

My finished responses showcase a wide array of work, including but not limited to; interactive fiction, text and image generators, games, pieces of code art, and physical installations. These pieces all engage with many different models and theories of play in their own ways. I particularly value the Rhetorics of Play, as outlined by Brian Sutton-Smith in his book 'The Ambiguity of Play', as well as the 'Pleasures of Play', developed by Brigid Costello and Ernest Edmonds and summarised in their conference paper 'A Study in Play, Pleasure and Interaction Design', as these both offer broad frameworks which helped to encapsulate the many different forms of play that exist in the world, and helped me to see how my responses, as different as they all were from each other, could fit within them.

Other modes of play that reoccurred often throughout the semester play were Ludus, or Structured Play, for the more traditionally 'game-y' responses, which were concerned with rules and scores; Contemplative play, for the responses that were more grounded in memories and attempting to evoke specific feelings in the player; and Frivolous Play, where my joy in the the response came from the inherent silliness, the impractical nature of what I had made.

What I discovered through Advanced Play Design is that playfulness is something that is just as present in the process as it is in the final product, and that it's just as important to enjoy the act of creating something, as it is to enjoy the end results. I realised that, for me, being playful means giving myself permission to be weird and irreverent, to tinker around and experiments, and to let myself have fun, and that my work will be all the better for it.