

# Eamonn Harte - Advanced Play Design - Folio 1

## 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](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 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, 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**

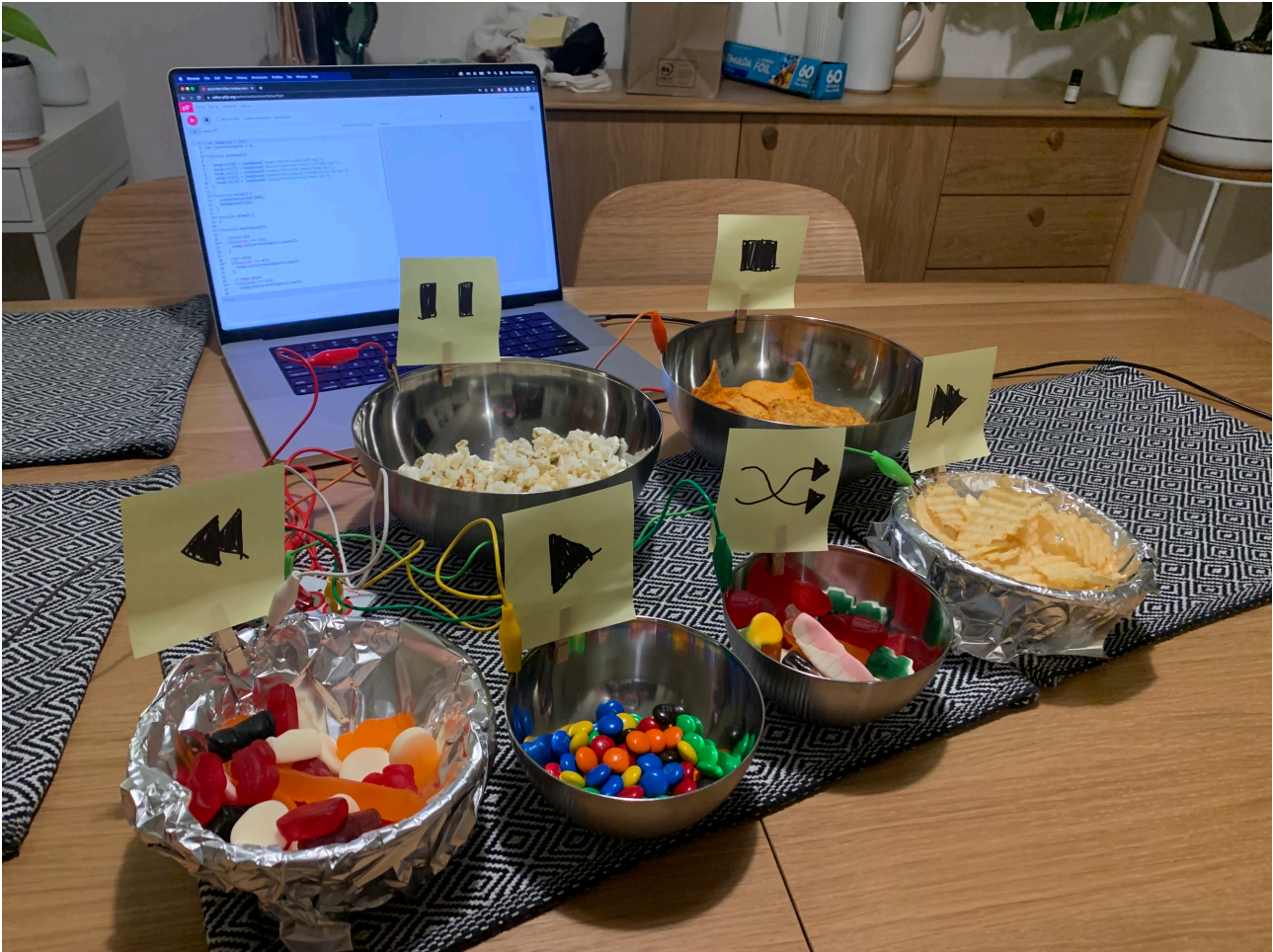
Caillois, R., 1961. *Man, Play and Games*. Chicago: University of Illinois Press.  
Costello, B. and Edmonds, E., 2007. A study in play, pleasure and interaction design. In: *Designing Pleasurable Products And Interfaces*. [online] ACM, pp.76-91. Available at: <<https://dl-acm-org.ezproxy.lib.rmit.edu.au/doi/abs/10.1145/1314161.1314168>>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



### 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 Makey Makey'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 Makey 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 whir 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.



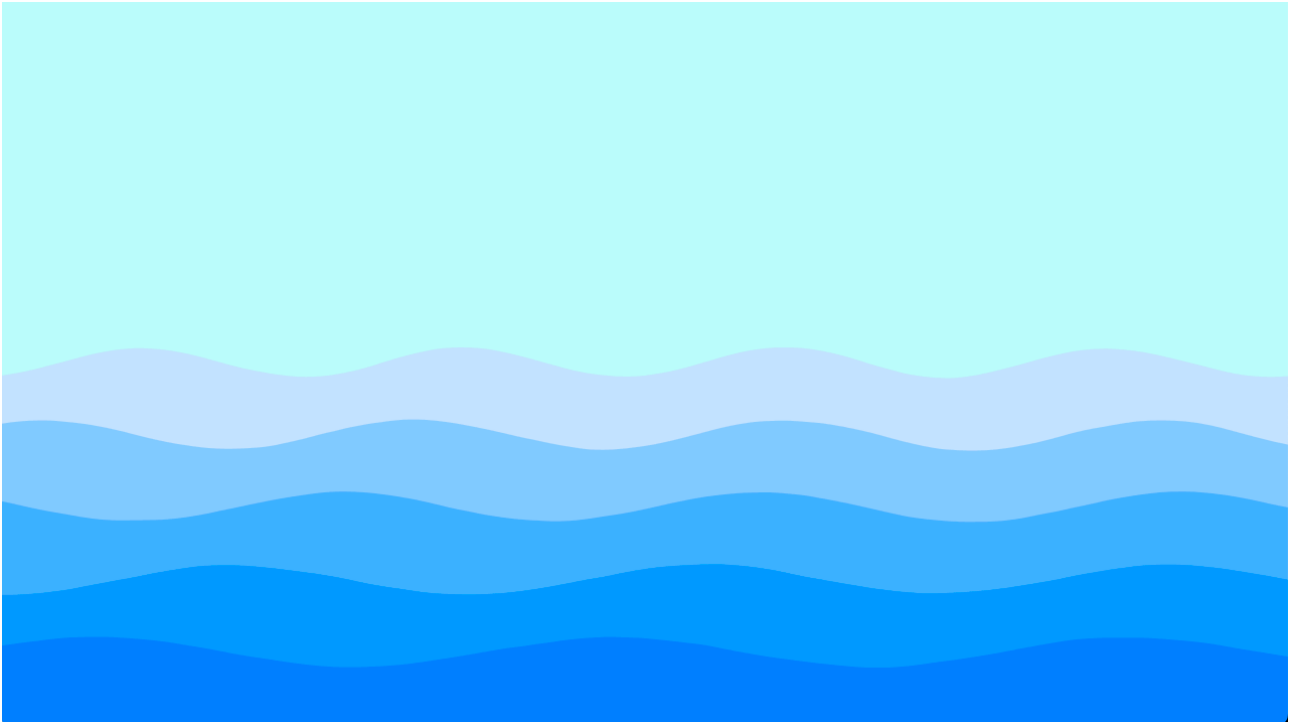
## Week 5 - Play and Forces

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

Documentation : [https://youtu.be/\\_axuGfu7kuc](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 and 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, 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].

## Overall Reflection

Over the last 6 weeks, APD has given me the opportunity to push myself to create a wonderfully varied collection of creative works. Looking at my responses, a common thread that emerged during the production was a focus on tinkering and experimentation, on trying out new approaches and techniques and seeing where they lead. This is most prominent in my responses to Play and Object and Play and Forces, where I felt encouraged by the theme to branch out of my typically digital / web based practice, and to experiment with physical components, electronics, and alternative controllers.

I particularly valued the triangle thought cloud exercise we were encouraged to do after each theme presentation, as a way of generating ideas to work with, and to draw connections between the theme, ideas of play, and our own practices. As someone who doesn't feel like I have a strongly defined creative practice, I found this challenging at first, but as the weeks went by I did start to see common threads in what I was producing; an interest in text and narrative, the use of code and algorithmic methods to create the response, and some consistent visual elements.

The process of trying to contextualise my responses also made me consider play as a concept more carefully. I'm primarily interested in interactive work, which has to be 'played' in some capacity to be engaged with, even if the interaction is only moving a mouse, or clicking a button. I realised while researching models of play that this wasn't in itself enough of a justification, and I had to be more critical about what I was making, and consider if it was something that was playful. This did however, also encourage me to consider the entire process, instead of just the final outcome, when I was thinking about playfulness. If I was enjoying the act of making as much as I was the final result, then I believe that was proof that I was successfully engaging with play.

Because my responses varied so much, I feel like I engaged with a range of different models of play. I found Brian Sutton-Smith's overview of the many forms and rhetorics of play to be a useful reference, as well as the Pleasures of Play framework developed by Brigid Costello, as they explore the breadth of playful experiences, and helped me to situate many of my responses, even as they differed in content and style.

During production I realised that I was most often engaged in Solitary Play, as multiple responses were very inward focused, drawing from my personal life, memories, or quite literally an archive of my own writing, and using them as the basis for a response. Other forms of play that I noticed recurring were Constructive Play, when my responses were focused on building up a response from physical materials, and Frivolous Play, when the joy of my responses came from intentionally making something that was presented as silly and irreverent.