THIS = THEN = THAT – Proposal

CART 360 – Physical Computing and Tangible Media
Concordia University

Adèle Bédard

October 4th, 2019

Github repository:
https://github.com/adelebedard/cart360

For my final project, I would like to create balls that would produce a soundscape as we throw them.

→ **Think of a context and an environment where you would like to intervene. Where will you present your project? Who is it made for?**

I would like people in serious places to let loose. The places would be like an office space, a university or a path between a metro and a workplace for example. I want them to feel that child like spark and amusement. More importantly, I want them to come together to form something. I feel like since I am of a shy nature, I need something to make contact with people. And that's probably the same for many people: rare are the ones who initiate conversation or interaction with strangers that easily. But having something, especially something fun and positive, that helps to bring people together is something that I would like to do.

The object however can also be used alone, in the case of jugglers, which I am. I feel like it would increase and enhance the meditative aspect of juggling, making it more apparent. For me, juggling is a kind of meditation. You set a rhythm with the juggling balls and then your brain goes everywhere, the juggling becoming almost an unconscious act. In that way, I relate a lot juggling to playing music, since I get the same kind of meditative effect when I play guitar, piano or drums. When there is a level of comfort with the piece or the instrument, your brain can leave a bit the mechanical aspect of music and wander off. Therefore, with my project, as an alternate purpose, I kind of want to bridge the gap between the two different art forms, juggling and music, which for me are very related.

→ **Think about the kind of relationship you wish to foster between your users and the artifact or installation. How can you use your project to destabilize the users and make them reflect on themselves, their environment and society?**

I just want people to experiment with my artifact. To try things and get together to do so. That in itself can be a challenge because we don't often allow ourselves to play with what we deem to be children's toys. However, the fact that they are not simple balls, but that they have something more complex embedded in them kind of allows us to consider having a go at playing

with them. I want them to realise in that sense that it is O.K. to still have fun like when we were kids. It's merely a reflection on themselves that I want users to have, but a reflection on society is also implicit. To see some people having fun or to be one of them, in an environment that is recognized as "serious", inherently provokes a reflection on society. Why does this place have to be that serious? And the fact that people are interacting as well can make us reconsider the way we act as a society in these places. We tend to pass by so many people, but to actually stop and have a moment with one of them provokes a reflection on why this doesn't happen more often. And why do these interactions have to be initiated by an object, or something from the exterior, like an event or something unusual happening. Therefore, I want people to have an opportunity to stop their daily routine and reflect on how they interact with people and how playing and having fun takes a part in that.

➔ **Think about the notion of empowerment. Is your artifact really helping or challenging its users in any way or is it just another psychological prosthesis?**

I think that this artifact empowers people. In fact, it helps them to think about fun in another way. For one part, it procures a welcomed break from the ongoing stressful daily routine. But more importantly, I think that it could help change the way we think about the idea of fun. And that can be empowering, because if we realise how fun can be integrated in our everyday life, it can actually be very beneficial, because we can feel like we choose to have fun. Often, we feel like we don't have the time to let loose and have fun. Yet, we do find ways to relax, for example scrolling on Instagram for an hour, but we don't allow ourselves to do anything that evokes the kind of fun we had when we were younger. Like toys, and in that case balls. While we have less fun with these objects than when we were kids, since there is no surprise to us anymore with a simple coloured ball, we can still do.

Also, this object can bring people together in an empowering way. In fact, it does not need people to be together to work or function. Therefore, people have the choice to either play with the balls their separate ways or to try to explore what it would do if we do it together. So, it tries to create this link between people, without forcing it. The object still works alone, but it encourages this collaboration, letting people decide if they will or not.

➔ Think about something meaningful. What are you trying to tell us with your project?

One of the main investigations that I have with this project, which is the main meaning that I would like for it to come across, is this idea of fun that transforms over time. I feel like there is such a gap between children's notion of fun and adults'. It's something I think about regularly: why don't I have fun the same way as when I was little. And what exactly has changed? We still are able to have fun like when we were children, but we do it so rarely that we forget how to. Why don't we allow that to happen more on a regular basis? Time is often our problem. We feel like we don't have the time to have fun. The only kind of fun we allow ourselves to do is not typical fun like when we are kids, because we feel like we don't have time to get involved with that. But if we have time to watch Netflix or scroll through Instagram every day, we should have the time to play. I am trying to encourage unexpected moments of happiness, that would bring people together. In fact, I feel like our idea of daily things to relax now involves a cellphone or a computer and involves being alone. However, I think that bringing people together on a well-deserved break should be encouraged more. Therefore, with my project, I am trying to tell that it's okay to have fun like when we were children and make a reflection on how different it is now and why.

**➔ Project's proposed Interaction Design Strategy**

For the concrete realisation of these balls, and the way it will exactly work, if it even does, I am not sure of what is possible and what's not yet, so this storyboard is very susceptible to change. Nevertheless, in the next pages are my main ideas for now of how these will work.
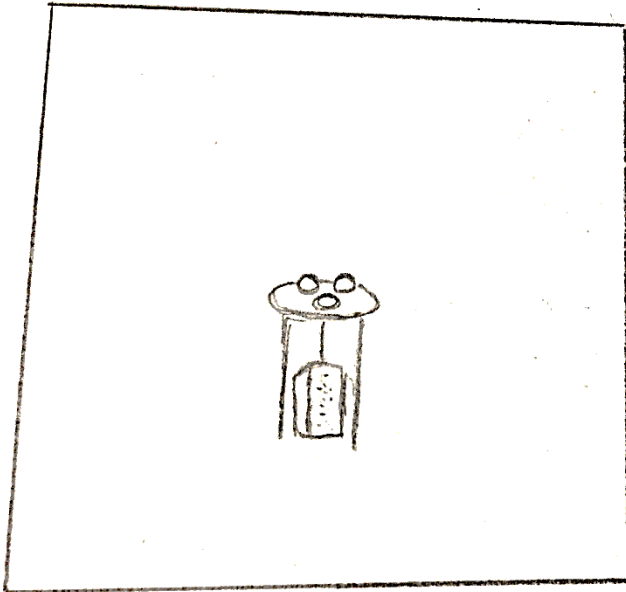
The balls are on a table, under which there is a speaker. They could also be on the speaker itself, or on another surface like a bench or even a toy box, the idea is that they are high enough so that people will tend to grab them.
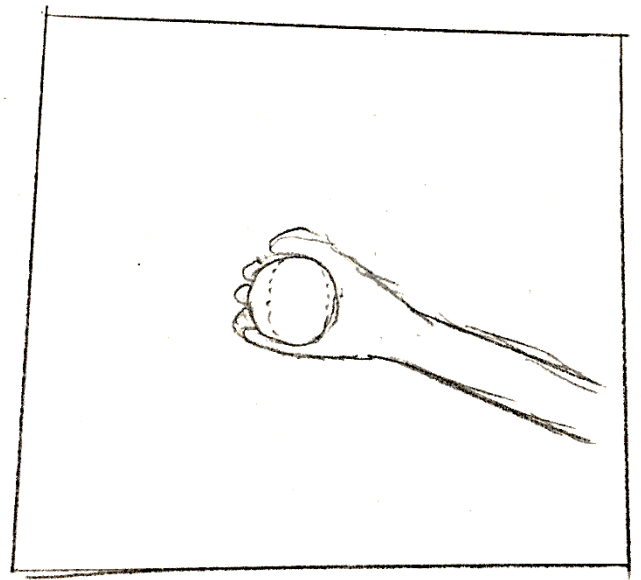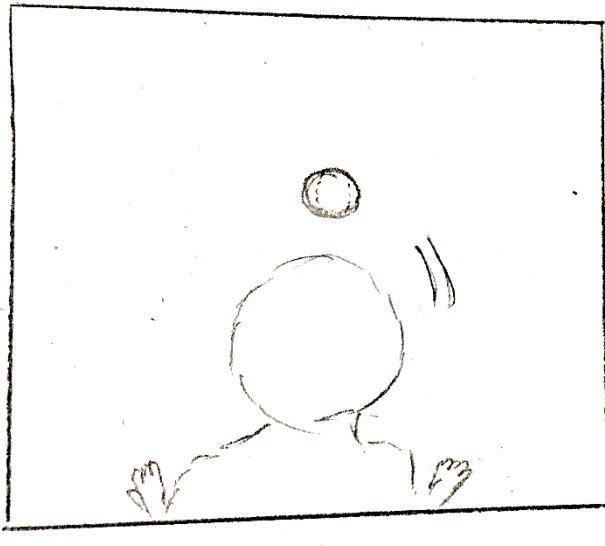
When the user takes the ball in their hand, nothing particular happens.
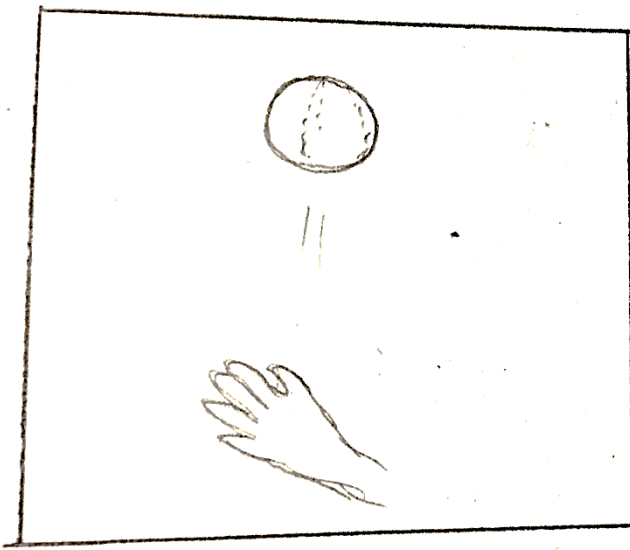
When the ball is thrown, a sound can be heard. The higher it is, the higher the sound will be, based on the initial vertical speed of the ball.
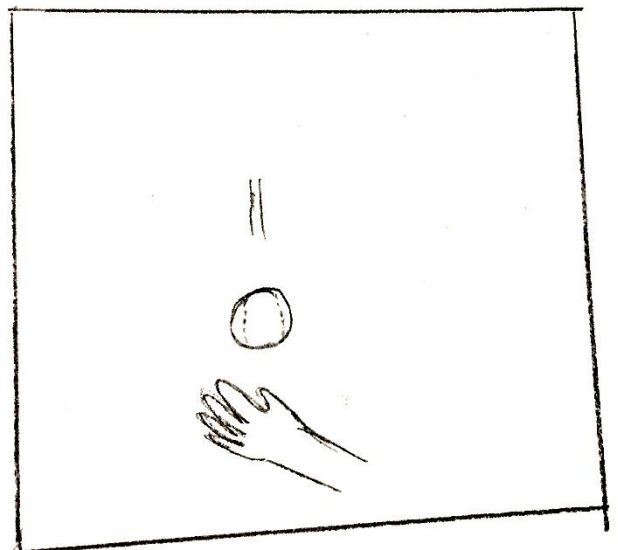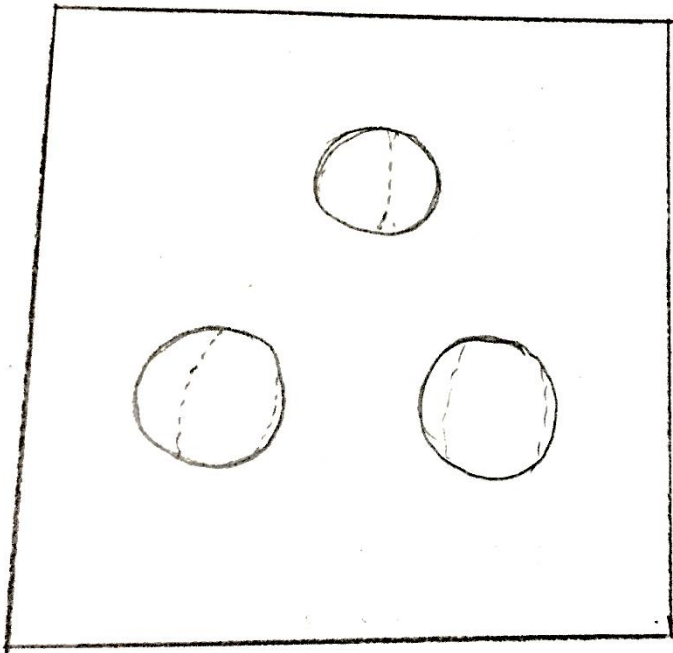
When the ball is caught, the sound stops slowly or firmly, depending on the acceleration given by the hand.

When the ball makes distance horizontally, a reverb effect can be heard.
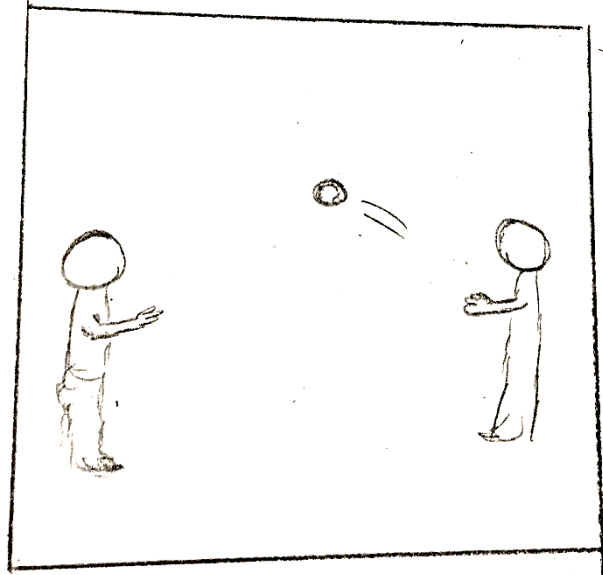
When the horizontal distance is bigger than what is possible with only one person, different sounds can be heard, creating a richer sonor environment, almost like a melody.

Each ball creates a different kind of sound, each depending on a different function, one with sinuzoïdal, one with triangular and one with rectangular ondulations. The balls would also be differently colored.
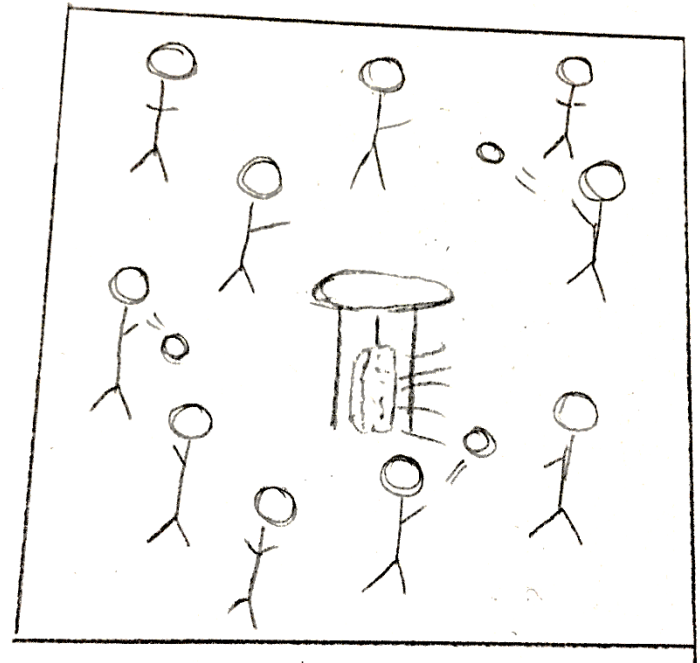
People can therefore gather around and produce the soundscape that they wish, collaboratively.

An artwork that is similar in its purpose is **_Lights Contacts_**. It was created by Scenocosme, a duo of artist composed of Grégory Lasserre et Anaïs met den Ancxt. The concept is simple: one person has to put their hand on a plateform. This does nothing a priori. But when other people touch this person, that creates sounds. People can then touch anyone else that is connected to the first person, creating a human chain to produce sounds. Lights are also produced, according to the sound, while the place is in complete darkness if no contact is made. Another version of this work, Urban Lights Contacts, happens in an urban center, the lights only covering one wall. That work really centers around the idea of creating human connection, both in the literal and metaphorical way. It therefore really allows a direct reflection, because we, as users, understand quite easily the point that it is making, by having people literally making connection in order to think about any type of human connection. It is also about creating something together, since no sound is made if there is only one person. Also, the input of everyone is important in this collective creation, it would not be the same without this or that person. It therefore makes users realize the importance of everybody in a creation, or in general in a collective. The Urban Lights Contacts version brings even more reflection in my opinion, since the setting is not made for people to experiment a priori, unlike the setting of a museum, where people expect to discover things.

The next artwork that I found very related was **_Cave of Sounds_**. In that piece, eight artists, led by Tim Murray-Browne, each created an original instrument. There are eight stations all put in a circle, each facing the center. At each station is one instrument that can be played with, either a concrete object or movements to be made. This also aims to bring people together, in a less obvious way than the precedent example. In fact, even if you can play your instrument alone and it can be fun to just experiment with that, there is also a possibility to explore playing instruments together. In fact, the way the others are playing their instruments will modify the sound of your instrument. The fact that the stations are placed in a circle, all facing each other, really reinforces this sense of community. It makes the user feel like they are really doing this together. In addition, the soundscape created is really beautiful, since more diverse instruments are used than in the previous example. And in this piece, the fact that people play with objects is also a similar idea to my project. Sure, it is a less traditional way of playing, but it still is fun to experiment moving things around or making movements, depending

on the instrument. It also evokes prehistoric musical instruments, that are simpler, but as interesting. This relates to childlike play, as we often relate prehistoric nature to a child's nature in their less significant need for material complexity than today's adults.

Another project that I found while searching for musical juggling balls is **Chuka Chuks**, a company created by Joel Salom that makes percussive juggling balls. This project does not comprise any electronics or programming. Material inside the balls make percussion sounds, similar to maracas, when thrown and caught. It is used mainly by professional performers, musicians and circus artists as a new interesting way to make music. Classes are also available online on how to play with these, but you have to already be a juggler. Therefore, this project does not have the same purpose as the other two. Its main purpose is art, for professionals, mainly as a way to reinvent themselves. It is also not used alone, since the percussions made are not diversified enough, so it is mixed with other conventional musical instruments. However, I found this project really interesting, because as a juggler, I often feel like I am creating a rhythm with the balls, so to have it actually create this rhythm aloud, all organically is very interesting. It also mixes music with juggling, which I feel like are two similar practices in the way they are meditative. They allow your mind to be elsewhere and to be transported in something that you control but that is natural, which is the rhythm. Overall, this is still a fun idea, even though the purpose is not the same, because it is intended at professionals, or at least at experimented amateurs, so not at the general public.

In comparison to the projects I researched, I think that mine can be different and impactful. Firstly, the idea of playing with a child's toy is not something that I found in those projects and I think that this is a strong point in this. The fact that the object in itself reminds people of childhood changes the relationship we have with it. We tend to be less inclined to play with it, rather let children do it, but when we realize that it is in fact intended at adults, it nurtures the reflection that we have about fun and playing even more. Because we realize more that we are actually playing, and not just experimenting some artistic practice. Also, the sense of creating a community and creating something together is still present in my project. And by comparing it to the organically made musical juggling balls, while my project can be intended at

8

experimented jugglers, it is mainly intended at a general audience, making the act of making music accessible and fun. It makes a more complete soundscape, each ball having a different sound attached to it, but still is easy to handle. And you don't have to be an expert at keeping a rhythm to make interesting soundscapes, since they don't rely on percussions only. In conclusion, I think that my project is still valuable, because it evokes this idea of playing, but also of building together as a community, two values that I think could be reinforced in our individualistic and work focussed society.