

ABILITY TO GROW

PARK HILL, SHEFFIELD

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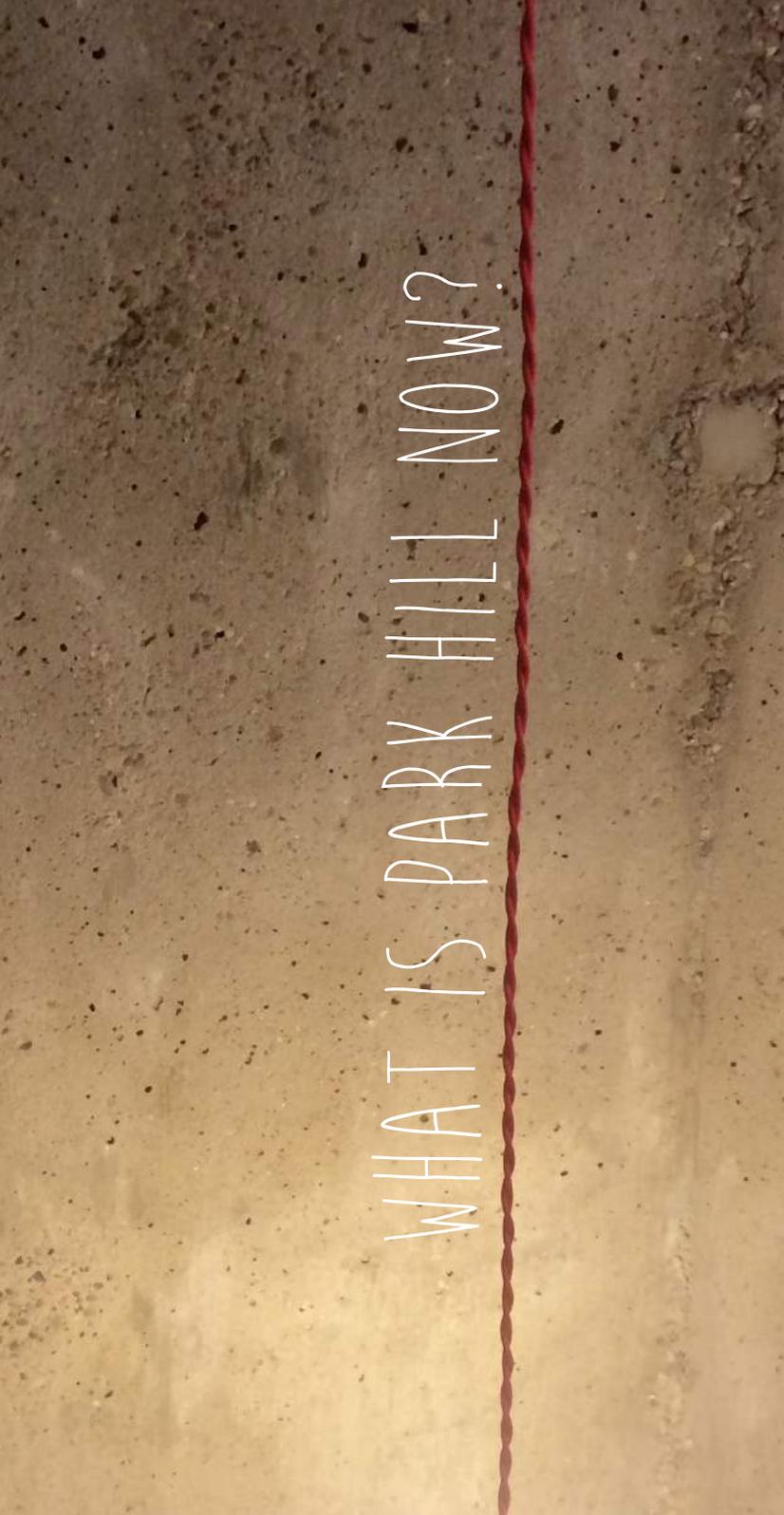
108 PRESENTATION BOARDS

112 BIBLIOGRAPHY

WHAT WAS PARK HILL?

Park Hill was completed in 1961. When it opened it became one of the largest clock of flats England had ever seen. Situated on top of Sheffield, it became famous for its brutalist architecture and the way it overlooked the city. To maintain a sense of community, people were moved very close together and each row of apartments was named after their old streets, giving Park Hill the nickname of "streets in the sky". In 1998 Park Hill was given the status of a Grade II Listed Building, protecting the concrete frame from being destroyed. (Source: Urban Splash, 2015)





WHAT IS PARK HILL NOW?

Urban Splash are currently developing Park Hill to try and reignite the sense of community and love the place once had in between its walls. The project started in 2008 and since then Urban Splash has designed and built 263 new apartment spaces. Urban Splash are retaining the culture with in the flats keeping the famous concrete as a focus point but furnishing the living spaces with a very minimalist and modern aesthetic. (Source: Urban Splash, 2015)

WORK, REST, PLAY

The exhibition theme of Work, Rest, Play enables peoples products, furniture and interiors to make a well rounded unique exhibition. However, through out this project when ever a product is designed, it should be thought about how and why the final design falls into this theme.



TYPOGRAPHY TOUR

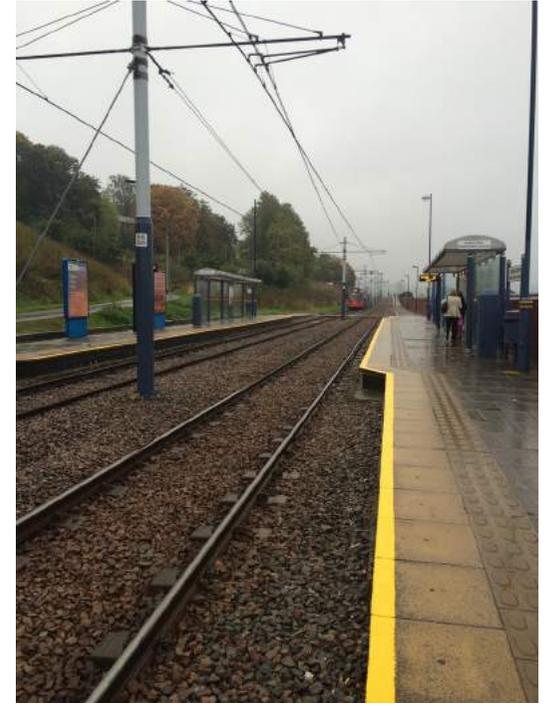
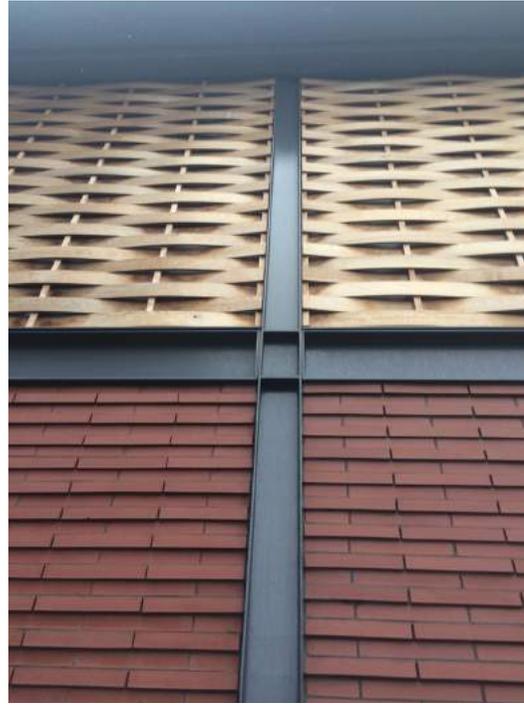




The typography tour enabled a vast amount of visual material and inspiration to be collected. Looking around the city was a great way to understand what Sheffield is and how it works as a collective of different areas. Understand Sheffield's heritage is key to this project and the typography tour enabled information to be learnt about certain areas and architecture. The materials and general colour schemes around Sheffield, gave a sense of the design language that Sheffield conveys.

This will help when it comes to looking at how the final concept portrays Sheffield's design language, if the final product looks like it could fit into a Sheffield environment then the goal of designing a product that feels like it belongs to Sheffield will have been achieved

VISUAL MATERIAL





BEING UNIQUE

The first idea of the project was being unique. After travelling around Sheffield and talking to people our group went off and decided to look at the interviews we undertook and see if we could find a theme ourselves. The theme of being "unique" was decided as a personal choice. To see if a living space could be designed to allow a user to express themselves and stamp their life into their surroundings. This could also be done using modular products to enhance a living space to improve somebodies life. The main idea however is stop the residents from thinking they are just an unimportant resident in this huge block of people that is Park Hill. The idea that they design a personal space themselves and the design just provides the tools for the person to develop the living space as an individual

PERSONAL

EXPRESSIVE

MODULAR

UNIQUE

TALKING POINTS

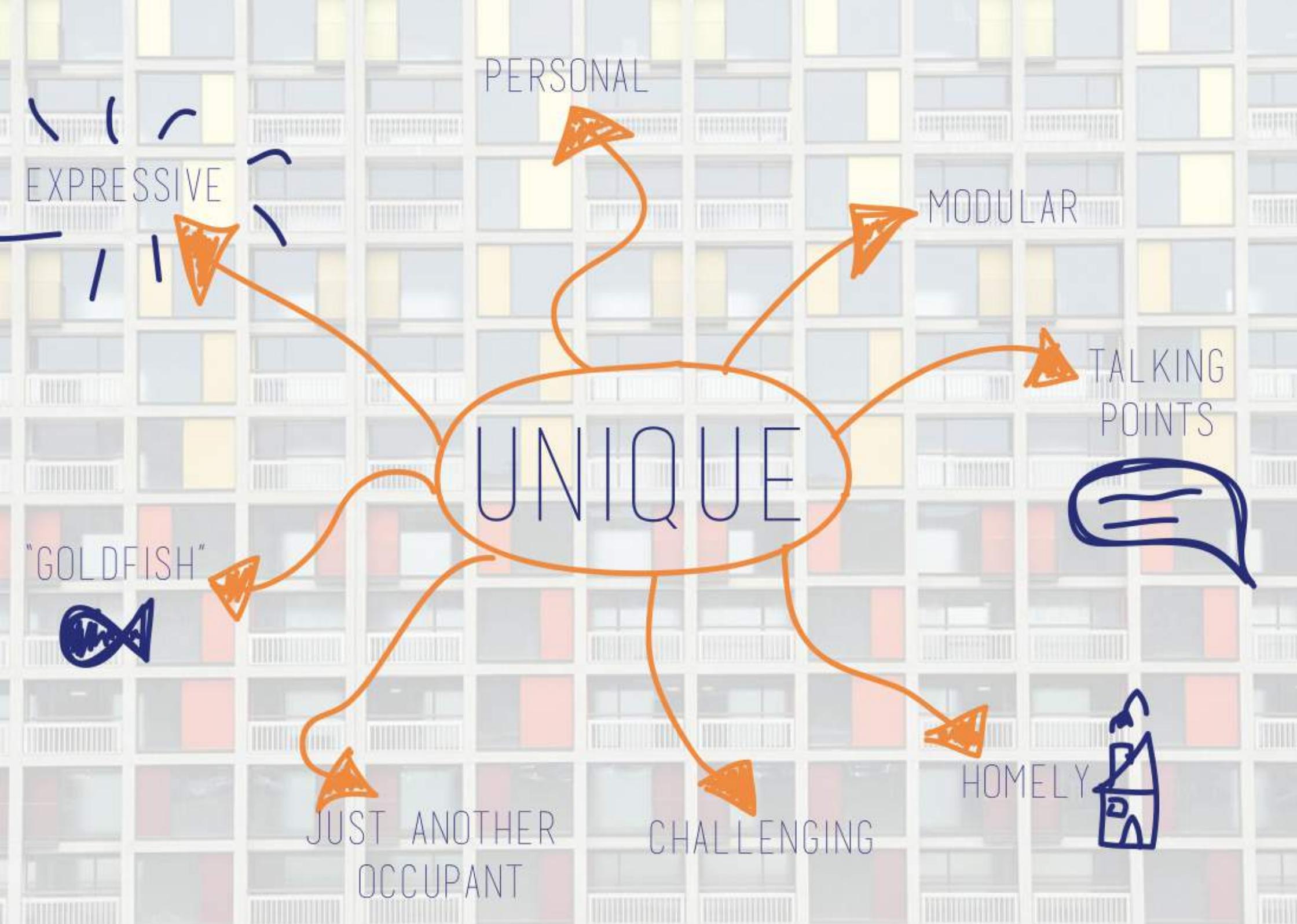
"GOLDFISH"



JUST ANOTHER OCCUPANT

CHALLENGING

HOMELY



TALKING TO THE COMMUNITY



Peoples thoughts and views of Sheffield and what it means to them. From the interviews it became clear the main themes of what people think of Sheffield and what they also think of Park Hill.

// A metropolitan almost, cosmopolitan society //

// When my Mum and Dad were offered Park hill it was like "Wow" //

// Sheffield uniqueness needs to be enhanced //

// The sense of community can be brought back //

GROUP MEETING

PROVIDING THE INGREDIENTS FOR PARK HILL TO GROW INTO A COMMUNITY

After the typography tour and each member of the thinking of an idea for the theme it was decided that the best way was to put all our ideas together to select a theme that we all felt had potential. After a while and some different ideas and debates it was found that we all wanted to achieve the same thing. As a group we wanted to design a living space that would benefit Park Hill Residents and a physical space that can help the uphold of the community. As a group this led to theme of "The Ability to Grow".

Fig.02

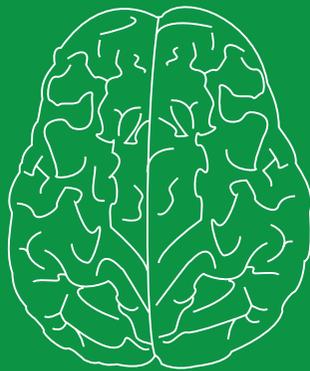


ABILITY TO GROW

The group then discussed how we can design a living space that enables a person to grow. We quickly found this was too broad as we thought of many concepts, for example, how somebody can grow into a community is very different to how the physical space in a room can grow to adapt somebodys lifestyle.

Refining The Theme

To refine the theme we brainstormed as a group and came out with the theme of "The Ability To Grow - Improving The Mindset Of A Person". This theme looks at how we can design a living space to improve the mindset of a person. The theory is that if we can design a living space to improve peoples mindset due to there living space then it should make Park Hill a nicer place to live and an easier place for a community to grow.



GROUP BRIEF

To design a living space that enables a person to grow and improve their mindset so they can go on and benefit Park Hill as a whole. With coherence to the Work, Rest, Play Exhibition theme.

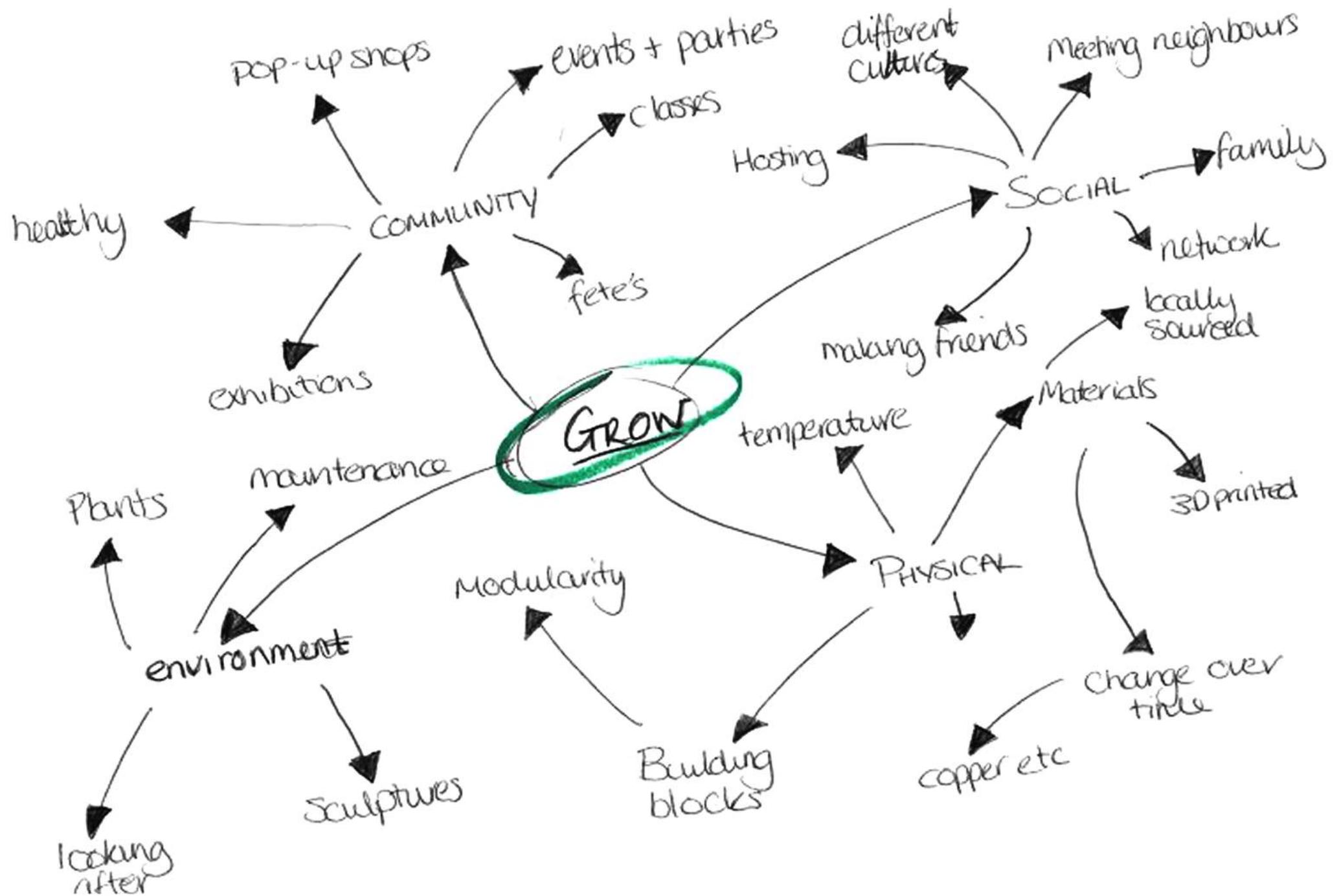
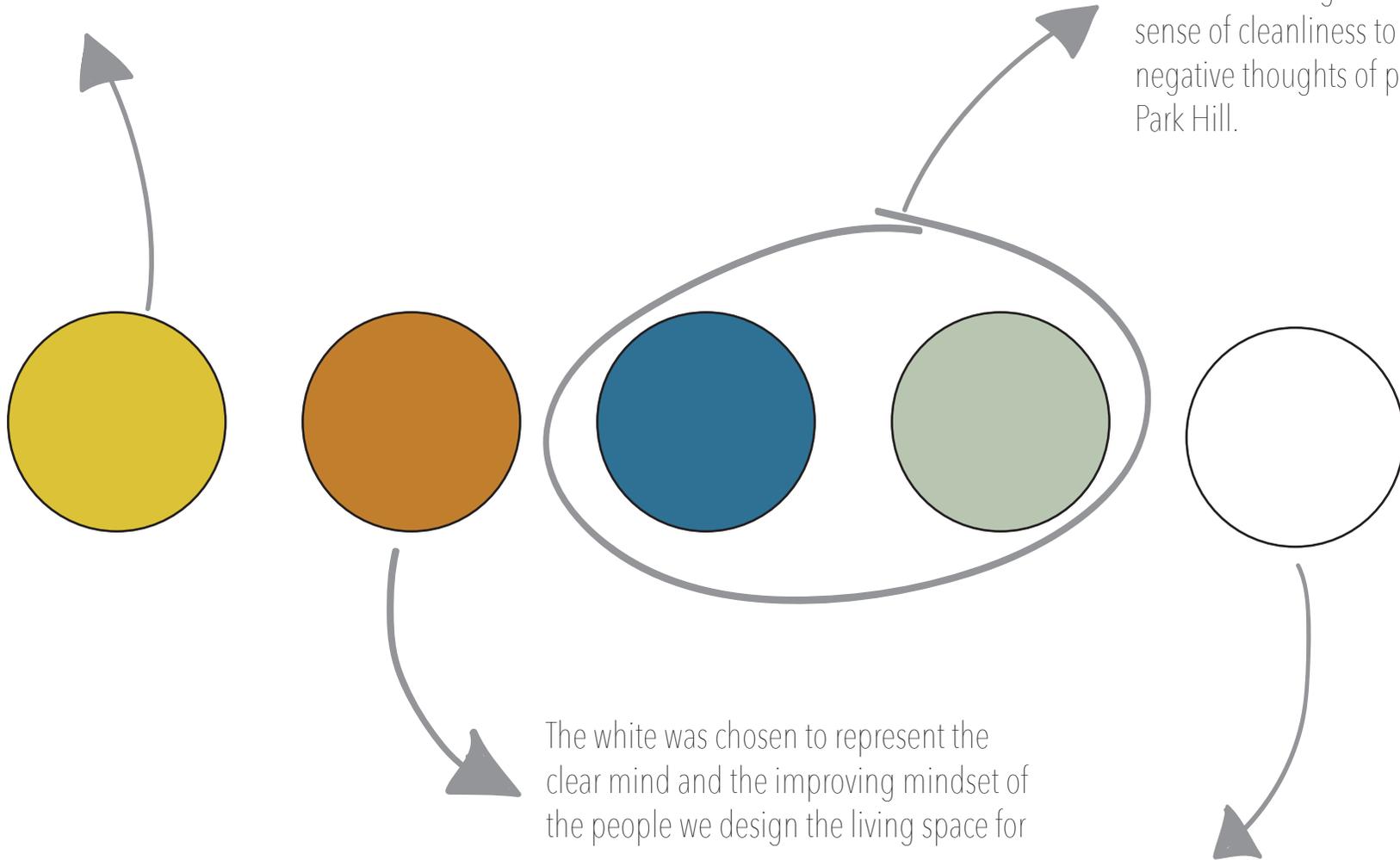




Fig.03

A contrast to the blues and whites to help people understand they need balance in their life even if it is subliminally through this neutralised yellow.

These two colours were influenced from the Typography Tour of Sheffield. These were picked to represent Sheffield's industrial heritage. They also give a sense of cleanliness to help remove any negative thoughts of people living in Park Hill.



The white was chosen to represent the clear mind and the improving mindset of the people we design the living space for

The white was chosen to represent the clear mind and the improving mindset of the people we design the living space for

COLOUR PALETTE

The stainless steel represents Sheffield's old industrial heritage. As well as this when stainless steel is used in moderation it can create a product that can be viewed as a relaxed product.

This PET felt was chosen to give the living space a tactile texture and a sense of softness, however this specific felt still does this with a contemporary look.



Fig.04



Fig.05



Fig.06



Fig.07

This reclaimed pine wood represents how we can give materials a secondary use. It also gives the living space a sense that there is natural elements in the room, a contrast to the mass use of concrete.

This 3D printed Resin was chosen to metaphorically represent growing. The group thinking was this was a material that physical grow as it is made. The clean aesthetic also helps to benefit to a clean healthy mind.

MATERIAL

INDIVIDUAL - BRIEF

To design an individual product that can benefit somebodies livelihood and mental state, by looking at relaxation methods.

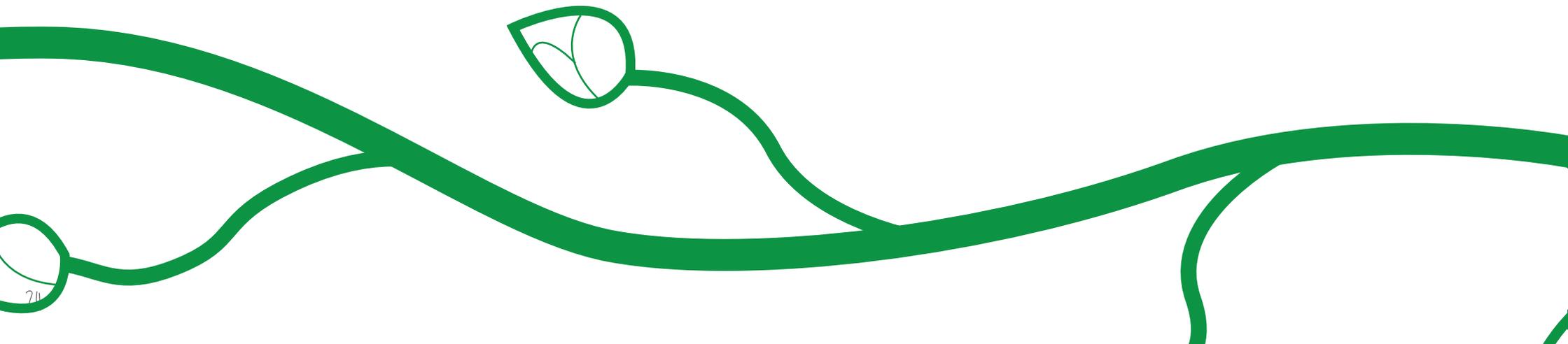
BRIEF REACTION



Look into how products can be used to positively affect somebodies mood. This can be done by looking into different brain therapies and experiences. Researching aspects of everyday human life to analyse how a product can fit into peoples lifestyle to improve a certain individuals mindset.

POSTER

After the theme was thought of within the group it was at the point in a project where our ideas needed to be brought forward. A poster from each individual was designed to explain the groups theme and how we can act on this as an individual. To the right is the chosen poster that explains the theme. It mentions how for the individual task an outcome will be designed to try and benefit somebodys mindset. The page after has mind mapped the individual ideas of interest that could be used in this process.



ELLIOT
LIGHTING/TEMPORARY



IMPROVING THE PHYSICAL SPACE



LIV
EMOTIONAL DESIGN



PRODUCT TO PERSON CONNECTION



OLLIE
SLEEP/UNCONCIOUS



UNCONCIOUSLY IMPROVE MENTAL STATE



MONA
SCIENTIFIC REASONING



IMPROVING BRAIN CHEMISTRY



SABREENA
INFLUENCING OTHERS/LAYOUT



POSTITIVE LAYOUT / FENG SHUI



MARIA
COLOUR AND TEXTURE



IMPROVING PHYSICAL SPACE



ABILITY TO GROW

GROUP IDEAS

The group decided the best way to understand how we would design a living space together was to identify peoples interests individually to make sure they could work together as one. This page to the left identifies each area of interest for each person and then allows each member of group to design something that does not overlap with anyone else's ideas. This also allowed the group to understand how each individual idea could develop and improve as the project goes on. Although the group would still have to meet on regular occasions to understand how our projects were developing through the project.

Collaboration

Using Sound

Meditation

Yoga

THE INDIVIDUAL THINKING

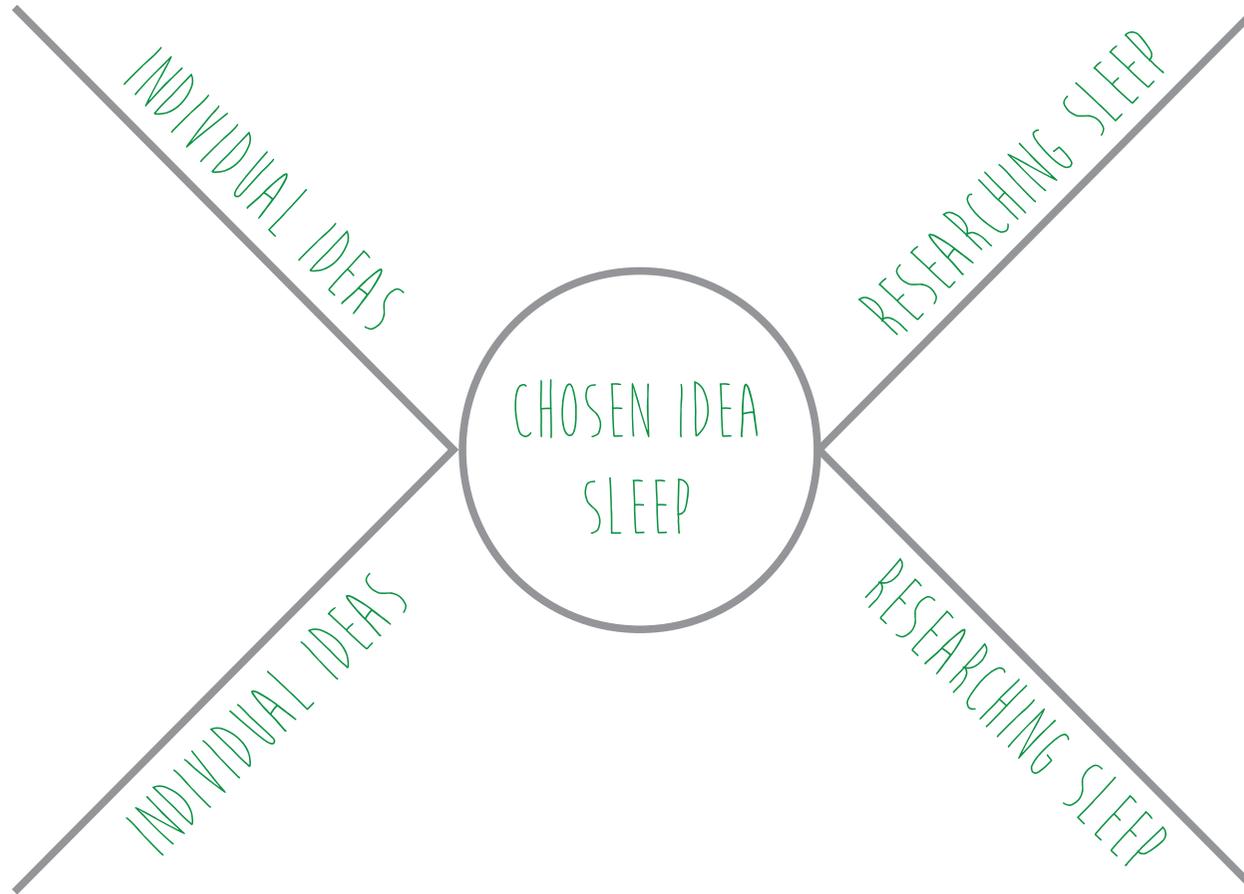
Community

Modularity

Social

Sleep

CHOOSING A PATH



REM
RESTORATION
ENERGY
TEMPERATURE
REDUCE STRESS
DARKNESS
LIGHT
COMFORT
ALARM
BODY CLOCK
ROUTINE
HEALING
SLEEP
COMFORT
SOCIAL CUES
RELAX
INSOMNIA
DREAMS
MELATONIN
DEPRIVATION
PEACEFUL

SLEEP

The research theme that has been chosen looks at Sleep. Sleep is often overlooked in our modern 21st Century lives, it is seen as an unimportant aspect of our lives that just gets in the way of people living their lives. However sleep is key to our survival, many interesting things happen in our sleep and these are split into three key areas.

RESTORATION	BRAIN FUNCTION	CONSERVATION
<p>REBUILD BRAIN</p> <p>REPLACE CHEMICAL STRUCTURE</p> <p>DISCARDING AND RESTORING UNWANTED MEMORIES</p> <p>REGENERATED PROTEIN MOLECULES</p>	<p>CREATING AND CONSOLIDATING MEMORIES</p> <p>CLEAR OUT TOXINS</p> <p>LEARNING AND REMEMBERING</p> <p>MAKES CREATIVE CONNECTIONS</p>	<p>ENERGY CONSERVATION</p> <p>SAVING CALORIES</p> <p>REDUCES METABOLISM</p> <p>REDUCED CORE TEMPERATURE</p>

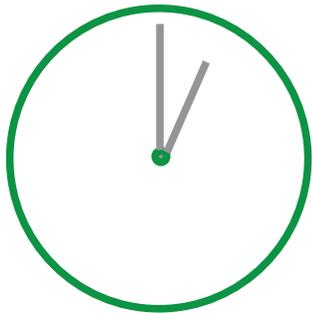
(Source: TedTalk - Russell Foster)

ETHNOGRAPHIC RESEARCH

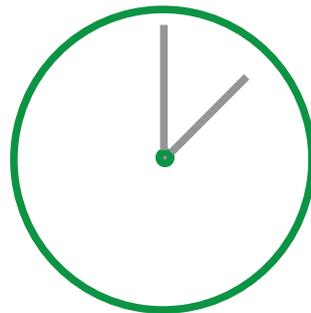
During the start of the project the group decided that we needed to immerse ourselves into the project. We decided on a good way of doing this was to go to a meditation session. The session was really helpful into understanding what it was like to have a clear mindset and what it is that we are trying to achieve when we design the living space for Park Hill. The group felt together as a whole that if we could design a living space that could give people a mindset close to what meditation gives then this will help hit our self-guided group brief.

TIMETABLE OF MEDITATION

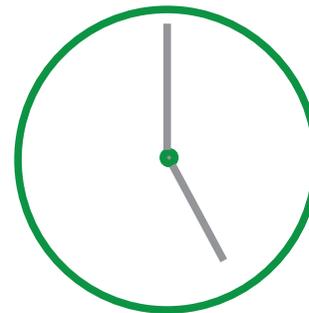
Introductory Music



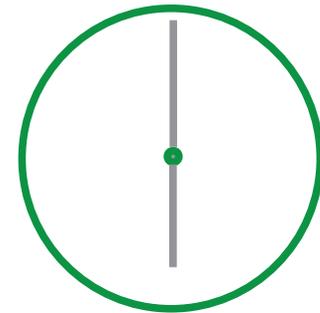
Commentary



Silence



End of the Session



PERSONAL EXPERIENCE

My first time meditating was totally different to what I thought it would be. It enabled me to totally clear my thoughts and to remove any worries I had at that specific time. This was a totally new experience for me, to have a set time where I did not think or worry about anything at all. Meditating is something I definitely want to try again.

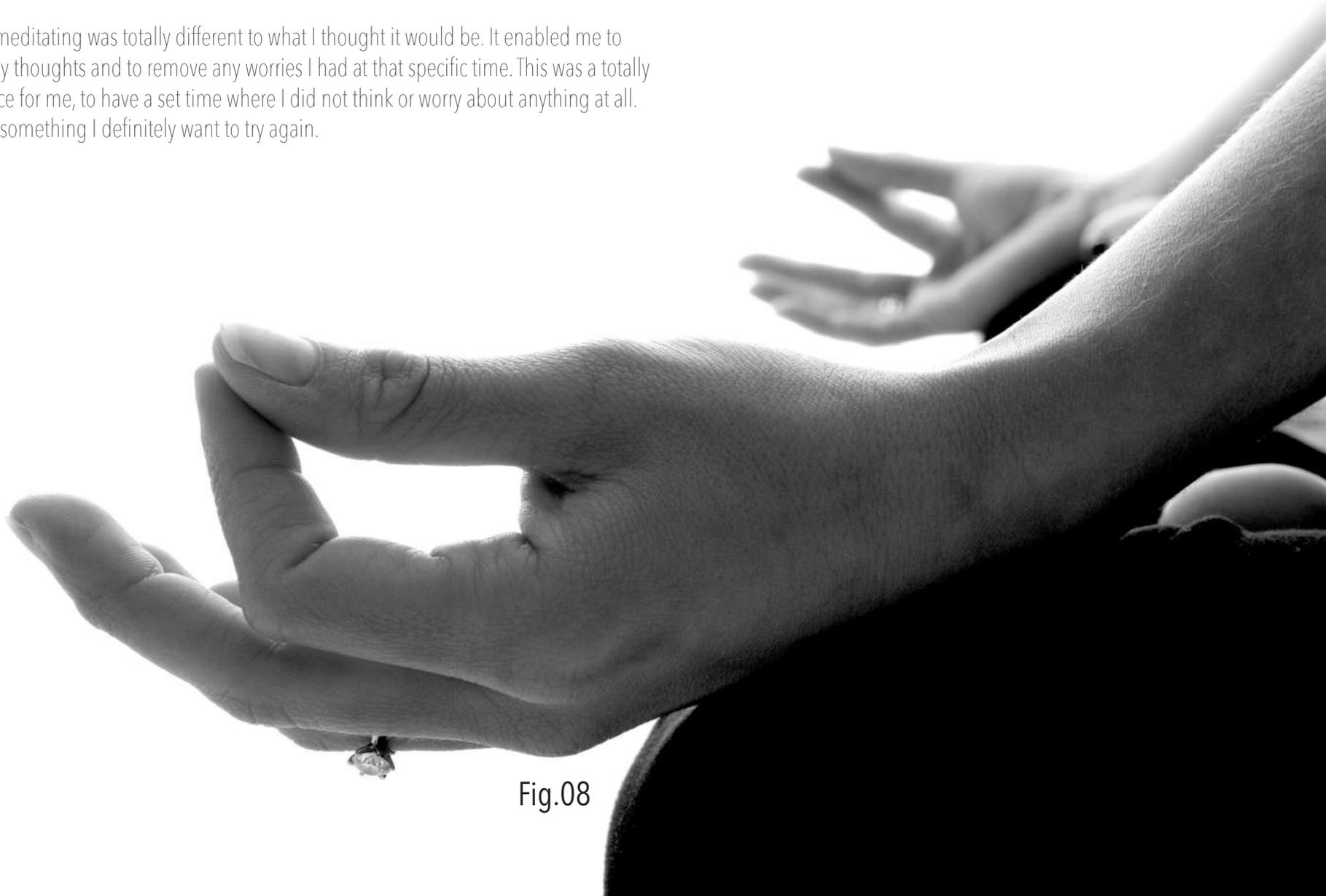


Fig.08

WHY WE NEED SLEEP

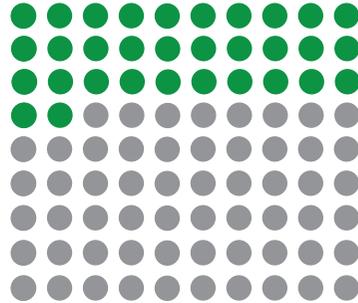
A TED Talk by a neuroscientist called Russell Foster help collate a large amount of qualitative and quantitative secondary data very quickly. During his 22 minute talk he mentioned how important sleep is for Restoration, Conservation and Brain Function. This involved talking about sleep deprivation in the 21st Century and how the biological body clock has had to learn to adapt to the "9-5" routine people have come into contact with. He also spoke about how sleep needs to be thought about and seen as a positive aspect in our lives, not a time consuming exercise.

(Source: Ted Talk - Russell Foster)

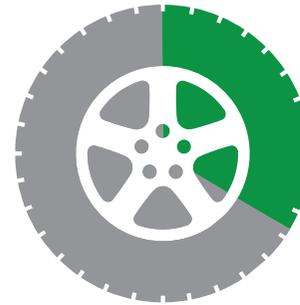
RUSSELL FOSTER



Fig.09



On average after a person has lived to the age of 90 they would have slept 32 years of their life.



It's been estimated that 31 percent of drivers will fall asleep at the wheel at least once in their life



According to a 2004 study, people who sleep less than six hours a day were almost 30 percent more likely to become obese than those who slept seven to nine hours.

"ENJOY THE HONEY-HEAVY DEW OF SLUMBER."

- SHAKESPEARE'S JULIUS CAESAR

"SLEEP IS THE GOLDEN CHAIN THAT TIES HEALTH AND OUR BODIES TOGETHER."

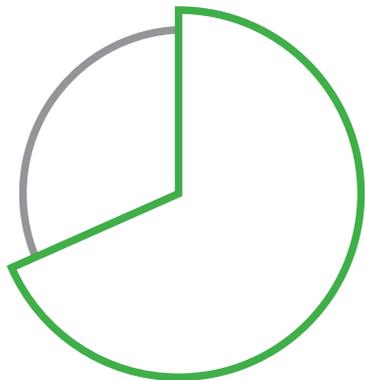
- THOMAS DEKKER

(Source: TedTalk - Russell Foster)

TYPES OF SLEEP

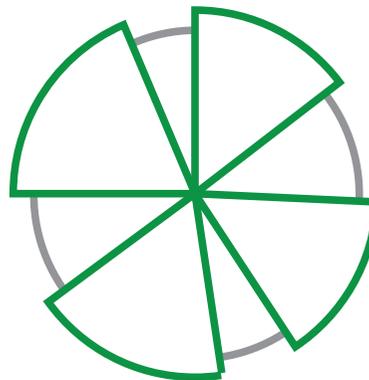
MONOPHASIC SLEEP

Monophasic sleep is the most common type of sleep that people use in the 21st century. The simple sleep pattern involves the person sleeping 7-9 hours on average per night in one continuous sleep. However there are some negatives with this sleep cycle, such as that it usually requires a large amount of sleep compared to some of the other sleep cycles. However this pattern is best suited to people working 9-5 jobs due to the large flexibility it allows in sleep times and wake times.



POLYPHASIC SLEEP

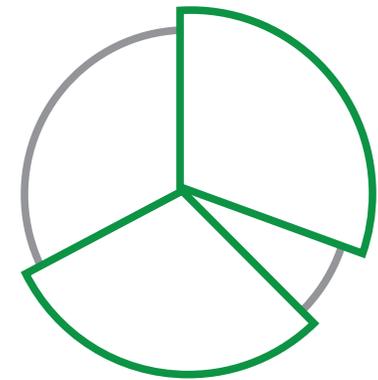
Polyphasic sleep can be used in different ways, however the most common way of using polyphasic sleep is to sleep around 4 times a day for 45 minutes to 1 hour. If this certain sleep cycle is perfected by the user then it allows the person the most wake time out of any other cycle, however this certain sleep cycle is very hard to adapt to and can cause sleep deprivation and other sleep related problems.



(Source : Brett Janes, 2014)

BIPHASIC SLEEP

Biphasic sleep was the normal for people before the advances in electricity and lighting, due to no artificial light people used to sleep firstly for around 4 hours, after these 4 hours people would wake up for around an hour and then have their second sleep of the night for another four hours. This certain cycle also allows free time in the middle of the night that our ancestors often used for, cleaning, their social life or light reading.



INTEREST IN BIPHASIC SLEEP

Due to Biphasic being adopted by so many people 200 years ago, it has really gained an interest in this project. In the 1990's [Thomas Wehr](#) conducted an experiment where he exposed people to only 10 hours of light per day, the other 14 hours they were in total darkness. During this experiment the participants slept in a biphasic sleep pattern, going to bed once for 4 hours and then waking up for around 1 or 2 hours and then falling back to sleep for another continued four hours. Historian [Roger Ekirch](#) explained that the reason this is not the normal anymore was due to the surge of night time activity in the 1920's, from street lights, domestic lighting and social late night gatherings. All these things left people less time at night meaning their was less time to wake up in the middle of the night.

Using Biphasic Sleep as in idea for a concept could lead to designing a product that can actually benefit peoples sleep. This could be done using sound, light or feel to wake the person gently during their nights sleep and then allowing them to go back to sleep a few hours later. Giving the people the chance to sleep in the best possible way would allow the persons mindset to be as calm and relaxed as possible, it would then be up to the other members in my group to go on and use this positive mindset that I design for a person and improve on it. As the product I design will look at how the person feels when the wake up first thing in the morning.

Source: Stephanie Hegarty. (2012)



Fig.10

LIGHT

DARK

THE BALANCE OF LIFE AND A POSITIVE MINDSET.

Another issue that is stopping people from sleeping in the best way they can is the balance of light and dark. Many people go to bed and end up going on their phone. Not only does this associate the bed with other things rather than sleep, it also stops the brain shutting off properly before sleep.

One way to counter-act this is by using warm, red lights before bed rather than artificial blue light. Below is a quick picture that explains how phones should display during the day. At around sunset the phone should start turning a warmer orange and continue all the way until the user goes to sleep. This light helps the person sleep in a much more natural way.

LIGHTING

MORNING

SLEEP

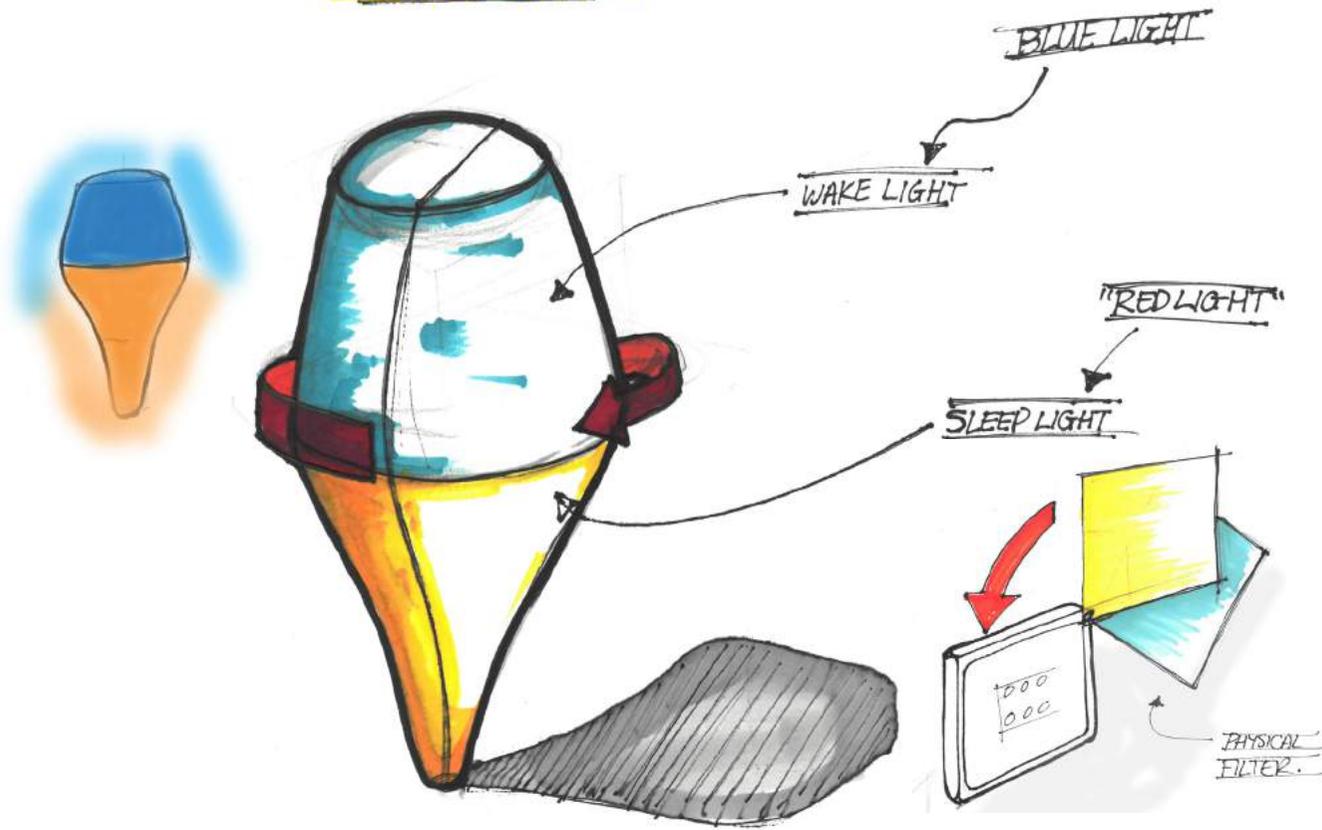


Fig.11

INITIAL LIGHTING IDEAS

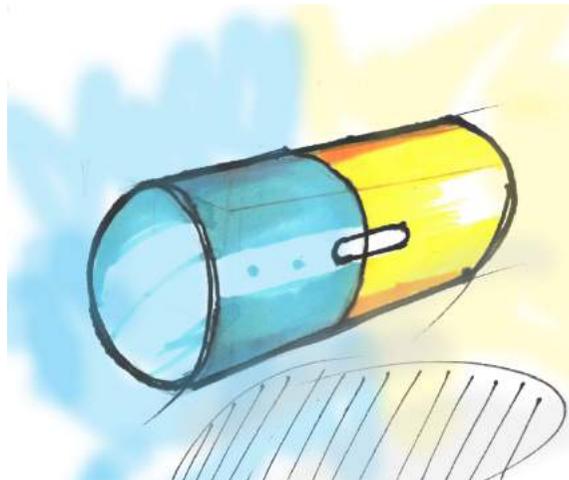
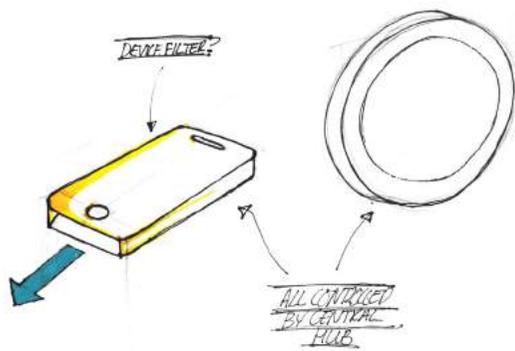
On the page to the right it is possible to see some initial ideas that were thought about in the project. These initial sketches use light to help somebody fall into a biphasic sleep pattern. The blue artificial light is used when the user is awake and busy. The warm yellow/orange light is used for just before the user heads to sleep. This is explained on the previous page with reference to commonly used devices such as mobile phones and laptops.

BIPHASIC LIGHT



THE ISSUE

Lighting has been the first initial idea in this project into how somebodies sleep can be improved to improve their mindset. However this has uncovered an issue, one of the group members from interior is using artificial lighting. If this idea was carried on and continued it could lead to some confusion with the final exhibition. To avoid this, the information that has been discovered from this project so far has been passed over to the interior group member. This then allows them to include the research that has been made and acknowledge it for their project if they would like to.



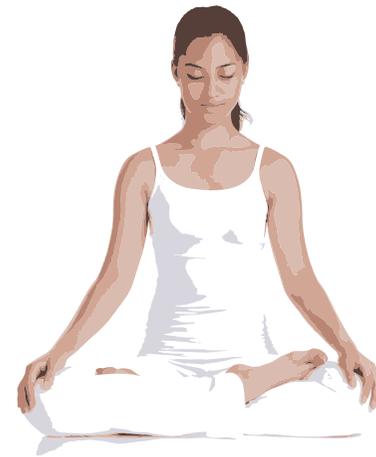
SLEEP HYGIENE



HOW TO GET A BETTER NIGHTS SLEEP

- Go to bed when sleepy
- Do not oversleep
- Use bed for sleep only
- Regulate wake times
- Moderate exercise before bed
- Relaxing bed time habits
- Meditation
- Avoid exposure to bright lights
- Regulate Temperature
- Fully dark room
- Limit intrusive noises

Source: Melinda Smith, M.A., Lawrence Robinson, and Robert Segal, M.A (2015)



SLEEPING POSITIONS



On back - Combats acid reflux
- Stomach below esophagus

On side - Elongates the spine
- Opens crowded oropharynx

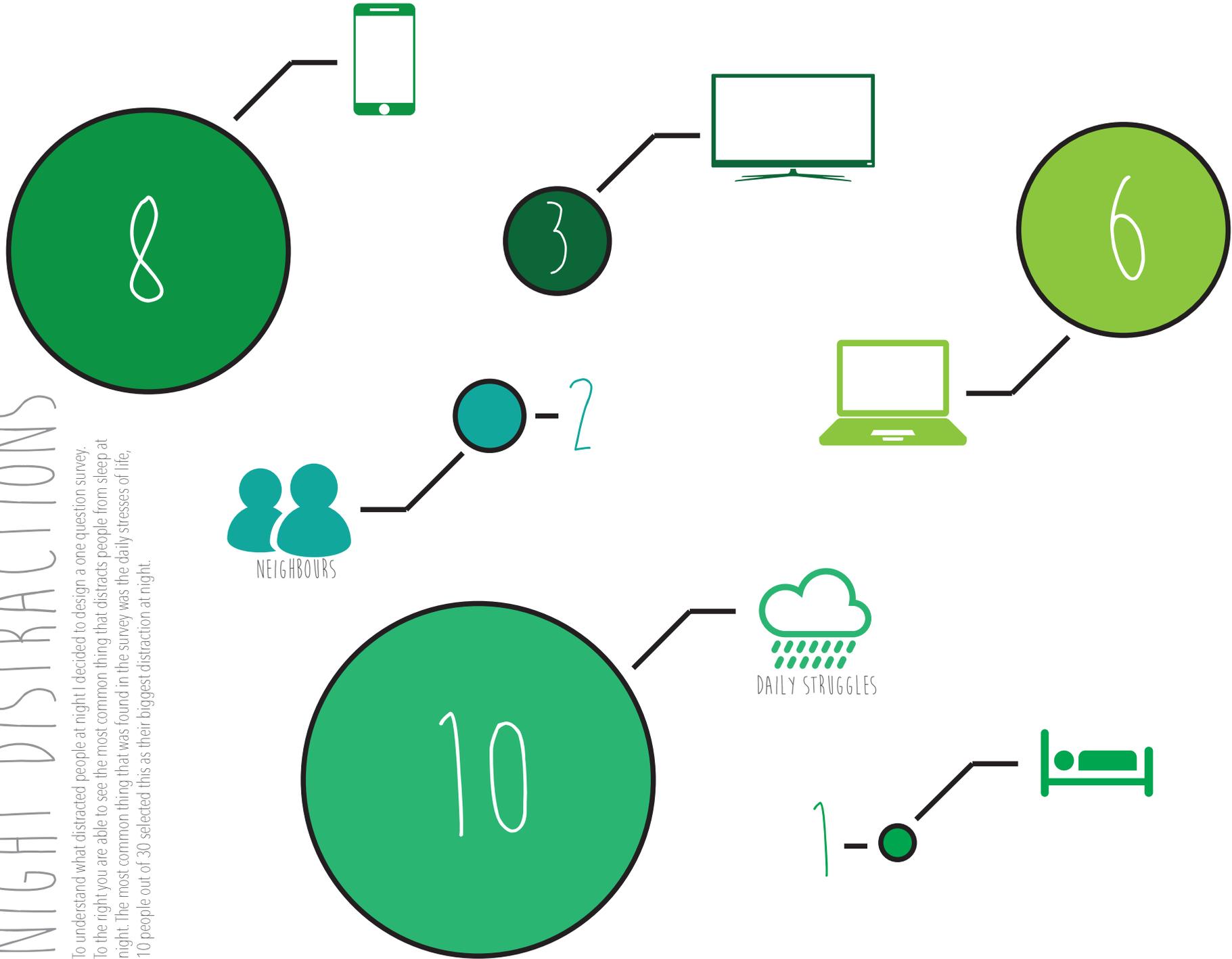
Stomach - No spine support
- Compromises breathing and circulation

Fetal - Strain on back
- Strain on joints

Source: Minq (2015)

NIGHT DISTRACTIONS

To understand what distracted people at night I decided to design a one question survey. To the right you are able to see the most common thing that distracts people from sleep at night. The most common thing that was found in the survey was the daily stresses of life, 10 people out of 30 selected this as their biggest distraction at night.



GUATEMALA

After some time looking into daily struggles due to the previous page outlining that these are the most common issues that stop people at sleeping the worry dolls were discovered.

These Worry Dolls are used in Guatemala as a way to stop children from getting scared at night. The idea involves children telling the Worry Dolls all of their issues, the doll is then meant to absorb all of their bad feelings and worries leaving the child happy and able to have a good nights sleep.

In 2015 Sheffield from many people that weer surveyed asking what kept them up at night it was found that daily struggles was one major issue. With inspiration to the Guatemala Worry Dolls it could be possible to create a product that removes peoples worries and helps them truly get a good nights sleep.

Source: Sara McDonnell. (2008)



Fig.12



Fig. 13

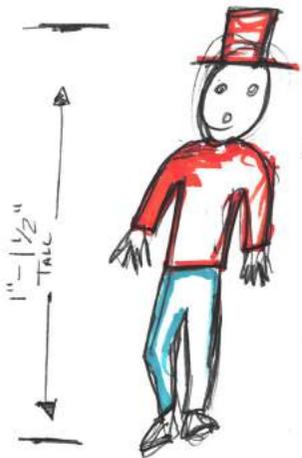
BLOCKING

Through the idea of blocking peoples worries using the Worry Dolls from Guatemala it has also been found through the research that blocking the outside world needs to be thought about when a person needs to sleep. This transfers into looking at how somebody can block devices such as mobile phones and laptops inside the bed to allow people to sleep and sleep only inside their bed. This could be done using existing technologies and would allow the person to identify what it was that was stopping them from getting to sleep. On the market today there is specialist products that can be purchased to do this exact job of blocking any Wifi and 3G signals in a certain area, normally used for security reasons.

Source: Ryan. (2009)

INITIAL IDEAS

Blocking...



Worry Doll

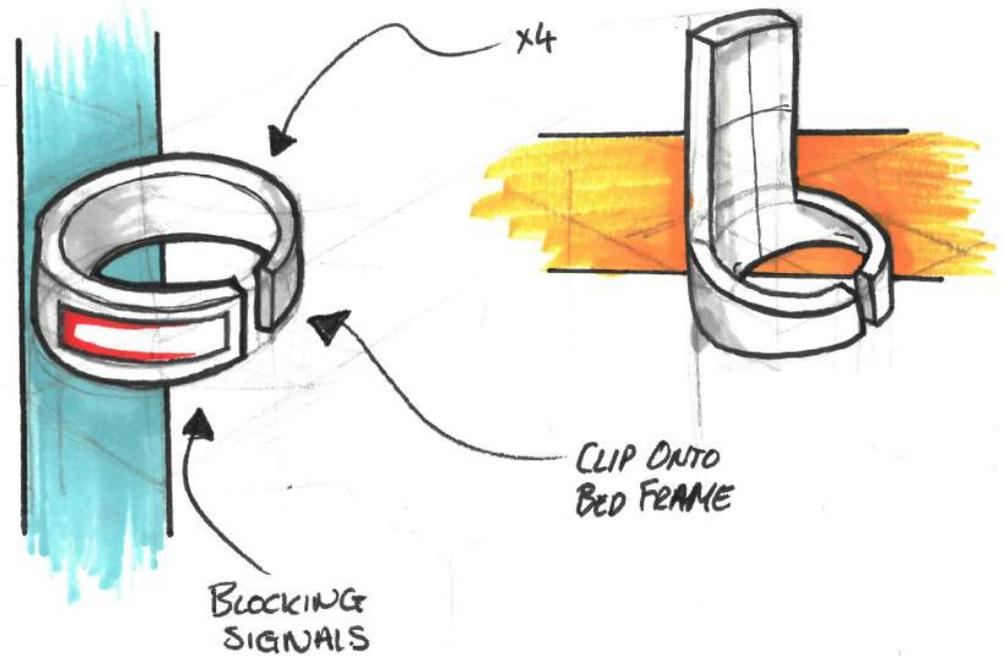
Guatemala

- ↳ Remedy to worrying
- ↳ A person should tell the doll their worries then places in small pouch or wooden box.



SIGNAL BLOCKER

- ↳ BLOCKS ALL WIFI, 4G + 3G SIGNALS
- ↳ PREVENTS DISTRACTION



This clip on bed signal blocker was designed to subtly block any signals leaving the bedroom. Using one main signal blocker then the use of 3 other smaller blockers to grab each corner of the bed. Made from a flexible casing these should be easily adaptable to any bed.



Licenses are usually granted subject to terms, provisions and limitations, which must be complied with. These may include:

Use only on a certain frequency;

Use only with a certain power and certain level of emission;

Use must not cause undue interference;

Use only within a certain geographical area;

Use only of apparatus which meets specified requirements; and access for inspection by Ofcom staff and close down in the event of interference being caused.



Due to these Ofcom reports it has made it very difficult to understand how and where Jammers can be used, these leads to a series of difficult issues. This could easily lead into the project losing track of what is important in, improving the inhabitants mindset rather than just blocking their phone signal in their bedroom. At this point in the project it has become clear that the direction needs to be changed.



Fig.14

AMBIOPHONICS

Ambiophonics involves using a set of two speakers in the same environment. Using two different speakers allows a very interesting thing to happen in the persons mind who is listening. Both speakers would play a different frequency. For example Speaker A would play a sound at 20Hz and Speaker B would play a sound 30Hz. This would then trick the brain into hearing a sound of 25Hz, the middle frequency of both Speaker and Speaker B.

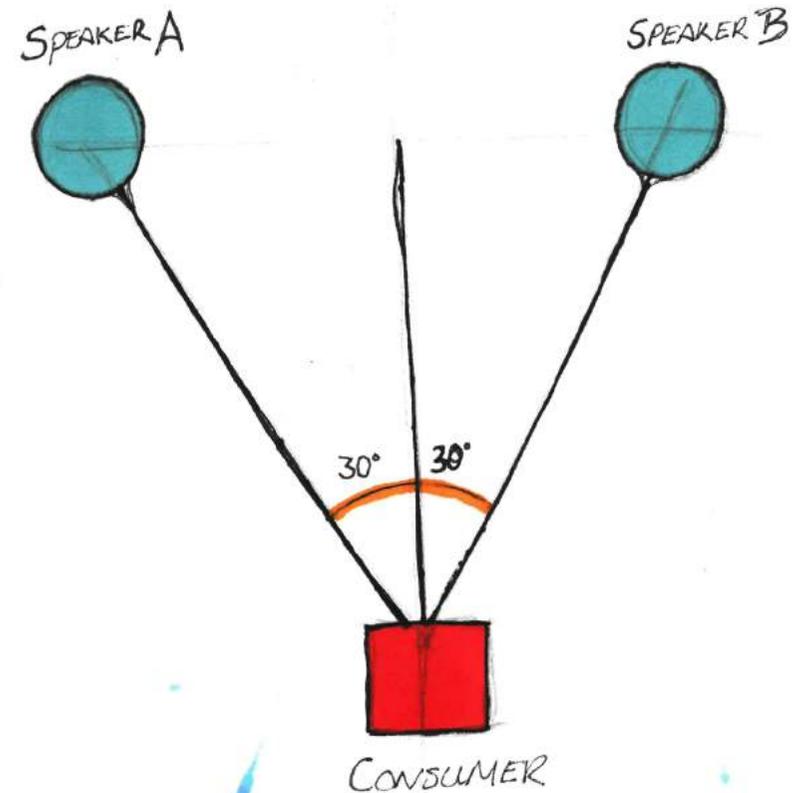
This technology can be used in many different ways, however the interest rose when it was realised that it could be used to play sounds to help people to get to sleep. A low frequency can be played by both speakers to help the brain relax and go to sleep. This is what the thinking is for this new concept idea.

Source: Les Leventhal. (2015)

USING AMBIOPHONICS

Using ambiophonics in a way to aid somebody's mindset could be a very positive aspect of the living space. One way this could be done is to use the frequency of **BINAURAL BEATS**. Binaural beats are used in methods such as meditation, sleep, and relaxation, all of which in hand with ambiophonics can be used to create an environment that is ready for the mind to relax and switch off before heading to sleep.

Source: Les Leventhal. (2015)



ACOUSTICS

Looking at sounds such as ambiophonics means the acoustics of the surrounding materials is very important. Underneath is the Tvisöngur sound sculpture in Seyðisfjörður, Iceland. This building is created using five different domes, the domes are used to create and echo sound to an Icelandic five-tone harmony. When the speaker creates sound the materials need that the product is made from needs to be considered to see whether any have a poor acoustic quality. Most buildings with very good acoustic qualities often have a concrete or hardwood interior, just like Park Hill, Sheffield.

Source: Harriet Partidge. (2015)



Fig.15

WIRED

Wired done a test on how these speakers below work. All of these iPhone speakers use no electricity however they just amplify sound using their form. Wired magazine went on to rate each speaker out of ten. The results showed that the best speakers often used hard metallic materials due to how they cleanly amplify sound.

Source: Richard Melville. (2013)

Materials in the home such as sofas, pillows and anything soft is good for stopping poor acoustic rebounds however. The best treatment for acoustic enhancement is using metals preferably aluminum and copper. However any material with similar properties to these metals like hardwoods are also recommended to be used to enhance sound.

Source: Stephen Allan. (2015)



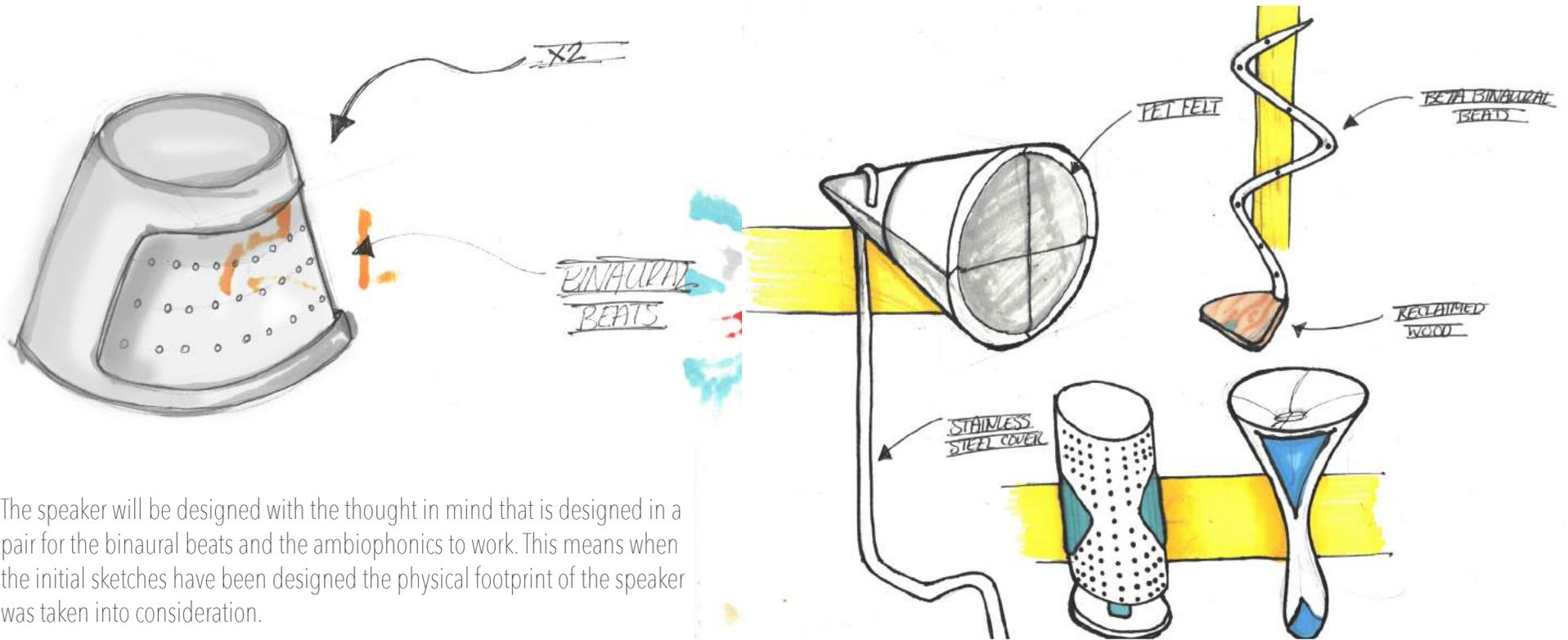
Fig.16

THE SPEAKER

Using the idea of ambiophonics and binaural sounds the idea is to create a set of two speakers that are positioned to help a person relax and go to sleep in their bedroom. The idea at this current time is to create the product and the idea is that the speakers are free standing by themselves in the bedroom, a statement piece in the bedroom.

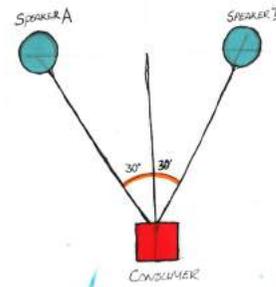
To the right are some initial sketches that were designed with this thinking in place, to design a speaker that will fill these requirements is what is trying to be achieved.

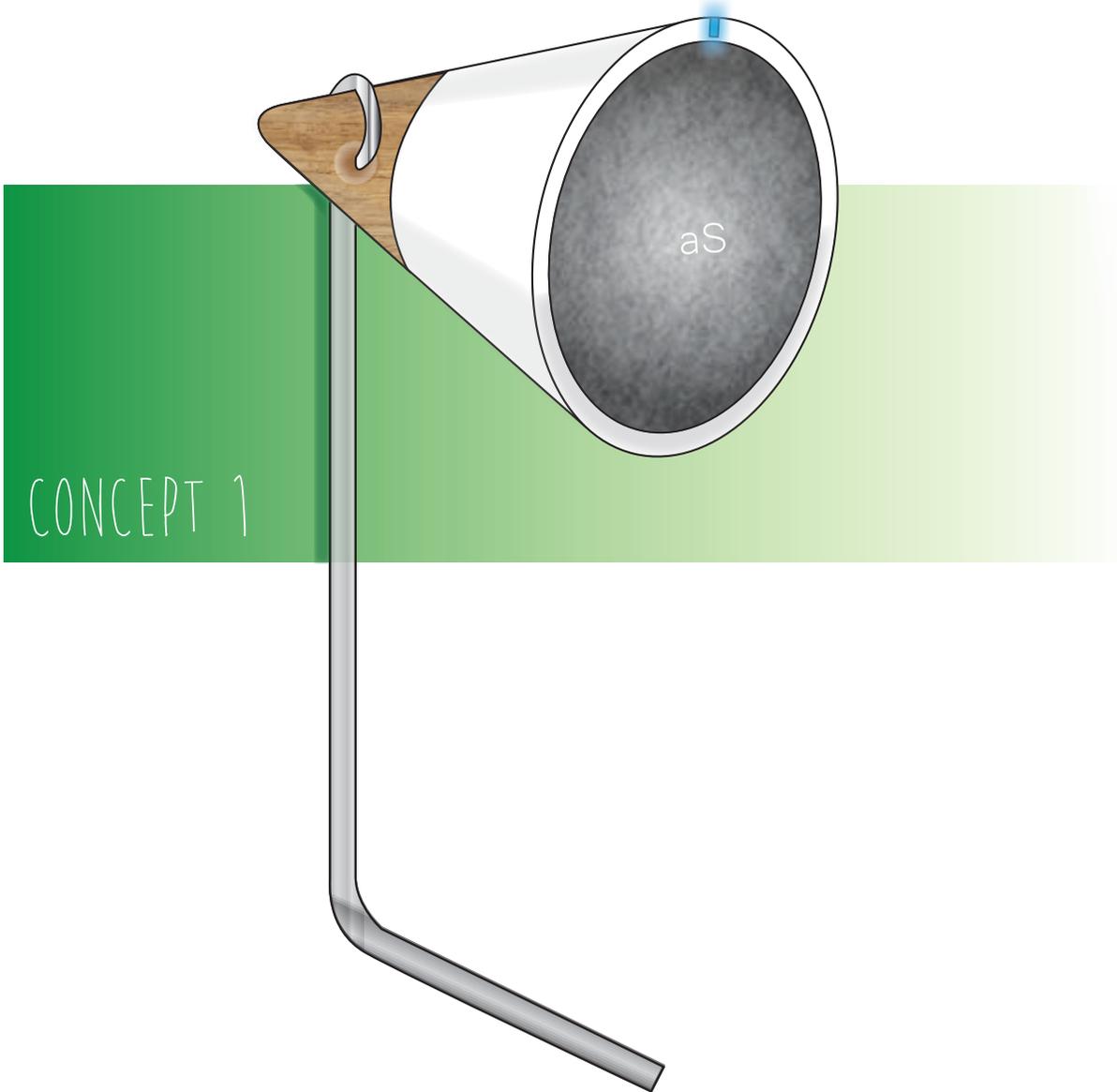
INITIAL SKETCHES



The speaker will be designed with the thought in mind that is designed in a pair for the binaural beats and the ambiophonics to work. This means when the initial sketches have been designed the physical footprint of the speaker was taken into consideration.

With a speaker with a large footprint this will cause complications when setting up the speaker for the correct 30 degree angle. As well as this the form was designed to be very simple and organic.





CONCEPT THINKING

This concept was designed with thinking that it would be free standing. The design is taken influence from Park Hill using neutral and raw materials like the pine and the PET felt. The form of the speaker takes influence from sound waves and how they are emitted from the speaker. The steel stand with reference to Sheffield's heritage keeps the speaker to a light and creates negative space in the product, when it hits the speaker head it wraps around the point of the speaker and controls the speakers movement. It also features a small LED on the front face of the speaker to signal blue tooth connectivity.

FENG SHUI

Feng Shui is a powerful method of balancing joy and inspiration. The art of Feng Shui came from China and uses the idea of creating an environment around you which is balanced and full with harmony, this being perfect for theme of Ability To Grow. The idea that products and objects are placed around us to create a balance of natural energy. Feng Shui all leads down to the same thing, if your surroundings and environment is designed to properly circulate your life-force energy then everyone in that environment should flourish.

Source: Jayme Barrett. (2010)

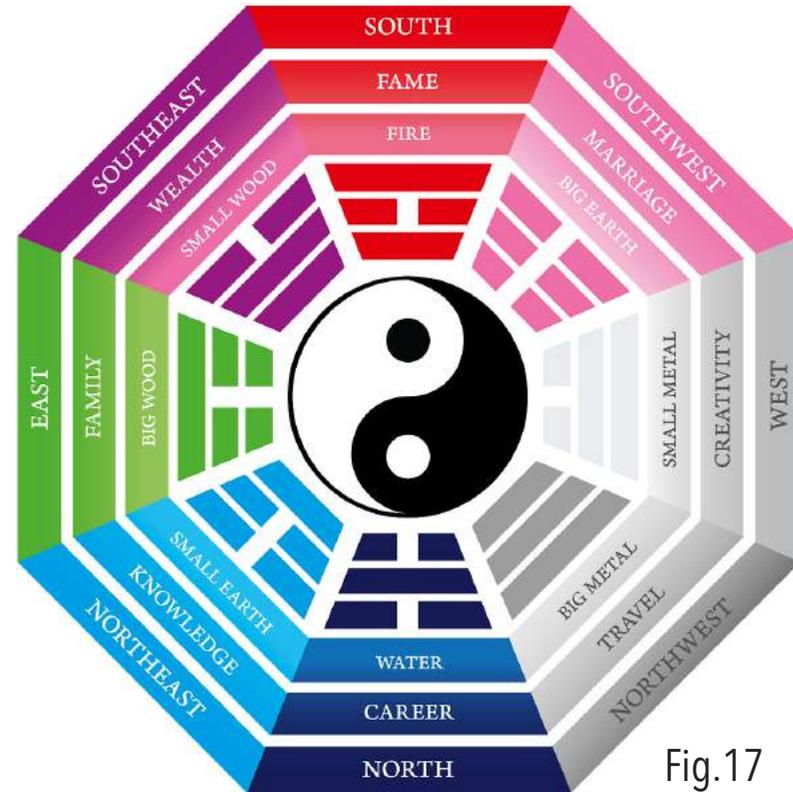
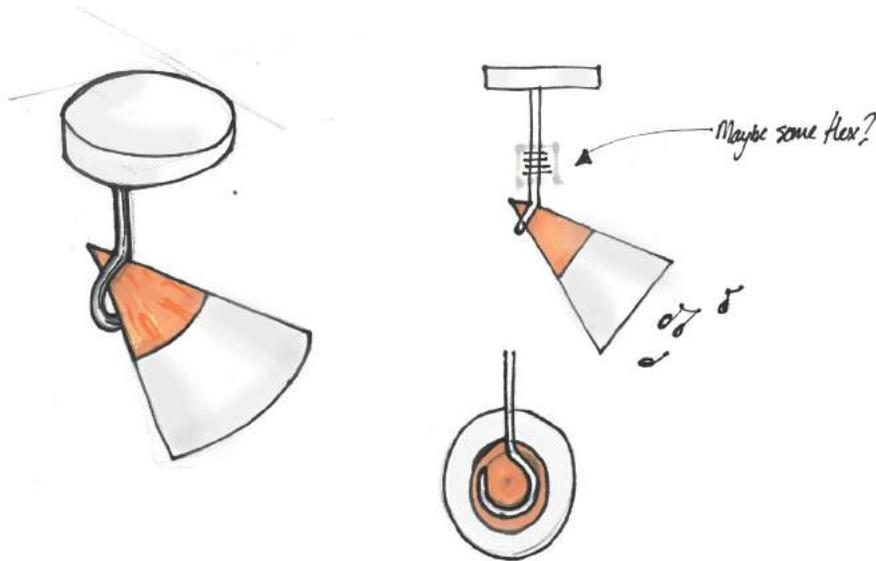


Fig.17



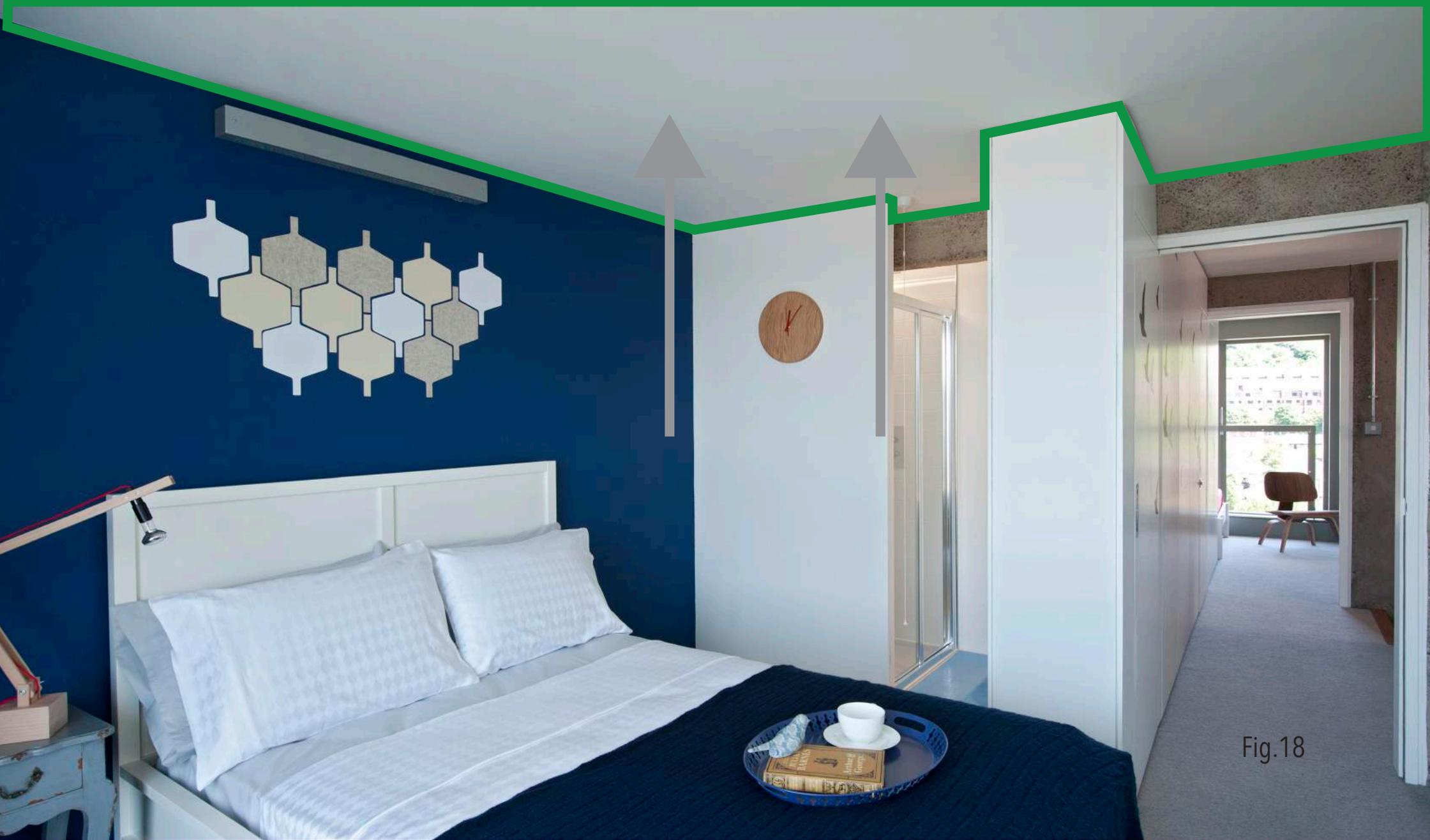
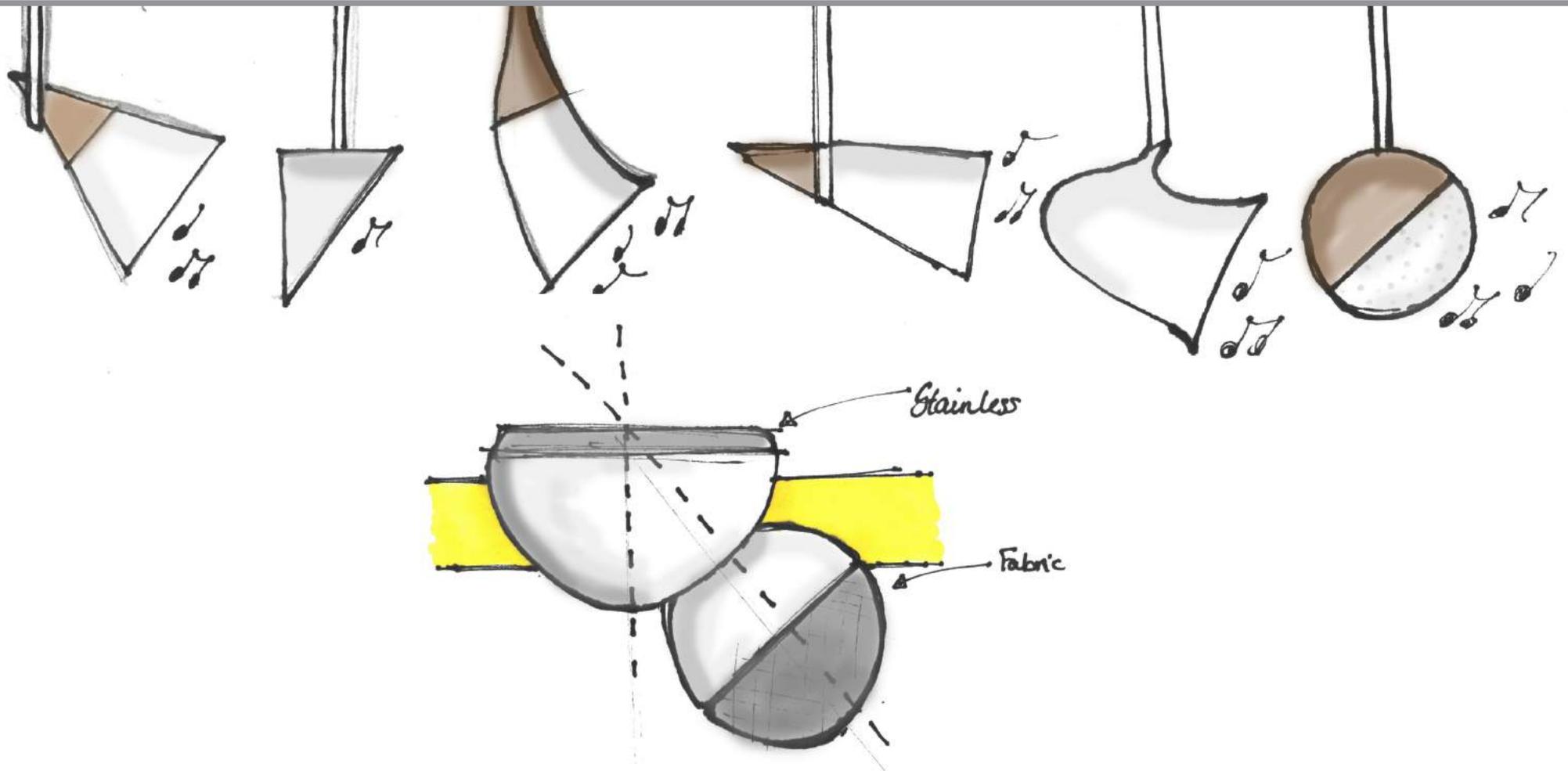


Fig.18

FENG SHUI CHANGES

Due to the idea of Feng Shui being used in our group by an interior member the speaker that has been chosen to be designed takes up too much room and does not suit the harmony of the room. Thinking of this the speaker has chosen to be designed to be mounted to the ceiling rather than a free standing speaker on the floor

DEVELOPMENT SKETCHES



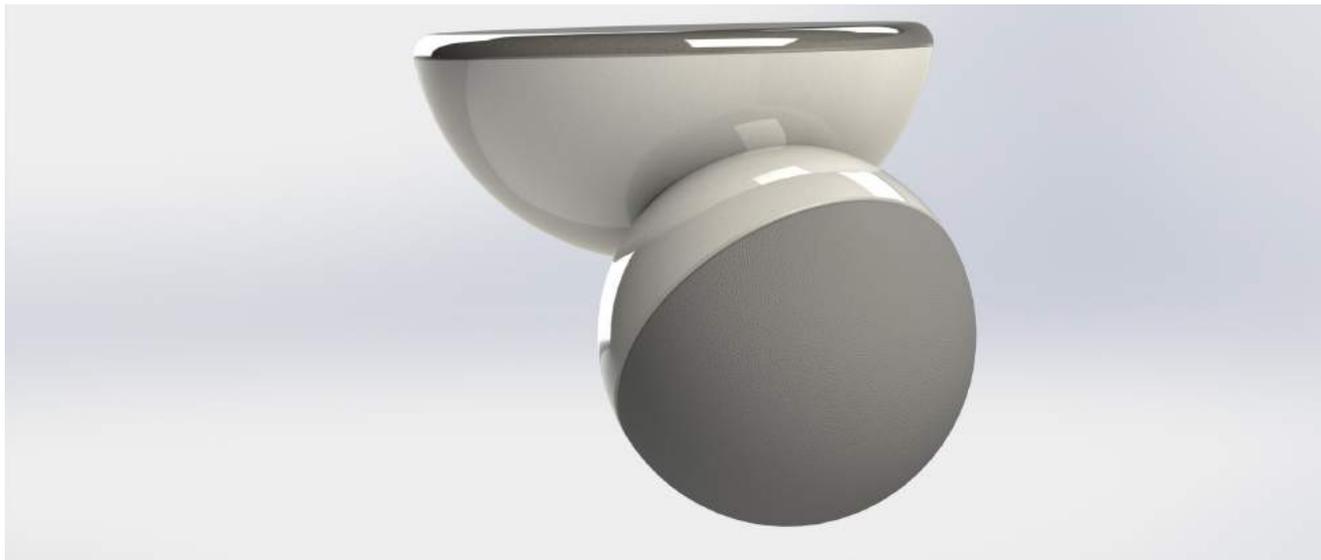


The Development sketches use the idea of a wall mounted unobtrusive design that will fit into the feng shui lifestyle. To do this I am creating an unobtrusive product that features a limited amount of materials and colour. This minimalist look will allow the speaker to flow into the room and not cause any dysfunction to the environment where a floor standing speaker may have.



DEVELOPED CONCEPT

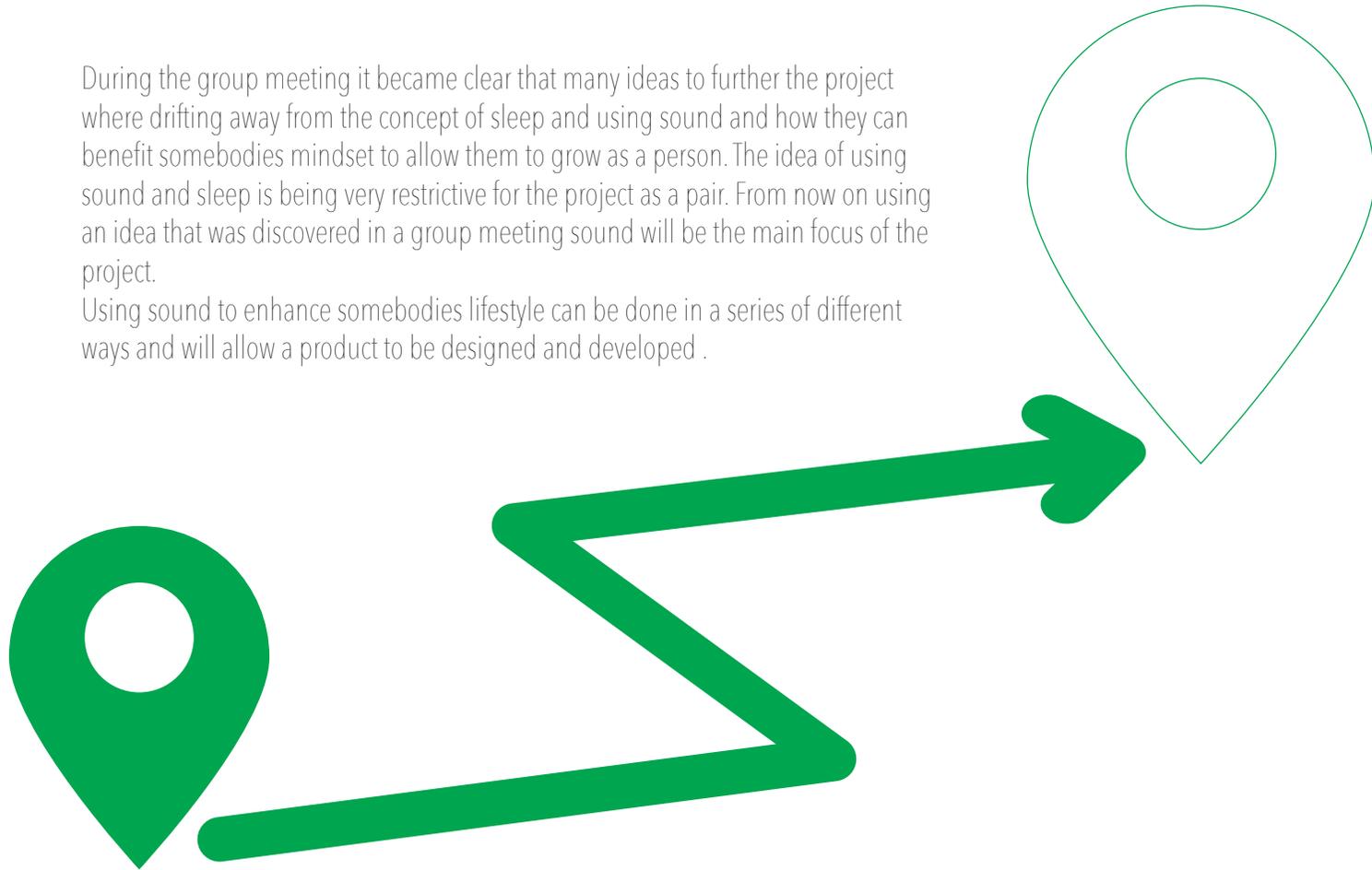
This developed concept uses the idea of a ceiling-mounted speaker that allows the user to control it from their blue tooth connected smart phone. The speakers form is designed to be subtle and unobtrusive in the environment. The secondary speaker ball is split directly in half at a 45 degree angle to give reference to the Ying-Yang symbol that features so heavily through being in the right mindset, from the research done on meditation, sleep and feng shui.



GROUP MEETING RESTRICTIONS

During the group meeting it became clear that many ideas to further the project where drifting away from the concept of sleep and using sound and how they can benefit somebodies mindset to allow them to grow as a person. The idea of using sound and sleep is being very restrictive for the project as a pair. From now on using an idea that was discovered in a group meeting sound will be the main focus of the project.

Using sound to enhance somebodies lifestyle can be done in a series of different ways and will allow a product to be designed and developed .



HEARING A PICTURE

During the group meeting a really interesting idea arose using the idea of hearing a passive picture. Using this idea of hearing an associated song that reminds you of a memory that you once had. This will allow a person to listen to songs that associated with their memories, and give them a sense of enjoyment every time they play their pictures.

The only struggle is to try and think about how a system can be put in place for this idea to work.





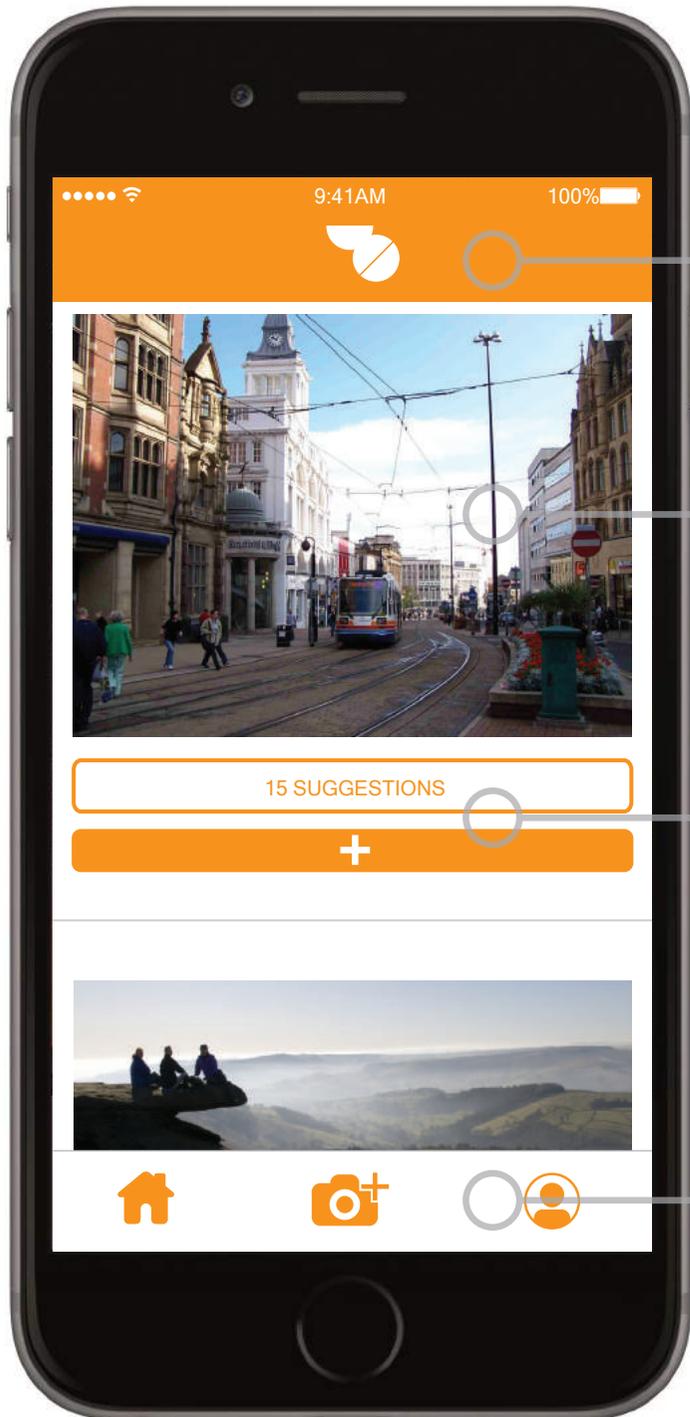
CONCEPT APP

Using the speaker I have planned out and designed an smart phone app that will be used alongside the speaker to help people play their pictures. The thinking behind using an app was that smart phones are so popular in todays world. Almost every person who moves into a flat in Park Hill will be assumed to have a smart phone.

Since 2012, the percentage of smart phone users has risen by 27%, including 90% of 16-24 year olds.

The app has been designed to be as simple as possible and allows users to communicate with the local community using pictures and music on a single social platform. This will allow people to grow as a person whenever they work, rest or play in their home.

HOME SCREEN



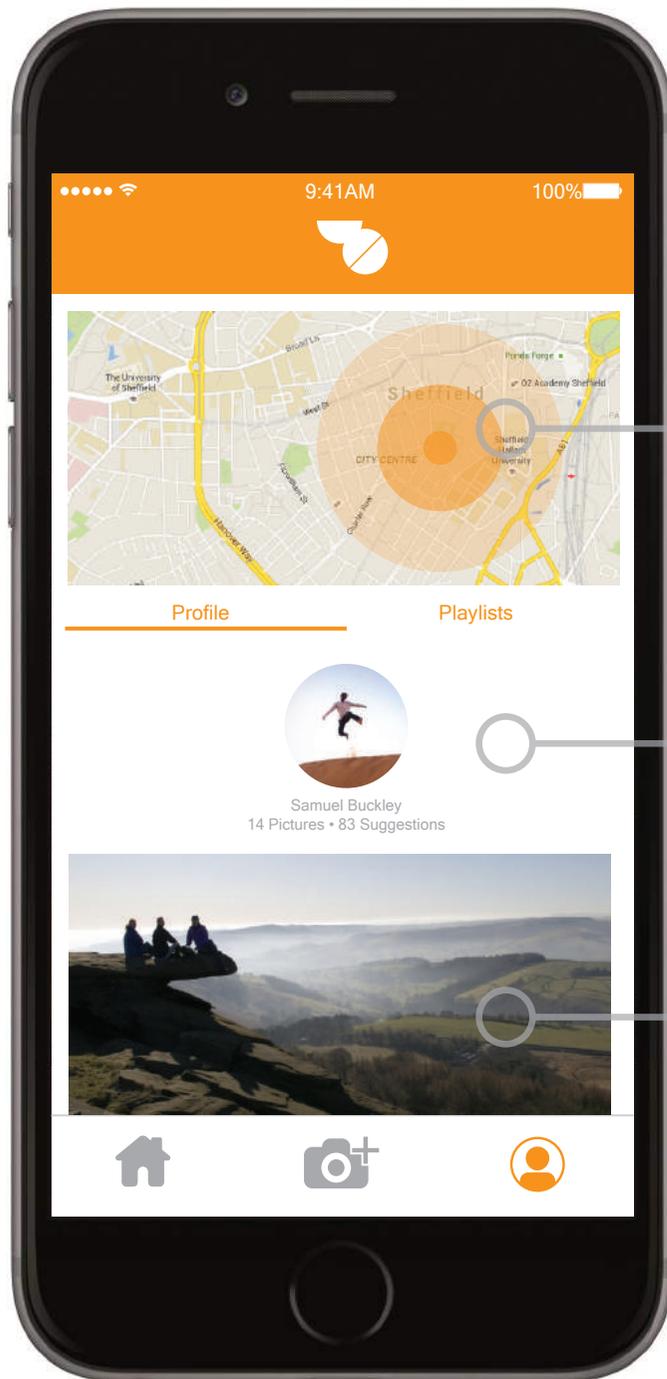
Banner with the app and speaker logo and a orange and white colour scheme to keep up with app trends.

This picture will be posted by a user in to the home screen using Geo-tagging. This means people can only see pictures on their home screen for people posting in their city/area. The picture will be anonymously posted onto the home screen.

These two feature buttons are used for people to look at the suggestions for each picture and a "+" button for somebody to suggest a song/sound for the picture.

Tool bar at the bottom features three controls, home screen where the user views all of the other peoples pictures in the surrounding area and suggests songs/sounds for others. Camera to take pictures inside the app using the smart phone camera and profile, where the person can look through their own pictures and decide what pictures they want to listen to, with regard to the suggestions from other people.

PROFILE

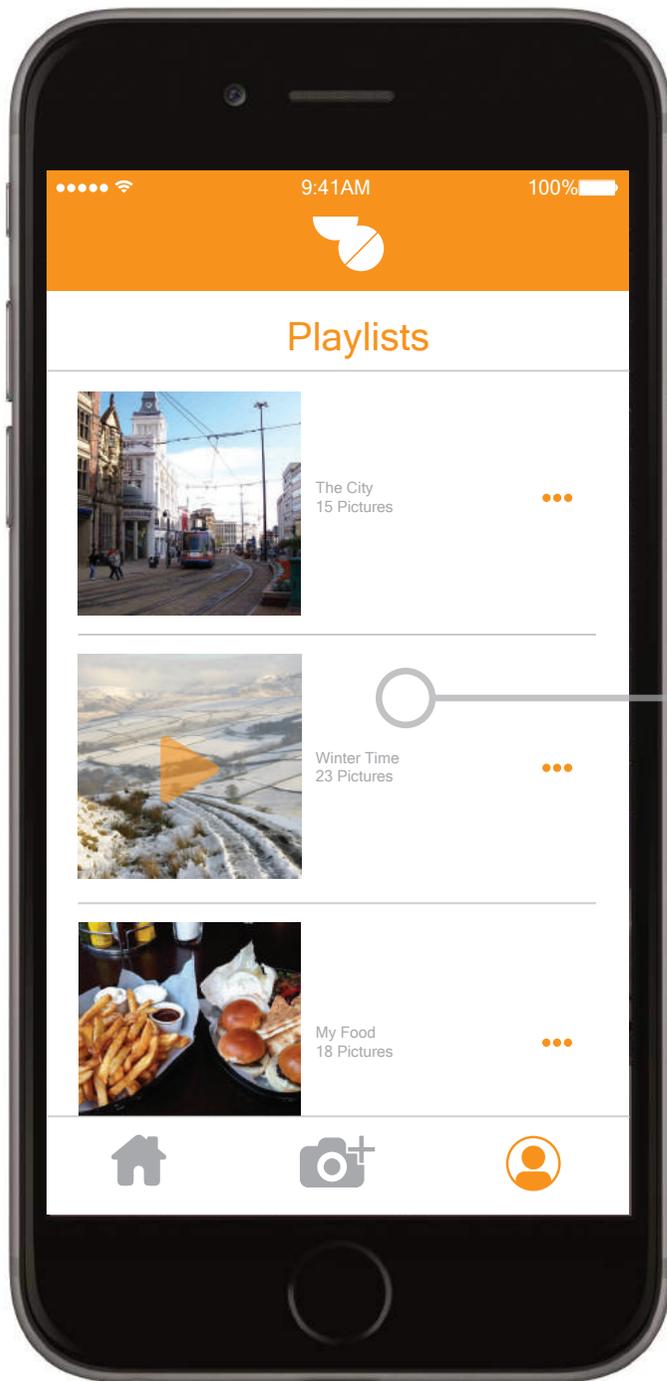


The profile is controlled by where the person is using a GPS system. When in a certain city/area everything the users posts will be uploaded to their current locations home screen.

This central hub of the profile is based visually shows how many pictures the user has posted onto the system. However just because the user has posted 14 pictures does not mean they have 14 sounds/songs to go with it. They could have 45 sounds/songs for 14 pictures due to the amount of suggestions from the community.

Under the profile all the users pictures will appear and will be able to be seen by downward scrolling. They can scroll through their pictures and click any one at any time and it will play all of the suggested songs for that picture.

PLAYLISTS



The user can create photo albums that go under the name of playlists. They assign pictures to go in the playlist and then this will allow them to listen to a group of memories at one after another. Examples to the left such as "Winter Time" the user will put all their winter pictures in this album and listen to the suggestions.

ANONYMOUS COMMUNITY

The system works using an anonymous community, this allows people to communicate with each other through the app without knowing who they are talking to. This allows somebody to suggest a song or sound for somebody else, when that person received that suggestion they will not know who did it they will have a sense of happiness that one person has helped them with a suggestion and apply this happiness through out to everyone in their community and their lives.

Source: Chelsea Stark. (2013)



MUSIC AND MEMORIES

Memories can be stimulated by music throughout our lives, certain songs can remind of us certain memories and experiences through our lives. Even sad music can remind us of happy times and happy music can remind of us sad times. This is called by psychologists as the "reminiscence bump". Music evokes emotion through the sound and feel giving relating back to a time where a person has associated these feelings with that music.

Source: Tiffany Jenkins (2014)

UNOBTRUSIVE DESIGN

Due to the previous concept not being as unobtrusive as required a series of development sketches were designed again to try and design a ceiling mounted speaker that is unobtrusive and does not take over the room or become a centre piece like a B&O self standing speaker would.

Mock Wallace. (2011)

HOW?

NEGATIVE SPACE

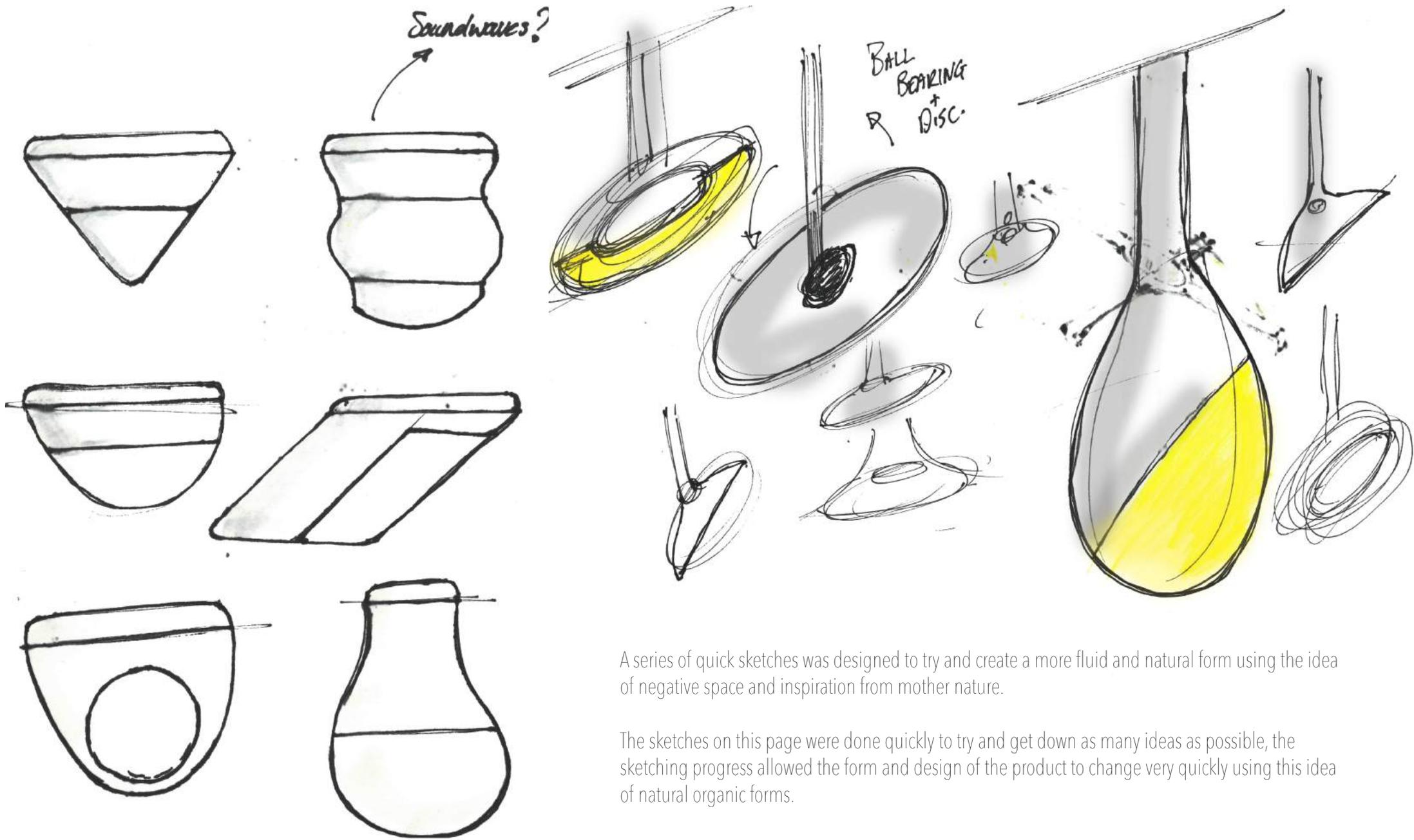
FORM

COLOUR

MATERIALS

FUNCTION

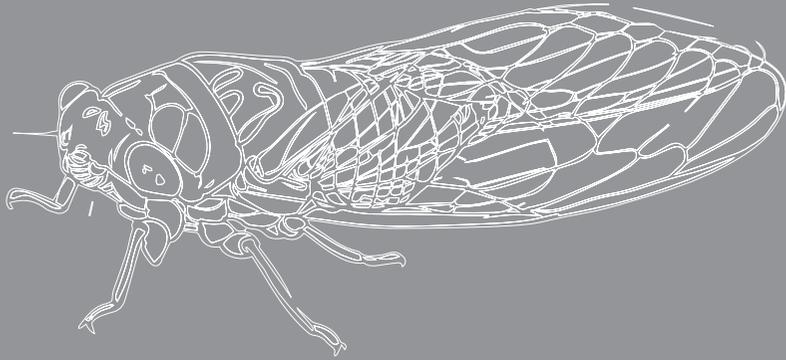
SOUND



A series of quick sketches was designed to try and create a more fluid and natural form using the idea of negative space and inspiration from mother nature.

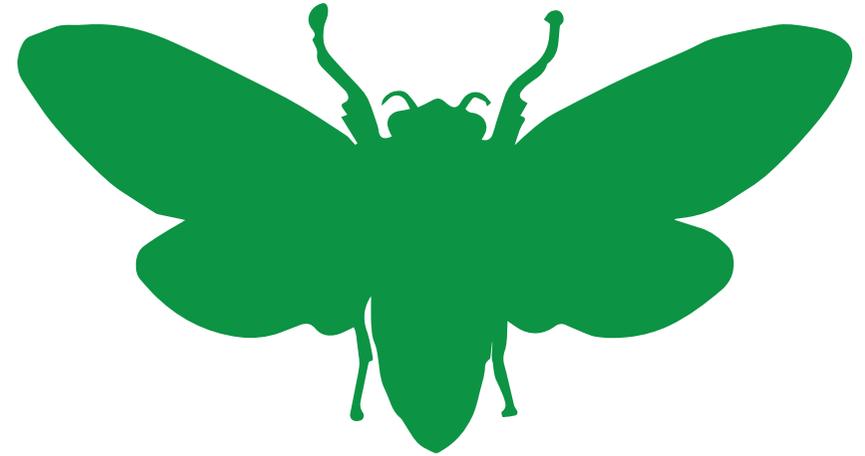
The sketches on this page were done quickly to try and get down as many ideas as possible, the sketching progress allowed the form and design of the product to change very quickly using this idea of natural organic forms.

CICADA



Cicadas come from the same family as lotus and grasshoppers. They are most well-known for their specific noise using the vibrations of their membranes. They use these sounds to communicate with mates and to express alarms. Cicadas are also known for disappearing for many years and then to reappear some time later.

Source: National Geographic. (2015)

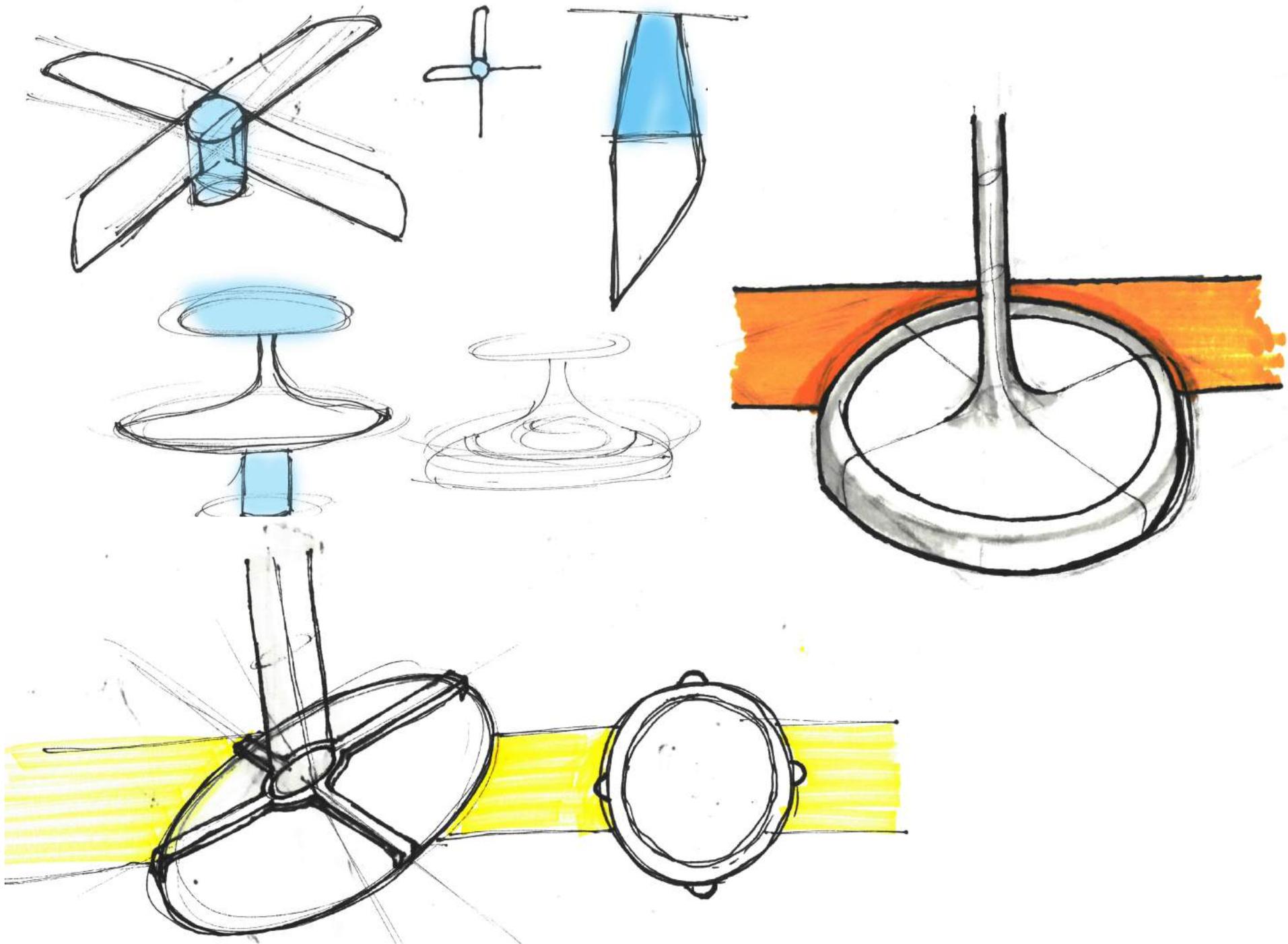


Chosen Logo

Due to these two main properties of the cicada, the distinctive sounds it releases and the way they disappear for many years, giving them unobtrusive qualities shows that a Cicada is a great way of branding the system and the speaker. The speaker design is created to be as unobtrusive as possible and the app will allow distinctive sounds to be played just like the Cicada releases.



Fig.20



FINAL FORM INSPIRATION

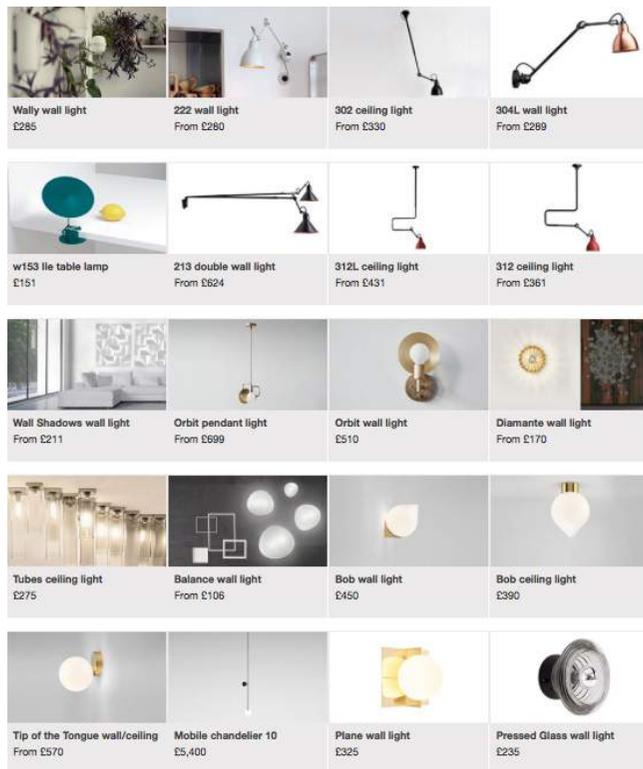
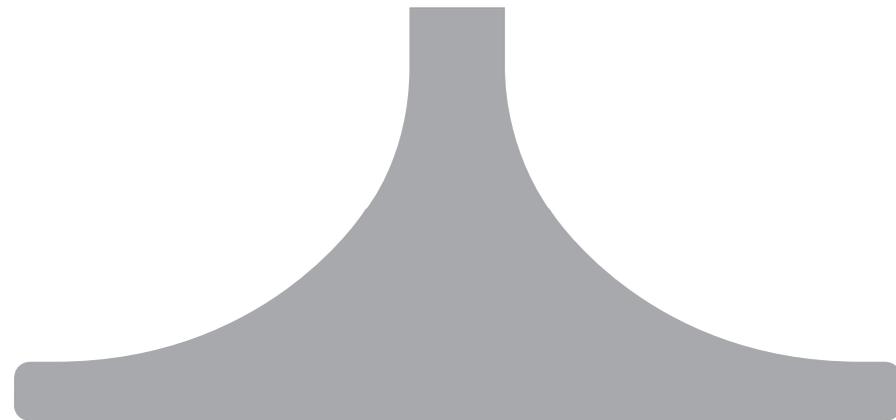
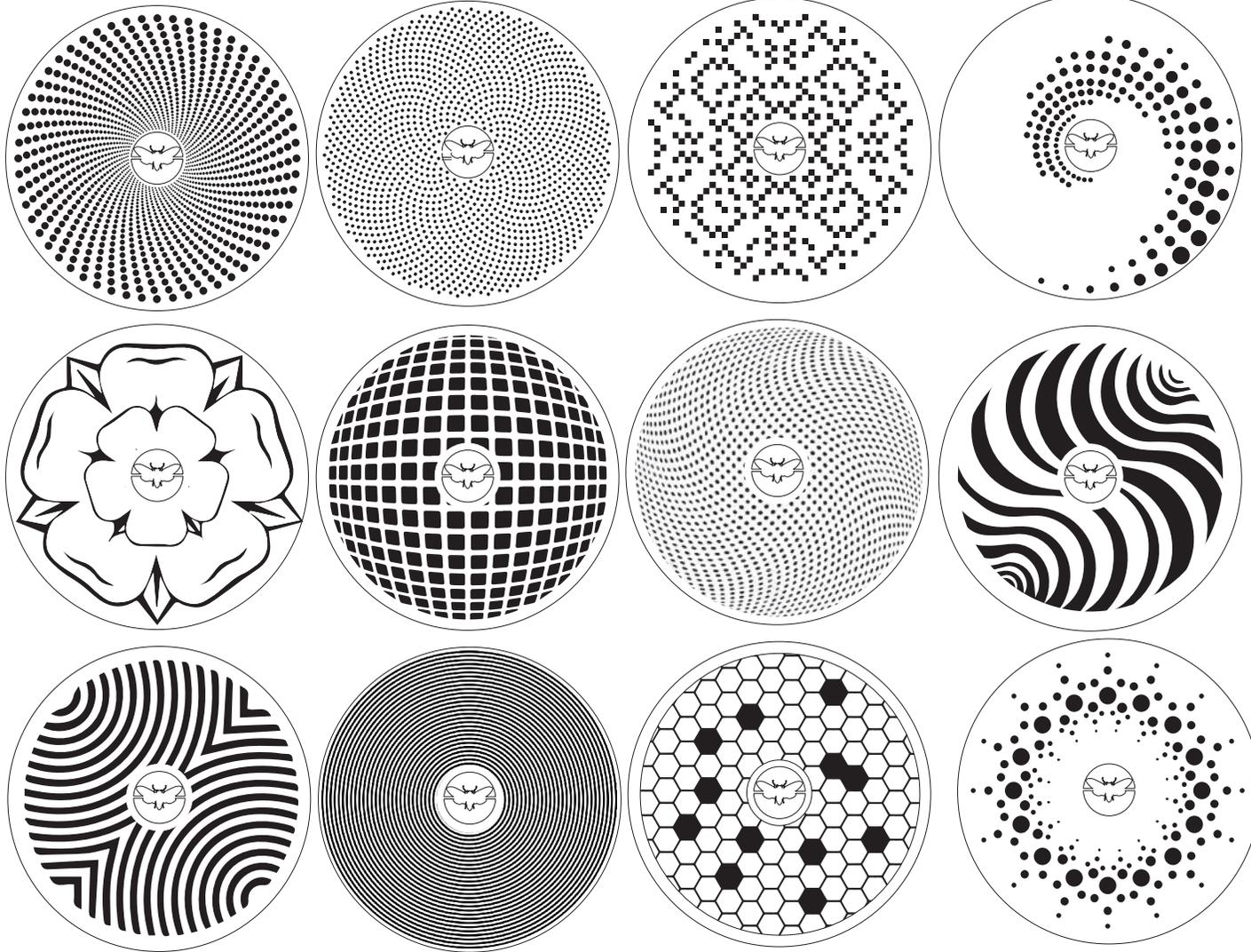


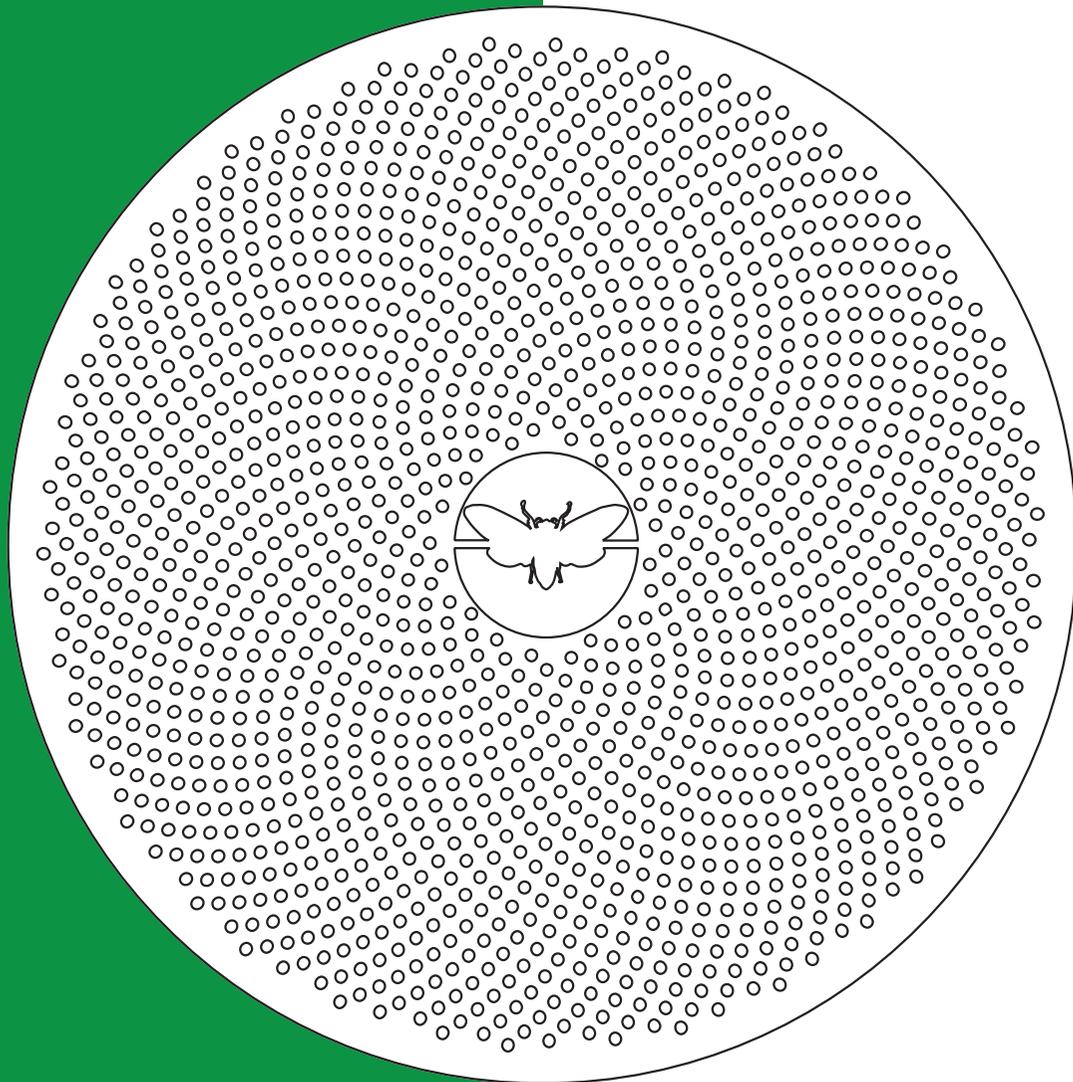
Fig.23

The form inspiration came from looking at a design company in London called TwentyTwentyOne. They design products to be minimal and subtle and take inspiration from Scandinavian influences. With my design the final silhouette has been designed below. It has been designed to feel like it would be part of TwentyTwentyOne's collection, this has been done so the final concept will fit in with what is trying to be achieved with the final design.

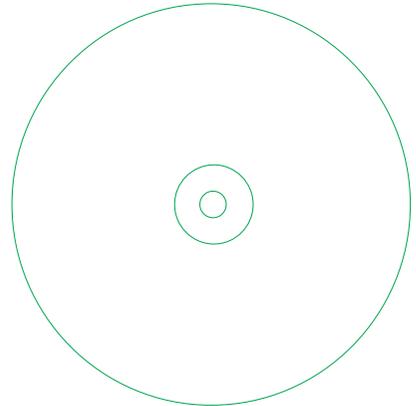
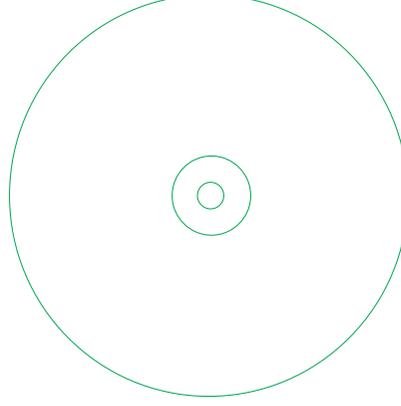
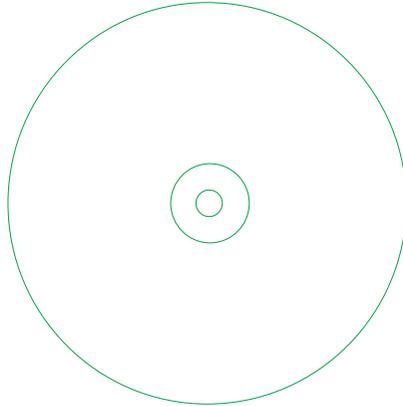
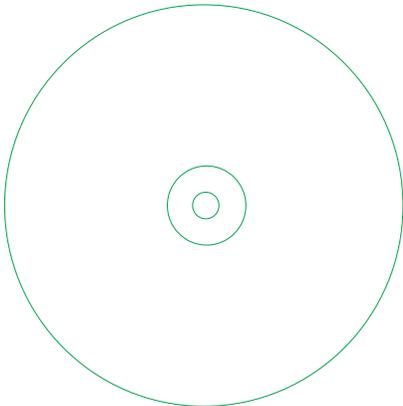
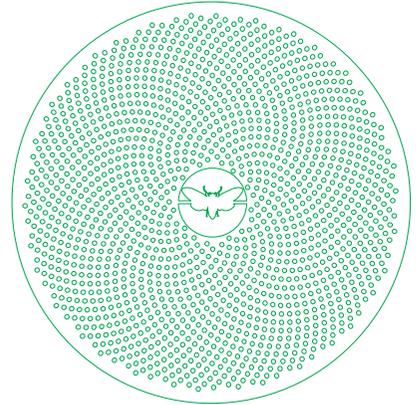
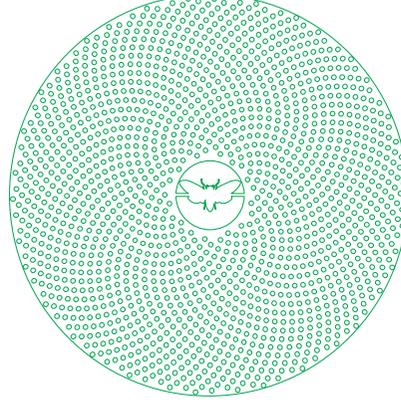
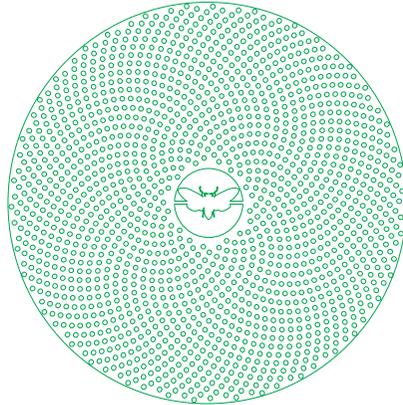
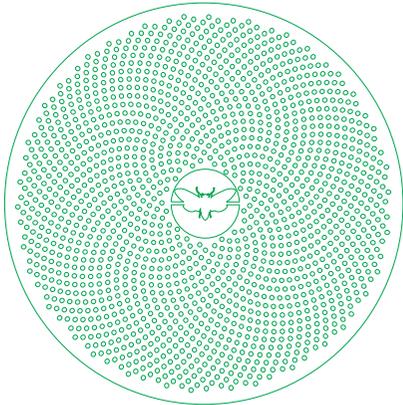
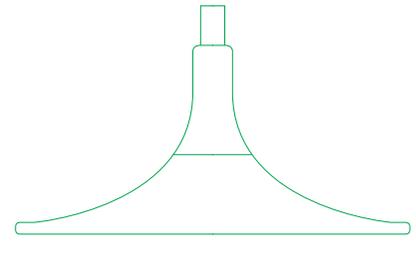
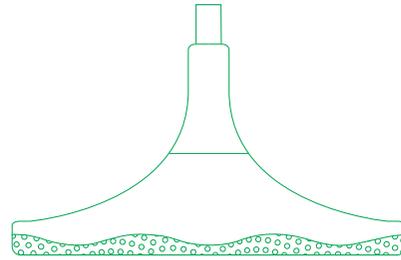
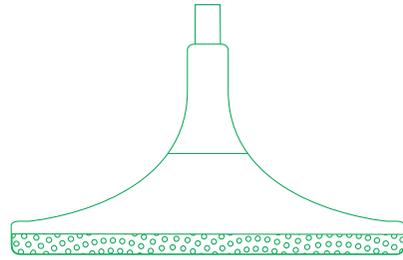
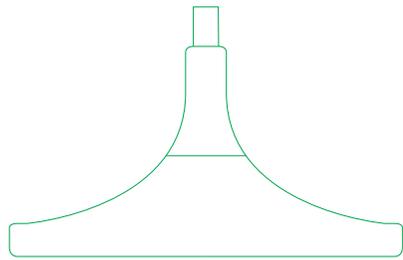


SPEAKER PATTERN





This chosen speaker pattern is called the sunflower pattern. It is a copy of the pattern that comes from the Sunflowers surface. This pattern was chosen due to its unique and interesting pattern that does not grab the users attention until they truly look at the pattern, when somebody looks at this pattern it seems to intrigue them without them knowing why. The reference to nature gives the speaker a humble and subtle aesthetic.

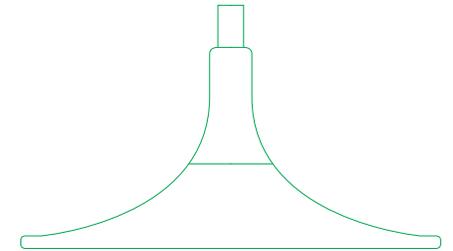
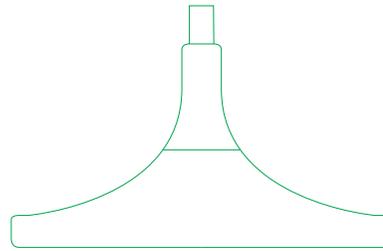


After the model and the speaker pattern was designed it became clear that the speaker required a small amount tweaking in its details. During this part it was the focus on the speaker grill to the main body of the speaker. The series of four different ideas to the left explore small details that could change to change the look of the speaker. After the test model was made it became clear that the speaker needed to be thinner, or using a speaker grill that comes round the outside of the fillet to try and make the speaker look thinner.

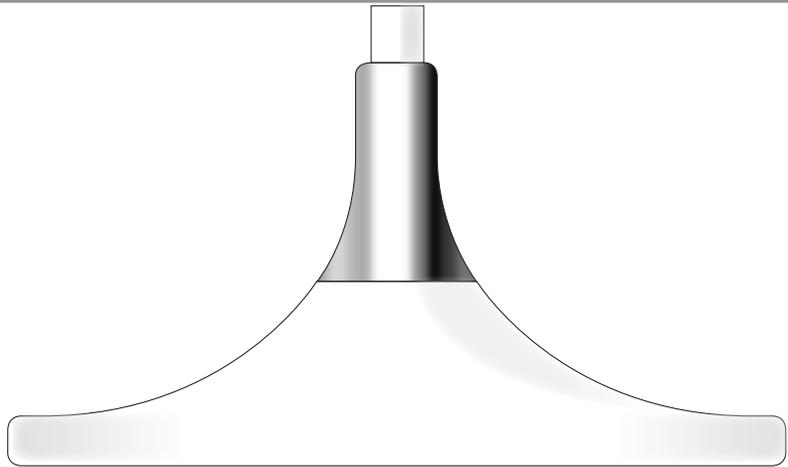
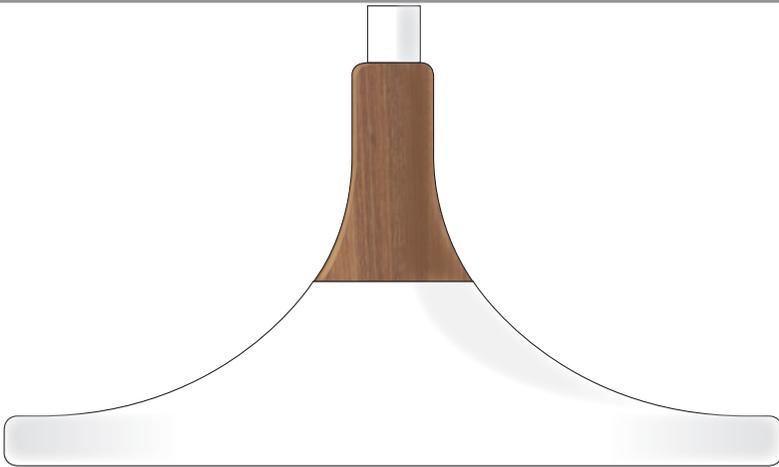
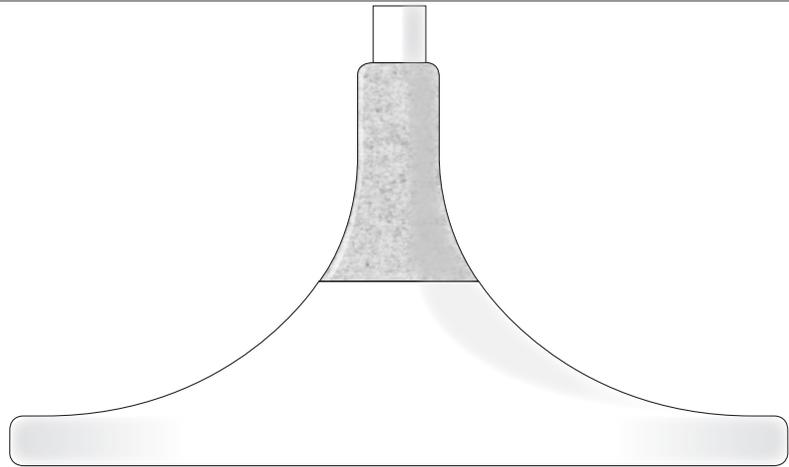
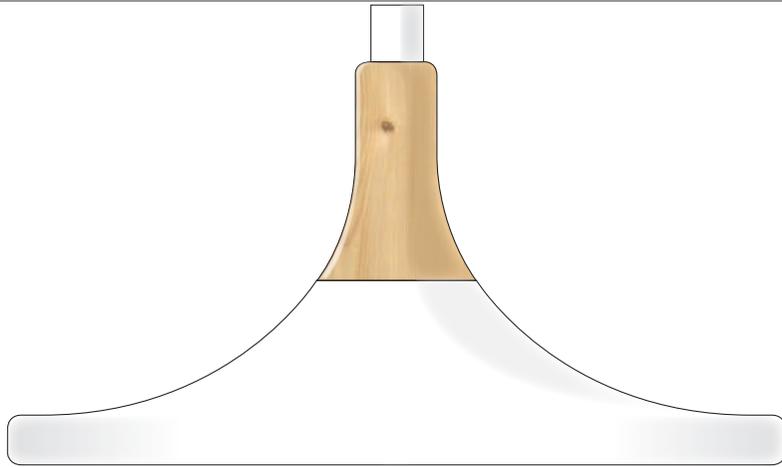




TEST MODEL



After a few test models the size and proportions of the speaker was created, this enabled a final design size to be identified. As well as this the laser cutter helped to create a speaker grill for the speaker. I chose two examples from the previous pages to look at how they aesthetically look on the model. After creating a model it became clear even more material need to be removed from the speaker to create a sleeker more defined look to the speaker.



MATERIAL BAND

ENGLISH PINE

Using an English Pine will keep the speaker looking light and minimalist giving the user a sense of calmness when they look at the product. It will also enable the user to gain a sense of natural harmony from the wood rather than a manufactured material like some of the other alternatives.

These above are the reasons why English Pine will be selected as the material for the band around the top of the product.

ENGLISH WALNUT

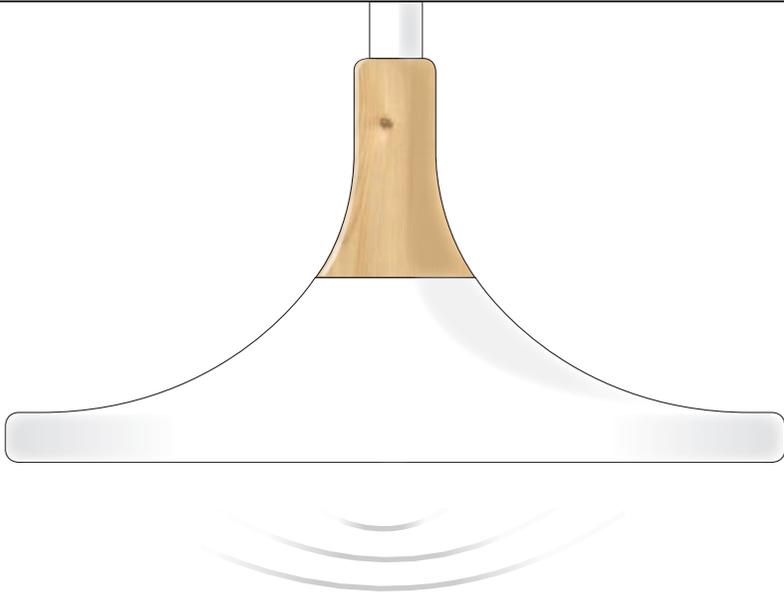
This english walnut gives the speaker a sense of stability and toughness, however the high contrast that the speaker will have with the white ABS is very noticeable. This is why the english pine has been chosen over this material, due to subtleness the english pine gives compared to the harshness from the walnut.

PET FELT

PET felt will give the speaker a sense of softness and a tactile look however, this is something that wants to be avoided when designing this speaker. The idea of the speaker is to not be noticed so the memories and the sounds can be the thing that the person engages with, not so much the speaker.

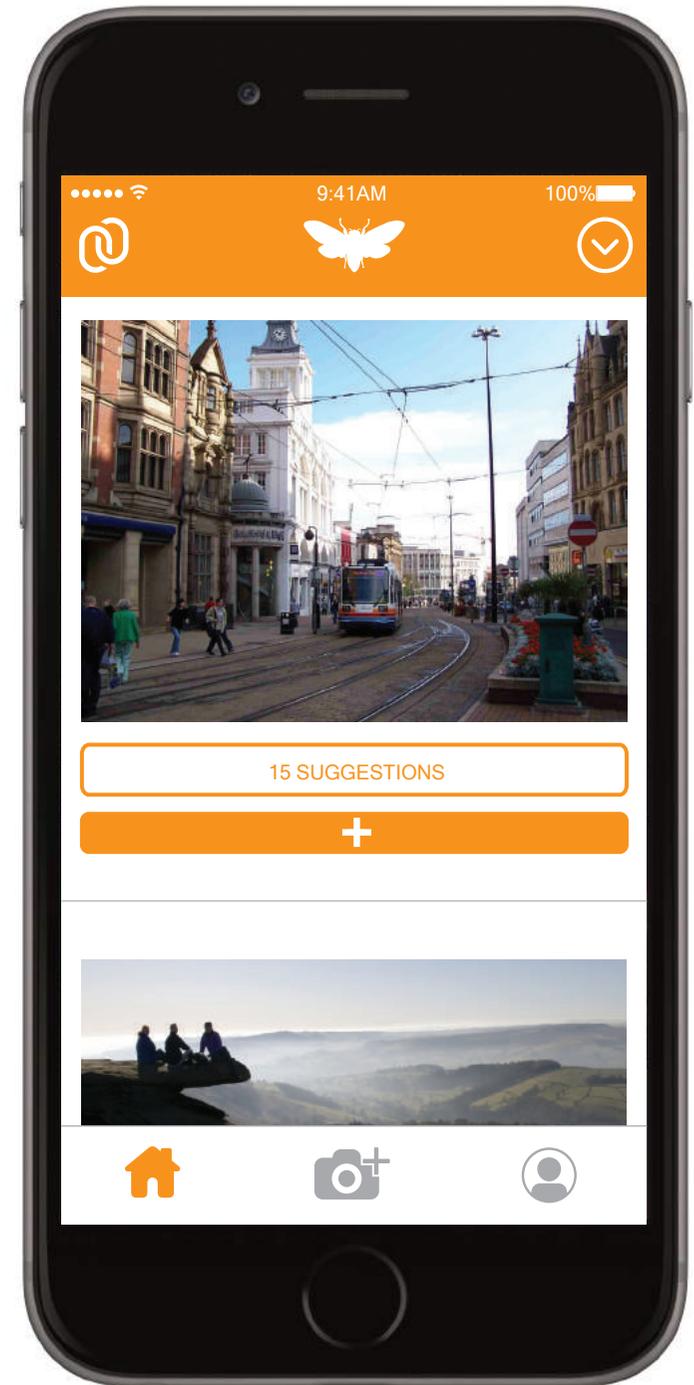
STEEL

Sheffield's heritage is known for the steel industry, this speaker that is designed for Park Hill in Sheffield, so steel is an obvious choice for the material band. The reflective nature of steel allows the speaker to look much smaller than it is, almost using negative space from its surface properties.



THE DROP

Whenever the speaker needs to be interacted with it will have a feature called "The Drop" this allows the user to interact with the product as it brings it down to around chest height. This is done by loading the app and pressing the top right button (arrow pointing down). This then lowers the speaker so either the batteries can be changed or the speaker can be cleaned. This idea also stops the idea of using any chairs or tables to be stood on when interacting with the product.



WELL SYSTEM

The well system has taken inspiration from how Wells are designed to drop their bucket. They use a rope and a horizontal metal bar that turns, when this turns either clockwise or anti-clockwise it will lower or higher the bucket. For the speaker it will use this idea alongside two wheels that will rotate to help hold the wire as well making the drop more gradual and controlled.

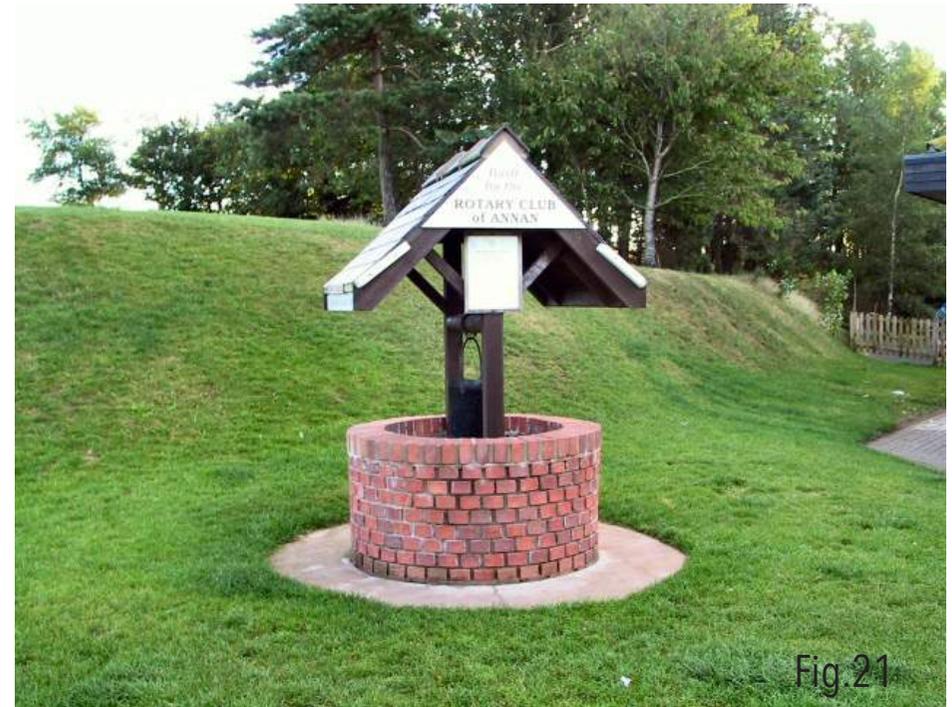
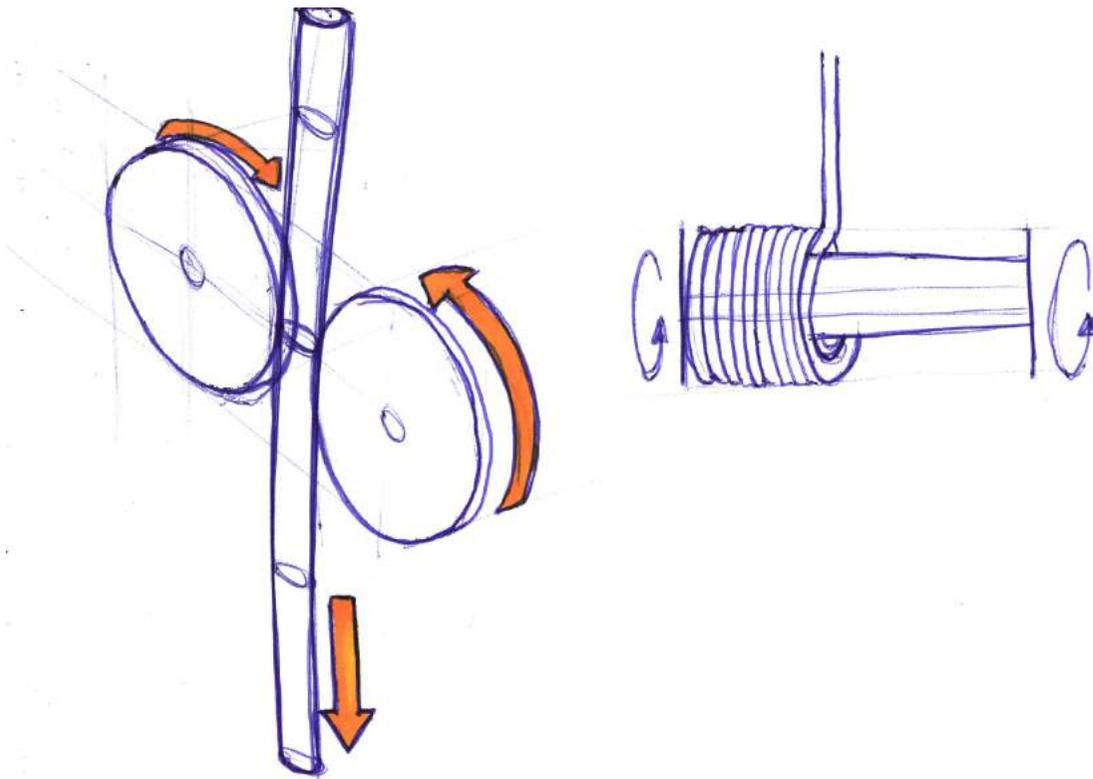
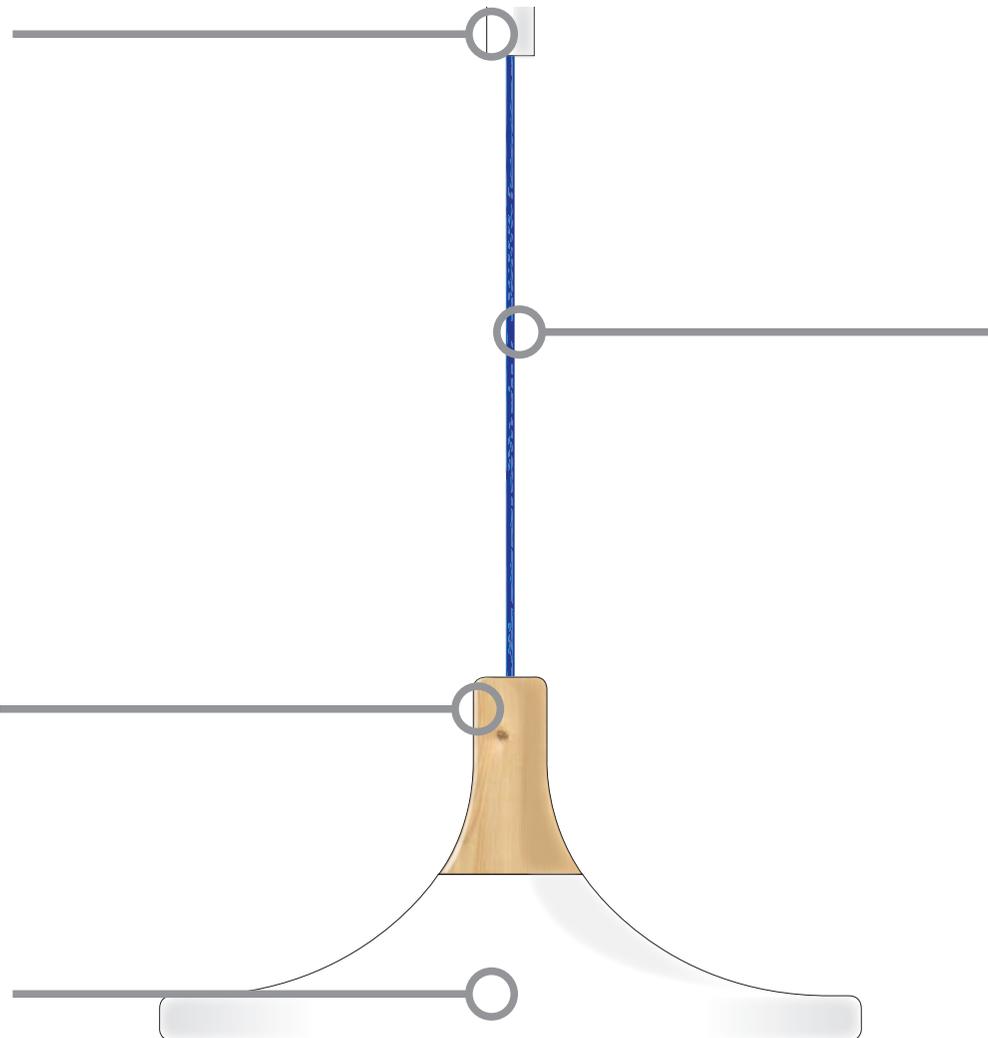


Fig.21

This is the ceiling mount for the speaker and allows it to be fixed for a long period of time. This will be made from a white medium gloss ABS, inside it will hold the wire and have four screw holes for the user to screw the speaker into their desired environment.



English Pine was chosen to create the material band and case the "well" system that helps lower and raise the speaker.

The ABS body of the speaker cases the main speaker and is split into three parts, the bottom part has the speaker grill machined the sunflower pattern into it.

The wire that is used to drop the speaker to enable the batteries to be changed will be sourced from Urban Cottage Industries, using their navy blue fabric cable. It will be made from this due to its physical strength, to enable the speaker to be lowered and highered. As well as this the aesthetic look of the wire will enable the speaker to stand out more when interaction is involved, however when no interaction is involved and you can not see the wire, it will remain a neutral coloured product. (Source: Urban Cottage Industries, Navy Blue Fabric Cable, 2015)



Fig.22

POWER

Due to the speaker being ceiling mounted it became clear that the speaker needed to be powered in a very unobtrusive way, This means wiring the speaker into the mains electricity of the home would cause a large amount of mess and work. To counteract this the drop idea was created and this allowed the design to be almost wireless. The speaker will use 4xAA batteries and this will allow at least 8 hours battery life on full volume..

THE BRAND



The idea for the branding behind the speaker came from the Cicada, the loudest and most distinctive insect through sound in the world. The speaker I have designed will work alongside the app to create the chance for people to listen to their memories through song suggestions, giving the person the ability to grow. However as part of the branding this will not be the only speaker that can work with the app. A proposal for a range of different speakers for the Cicada brand could be designed, all specifically designed to be unobtrusive speakers that will work hand-in-hand with the app to help people listen to their memories, all aimed at different price points for different users.



FINAL CONCEPT

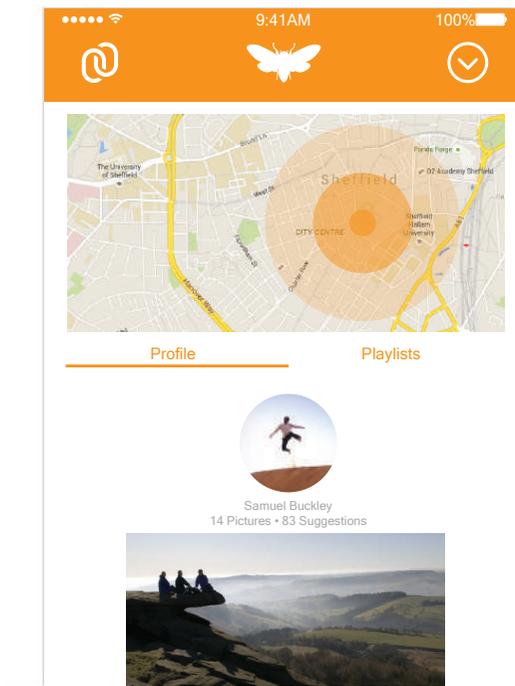


Cicada
 Cicada Sound >
 No in-app Purchases

★★★★☆ (335)

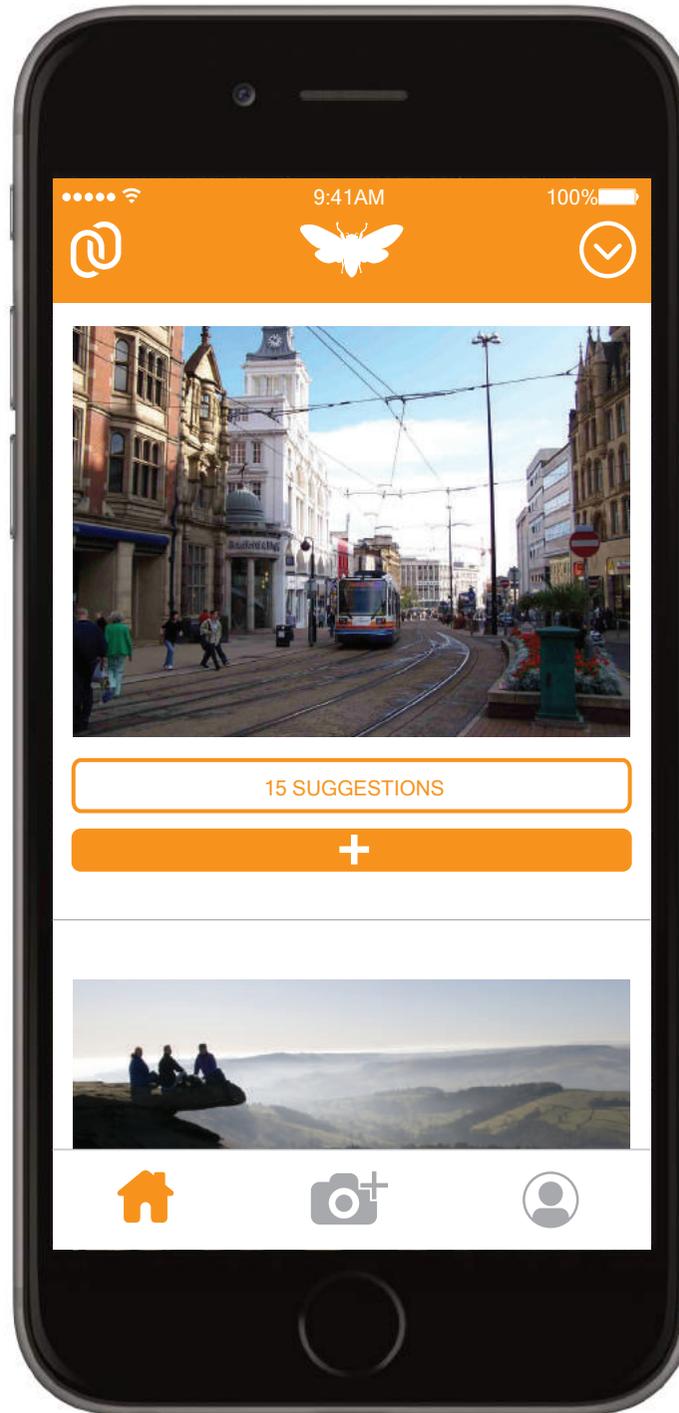
+ GET

- Details
- Reviews
- Related



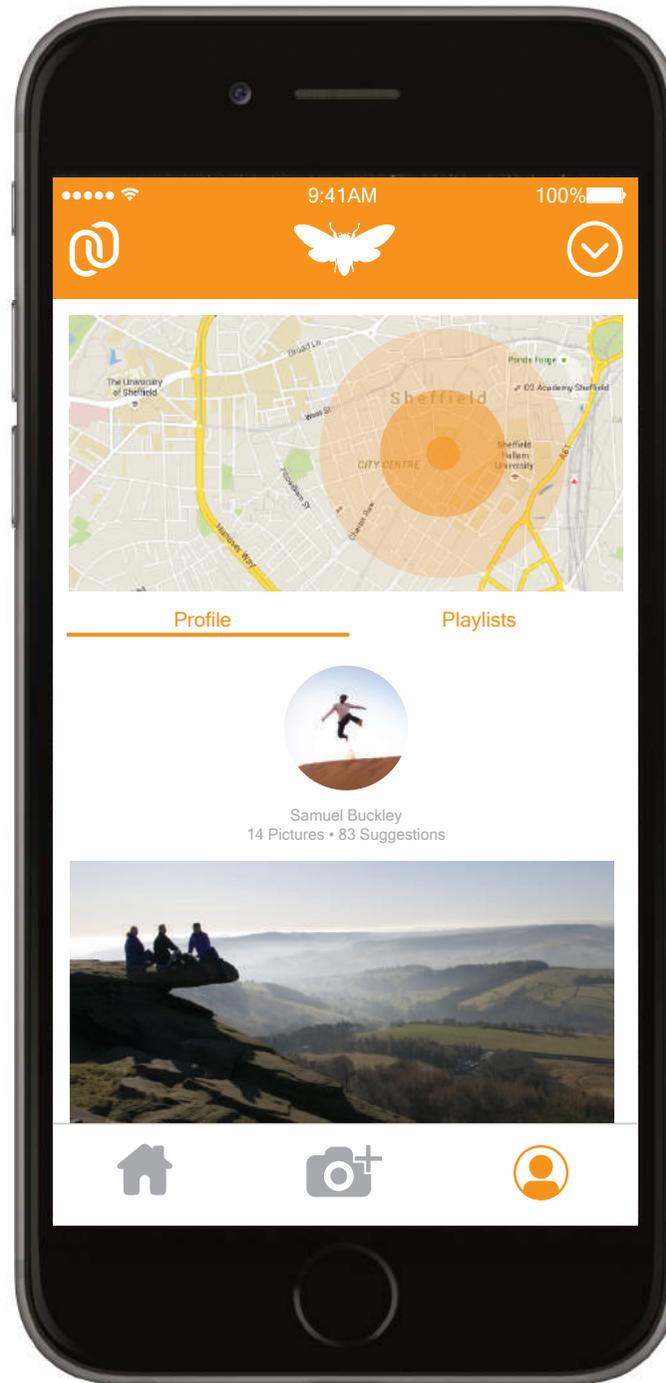


C I C A D A



Home page for the app to show what people are taking pictures of in your area, people go through and add music suggestions for the picture. This allows people to feel their pictures and experience them in a much more interactive way.

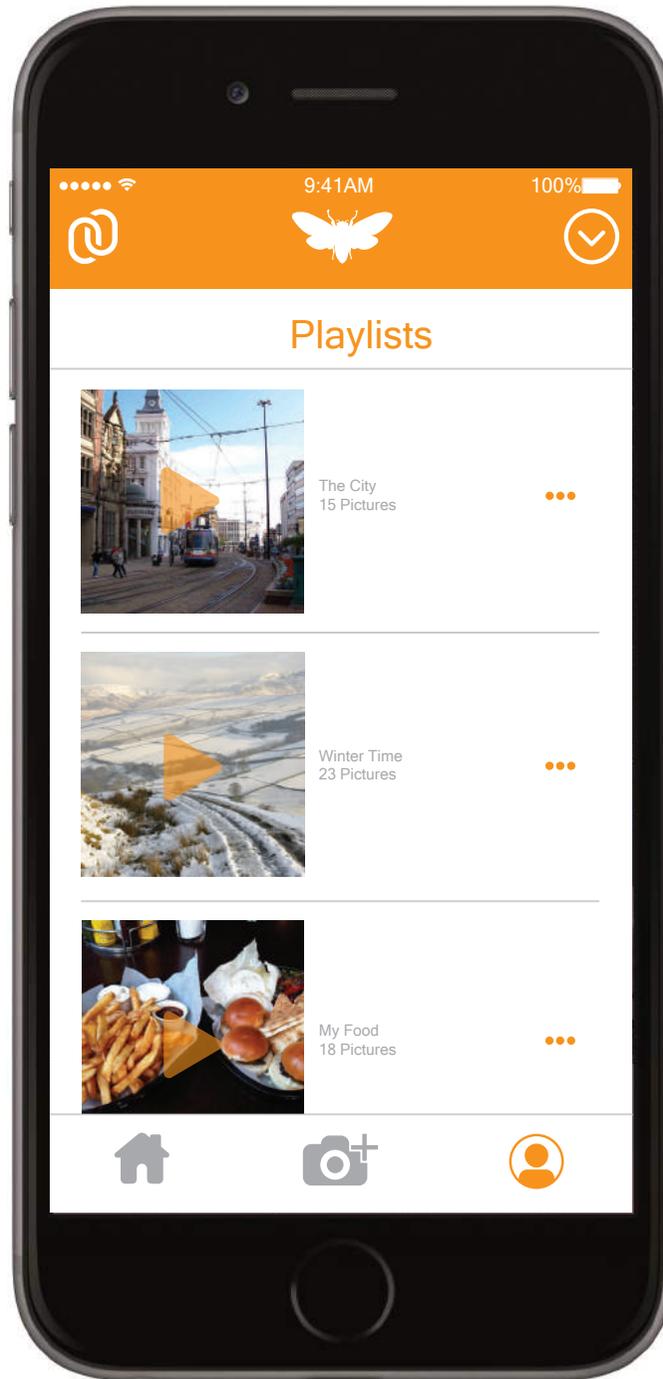
The profile is where the user can look at their own pictures and the suggested songs, they can scroll through and select pictures they want to listen to.



C I C A D A

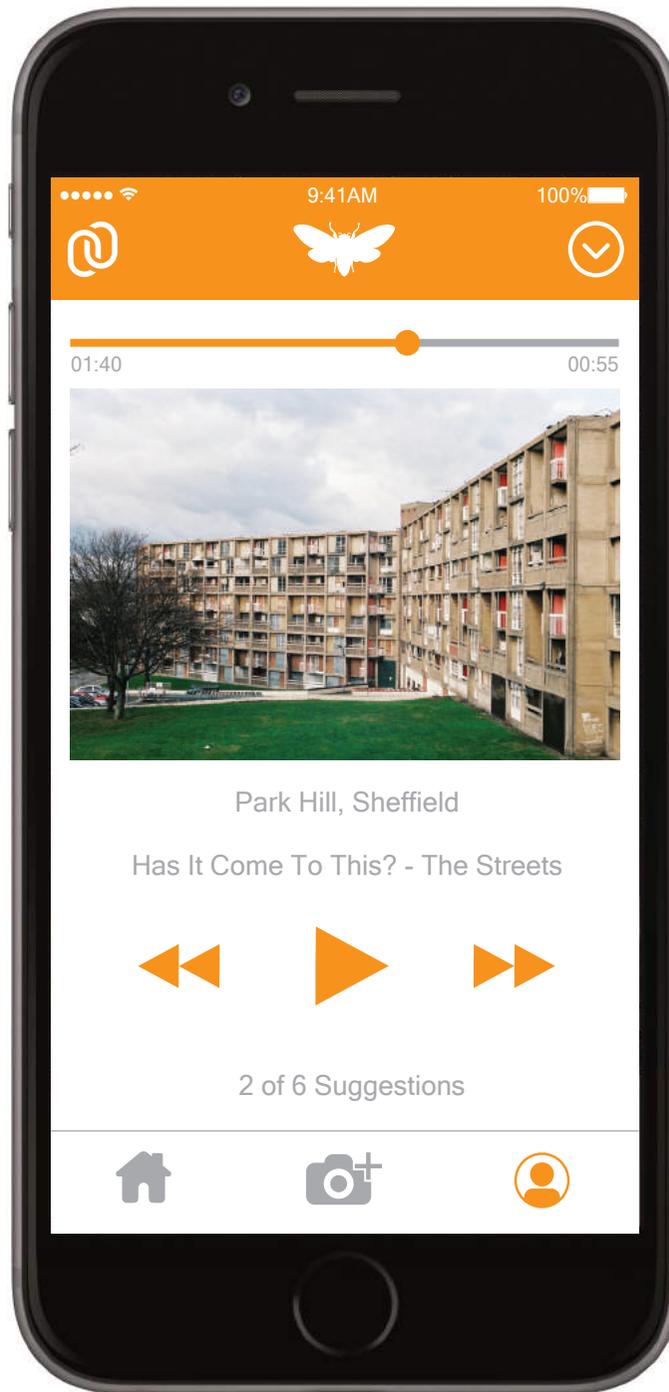


C I C A D A



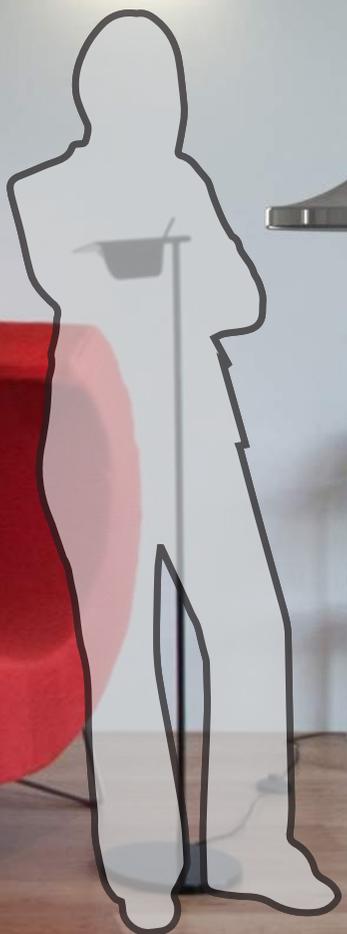
Playlists were designed so the user can group their pictures together to listen to a large amount of relateable memories at the same time.

The "Play" screen shows where the picture was taken and what song somebody has suggested, helping people experience their memories in a new enlightening way.

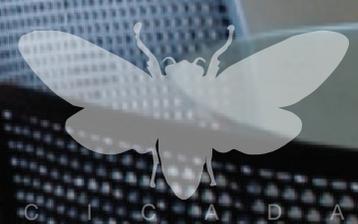




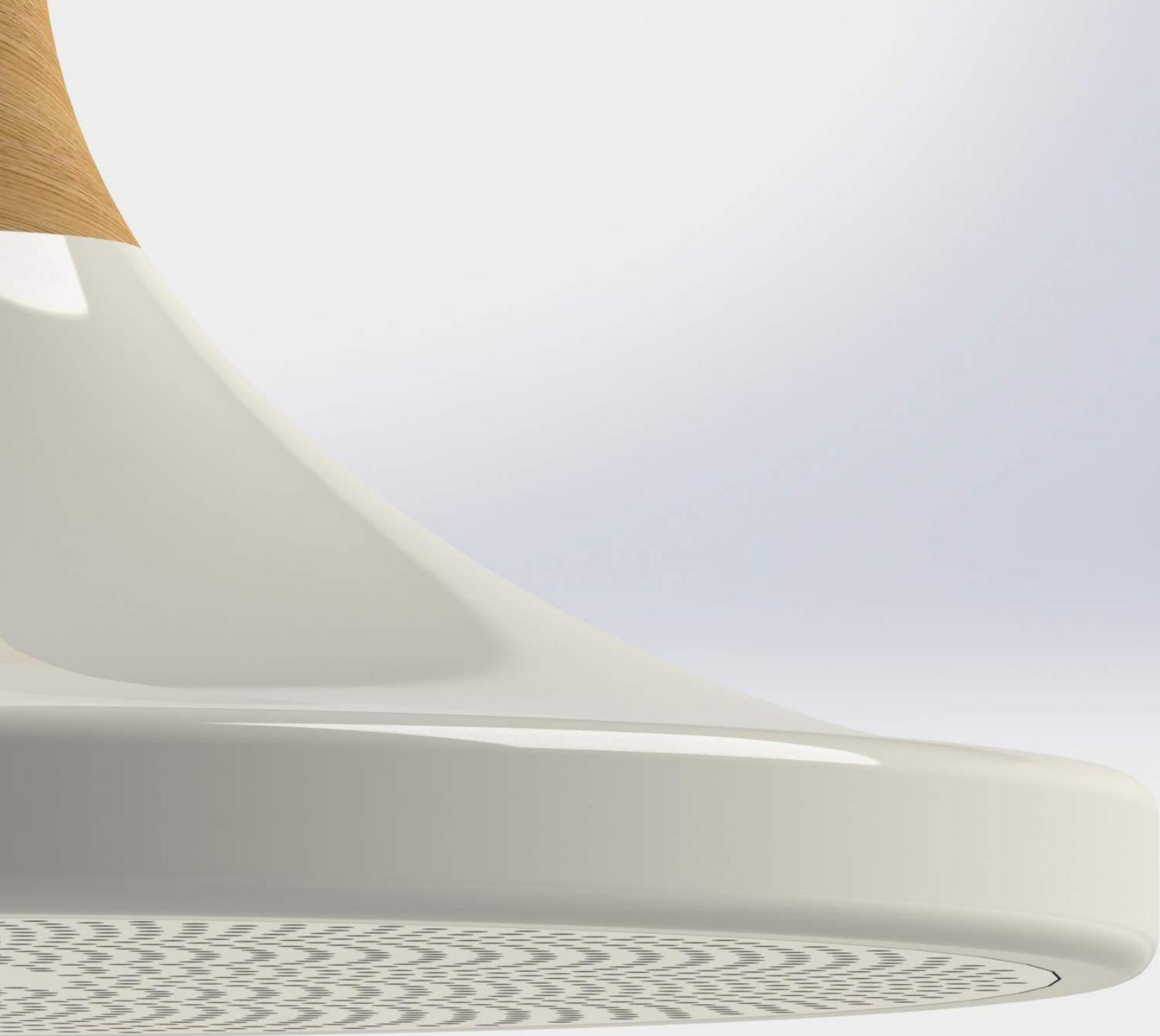
C I C A D A



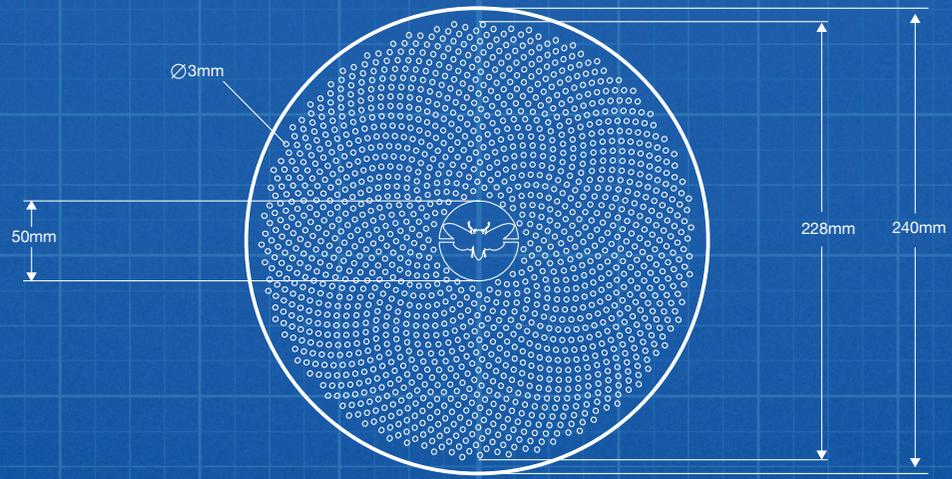
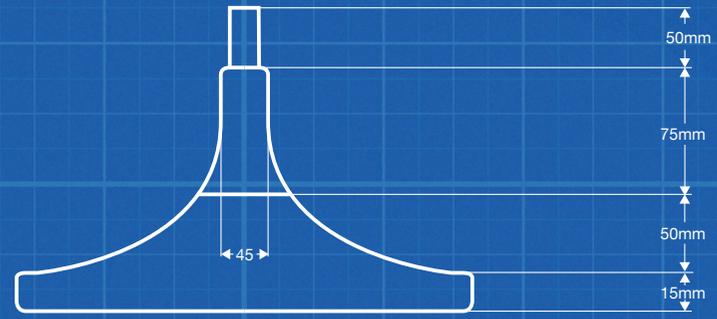
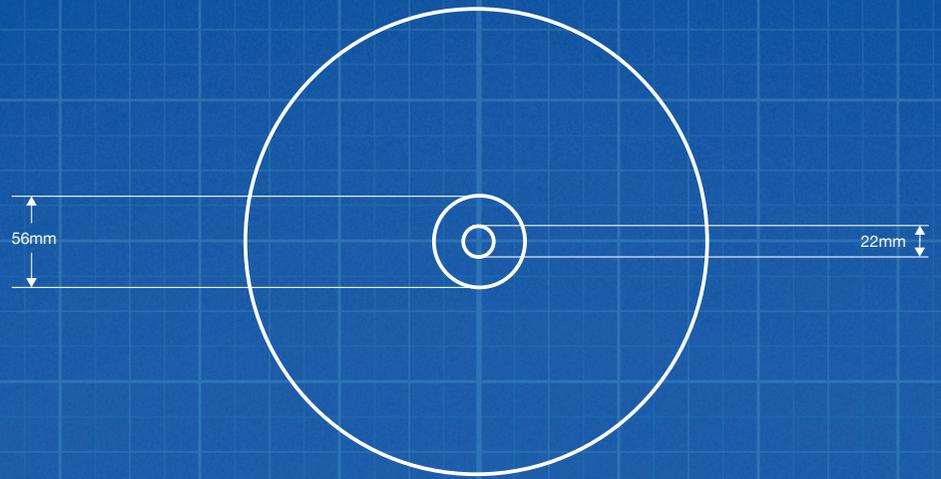
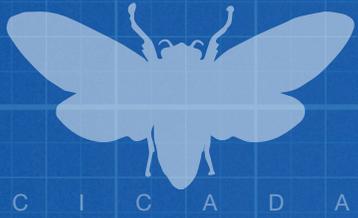
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G I C A D A



C O L L E C T I O N











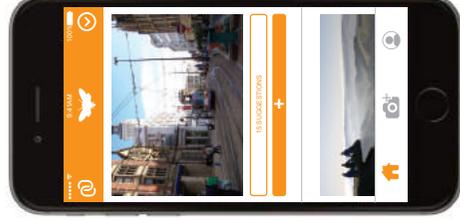
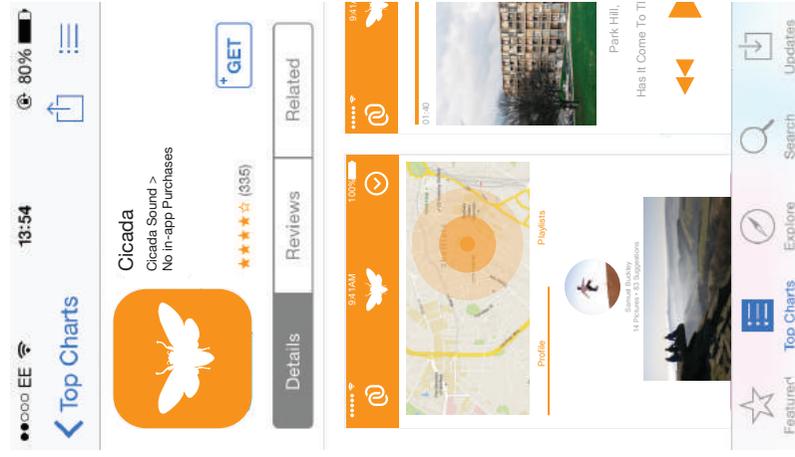
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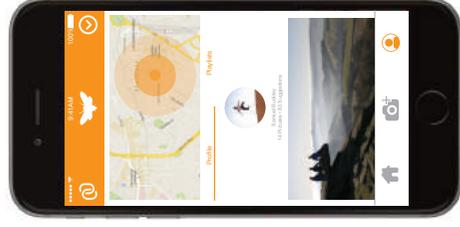


C I C A D A

ABILITY TO GROW



HOME



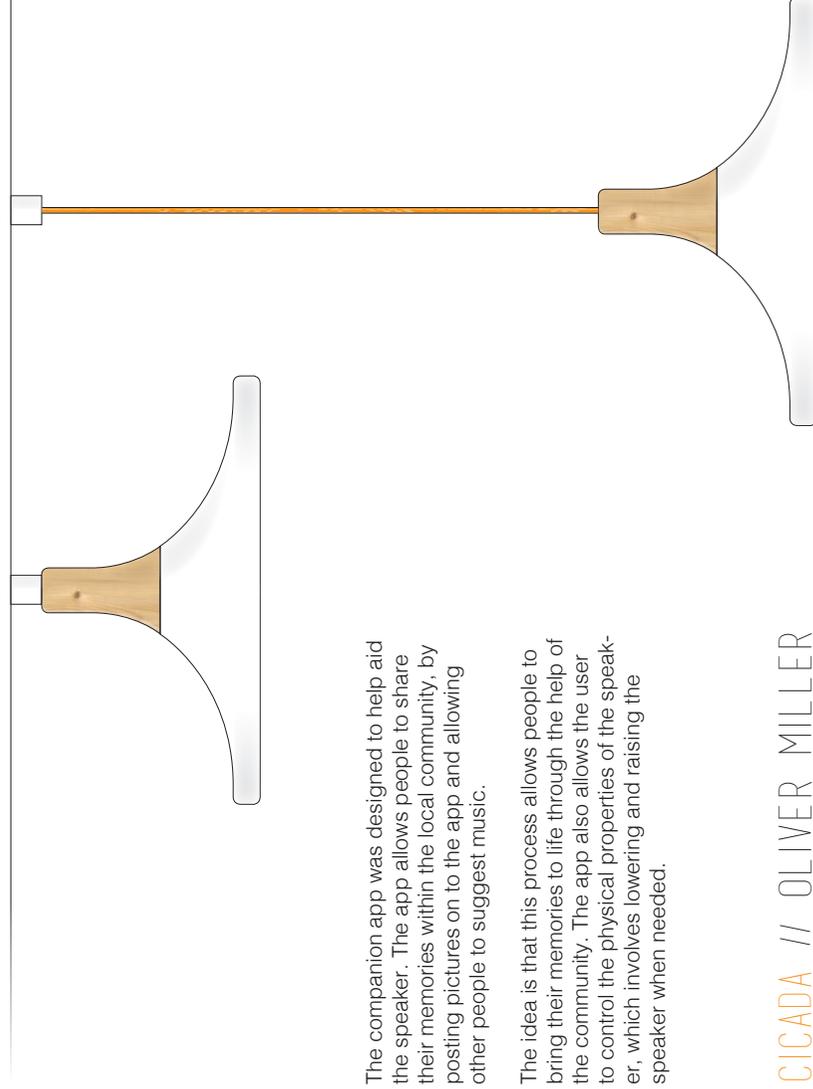
PROFILE



PLAYLISTS



LISTENING



The companion app was designed to help aid the speaker. The app allows people to share their memories within the local community, by posting pictures on to the app and allowing other people to suggest music.

The idea is that this process allows people to bring their memories to life through the help of the community. The app also allows the user to control the physical properties of the speaker, which involves lowering and raising the speaker when needed.

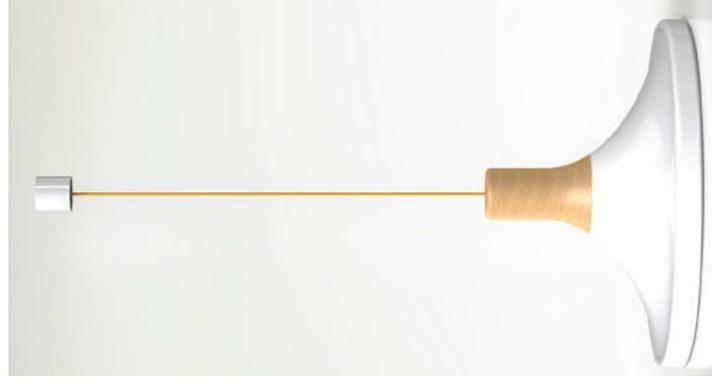
CICADA // OLIVER MILLER

ABILITY TO GROW

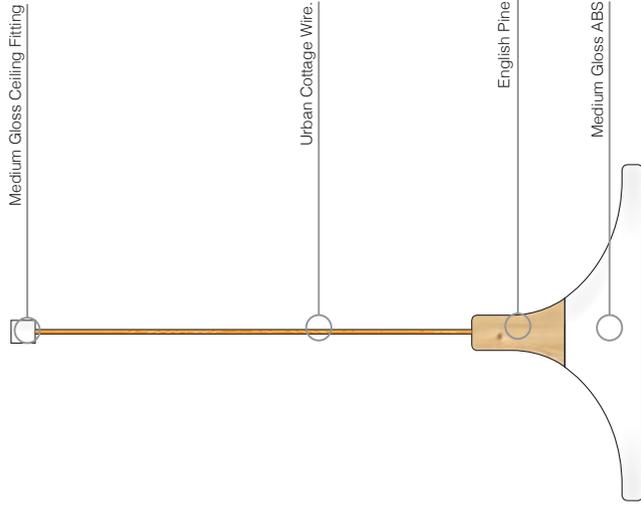


CIGADA // OLIVER MILLER

ABILITY TO GROW



Medium Gloss Ceiling Fitting



Urban Cottage Wire

English Pine

Medium Gloss ABS

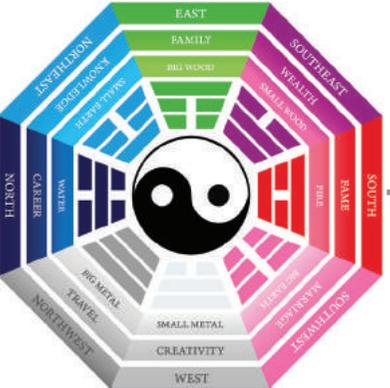


The design of the product took inspiration from the theme. The speaker has been designed to drift into the surrounding living space. The reason for this is due to the system that has been designed alongside the speaker. The idea of the system playing music associated with memories to alter somebody's mood is very strong and powerful so this is why the speaker is very subtle and unobtrusive in its form and finish. The subtle design floats into the living space without being too obvious, giving the chance for memories to flourish.

GROUP APPROACH

From an early stage the group decided that the theme for this project would focus on trying to improve Park Hill from the bottom up. We decided that if we can focus our design work on helping somebody improve as a person, then one by one each person will help create a bigger growing community.

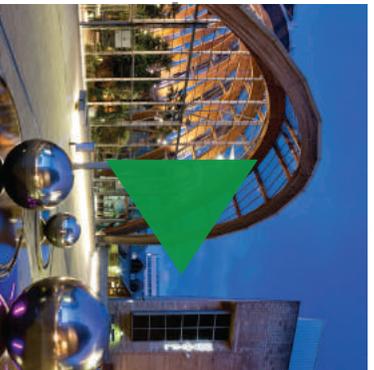
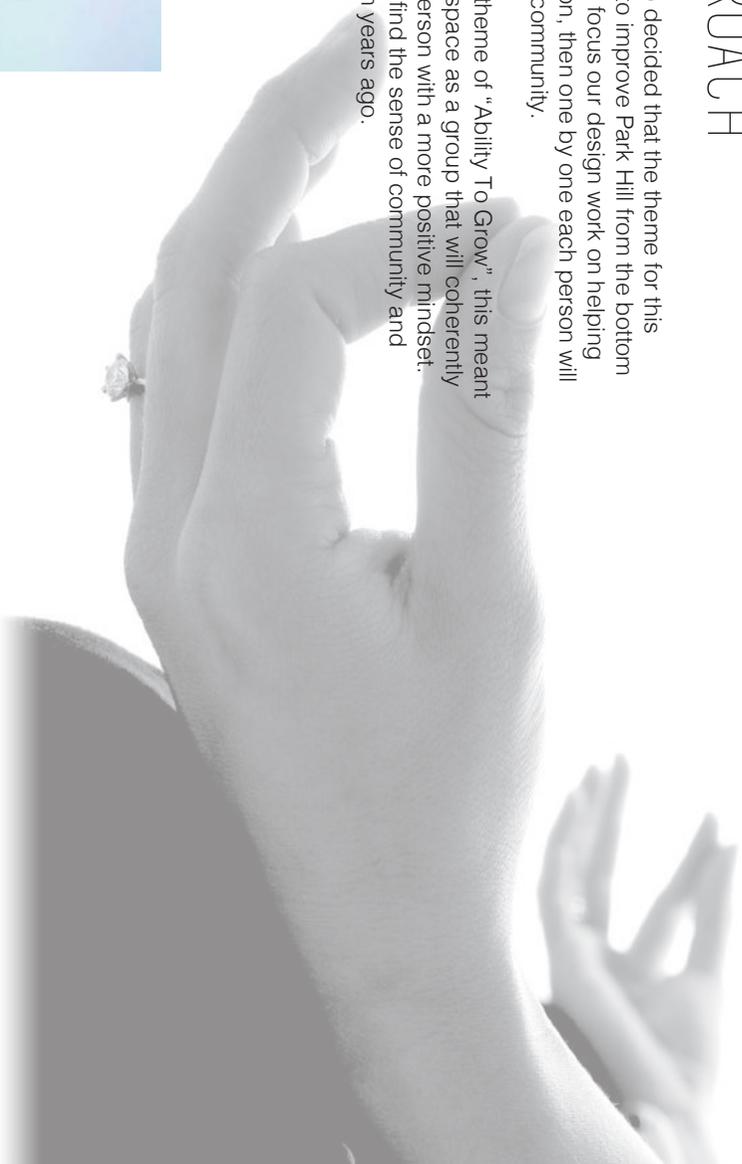
To do this we decided on the theme of "Ability To Grow", this meant that we would design a living space as a group that will coherently help somebody grow in to a person with a more positive mindset. This would then go on to help find the sense of community and spirit that Park Hill lost all them years ago.



INDIVIDUAL APPROACH

As an individual after deciding the theme my first thought was to think how I can design something to help improve sombodies mindset without them realising. The research started by looking at sleep and how I can design a speaker to help somebody rest and conserve their energy in a more efficient way.

The idea of using sound then changed. It involved using sound alongside a memory to help people experience memories in a more fulfilled way. Experiencing memories can be a very strong and emotional thing, so focusing my design work on this led to a more in-depth and fulfilled project. This led to the speaker and the companion app being designed.



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