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url: https://vivian-b.github.io/proxyU/index.html

ProxyU

PROJECT DESCRIPTION :

1. Context

The context in which we would like to intervene would be the one of relationship with others in our casual, day to day life. The environment is therefore evidently anywhere that can be deemed “casual”, be it at home, in neighborhoods, at school or at work. The reasoning behind such a general and somewhat vague definition is the fact that our connection/relationship with our surroundings is a daily-recurring and fundamental part of our existence. Yet, their omnipresence is exactly part of the problem.

In order to prevent our brain from being overwhelmed by stimulus, our emotional feedback towards common events (such people close to us that we see on a daily basis) are often greatly subdued and our mind could even be desensitized to their presence so that more dramatic reactions; the high and lows of emotions could be saved for more special occasions.

With the backdrop of modern society, highly efficient communication methods simultaneously made even the sensational events numb and repetitive while isolating us further (physically). Especially during the pandemic, the proportion of isolated, unfeeling times of life have drastically increased. The aim of this project is not to help us circumvent the problem as a whole, but to reintroduce these precious feelings , fleeting experiences of excitement and emotions that have been lost. At the same time,

hopefully make people more aware of the emotions and connections that make up their life.

As for the intended user, in truth it is for everyone and anyone that is more or less isolated emotionally and physically in their connection to their surroundings But more specifically so for those that are completely lost in their world.

2. Potential relationships & experiences

The artifact, which is potentially a bracelet, has the ability to track and monitor, making the device more of a tool. As the main characteristic of the device is to indicate the proximity between the user and the other half of the artifact, the users can become more or less aware of their surroundings. The owners of the bracelets can be inclined to stay near each other. The users can be at loss in their environment when focusing too much on finding the other half. People can feel more at ease with knowing where the other party, or object, is. The two individuals can feel a sense of connection with their partner through the bracelet. While the intention of the artifact is to keep the paired devices close to each other, or at least be more aware of the distance between them, the bracelets become a useful tool (a safety precaution) to be more mindful about the other half to ensure they are not lost or too far away.

The artifact becomes a subtle and informative tracker for the user to keep in check with the other party. Knowing the approximate location of one's "belongings" can essentially give the user a sense of security and save some stress as they do not need to worry about being lost or unaware of the location. However, this effect can also go the opposite way by making the user worry when the device is not able to locate the other half.

The owners of the artifact essentially gain information of the other's location by giving away their own info. Even on a more intimate level, like many other modern tracking devices, the users become aware that they must exchange their own location to know about someone else's. The data may as well be shared to a bigger network,

which puts the users privacy in question.

3. Associated privileges

Is there a device or a tool that is exclusively beneficial? To further analyze any invention or design, there cannot be an end product without exploitation (abstract or not). Clocks would not exist today if we did not take materials from the earth and the ideas that began with Archimedes, the first known geared clock inventor. We believe our device will probably help, challenge and act as a psychological prosthesis under the circumstances of the user and/or the environment situated.

The advantages of our proximity instrument can be as limited or as extensive depending on how much the user wants to engage with it. For example, it can facilitate interpersonal connection between two parties, aid in material recovery and, assist in experiencing the environment. A constraining factor, simple as it may seem, is having to consider the material dependency that is necessary to utilize this device. When there is a certain degree of dependency on any material possession, the object tends to become a clutch in our daily lives.

The value of the proximity device leans on multiple influences that shows us an element of interconnectivity. Just as notions of empowerment are closely associated with other terms such as community and society. One person's approach to empowerment can be at odds with another person, because an anticipated outcome is to gain control of one's life through empowerment. So there are intersecting boundaries between giving extra privileges to a device over the user. Our objective is to offer, not necessitate this gadget for users, and present them as gadgets that are only capable of communicating with each other in reality.

4. Interaction design strategies

Our intentions are again to offer the user the potential to connect with another

user or object. Fundamentally, we will attempt to construct tangible devices that will communicate with each other. For practical purposes, perhaps bracelets or necklaces that are visually an indication of a possibility that it could be worn. We seek to make a device that will lack as much direct user to object interaction as possible. Therefore, this accessory would not take up too much physical space. There will be only one button that will function as an on/off, cycle (between options) and synchronize button. Lights as well as vibrations will be an indication to the user. As soon as an individual setting is specified, the user's only task will be to analyze what the device is communicating to them.

To make it a more comprehensive product, the user will have an option to choose between different engagements. A visual model, where the device will flash through colors of cool and warm tones. A contact model of patterned vibrations or an audio interaction. Since we want to present a device that would limit direct user to object interaction, the object itself will also have an option for the user to limit it's exchange of information. A ideall setting while using the proximity device is when the user benefits from the awareness of their own existence in space in relation to another user (/thing). It is in a sense, a consensual geo-locating apparatus.

Again, this is an accessory that is tasked to connect people. Each device is established to work co-dependently with each other. Meaning if there is no intention for any form of distanced relationship, these devices are not essential.

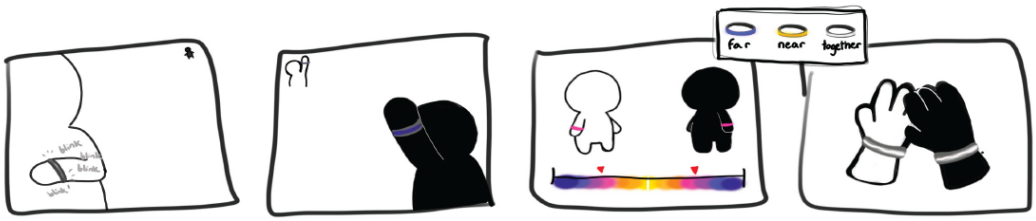
EVALUATION OF SENSORS:

Associated affordances; how they would support our project.

The primary affordance that would be at the center of our devices and all its components/sensors would be portable by an average human. Since the desired interaction of our project is to enhance the connection between two individuals in their casual environment, a portable device allows the user to go through their daily routine without disturbance and not requiring extra efforts. In contrast, a heavier, bulkier device would require dedicated carrying methods and all sorts of other complications that will result in less convenient experiences and rendering the whole process “uncasual”. In a related fashion, the entire device would also be concealable, or to the least be forgettable in a sense. Since large and obvious devices attract unwanted attention and thus makes going through daily routine more inconvenient, being able to pass on the device as nothing out of ordinary just like a normal smart bracelet is also important. Both these affordances need to be met on all sensors and components otherwise they could compromise the desired experience of our project. For example, users can find them to be a nuisance and leave them in place instead of wearing them.

For more specific affordances, the proximity sensor in conjunction with communication between two devices is the first step of allowing the user to learn the distance between his device and another device. It is a first step because the user would not be able to see the result directly, rather, that is the affordance of the components in the 2nd step: LEDs similar devices. These components will allow the user to actually read his distance with the other device via specific display of light. Since our entire project revolves around the idea of enhancing the connection of two individuals, these affordances are exactly what enables that to be achieved by allowing them to know the distance between each other and demonstrate it in a special way.

INTENTION: (storyboard)



the bracelet starts blinking when both devices are within a certain range from eachother

once the two people start getting closer to one another, the bracelet lights up in a specific color

the bracelet lights in a different color depending on the distance
far = cool (purple,blue)
near = warm (red, yellow)

when the individuals are very close to eachother (arms reach) the lights turn white

when the individuals are distancing from eachother, the light starts fading away.

*if the connection gets cut, the bracelet goes back to blinking they get back in range (1st scene)

if one side makes intense motion (eg. shaking), when connected, both bracelets will start blinking together

there will be an option to change the brightness of the lights. (cycles from lowest, mid to highest)

when there is no motion detected, the bracelets are turned off. (save battery)

*product design is not set

RESEARCH:

1. The Tracker | Derek Van Riper, 2014.

The Tracker is a senior project in 2014 from the California Polytechnic State University. The Tracker is a portable device that is used as a proximity alarm system. The device has a microcontroller that is connected to a smartphone via Bluetooth signal. The device is a small object that can be clipped and be attached to any object, similar to a GPS microchip. The alarm is set to remind the user when they walk too far away from said possessions. When the connection with the device (the piece attached to an object) is cut, such as when it is too far away from the individual, the user receives an alarm on their phone alerting them about the item being lost.

The intention of the project is to “help individuals remain mindful of where they set down their important possessions”. The Tracker solves small problems to endless situations pertaining to the loss of an object. By warning the user with an alarm, the person will necessarily look for said item that the device is attached to and may remember when a similar situation happens again in the future. The device also intends to help eliminate some of the forgetfulness of individuals who constantly lose track of important things.

The Tracker does not specify the exact location of the tagged object in question. It mainly notifies when the user is out of range of the device and not much other information for the person to take in.

Comparison:

For our artifact, we intend to go beyond just connecting two things together as a commercial tool. While both our project and The Tracker’s main goal is to inform the user about the distance between them and the other half of the device, we wish to have the bracelet be used for more animated objects (such as a person or a pet) to help connect them and prevent some sort of separation.

The Tracker only really reacts when the user is far away and does not hint about

the distance between the device and the person. An indication to inform about the gap between the devices may be necessary to help find the other half easier. Changing the radius manually to locate The Tracker may help the user to close in on it, but a visual change (live update) on the artifact will be easier for the user to follow.

Our project won't only be relying on the idea of a tracker and a monitorer. Both parts of the artifact will be eachothers tracker and monitor. The two users are able to gain information from each other based on their own interactions with the device.

Our device won't only serve as a tool to make sure both parties stay within a certain range for each other, but also to give each side a sense of connection to one another and keep them engaged.

2. Mont-réel | Eva Clouard, 2015.

Mont-réel (my reality) was a digital installation exhibited as part of "Art Souterrain" Festival in 2015 in the Palais des Congrès de Montréal. The on-site installation is presented with a screen showing a map of the streets of Montreal. Inside the map, red lines on the map extend in real-time led by a small photo of an eye. First, it indicates the artist's live movements in Montreal. Throughout the day, a fused weave of red lines becomes a record of her positions in Montreal. Clouard achieves this by downloading an already fabricated GPS application.

Clouard aims to raise awareness of technology's dominant submersion within our daily lives. Cell phones, a gadget of integral necessity aids us in communication and to efficiently manage one's place in society. To narrow it down in a smaller scope, cell phones are able to collect our conversations and track our movements. When Clouard positions herself as the subject, the spectator at the exhibition becomes a voyeur. When the spectators are given the post of a surveiller, they are in a position of power with the ability to do anything with the data they possess. Clouard wanted to show the trust in technology and the supposed line we draw as public and private. Also, in hopes to draw out ideas of how technology are devices of surveillance, Clouard uses a strategy of

switching perspectives. Viewers' points of view are transformed when they are granted responsibility for Clouard's private life.

Comparison:

The main theme of surveillance from Clouard's project is one of the underlying ideas behind our project. The difference, however, is in our implementation and execution. Mont-réel creates two clear binary circumstances. One placed in the position of the watcher and the other of the monitored. Our proximity device operates in any environment, but most importantly, their main function is to engage with each other. We're interested in relationships based upon mutual dependency. Clouard's installation wants to warn us of important drawbacks of giving out our data without understanding how much of our privacy we are allowing to be invaded. Her approach is to reveal aspects of control and power. Our devices aim to remove the underlying ambiguity that usually dwells within our phones, tablets or computers. All control lies only between the two users with the device. One accessory is only active if paired with another and functions in relation with one another.

The way in which Clouard displays her whereabouts with a geo-locating app detached. It's visual interface is very similar to other map applications. A passing spectator of Clouard's exhibition might be more visually interested in the scope of her movements than the questions behind it. Our founding implementation may also encounter the same problems of a simple superficial tool. However, we hope that since one device is dependent on another, we are able to reclaim a tiny fragment of intimacy absent in most devices we use everyday. This partnership will be created with the paired accessory that is associated with another person or meaningful object.

3. Remote Pulse | Rafael LoZano-Hemmer, 2019

Remote Pulse is an interactive art installation aiming at connecting two complete

strangers in different physical spaces through usage of technology. Each instance of this installation is composed of two identical stations at different locations.

In its original 2019 incarnation, one of the stations was located in El Paso, Texas, United States while the other in Ciudad Juárez, Chihuahua, Mexico. These two stations are separated by the US-Mexico border but they are connected via the internet. Each station's core component is a small panel located on top of its podium-like base structure. On the panel, there's two symmetrical hand-shaped plates placed side-by-side and one LED on top of each plate, with "USA" inscripted next to one, "Mexico" next to the other.

Whenever a user places both their hands on the plates, the LED corresponding to their station light's up and starts to pulsate dimly according to his/her own heartbeat. On the other side, if another user also places their hands on the plates at the same time, not only will they activate the station in a similar fashion, they will also feel the remote person's pulsating heart, communicated by the 2nd LED on each station lighting up, and more importantly the hand plates vibrating in sync with the other's pulse. As such, both participants, possibly complete strangers before this interaction that can't even visualize each other during it due to the physical separation, will be able to connect and bond with each other in a very intimate way.

Comparison:

Obviously, this installation is very different at first glance with our project. From the get go, it's not even a remote device that can be carried by a user. The method in which it communicates the "connection" between the two halves is also very different, being with pulses that are synced to the user's heartbeat. Even though the larger context is very much different than ours, one can easily interpret this installation as a project trying to comment on the social and cultural background of the relationship between Mexico and the United States. But, I feel like the core idea is what our projects share: the intention to highlight and put emotions back into human connections and relations that are now trivialized, downplayed or outright ignored.