PERCEPTION

VISUAL RESEARCH SUMMARY

OUTPUT / UNIT ONE

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MAGMI 2015

CONTENTS

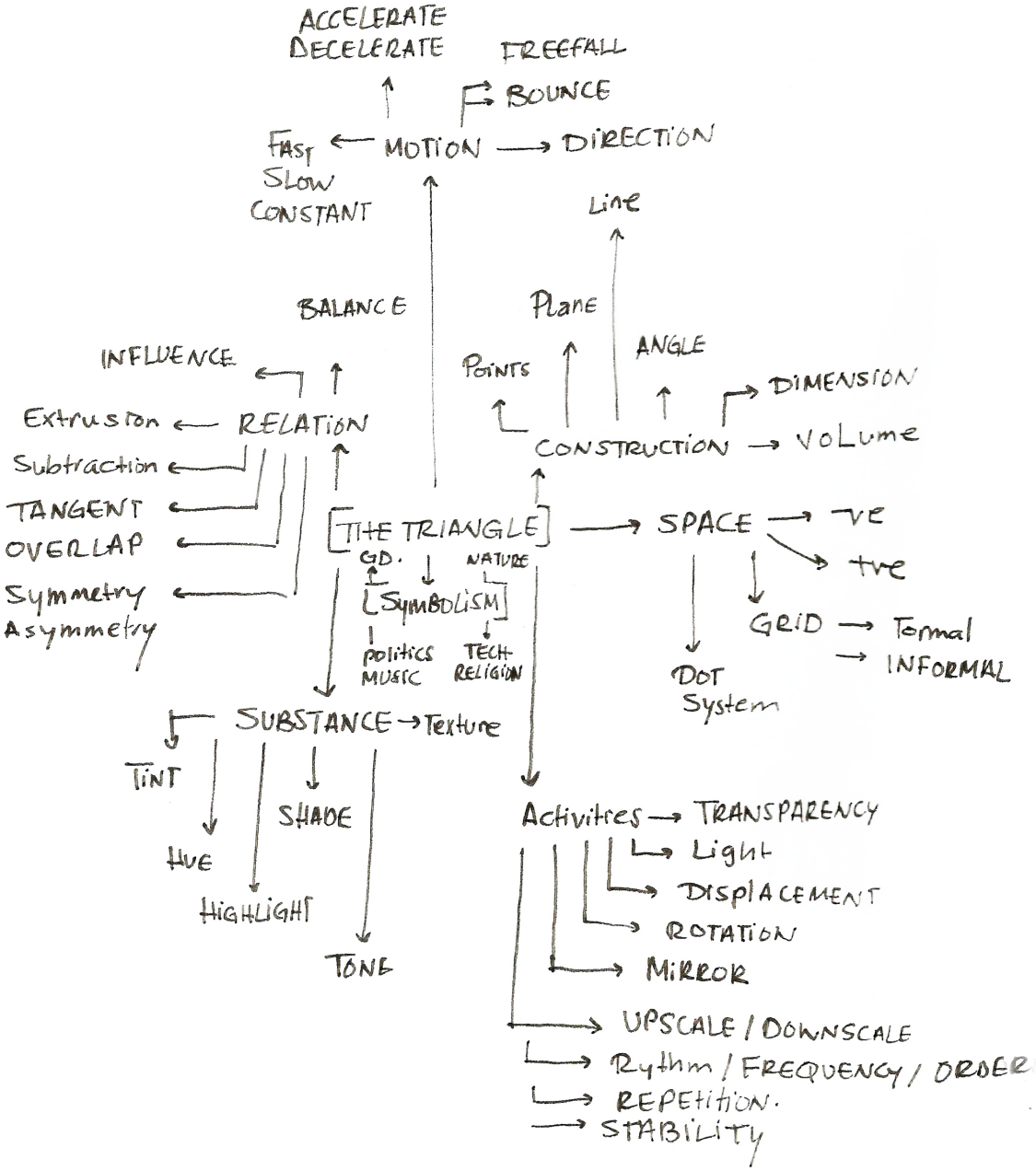
PRIMARY RESEARCH

THINKING

On receiving the brief for unit 1.1 Input, I was allocated the triangle as my shape for visual research. The brief stated that we should investigate the form of our shape through visual experiments, and then research to find about its meaning, and values within different cultures.

I started my input phase by taking a closer, and more critical look at the form of my shape. I asked myself two questions, what do I want to find out about it? And why?

Those two questions then led me to create a mind map of all the things I wanted to investigate, and helped me form specific questions about my shape that I was particularly curious to examine. The experiments I did, as a result, took the form of visual answers.


ACCELERATE
DECELERATE
FREEFALL
BOUNCE
FAST
SLOW
CONSTANT
MOTION
DIRECTION
Line
Plane
ANGLE
BALANCE
INFLUENCE
Points
DIMENSION
Extrusion
RELATION
CONSTRUCTION
VOLUME
Subtraction
TANGENT
OVERLAP
Symmetry
Asymmetry
THE TRIANGLE
SPACE
-ve
+ve
GD.
NATURE
SYMBOLISM
GRID
Formal
INFORMAL
POLITICS
MUSIC
TECH-
RELIGION
DOT
System
SUBSTANCE
Texture
TINT
SHADE
HUE
HIGHLIGHT
TONE
Activities
TRANSPARENCY
Light
DISPLACEMENT
ROTATION
MIRROR
UPSCALE / DOWNSCALE
Rythm / FREQUENCY / ORDER
REPETITION.
STABILITY

PRIMARY RESEARCH

EXPERIMENTS

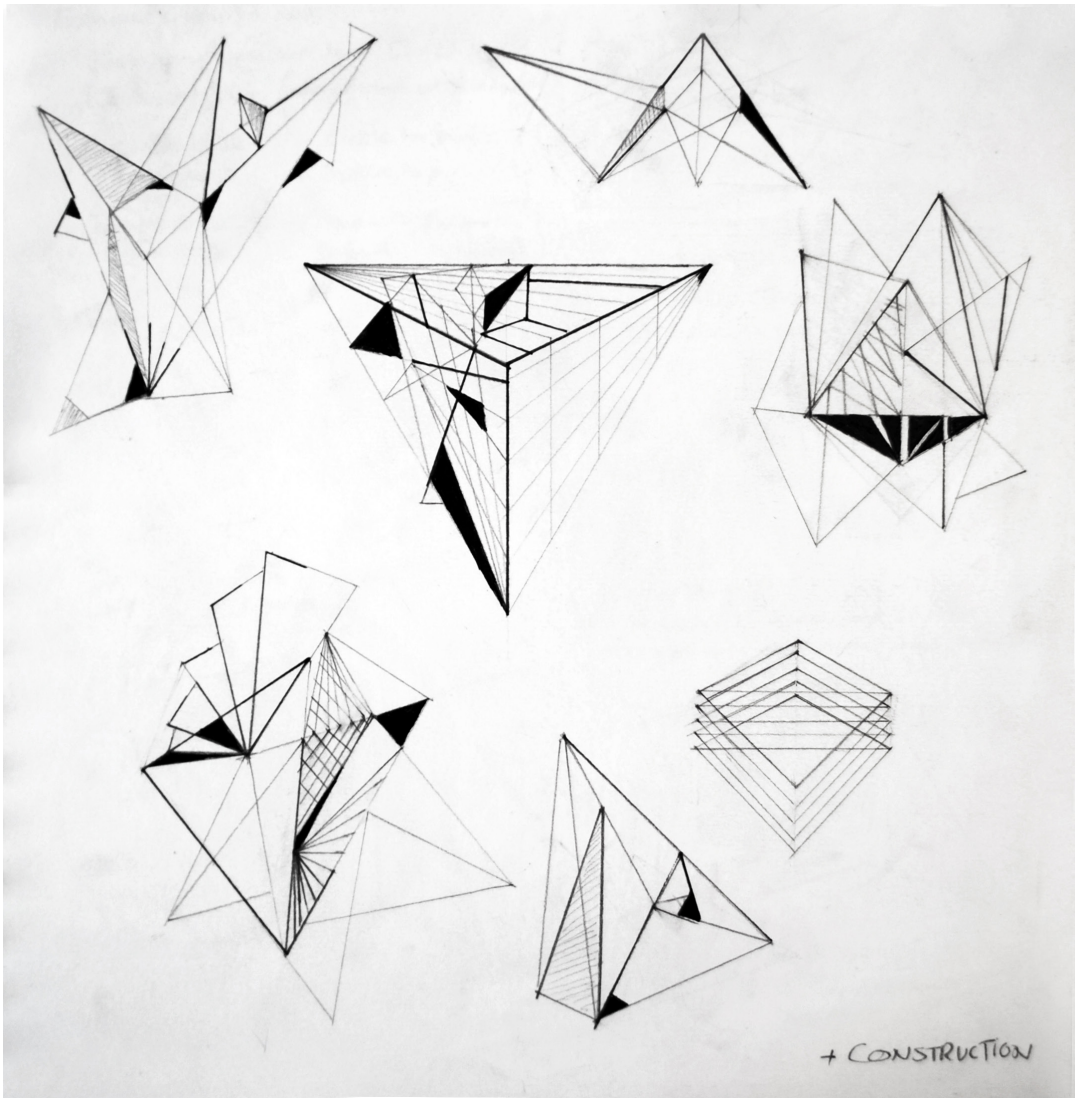
All the questions that I formed were followed by visual primary research. Some questions were examined in detail while others were only lightly touched upon. Here are some examples of these questions:

How does the triangle integrate with other shapes?
How can I visualize emotion through a triangle?
How can I bring the triangle to life?
When does a triangle look static or dynamic?
Does a triangle's shadow change with different lighting?
How can I build a triangle out of negative space?
Can I transition a triangle between different dimensions?
How can I form a triangle without using one?
Can I make my shape out of unconventional material?
How can I use my shape to distort images?
How can a triangle defy the laws of physics?
How does a triangle's shadow behave under moving light?
Where can I find triangles in nature?
What does the triangle mean in different contexts?
Can a triangle be replaced by any other shape?
Can a triangle be used to express an idea?

This visual summary will encompass most of those questions and their answers under both primary and secondary research.

“I found that I could say things with color and shapes that I could not say any other way - Things I had no words for. ”

GEORGIA O’KEEFE



TRIANGLES & TRIANGLES

EXPERIMENT ONE

HOW DOES THE TRIANGLE INTEGRATE WITH OTHER SHAPES AND OTHER TRIANGLES?

OBJECTIVE

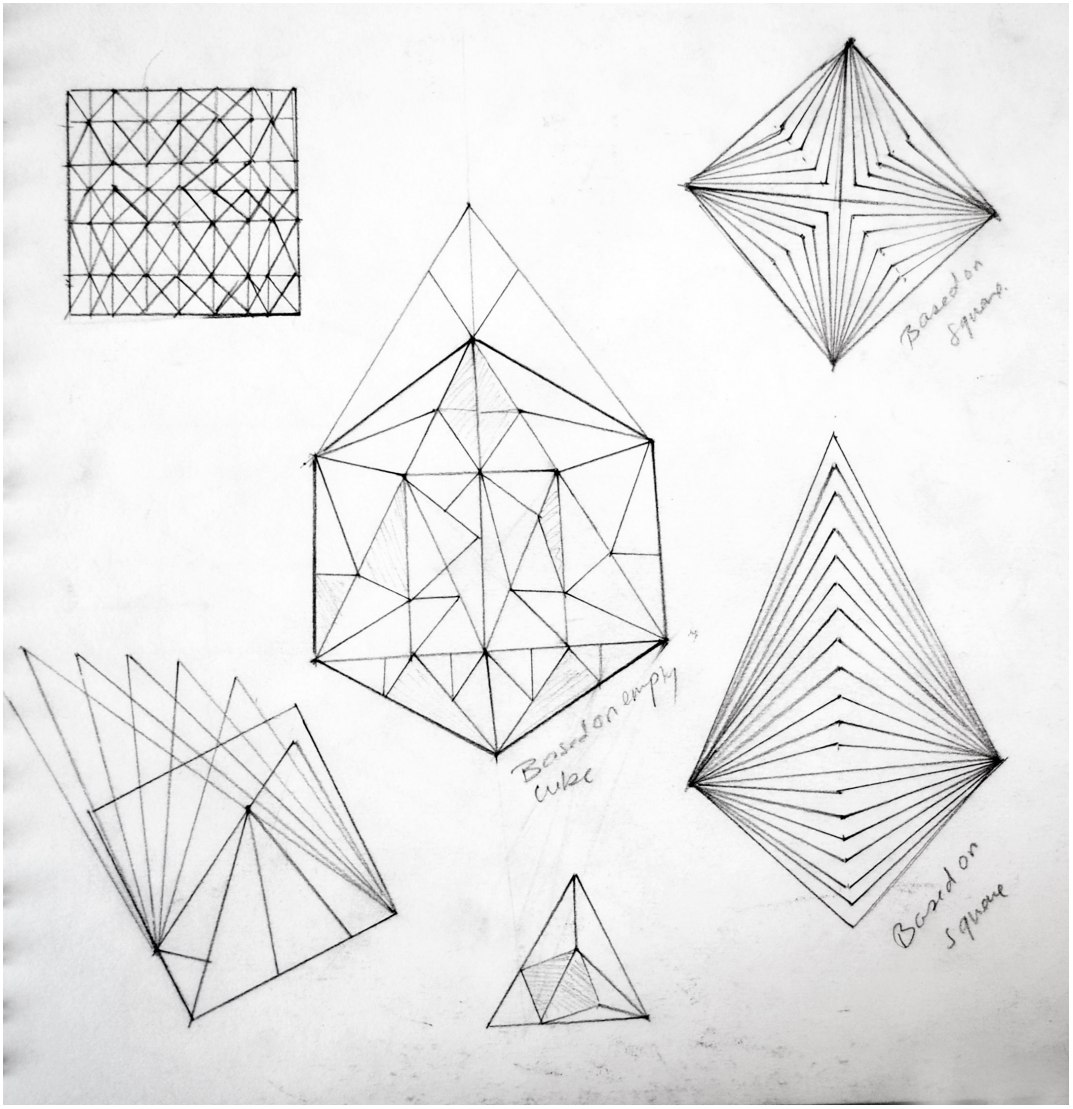
My aim with this experiment was to find out how many ways are there for a triangle to interact with other shapes and itself. I focused here solely on creating a shape synergy between a triangle and a circle, a triangle and a square, and finally a triangle and another triangle.

METHOD

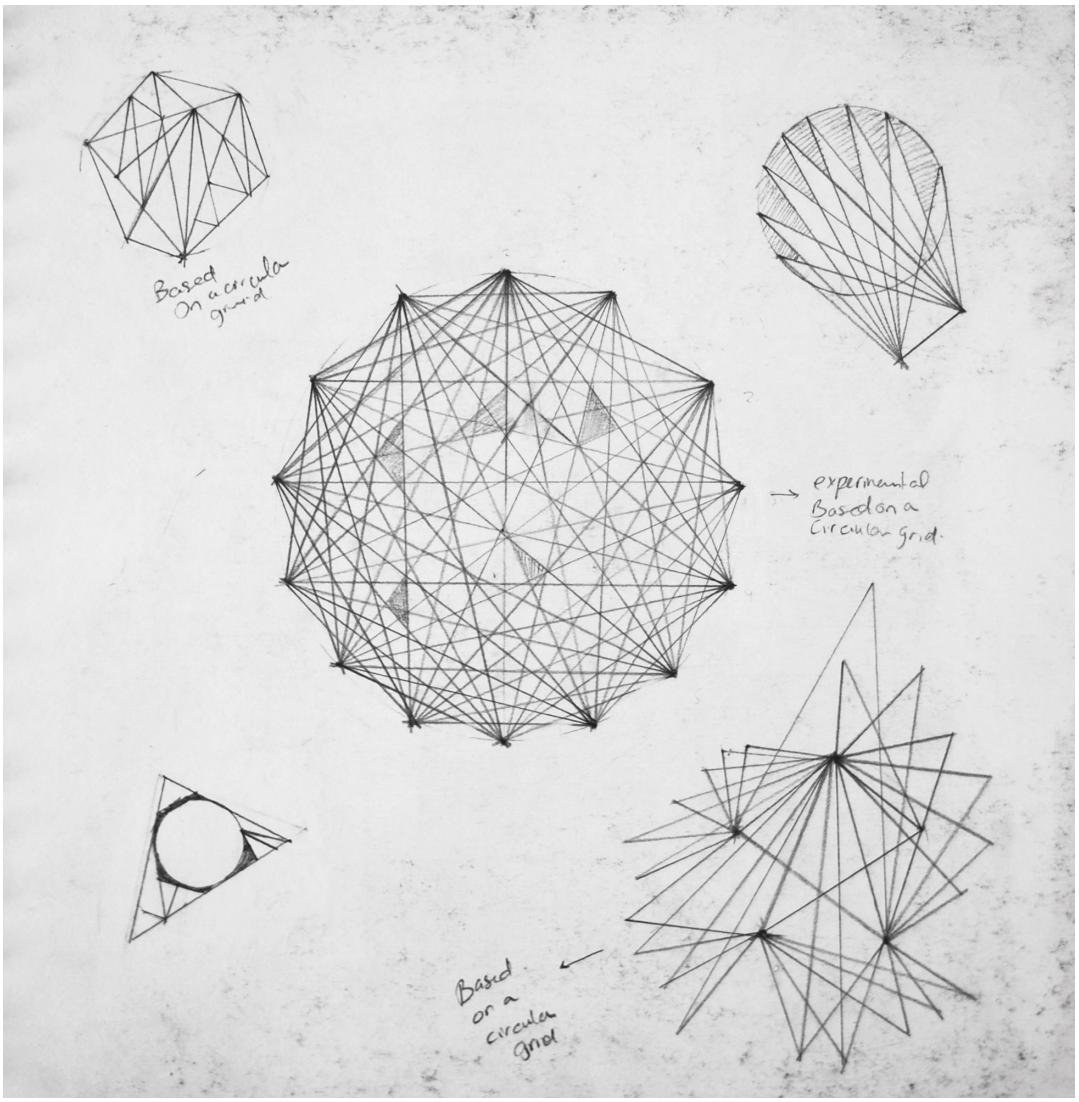
I chose sketching as my method to answer this question in order to be able to draw the lines myself and see how and where an interaction can occur. I tested as many forms of interaction as I could such as tangency, intersection, extention, subtraction and so on.

OUTCOME

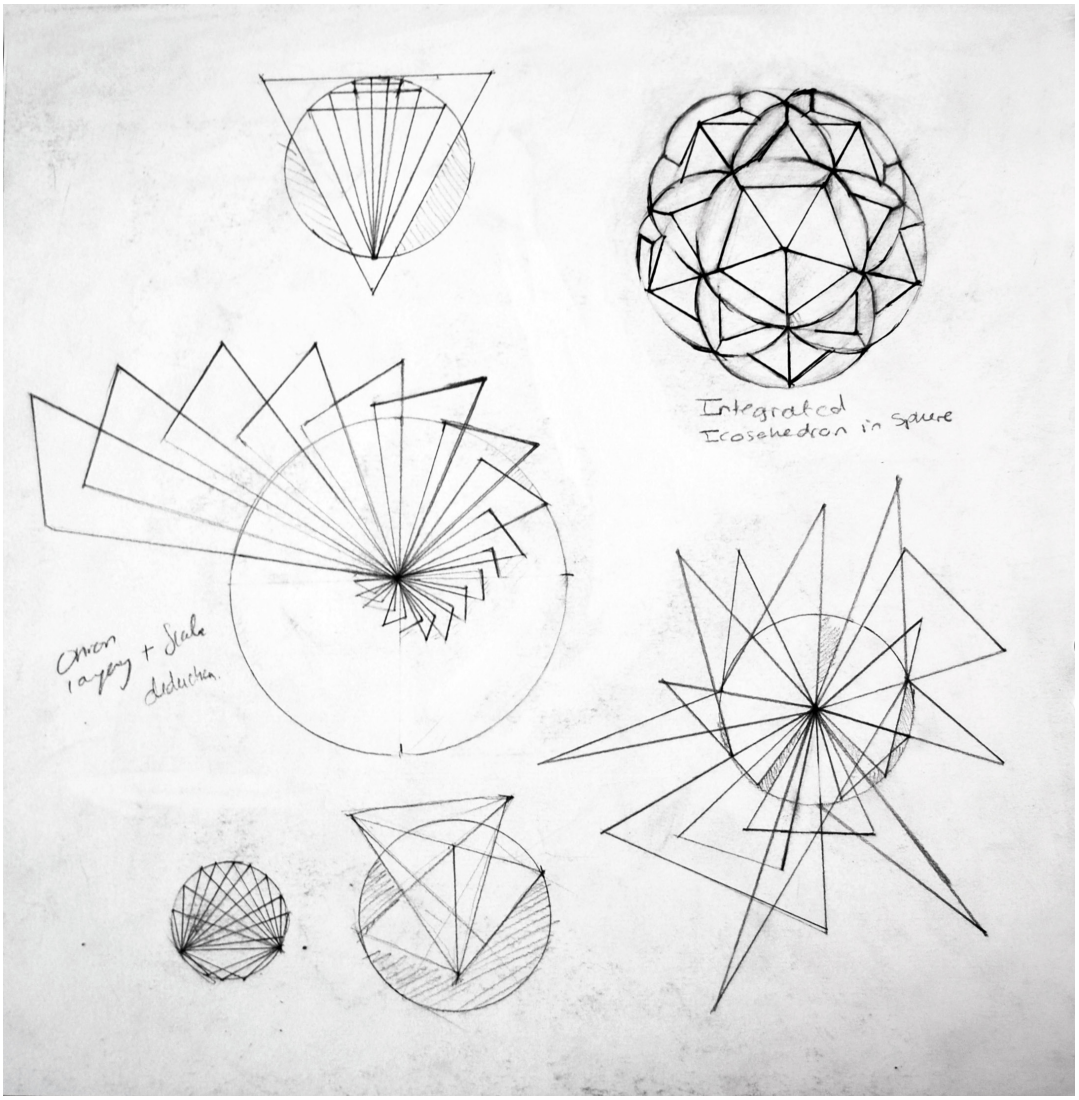
Being able to see how and where the shapes can interact and witness the result of their interaction, enriched my visual vocabulary. It helped me recognize the points of difference and similarity between the circle, square, and triangle, and how they can come together to form more complex shapes. This enrichment in my visual vocabulary will aid me largely when brainstorming for motion in future projects.



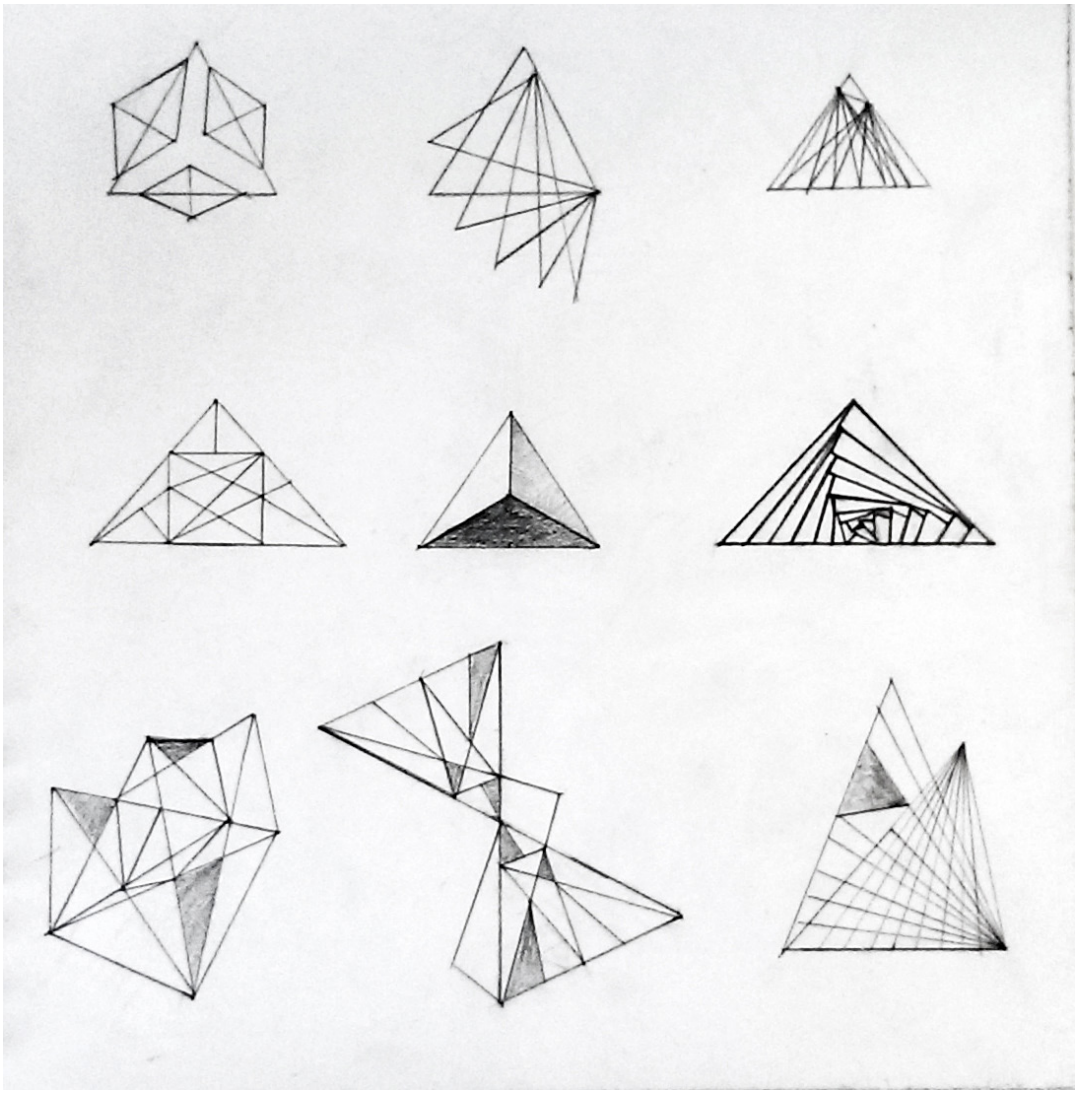
SQUARES & TRIANGLES



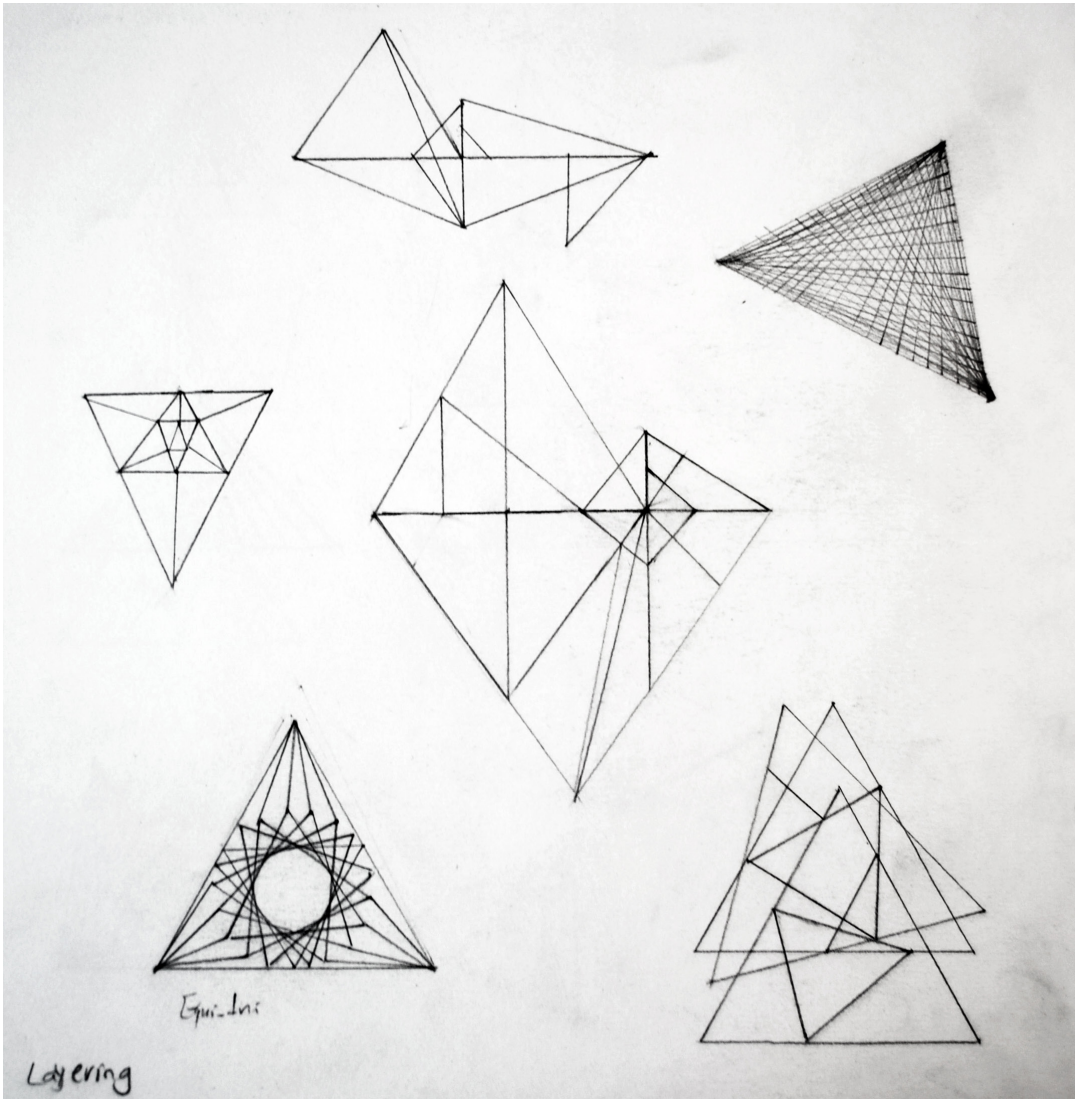
CIRCLES & TRIANGLES



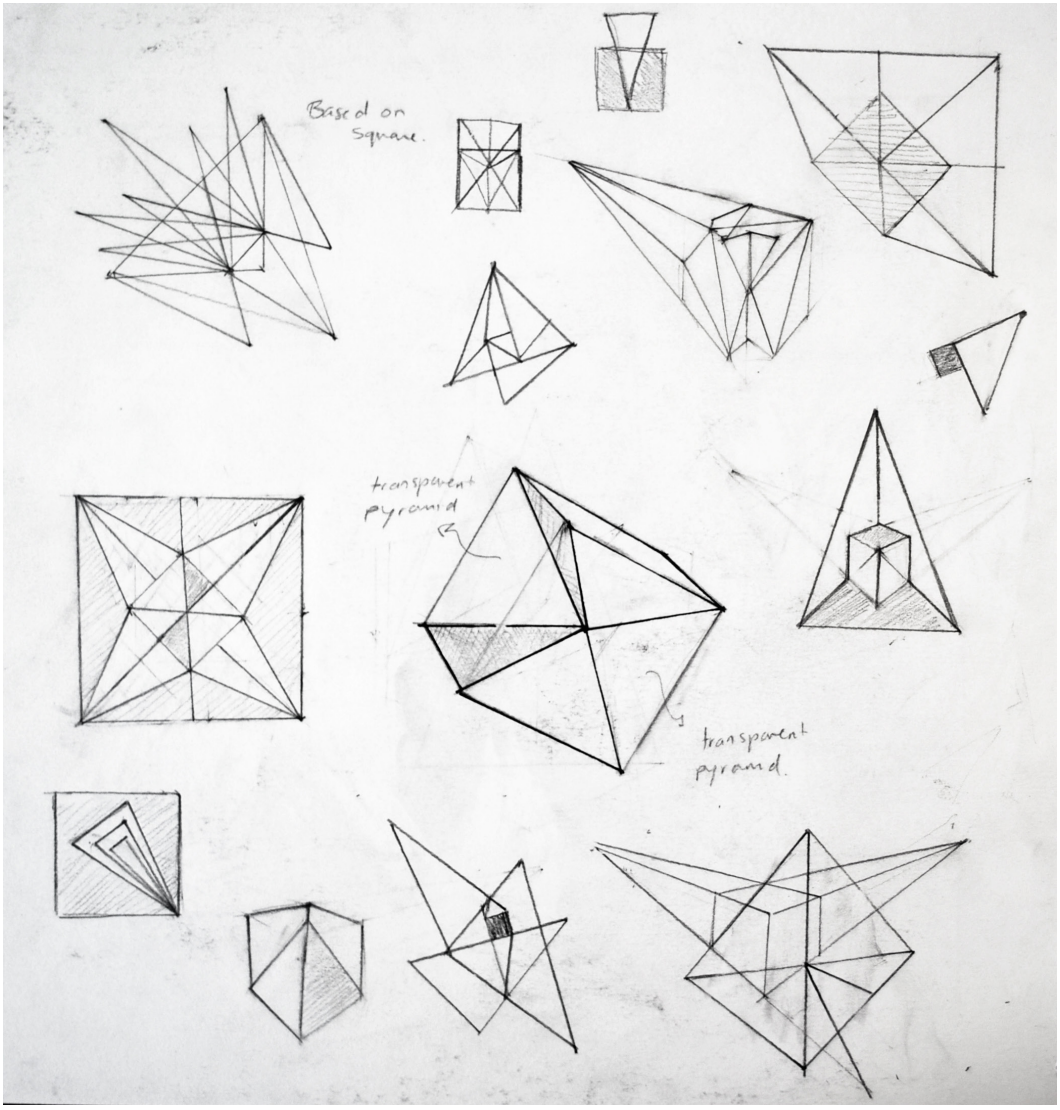
CIRCLES & TRIANGLES



TRIANGLES & TRIANGLES



TRIANGLES + TRIANGLES



SQUARES + TRIANGLES

EXPERIMENT TWO

HOW CAN I FORM A TRIANGLE WITHOUT USING ONE?

OBJECTIVE

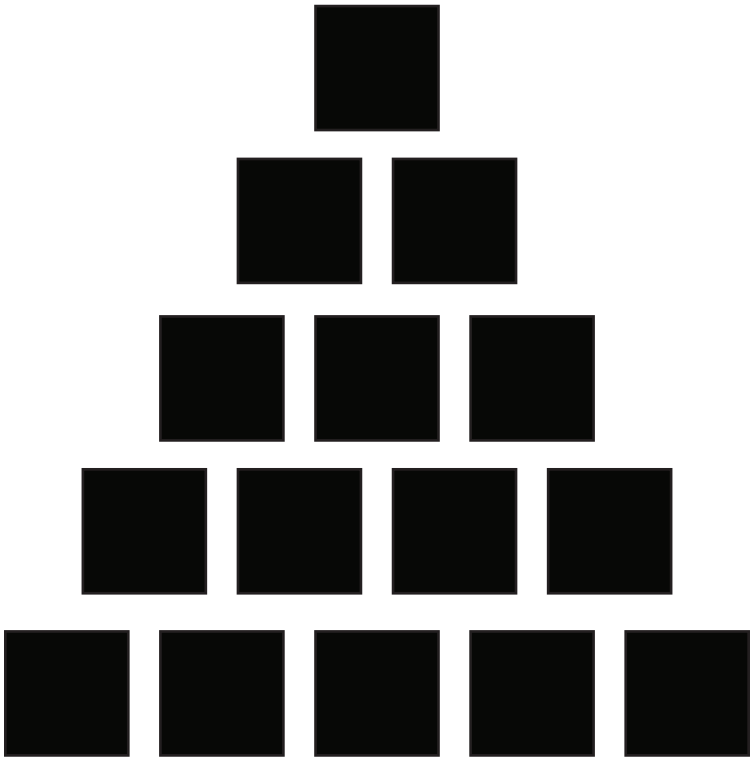
For this experiment, I tried to make triangles using both shape alone or shape and negative space. The idea was to form a triangle without actually drawing one to be able to understand when and how it can be involuntarily implied within a context. This experiment was inspired by Gestalt's theory of perception (Closure).

METHOD

To carry out this experiment I used Illustrator, in order to be able to make precise digital drawings, and manage negative space accurately.

OUTCOME

Through this exercise I was able to understand the way our eyes see form and how negative space is an essential aspect of a composition. I was also able to form an idea of how triangles can be implied rather than applied using different elements.



SHAPES

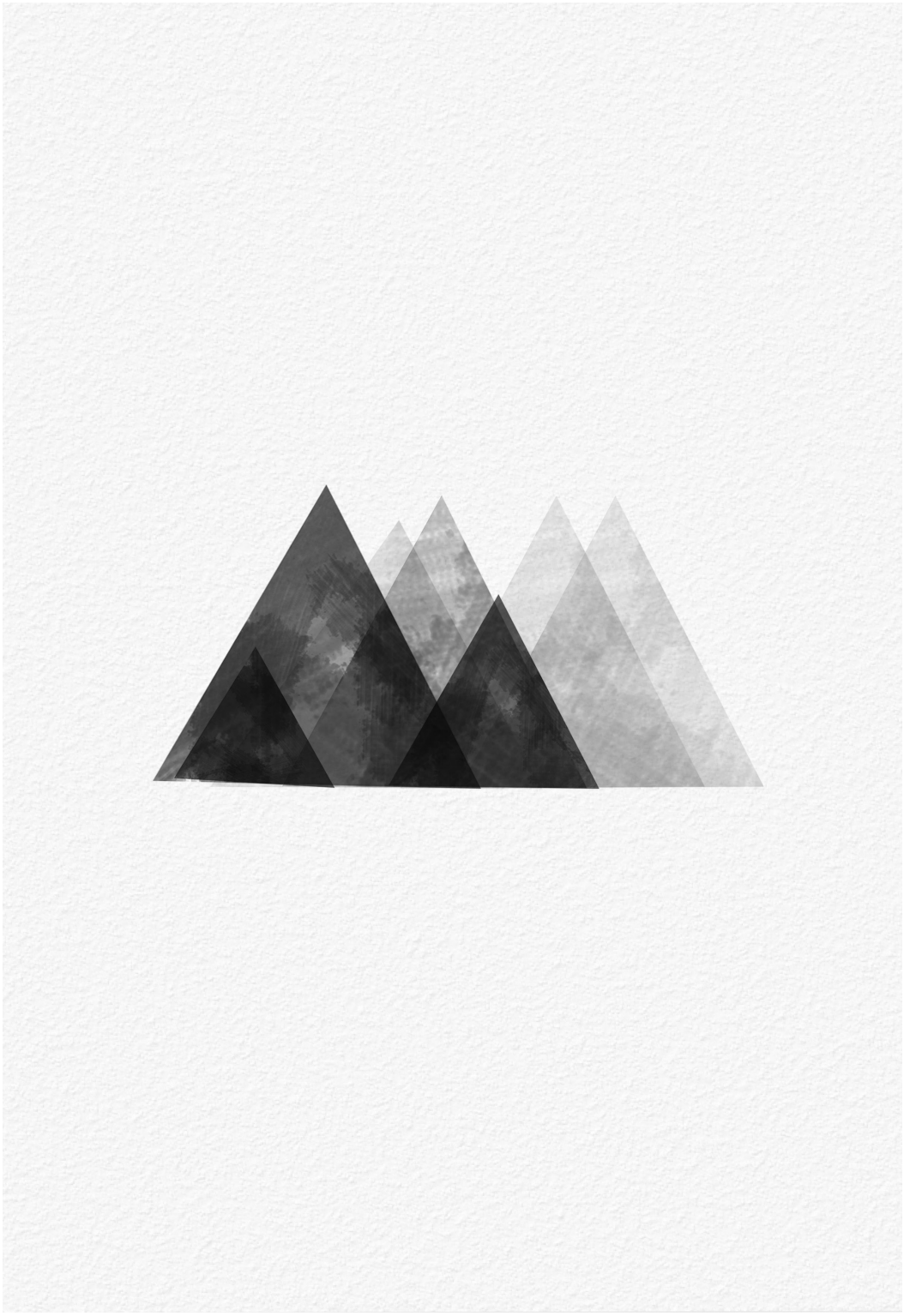
Squares are used as building blocks.
Their arrangement insinuates the
presence of a triangle.

DOTS

Our brains, based on Gestalt's theory of perception, close off these dots filling in the missing information.

LINES

Lines of different thickness are used to represent hierarchy, hinting at the presence of a triangular shape.



EXPERIMENT THREE

HOW DO TRIANGLES OF DIFFERENT OPACITIES INTERACT WITH ONE ANOTHER?

OBJECTIVE

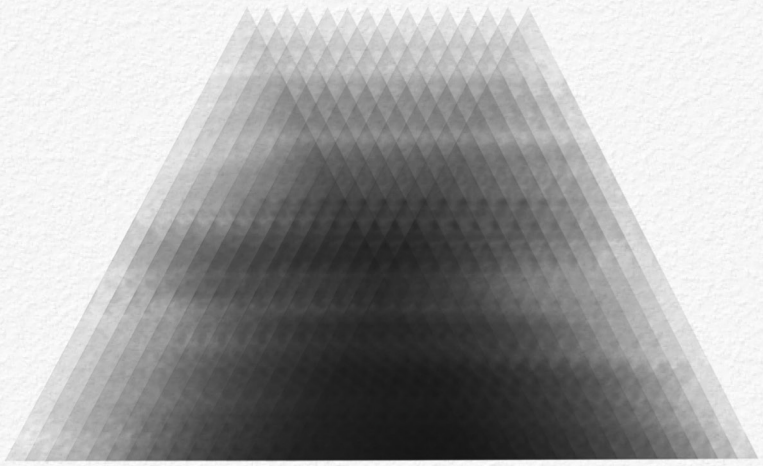
In this experiment my aim was to investigate the visual impact of my shape at different levels of opacity. I was curious as to see how opacity or transparency can play a leading role in the formation of a composition and how changing it can add depth to a flat shape.

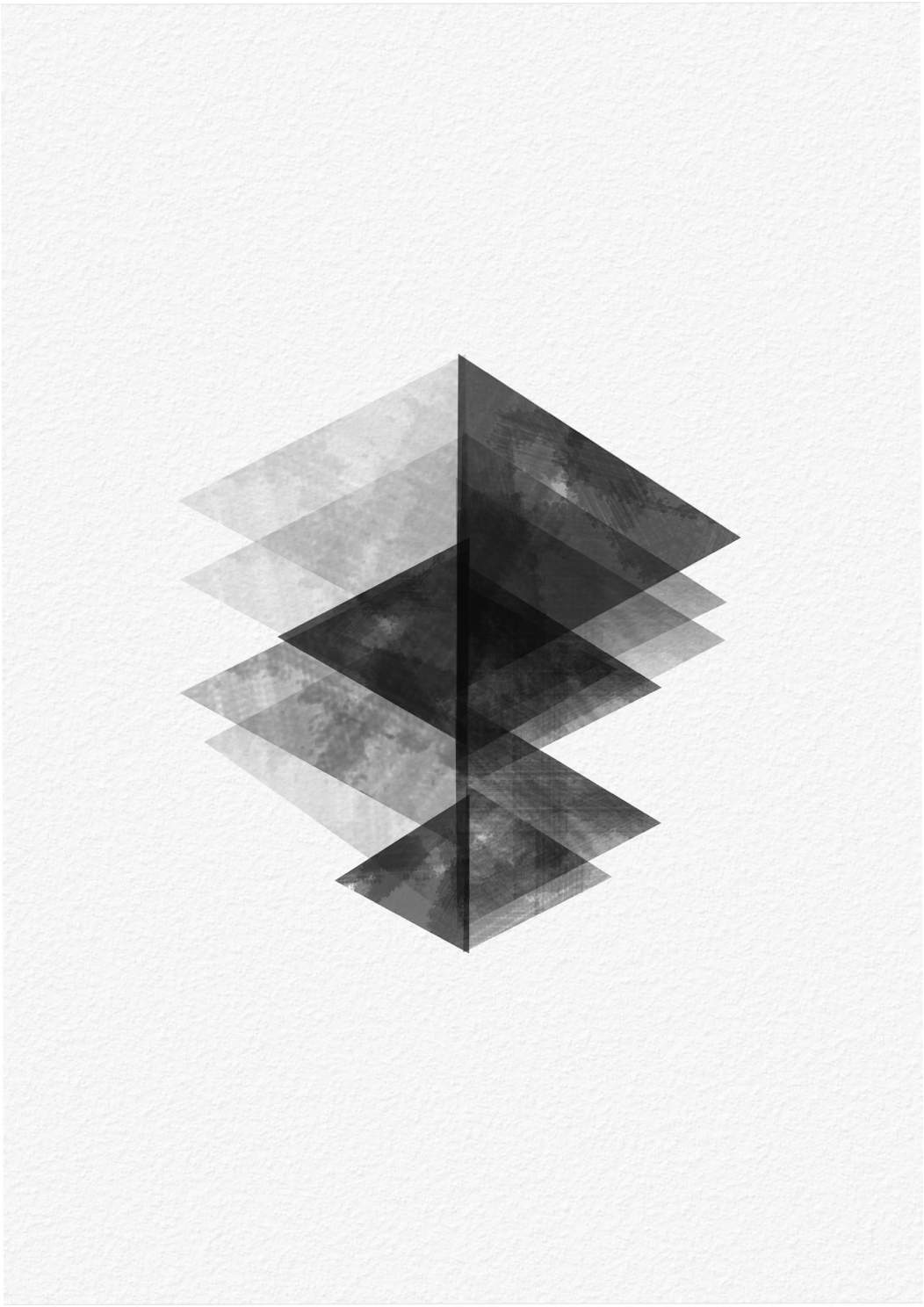
METHOD

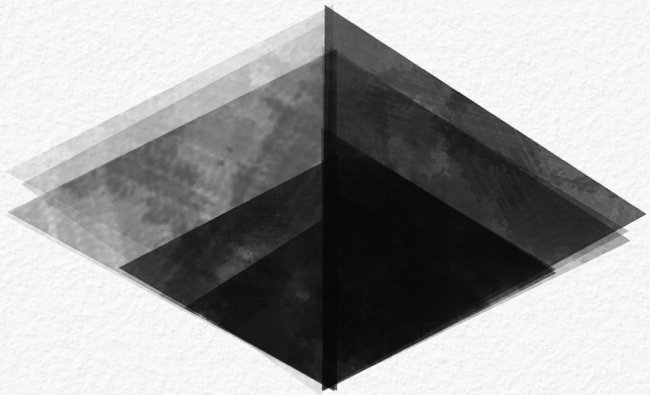
I used ink on paper to create my own brush tool on photoshop. I then used this brush to draw triangles digitally. I layered them one on top of the other at different opacities and formed different compositions. Some layers were duplicated.

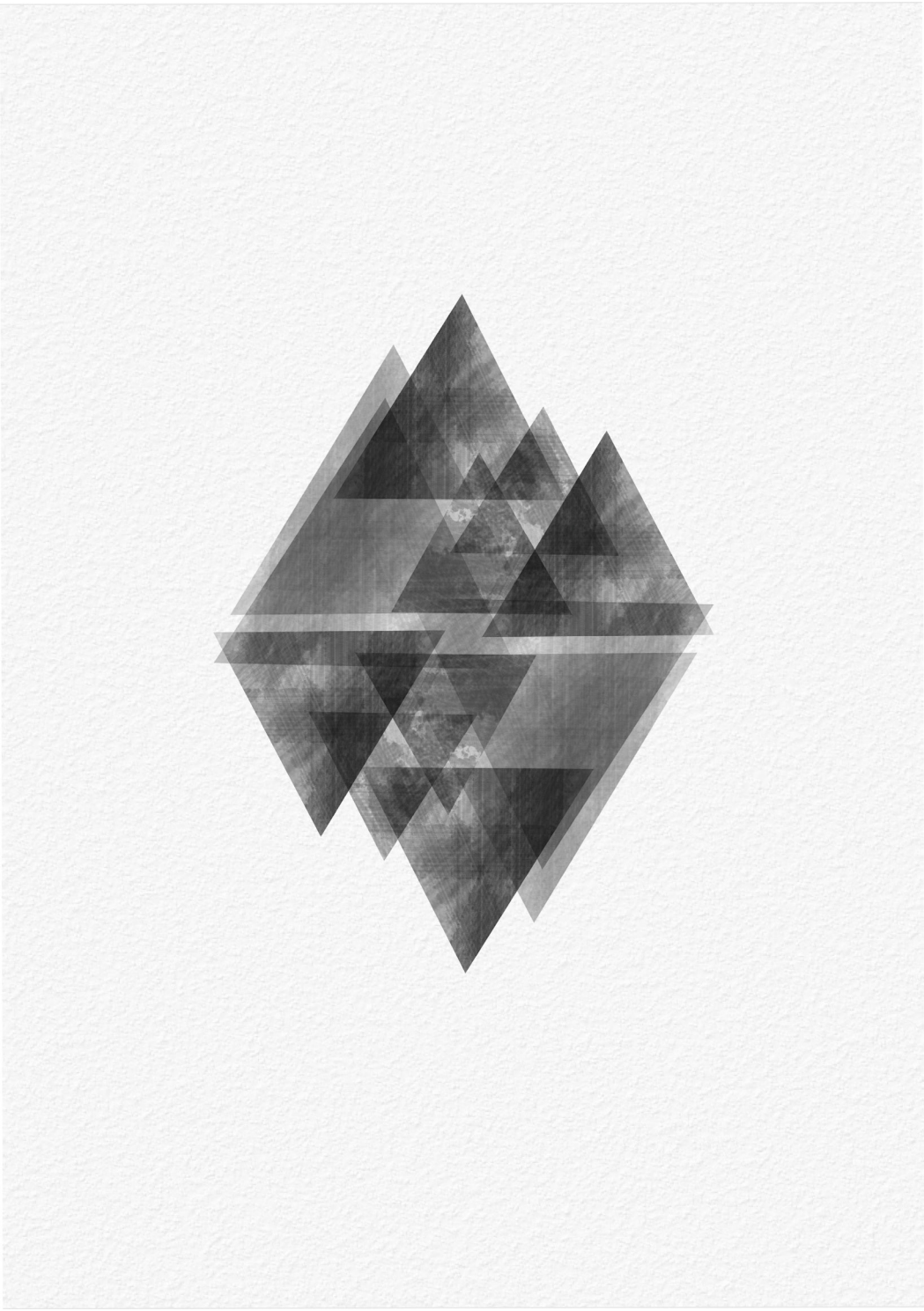
OUTCOME

My realization was that although changes in opacity does not seem like much alteration to a shape, it does convey a different feeling at different levels within different compositions, and can be used to change the meaning of what is seen.









EXPERIMENT FOUR

CAN EVERYDAY OBJECTS FORM A TRIANGULAR SHADOW?

OBJECTIVE

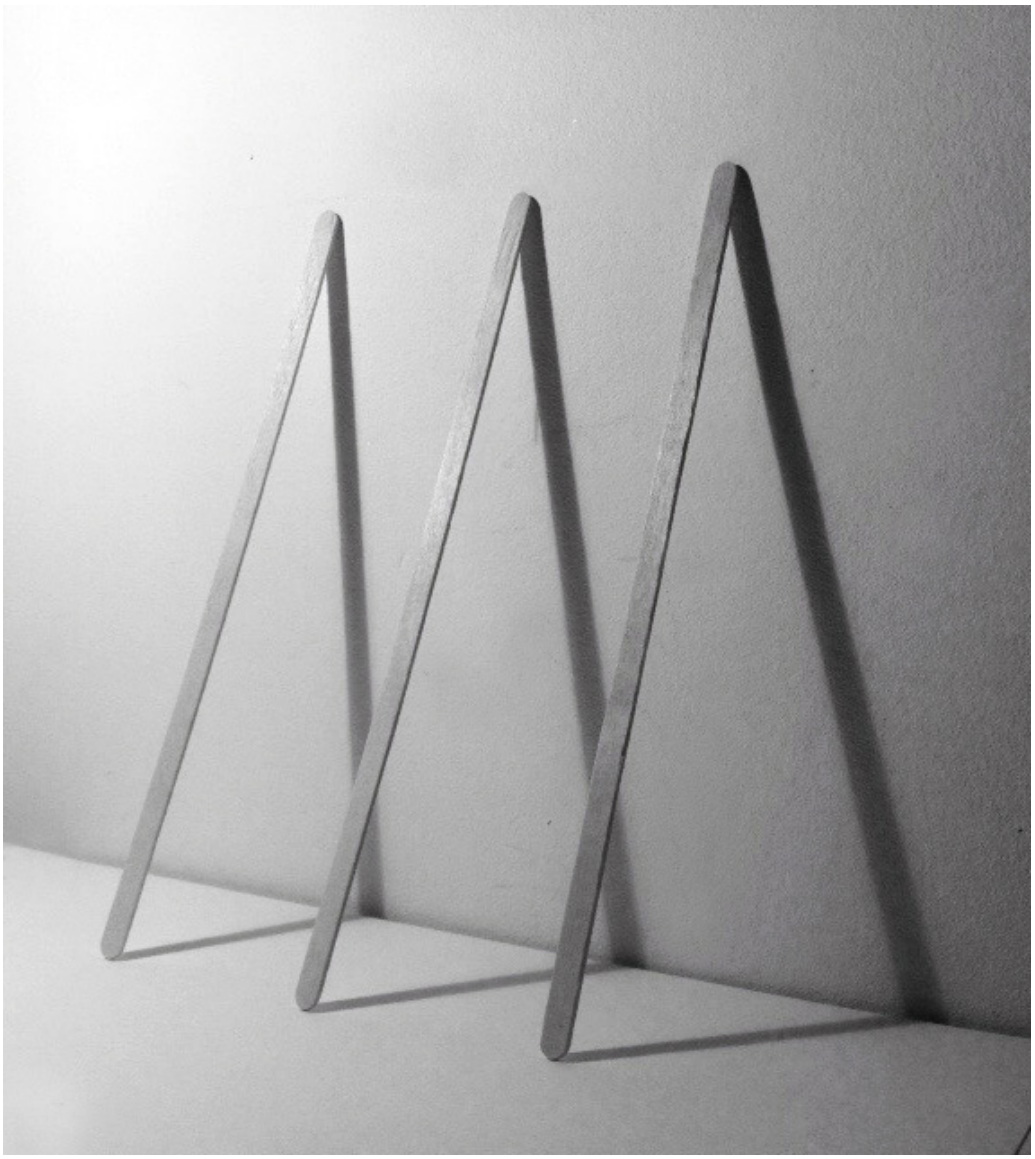
This experiment was all about shadows. I tried to form triangular shadows out of wooden stirring sticks, wireframe and straws. My aim was to investigate another way in which triangles can be formed.

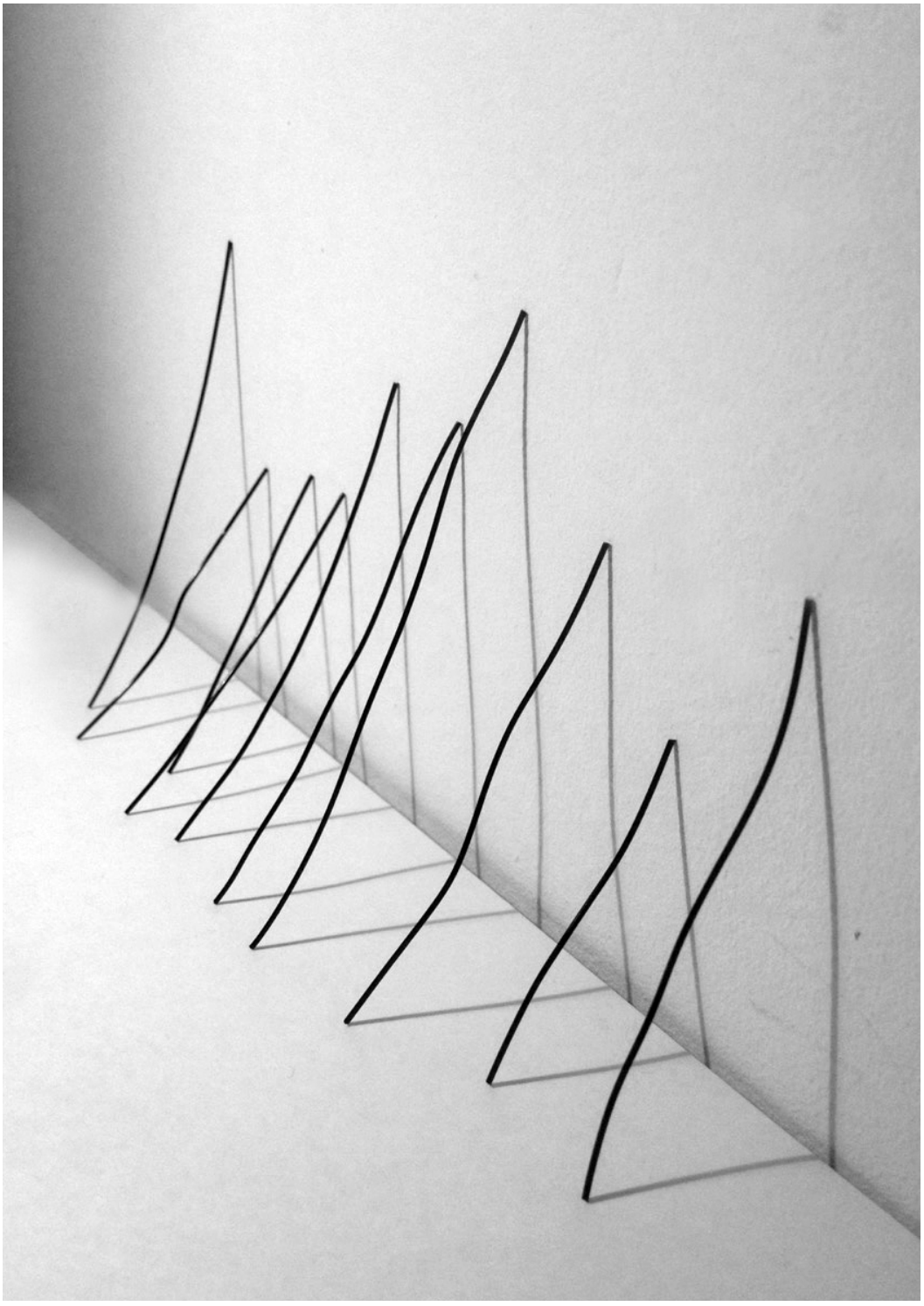
METHOD

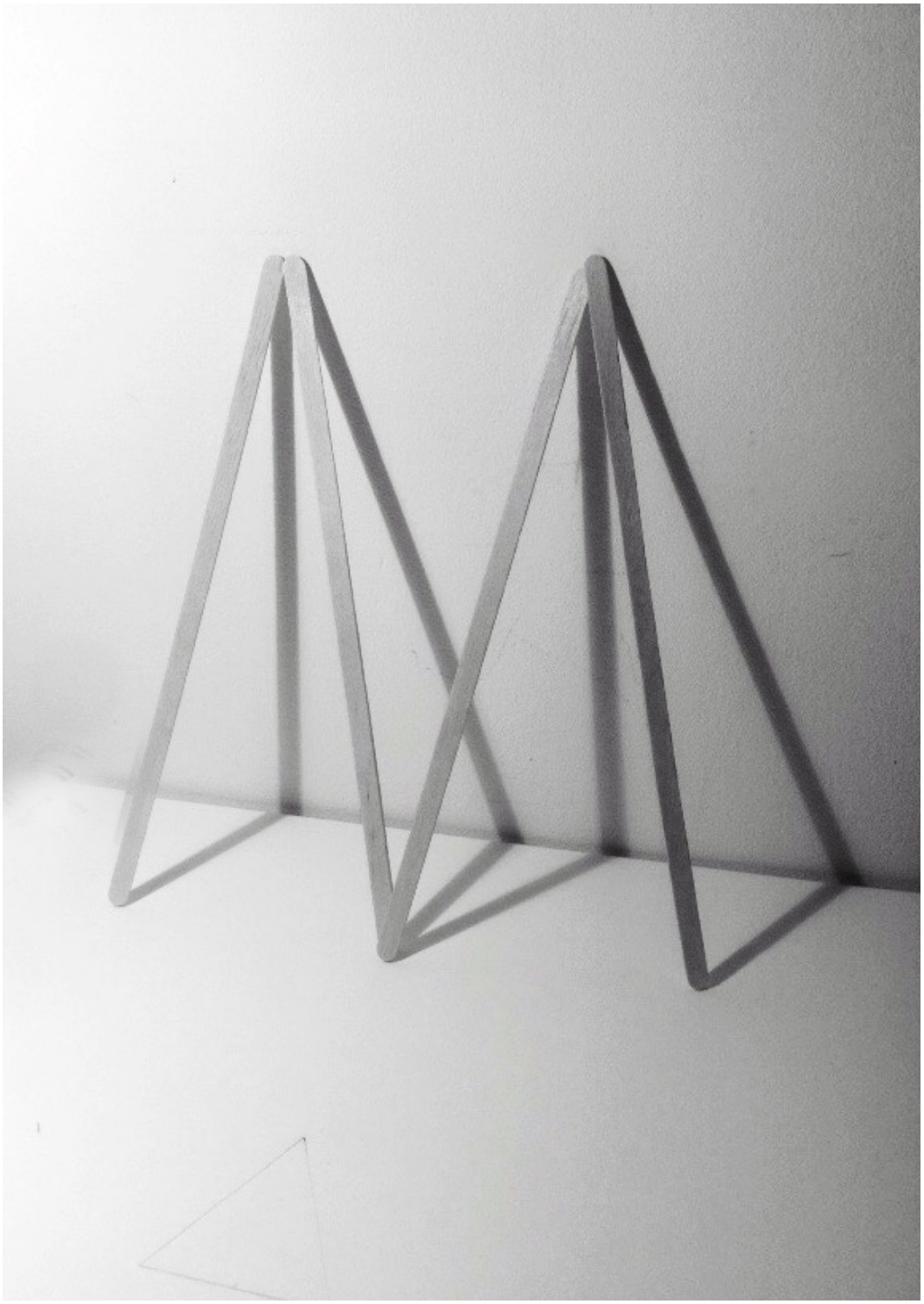
I used photography to be able to document how the shadow changes when seen from different perspectives, and used video to show how the shadows change when the object casting the shadow is moved in front of a stable light source. The video can be found on my UAL blog or at https://vimeo.com/120302888

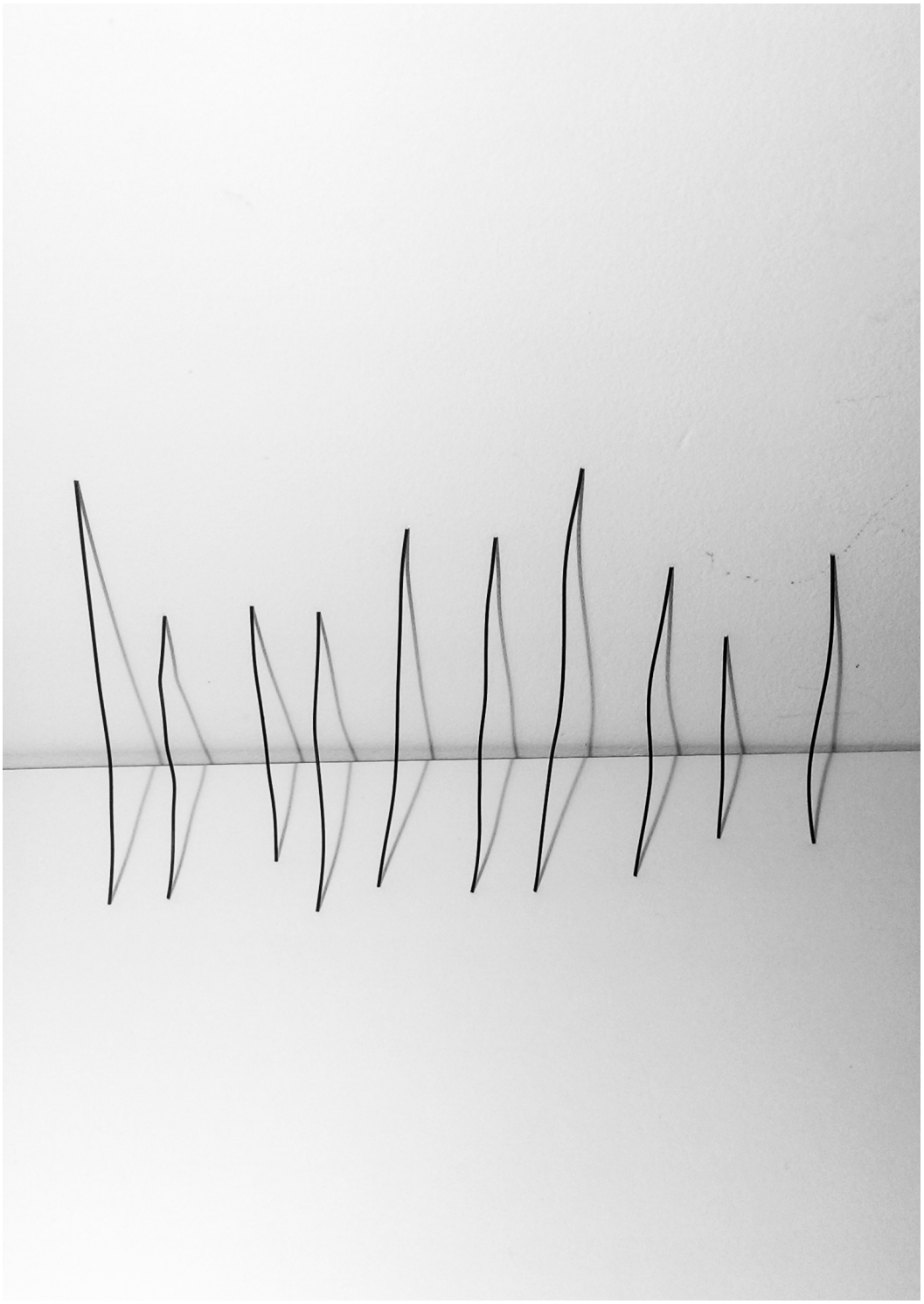
OUTCOME

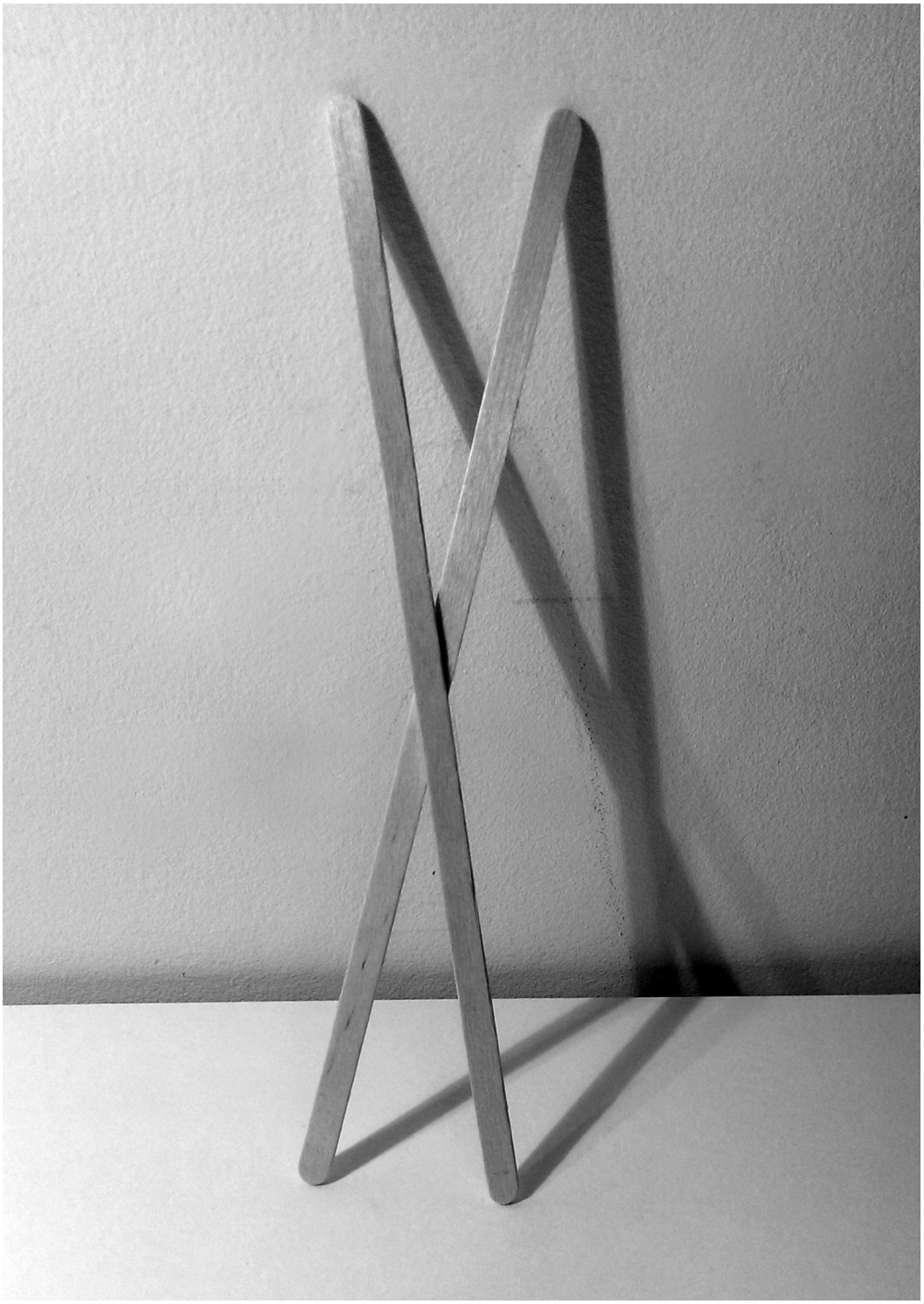
I was able to see through out this experiment how one object can be much more than what it is. This idea helped me form the visual style for my output project which can be seen later on in this visual summary.

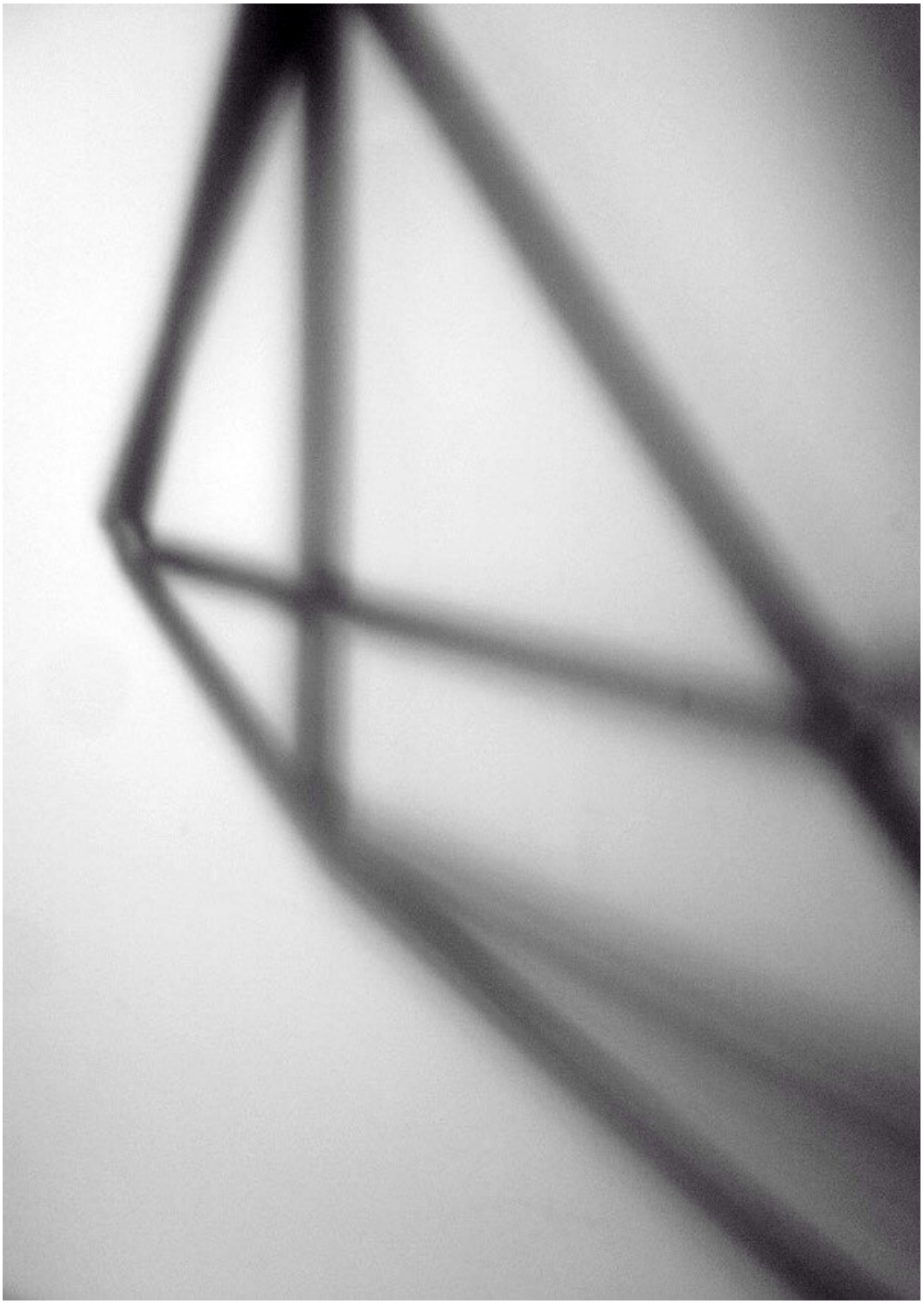












EXPERIMENT FIVE

HOW CAN I MAKE TRIANGLES OUT OF UNCONVENTIONAL MATERIALS?

OBJECTIVE

This experiment was the output of a brief we took in class where we were asked to form triangles out of unconventional materials from within or around our campus.

METHOD

Heidi (my classmate) and I joined forces and worked together on gathering some objects from around campus. From all the things we gathered, we ended up using wooden stirring sticks found at the Typo Cafe to form an Icosahedron. We then hand-picked and cut up headlines from old newspapers and glued them to cover the negative spaces of some triangles in this Icosahedron. We thought of this form as a triangular dice,that when is rolled it lands on one headline or one message. Our aim was to test the stability of this triangular dice compared to that of a normal dice which is made out of squares.

OUTCOME

Due to the fact that the Icosahedron was made out of wooden stirring sticks, it was hard to test whether or not it would roll properly. It was too fragile to throw around. We however wanted to demonstrate how it might roll so we recorded a stop motion loop of it rolling down some stairs. The video can be found on my UAL blog or at https://vimeo.com/119701928


care for friends or relatives,
Go on, pamper
ourselves!
dedicated carer


two statistics. One is
the final three months
they were up 5% year on year
terms. That is the fastest
increase since 2002, and of course
Ideas at wor


BE
AT YOUR
BEST


Under
pressure
FARE
ENOUGH?
BE
AT YOUR
BEST


FARE
ENOUGH?

EXPERIMENT SIX

HOW TO TRANSITION FROM ONE SHAPE TO THE NEXT?

OBJECTIVE

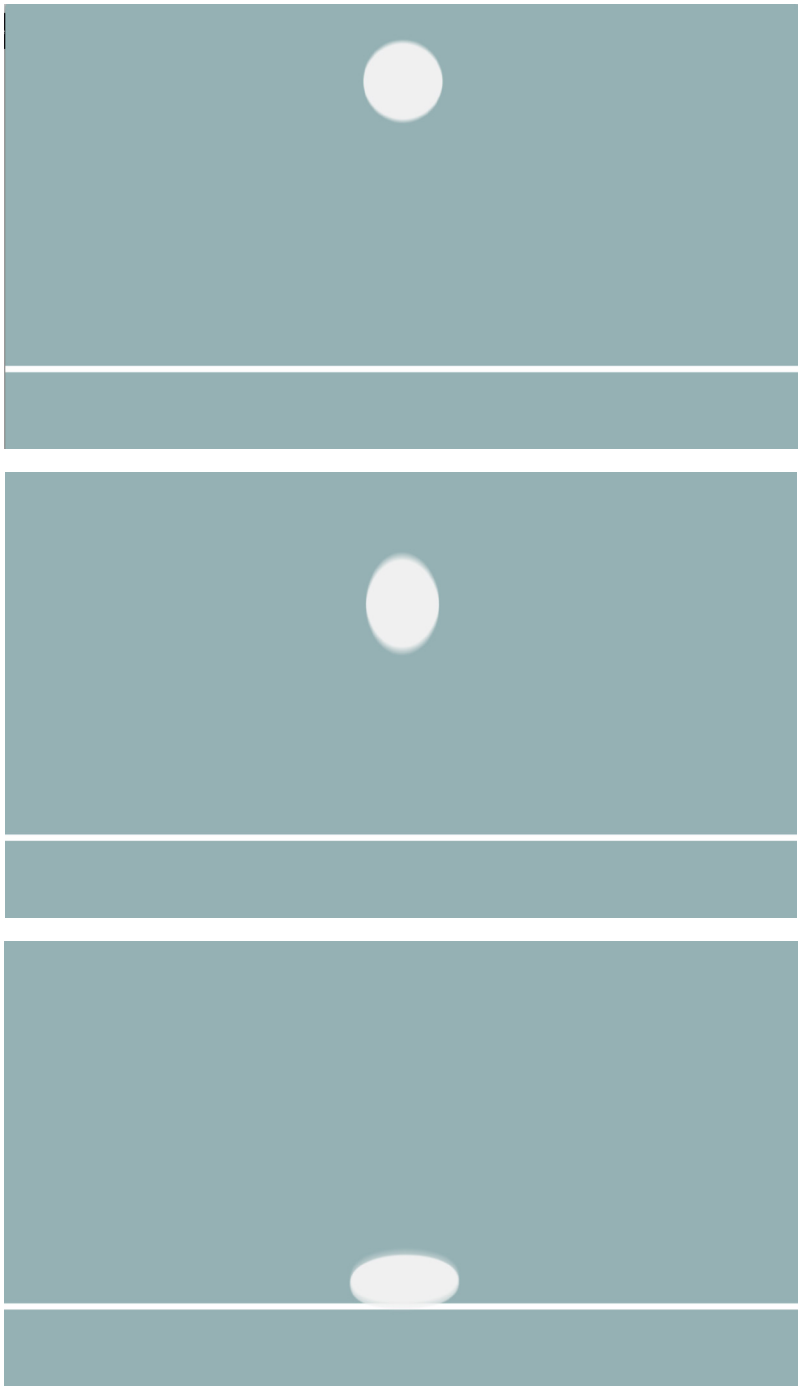
The aim of this experiment was to come up with different ways to transition from one shape to another eventually forming a triangle. I found this experiment to be particularly interesting because I was curious to know how one shape can form another using the previous shape's points and lines. This experiment was inspired by the stop motion workshop covered with David Daniels.

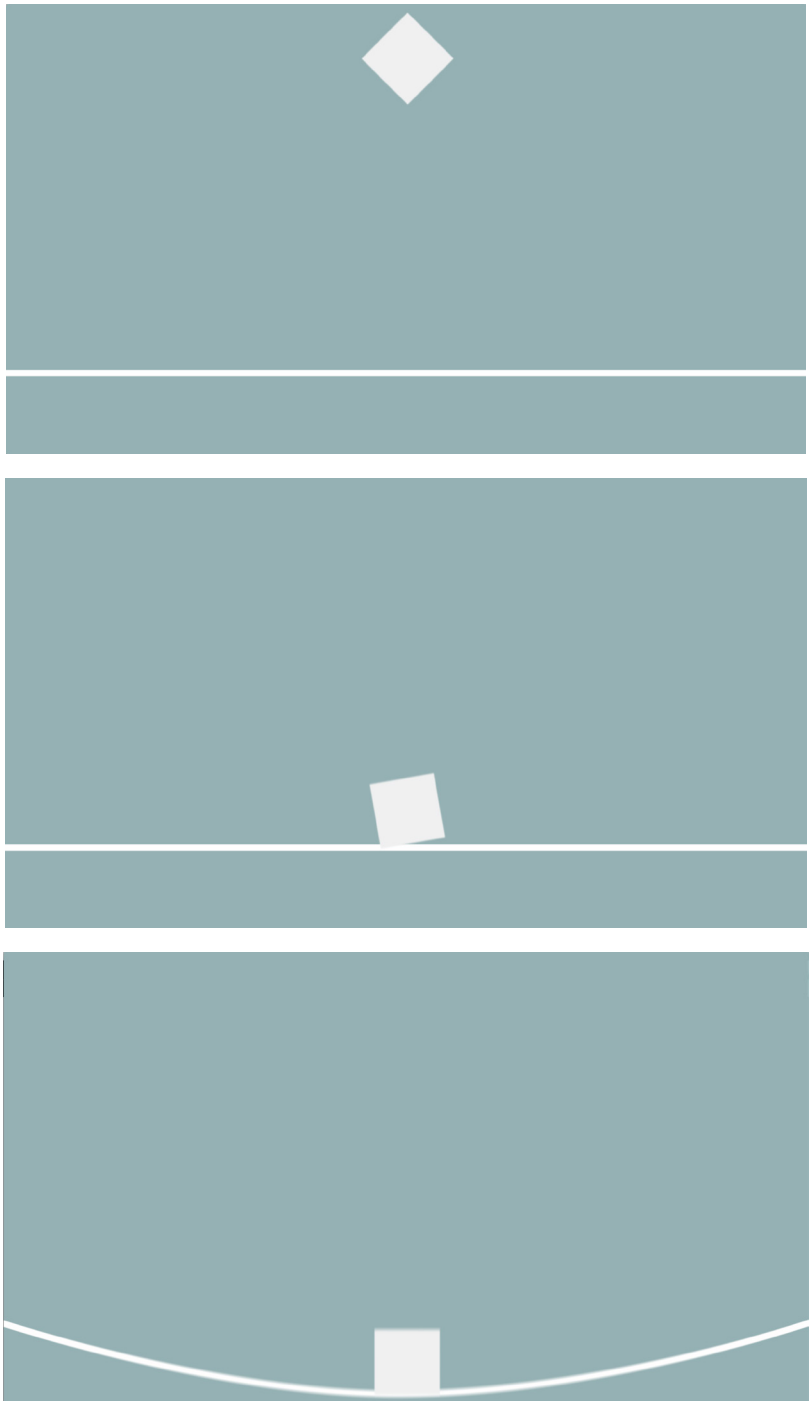
METHOD

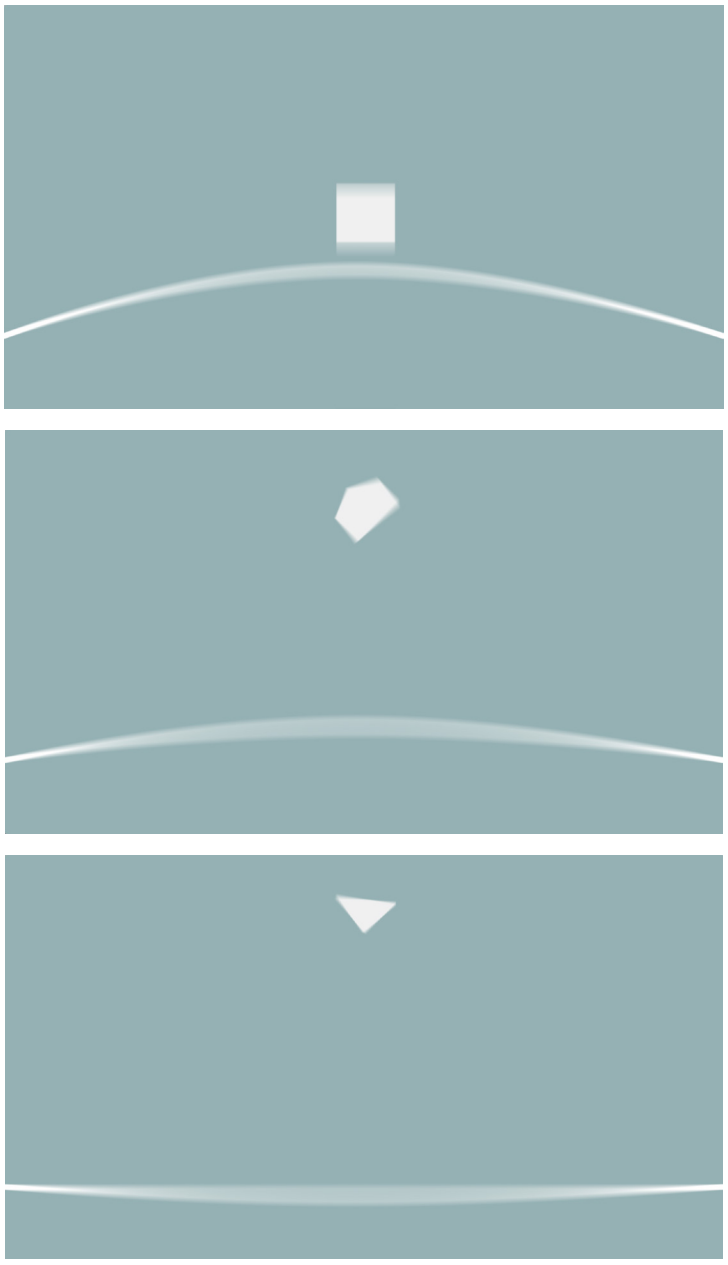
First, I brainstormed in my sketchbook about how a circle or a square can eventually transition into a triangle, then I implemented some of the ideas in digital animation.

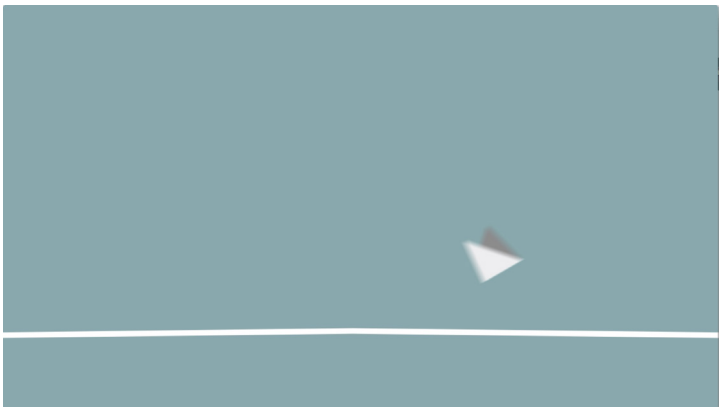
OUTCOME

Through this experiment, I was able to see those similarities and differences between all three shapes that I have realized whilst working on experiement one, put in motion. The opposite page shows sequential screenshots of one of the animations I made. The actual animation can be found on my UAL blog or at https://vimeo.com/119861020









EXPERIMENT SEVEN

HOW CAN I DISTORT IMAGES USING A TRIANGLE?

OBJECTIVE

With this experiment my aim was to find different ways to distort images using triangles.

METHOD

I used a bunch of old newspapers and magazines to create collages of small compositions by cutting them up and glueing them purposefully.

OUTCOME

I was able to see through this experiment how when one image is distorted a complete new image is made. I demonstrated this in three different ways.

Image 1:
My intention with the first image was to cut up magazine paper into small triangles, and then use these triangles to create an illusion of one big three dimensional triangle.

Image 2:
My intention with the second image was to take an image from a newspaper cut it up into equal triangles, and glue it back with minor shifts in placement, in order to be able to see if the viewer's ability to read the image changes, and if this slight distortion changed the image's meaning.

Image 3:
With the third image, my aim was to combine two images through a triangular cut-out. My aim here was to see how two images with two different meanings would be readable when seen as one.

IMAGE ONE

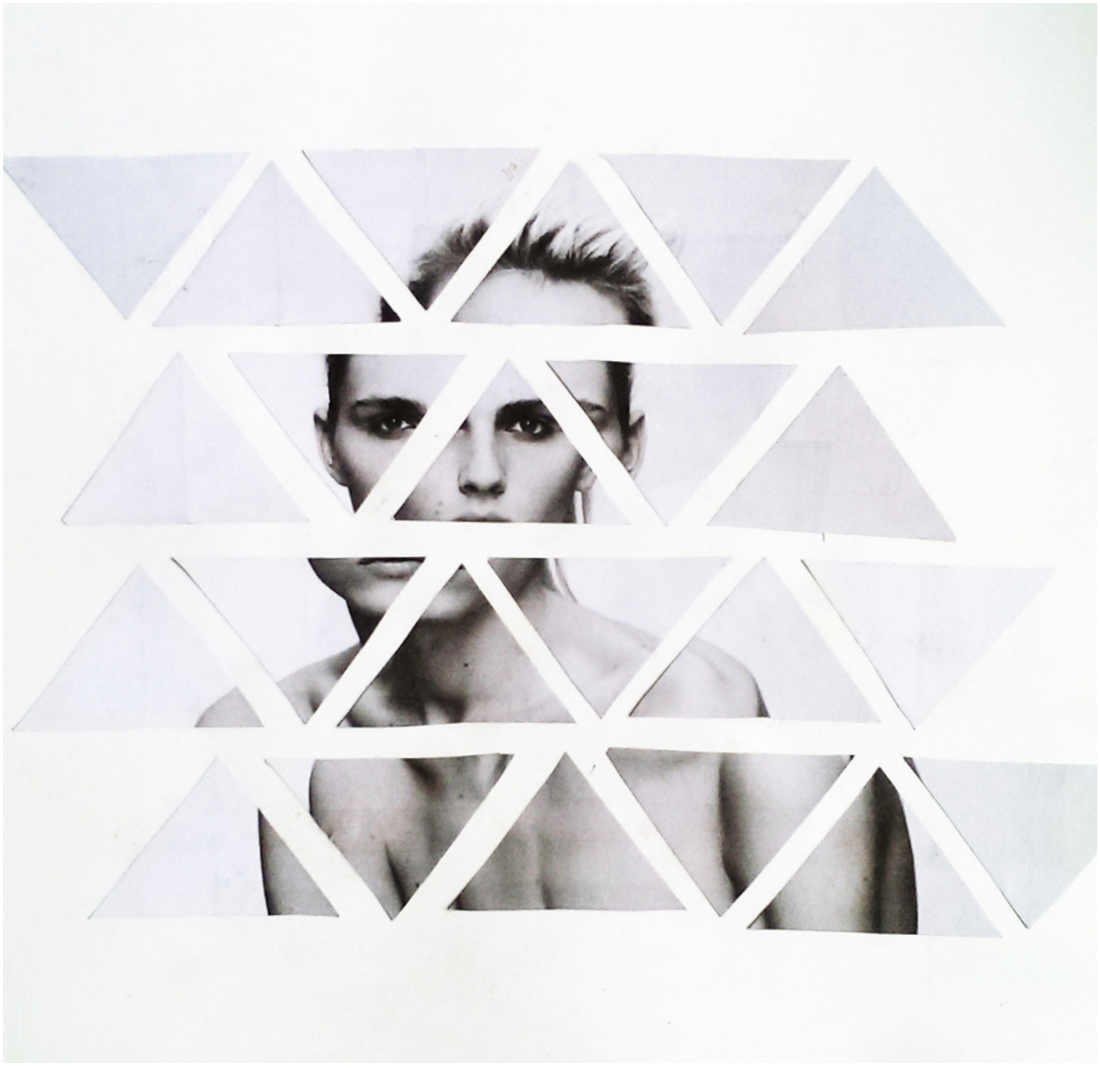


IMAGE TWO

IMAGE THREE

EXPERIMENT EIGHT

HOW CAN I TRANSITION A TRIANGLE BETWEEN DIFFERENT DIMENSIONS?

OBJECTIVE

In this experiment my aim was to find ways to transition a triangle from one dimension to the next.

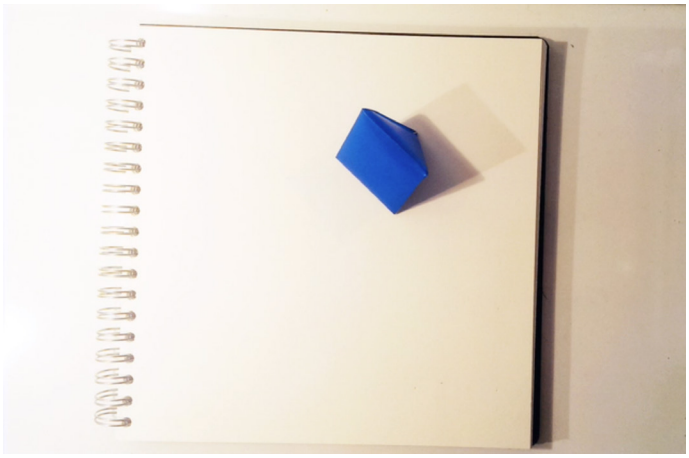
METHOD

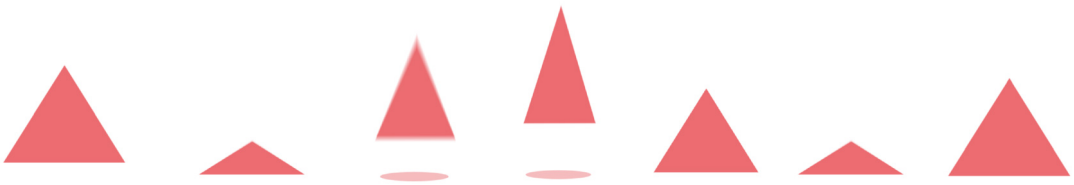
To be able to do this, I used stop motion as my technique. I started this transition from a single two dimensional sketch in my sketchbook, into a paper cutout. This paper cutout then duplicates and is replaced by a three dimensional pyramid out of plastic divider paper.

To make this short stop motion experiment, I had to use unconventional materials to set up a stable camera. The pictures were taken on my HTC mobile phone and then edited on after effects.

OUTCOME

Since this experiment was carried out before the stop motion workshop, I was unaware of any application that can be used to make this process simpler, but this made me see how much work goes into perfecting a stop motion piece, and how this perfection can eventually alter the viewer's propensity to believe that this transition was real rather than just a replacement of objects on screen. The final outcome can be found at https://vimeo.com/119709090





JUMP

WALK

DANCE

EXPERIMENT NINE

HOW TO BRING A TRIANGLE TO LIFE AND GIVE IT EMOTION?

OBJECTIVE

In this experiment, I was very keen on figuring out how I can make my triangle alive. I found it particularly challenging to be able to convey emotion and body language through just a three sided shape and without the employment of sound.

METHOD

I started by dissecting the triangle into anatomical body parts in my sketchbook, and then went on to analyze how I would be able to make it walk, run, turn, nod, jump, dance or sit in comparison to all those movements in human beings or animals in nature.

OUTCOME

After having tried to implement several of these movements, I ended up using them in a narrative to show emotion based on an ongoing storyline. Having correctly translated those emotions made me keen on investigating this question further as part of my output project to see how far visuals alone can go in translating feelings and ideas.

The images on the opposite page are a sequence of screenshots from some of these experiments. The actual videos can be found on my UAL blog or at https://vimeo.com/119976338, https://vimeo.com/120019596 and https://vimeo.com/119706659

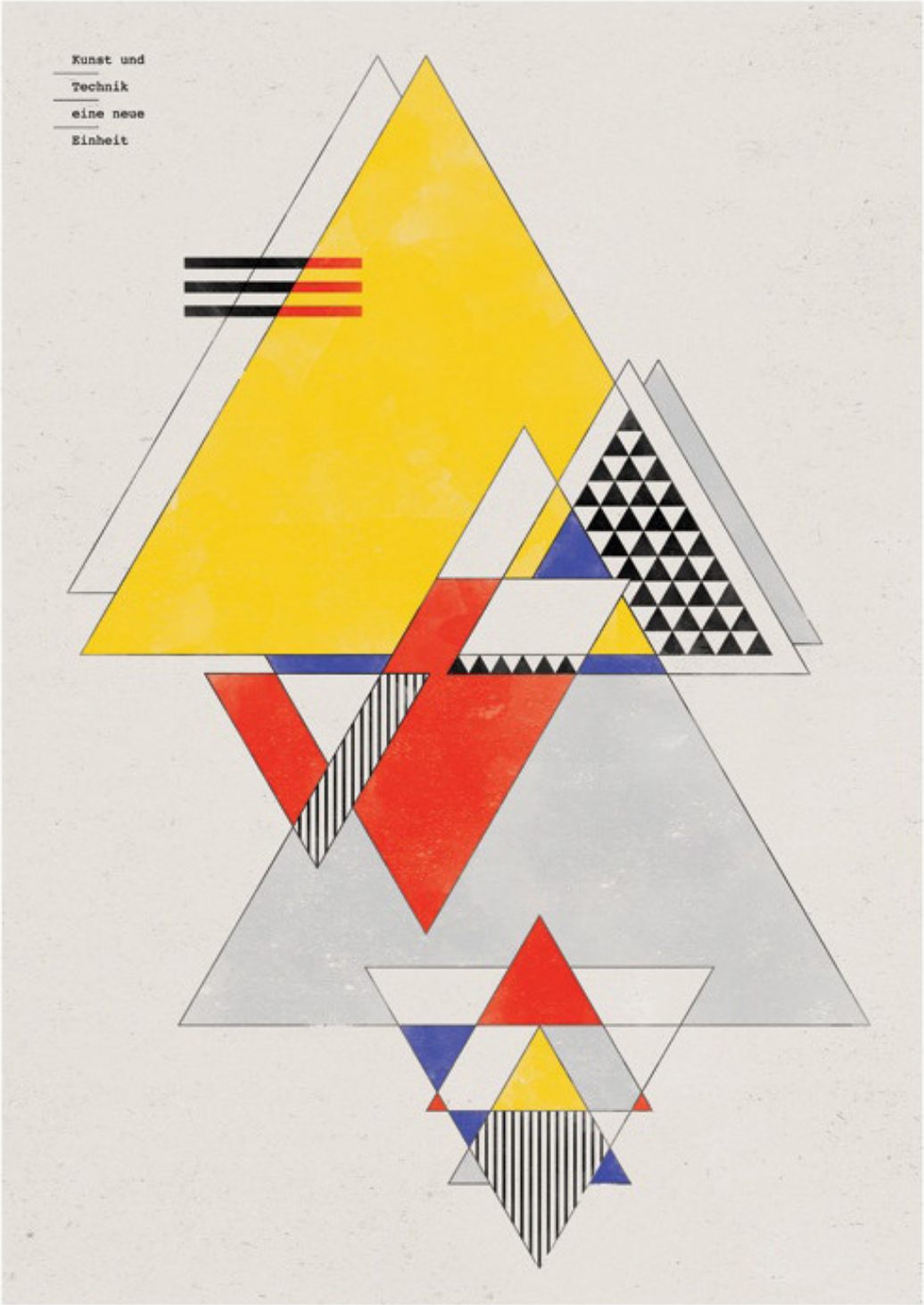
SECONDARY RESEARCH

SHAPES

Triangles, along with circles and squares are the three primary shapes that form the world around us. They are the means by which we are able to decipher, define and organize visual information on a daily basis. As a result of this, they are seen as the building blocks of our cognitive development. Unlike language, they are universal and speak directly to the mechanics of our eyes and brains. Through them we are able to exchange meaning and information, thus allowing for collective and collaborative thought processes.

The significance of those shapes in our lives made them play a major role in history, especially in that of art and design. The triangle, circle and square were the core elements that shaped many modern art movements. According to Lupton and Miller (1993), Bauhaus - school of art, architecture and design, founded in Germany in 1919- was one to define the three primary shapes as "paradigmatics of the formal laws considered to underlie all visual experssion." In other words, they are the grammar to many visual sentences we encounter everyday .

Having studied the triangle in particular out of all the primary shapes for our brief, I was able to see the diverse world that the triangle was a major part of. It carried various meanings and connotations depending on the context it was in. Whether it was art, design, mathematics, architecture or religion the triangle always represented a different symbol and a different meaning.



ART AND TECHNOLOGY
Bauhaus Exhibiton (1923)

SECONDARY RESEARCH

THE TRIANGLE

Out of all the three primary shapes, the triangle is the only one that happens to have more than one form. Whilst there is one type of circle and one type of square, there are several types of triangles. The type of the triangle can vary from the length of its sides or the size of its angles. There are Equilateral, Isosceles, Scalene, Right-angled, Obtuse, Acute, and Equiangular triangles. All of which have been used across history to symbolize different things within different contexts.

The shape of the triangle can however be defined similarly by everyone around the world, and although the emotion it evokes in every person depends on their constructs and culture, there have been some unified feelings described about the shape of the triangle. Whilst working in a workshop with students from Branding and Identity, we were able to come up with words that we believed described our allocated shape. These words can be seen on the opposite page.

SIMPLE	SHARP	DYNAMIC
POWERFUL	ADAPTIVE	ALLURING
SUPPORTIVE	BALANCED	CONFIDENT
NAVIGATIONAL	ENERGETIC	AGGRESIVE

TRIANGLES IN SYMBOLS

The triangle was a shape that has been used time and time again across history. Its meaning changed from one culture to another symbolising different things to different people. Upon my research, I was able to collect some of these symbols and form a basic understanding as to what they represented.

ROSA WINKEL

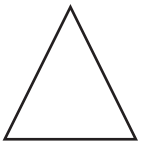
This symbol was imposed by Nazis, to be used as a badge in order to identify homosexual prisoners.

BLACK TRIANGLE

A badge imposed over prisoners in a Nazi concentration camp for those who were considered asocial.

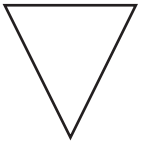
RED TRIANGLE

Used as a badge in Nazi concentration camps to identify political prisoners like democrats and communists.



MALE

an up-right equilateral triangle, symbolises the aspiration of rising up, power and male force.



FEMALE

ancienct symbol of femininty, symbolising the genetalia of a goddess or a womb.

GREEN TRIANGLE

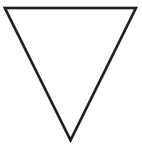
Used as a badge in Nazi concentration camps to identify professional convicts or criminals.

PURPLE TRIANGLE

Used as a badge in Nazi concentration camps to identify Bibelforscher or Jehovah's Witnesses.

FIRE

Also known as blade. It symbolises power, a rising force or rising energy.



WATER

Also called Chalice. A symbol of water flowing downward as the grace of heaven.

EARTH

This symbol represents earth as a material element of stability, fertility, and stillness.

AIR

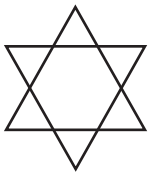
Air is as an untangible, active masculine element. Superior to other elements like water or earth.

AETHER

Divine unity & balance that holds all the world together and encompasses spiritual energy and force.

THE HOLY TRINITY

the symbol respresents the unity and distinctness of the father, the son and the holy spirit.



STAR OF DAVID

Also known as the Shield Of David. It is associated with Judaism, and appears on the flag of Israel.

DELTA

This is a Greek capital letter, equivalent to the English letter D. It is also used in mathematics.

TRIANGLES AS SIGNS

Triangles are also used to create signs that communicate a specific message to its spectators. Those signs can either be universal or they can vary in meaning from one culture and context to the other. More often than not triangles were used to alert people and grab their attention. This is because they have a universal characteristic of being alluring (e.g. an alert for danger). The following illustrations show some examples of such signs.


EX

TRIANGLES IN GRAPHIC DESIGN

In graphic design, the triangle can be seen within all its different mediums, from logos and posters to books and motion graphic films. Its meaning and function within any of these mediums will always depend on the context and the concept of the message being communicated to a distinct audience. The folowing images show some examples of how a triangle can be used in graphic design.

JEDYNE WYJSCIE
By 1910 Design & Communication

This logo symbolises a music venue in Praga, a historical location

CINE CABARET

By Shebam studio

Advertising a French production by the Théâtre ça respire encore

TRIANGLES IN NATURE

On researching about the triangle and learning about its history within different contexts, I realized that the triangle is a man made shape. Sharp edged perfect triangles do not exist in nature, however nature does encompass things that can be abstracted into triangles.

REINDEER
By Nicolas Le Boulanger
Taken in the forest of
Rambouillet

MATTERHORN SUNRISE
By Andreas Jones
Taken in Switzerland

TRIANGLES IN ARCHITECTURE

The triangle has also played a major role in architecture. The influence of it shows on several buildings around the world, both in the past and in the present.

ORCHARD CENTRAL MALL
Trigonometry in architecture for Singapore's tallest vertical mall.
Photographed by: Roisin Connelly

FLATIRON BUILDING
New York, circa 1905. Designed by
Chicago architect Daniel Burnham.
Photographed by Berenice Abbott

TRIANGLES IN PHOTOGRAPHY

Abstract black and white photography was another medium where the triangles can be repetatively seen. The following photographs show some very popular examples.

SHADOW PEOPLE
By Lui13

APPROACHING SHADOW
By Chinese artist Fan Ho

BODY PART IN A TRIANGLE
By Eduard Bonnin

BODY PART IN A TRIANGLE
By Eduard Bonnin

OUTPUT PROJECT

IDEATION

After having researched about triangles in several contexts, I was able to see how one simple shape can have so many different meanings and connotations across several cultures and historical periods. The idea that one thing can be understood differently by many people all around the world, causing at times unnecessary conflict, was something I have encountered repetitively throughout my life.

Although I was born and raised in the Middle East, I had the luxury and the ability to travel around the world. I was fortunate enough to meet and make friends with people from different cultures that carried different ideologies and beliefs than my own. Being exposed to such diverse opinions, especially ones that revolved around similar topics, helped widen my understanding of the world and highlighted for me the importance of looking at things through someone else's eyes. Being able to do so has widened my propensity for empathy and my ability to imagine and hope for the better.

However, since my childhood and the days that have expired between then and now, I have encountered a large amount of people who were unable to see things from more than one perspective. Their vision of things was locked to their own subjective opinion, and hardly were they ever able to be objective. This often caused unnecessary conflicts in their own lives and the lives of everyone around them. For that reason, I decided to dedicate the output project of unit 1.1 to illustrate how one simple thing can be seen so differently by several people all around the world and stress on the importance of objective perception.

“Your opinion is your opinion, your perception is your perception–do not confuse them with “facts” or “truth”. Wars have been fought and millions have been killed because of the inability of men to understand the idea that everybody has a different viewpoint.”

JOHN MOORE

CONCEPTION

During the input phase of this unit, the question that I enjoyed answering the most was **«How to bring a triangle to life and give it emotion?»** Trying to bring the triangle to life was the most challenging thing I had to work out during that phase. Using such a simple shape to tell a narrative and display emotion without the use of supporting sound, dialogue or text was something that I found fascinating. The output of it, having correctly translated the emotions I intended, made me realize the power that lies in visual communication. As a result, I decided to look into this question further under the idea of perception.

To communicate my message, and illustrate how one thing can be seen differently by various people, I planned to create three separate films where in each film a triangle will be seen reacting differently to its own shadow. One would react in joy, one would react in fear, and the last in sorrow. The reason I used the shadow as the stimulus of the triangle's reaction is because I believe it to be the most familiar thing to us that is in a way separate from us, yet we all have it in common.

The reason I chose the triangle as the subject and the main element of my design is because of how I saw this one simple shape used across history and cultures to mean very different things. The use of its reduced form in my output to correctly convey a different emotion in each animation underlines and raises attention to how the simplest thing can be interpreted so differently depending on who is viewing it.

Neither sound effects nor type will be used to support the visualization of each emotion. The interpretation of what triangle carries what emotion will be completely based on the viewer's perception. Whilst one viewer can translate the movement of a triangle as joy, the other could translate it as fear and neither of which should be right or wrong.

PROJECT BRIEF

TITLE: Perception

OVERVIEW

Designing three animated shorts of three triangles reacting to their own shadow in three different emotions to illustrate how people around the world can see similar things from different perspectives and react to them accordingly.

AUDIENCE

Ages ranging from 17 and above, all cultures and all ethnicities.

OBJECTIVES

With this project I want to highlight the importance of looking at things through someone else's eyes, or the importance of looking at things objectively.

DELIVERABLES

Three animated shorts of three triangles reacting to their shadow in three different emotions (Joy, Sorrow and Fear).

PROJECT DEADLINE: 21st of April, 10 am

CREATIVE PROCESS

STAGES

To be able to complete this project, I divided my research and work tasks into seven stages.

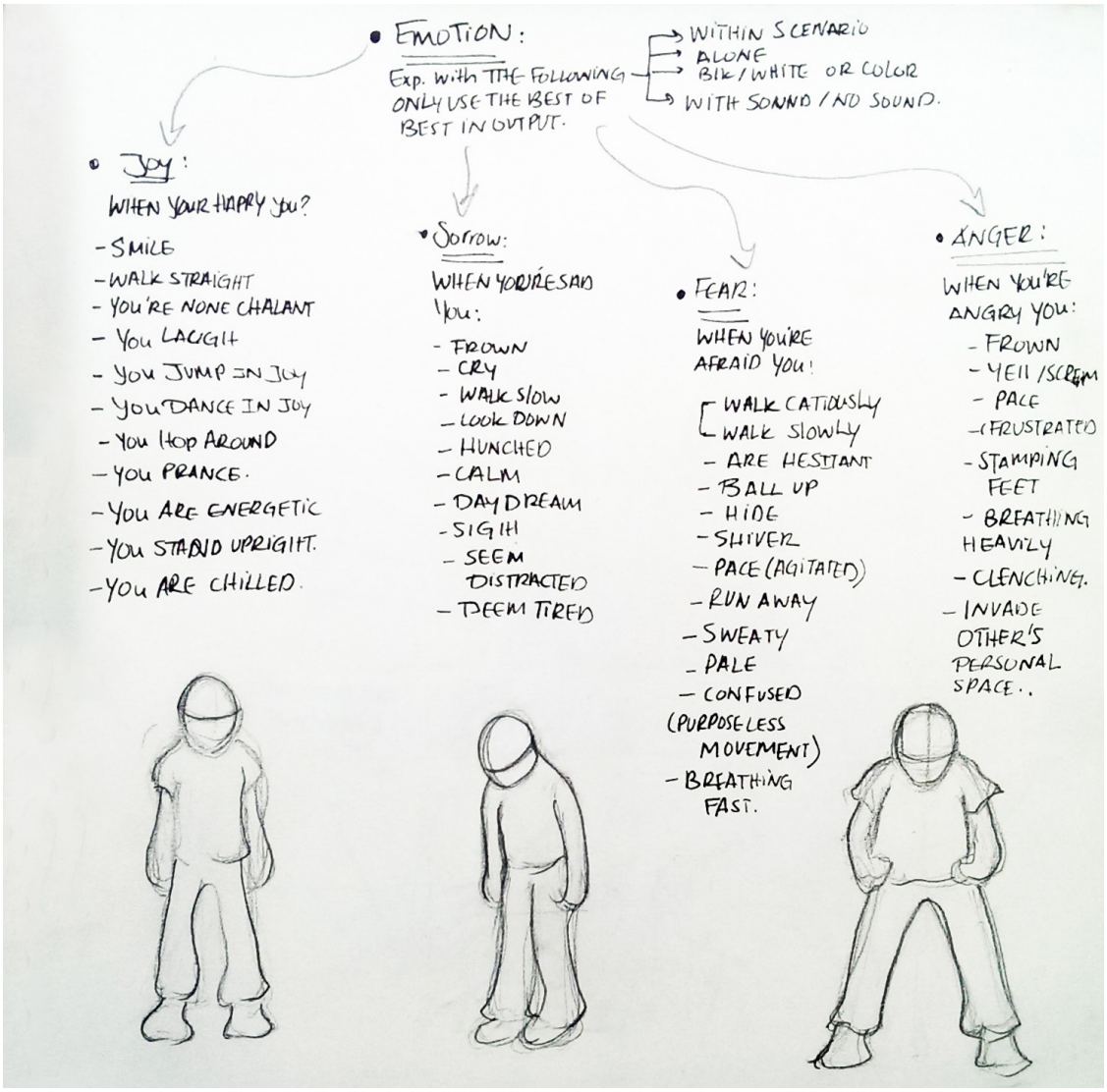
Studying human behavior
Movement breakdown
Visual style development
Understanding shadows
Storyboarding
Illustration & Animation
Testing

STUDYING HUMAN BEHAVIOR

My first stage «Studying human behavior» involved going out in public spaces and documenting the behavior of people based on their emotions. I wanted the movement of my triangle to be based on reality although this reality might be exaggerated later on in the animation stage.

For legal reasons I refrained from taking pictures or videos and went about writing down all that I have witnessed. I then analyzed my writings and summerized my findings into a list of behaviors for every emotion.

From that point on, I started studying how some of these behaviors can be translated through a triangle, whilst making sure there is minimal to no compromisation to its geometrical form.



LIST OF EMOTIONAL BEHAVIORS

This was my final list of observed behaviors based on the notes taken earlier on.

Session 1:

→ LAUGH: → clinks White cup · Laugh. Slouches down (Not Relevant)
. SMALL TWIST: Flick Hair → open torso → easy slow movement back. Giggles: Shoulders ↑ Rise ↓ fall 3 times at least.
→ CHILD: Runs down (jog/skip) + turns around to Attract Mom's attention → skips AGAIN.
→ WALKING Bumps into FRIEND, SUDDEN CHANGE IN POSTURE → Elevated SHOULDERS → MORE EASE IN MOVEMENT AS THEY WALK OFF.

→ CHILD: TUBE: PRANCES AROUND (BORED) WANTS TO GET OUT. GIVEN AN OBJ of DISTRACTION. CALMS MOVEMENT SLOWS DOWN. THEN TURNS STATIC.

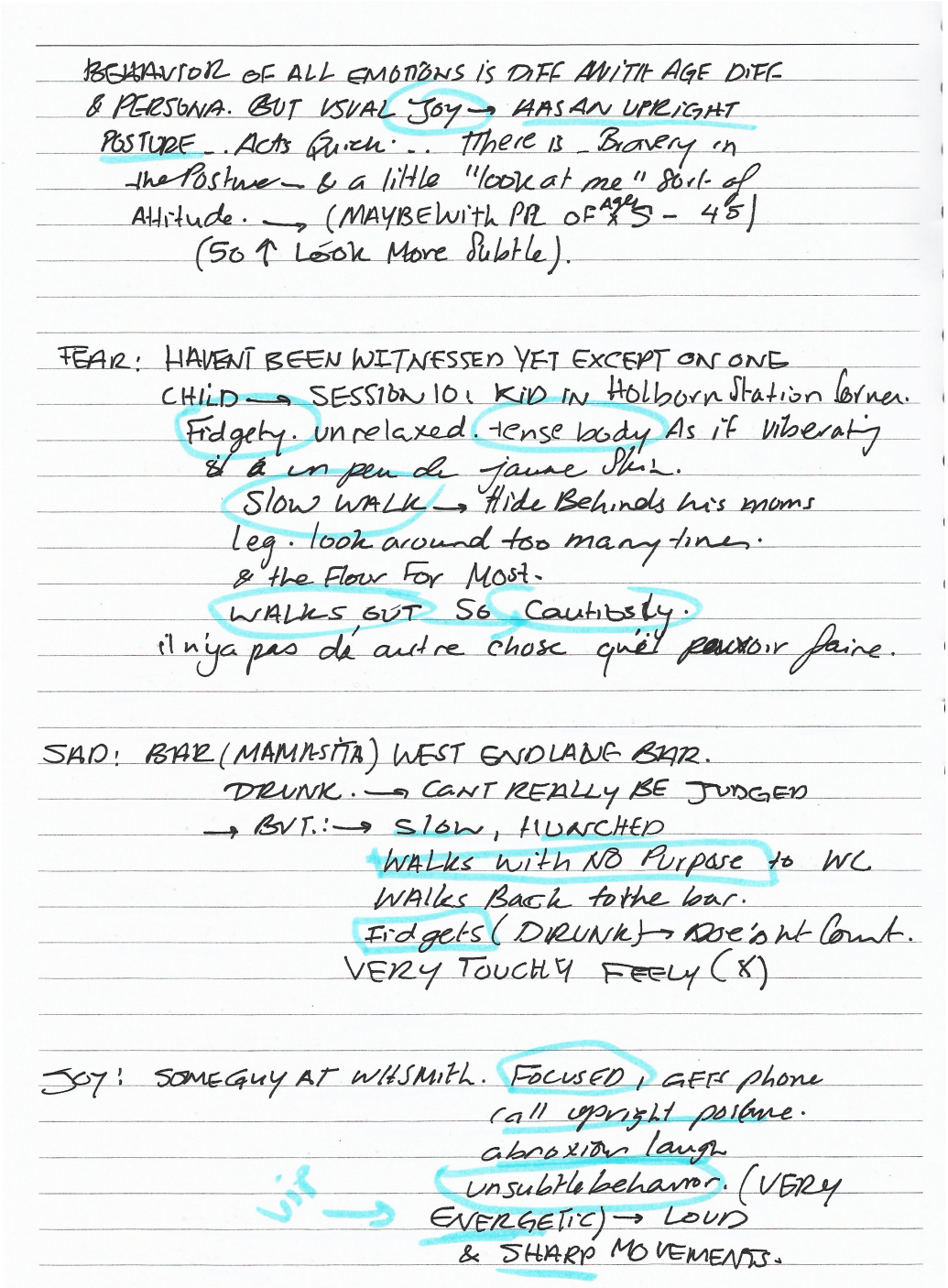
→ SESSION 2:

. HOMELESS GUY.. still, VERY slow movement, slow Shoulders, tired MOVEMENT, TIRED LEGS → TIRED TORSO, BUT FAST HANDS, HUNCHED SLIGHTLY.

GUY BEHIND THE CAFÉ TABLE: HUSTLED, FOUSED. (STARBUCKS SESSION) UPRIGHT, POSTURE STR8. BREAKS OFF.. POSTURE IS STRAIGHTER.
→ HAPPY POSTURE: STR8 INS UP EVERY TIME.

* ZARA DAY
→ FAMILY IN SHOPS: MOM Looks ANGRY At kid. lol.
ST. POSTURE AS WELL AS JOY BUT less loose ALOT MORE RIGID AS IF AFRAID TO BREAK FORM. DIRECTION ST. NO HESITATION IN BEHAVIOR.

DAD: SORT OF CHILLED. WALKS Slow At EASE NO FOCUS → NOT TOO UPRIGHT ~~circle~~ Layed back. (NOT IN SIMILAR TO JOY) *



NOTING HUMAN BEHAVIOR

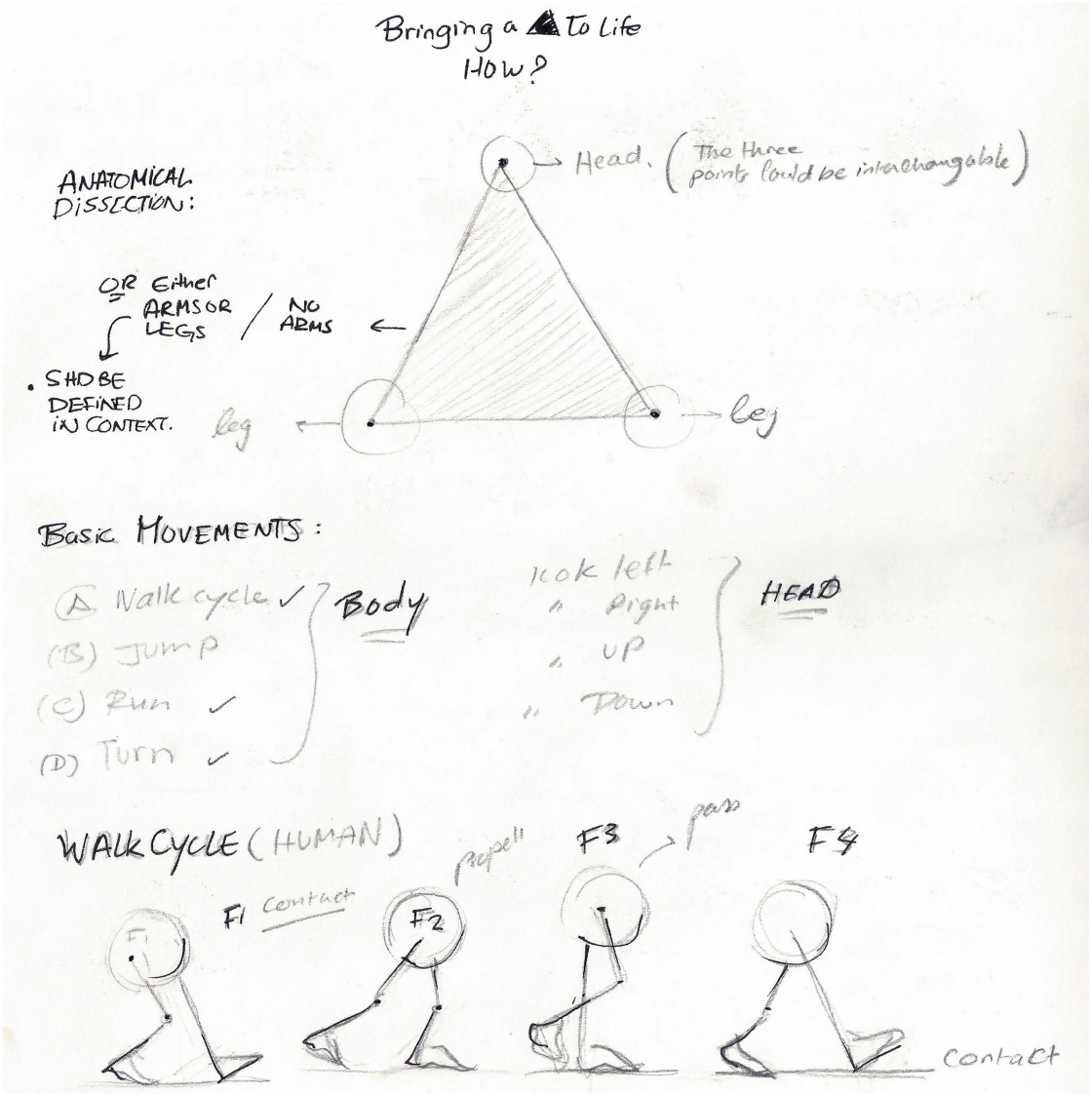
These are examples of the notes I took to document human behavior for each of the three emotions.

MOVEMENT BREAKDOWN

The second stage of my creative process was movement breakdown, analysis and implementation. It encompassed how might the triangle move in order to translate the behaviors observed in the previous stage. This was something I started working on in the experimentation phase of unit 1 whilst answering the question, "how can I bring a triangle to life and give it emotion?"

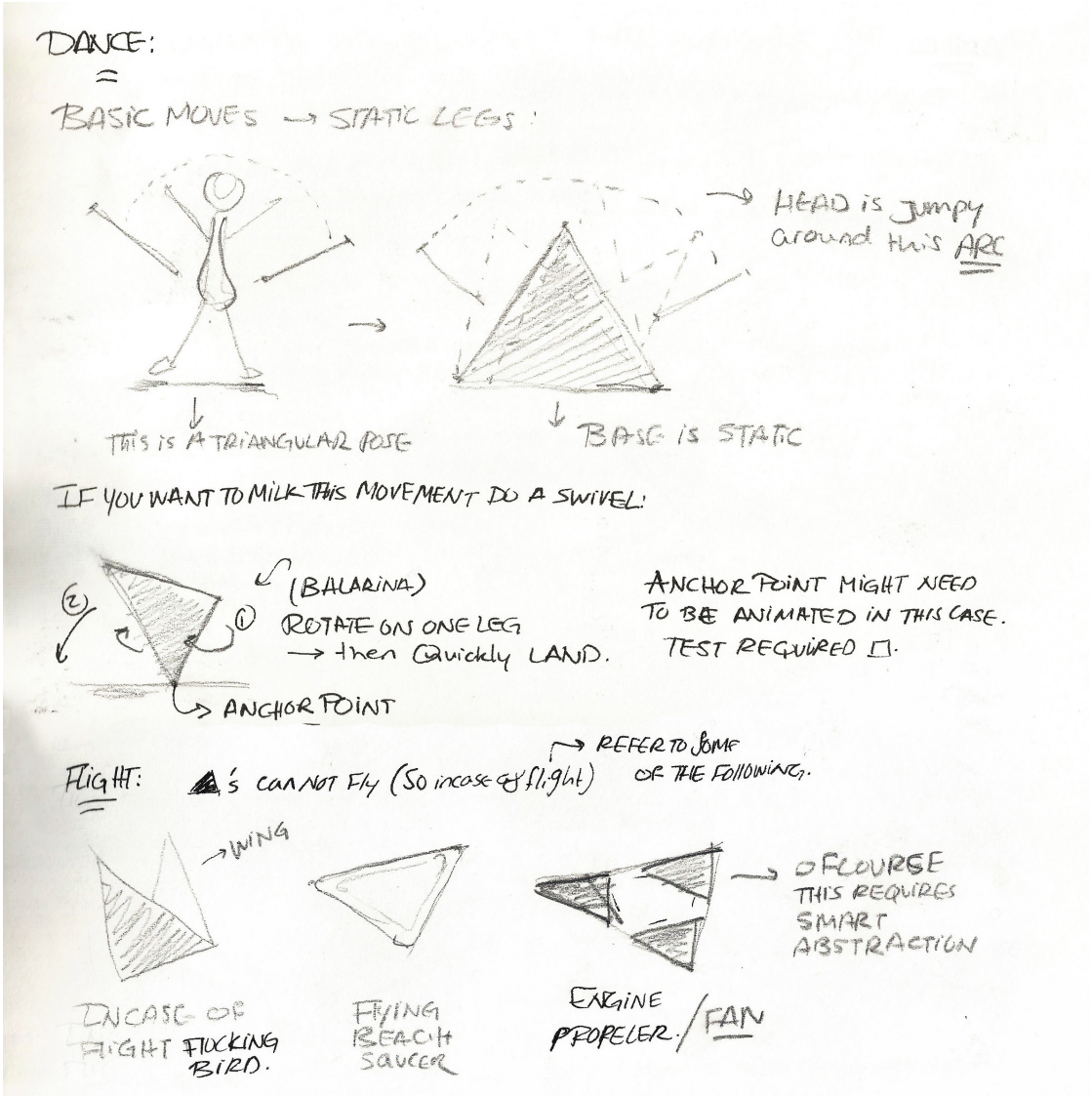
My studies from the previous phase gave me a head start in understanding how I will eventually be able to move the triangles to represent the three different emotions. For further exploration I sketched out every possible movement that I can implement in my animation without ruining the triangle's form. I also studied how the form can be altered without causing too much distortion to the original shape.

The image on the opposite page and the ones on the next four pages show some of the sketches and writings from my sketchbook. They reveal some of the research I did in order to be able to move the triangle in a way that can look both understandable and believable. Those sketches were followed by animated movement tests. An example of these tests can be found at this link https://vimeo.com/119703835



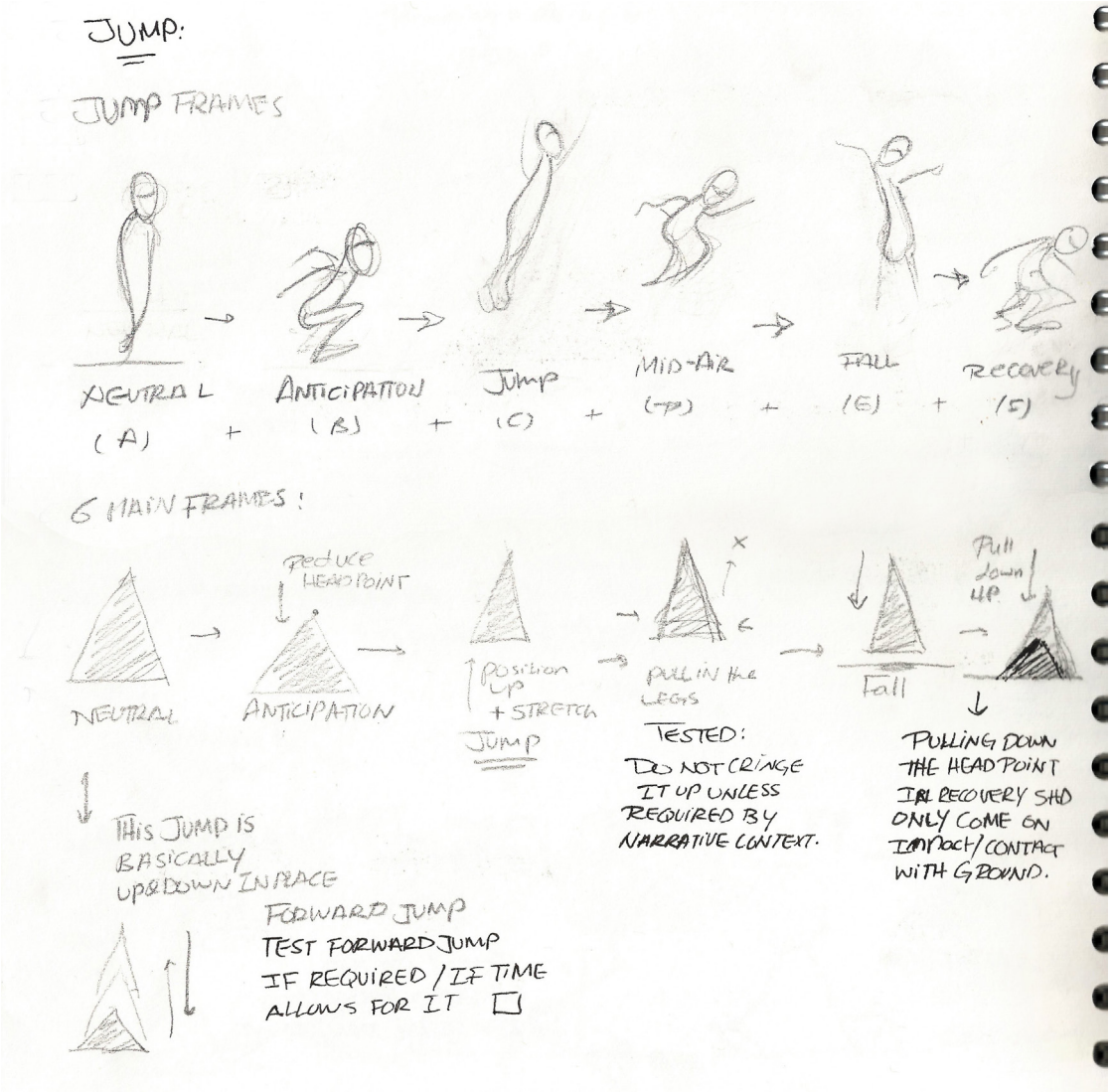
PRELIMINARY SKETCHES

The dissection of an equilateral triangle and walk cycle analysis and breakdown.



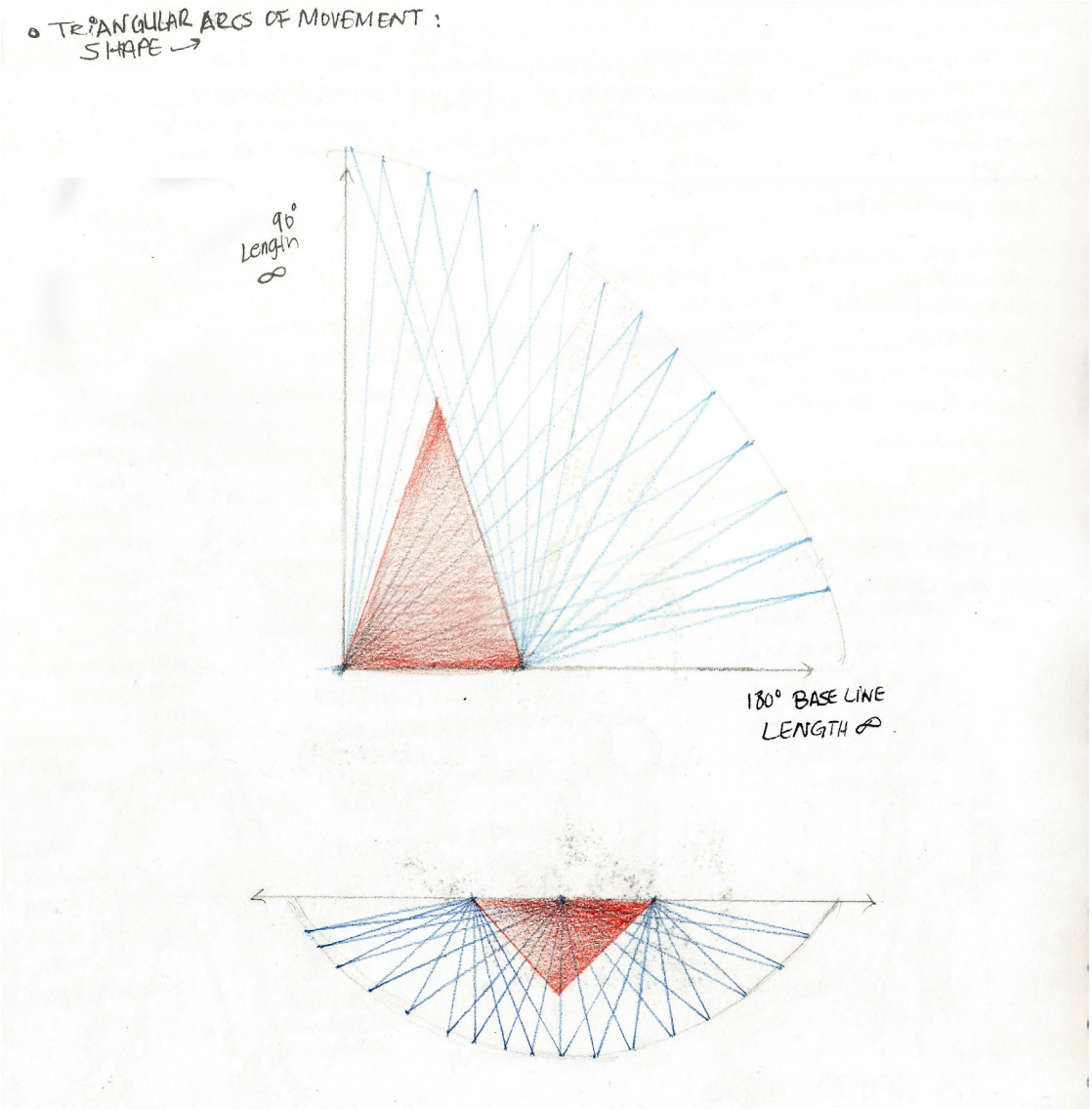
PRELIMINARY SKETCHES

Analysing how might a triangle dance or fly from one point to the next.



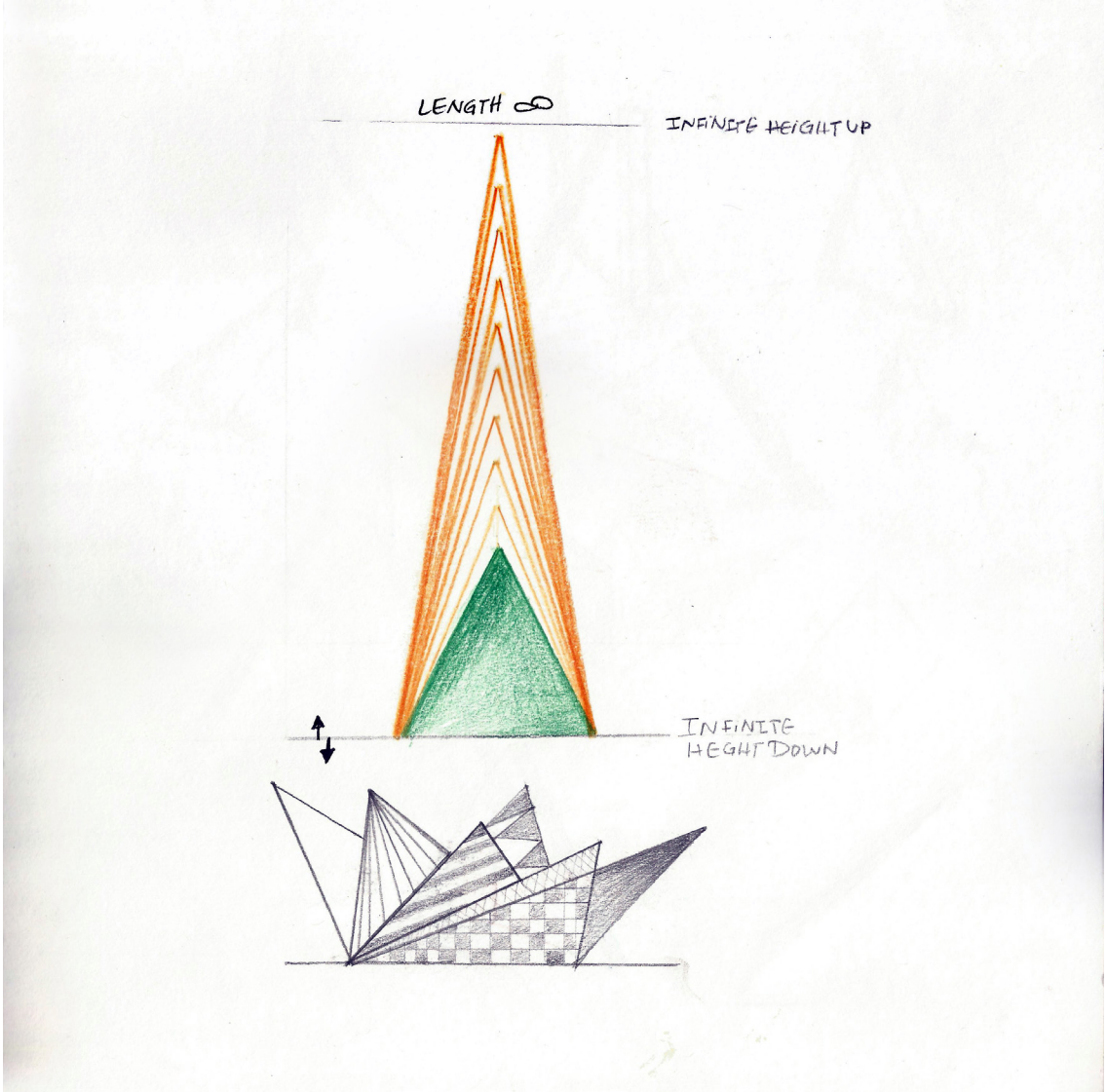
PRELIMINARY SKETCHES

Analysing how might a triangle jump compared to a human being.



TRIANGLE ARC OF MOVEMENT

The breakdown and sketching of all possible movement a triangle can do without compromising its form.



RANGE OF MOTION

The breakdown and sketching of all possible movement a triangle can do without compromising its form.

VISUAL STYLE DEVELOPMENT

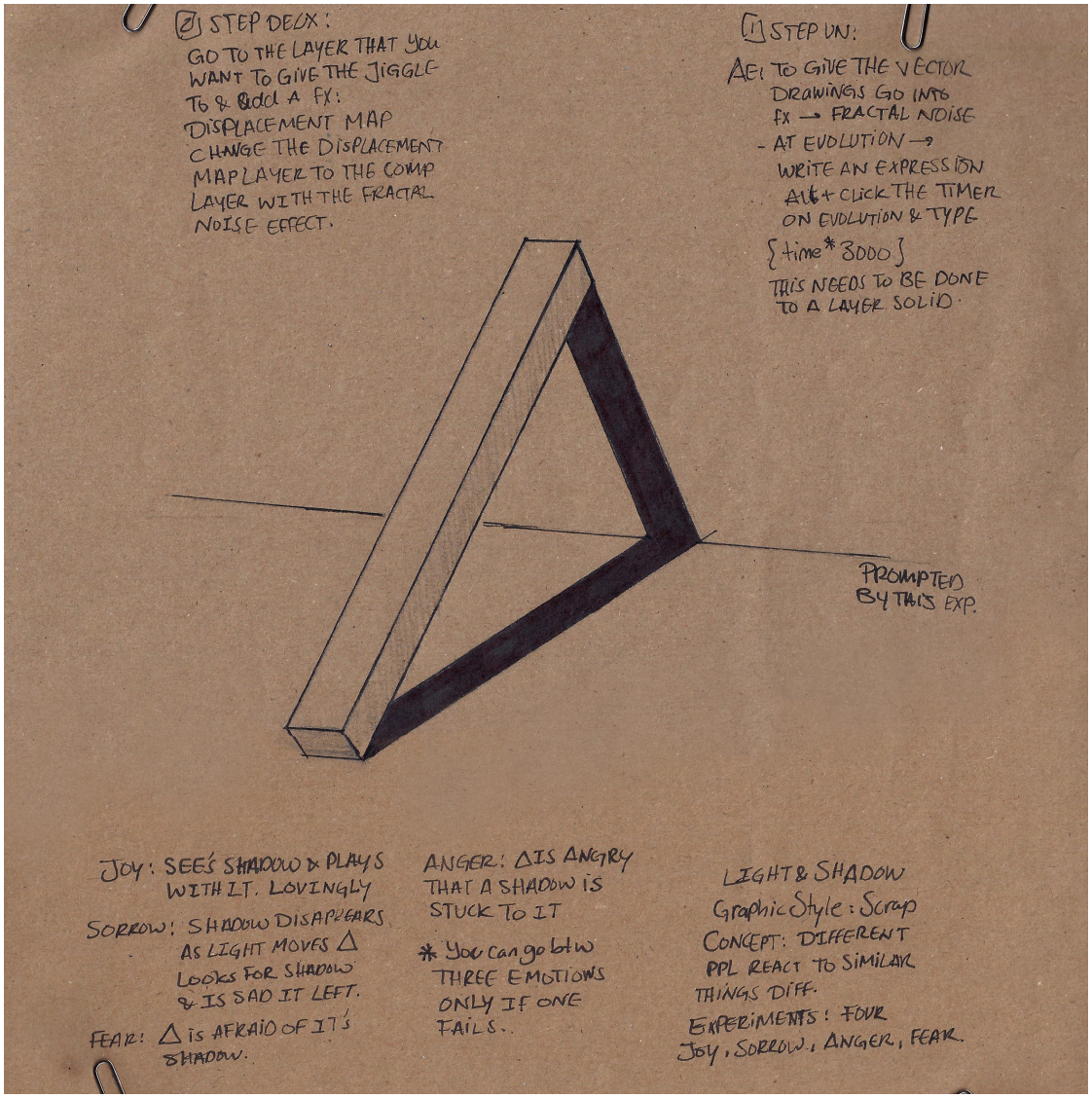
In order to match the idea of using a simple shape to communicate my message, I planned to keep my visual style minimalistic and reduced to the bare essentials.

I wanted the triangles to look three dimensional so that they would add an illusion of depth to the background plane, employ the negative space, and enhance the viewer's propensity of understanding their movement. Baring this in mind, I started sketching and brainstorming about how I might illustrate the illusion of a three dimensional triangle in two dimensional space.

My final idea of how to do so was inspired by the visuals in one of my experiments «Can everyday objects form triangular shadows?». (page 23)

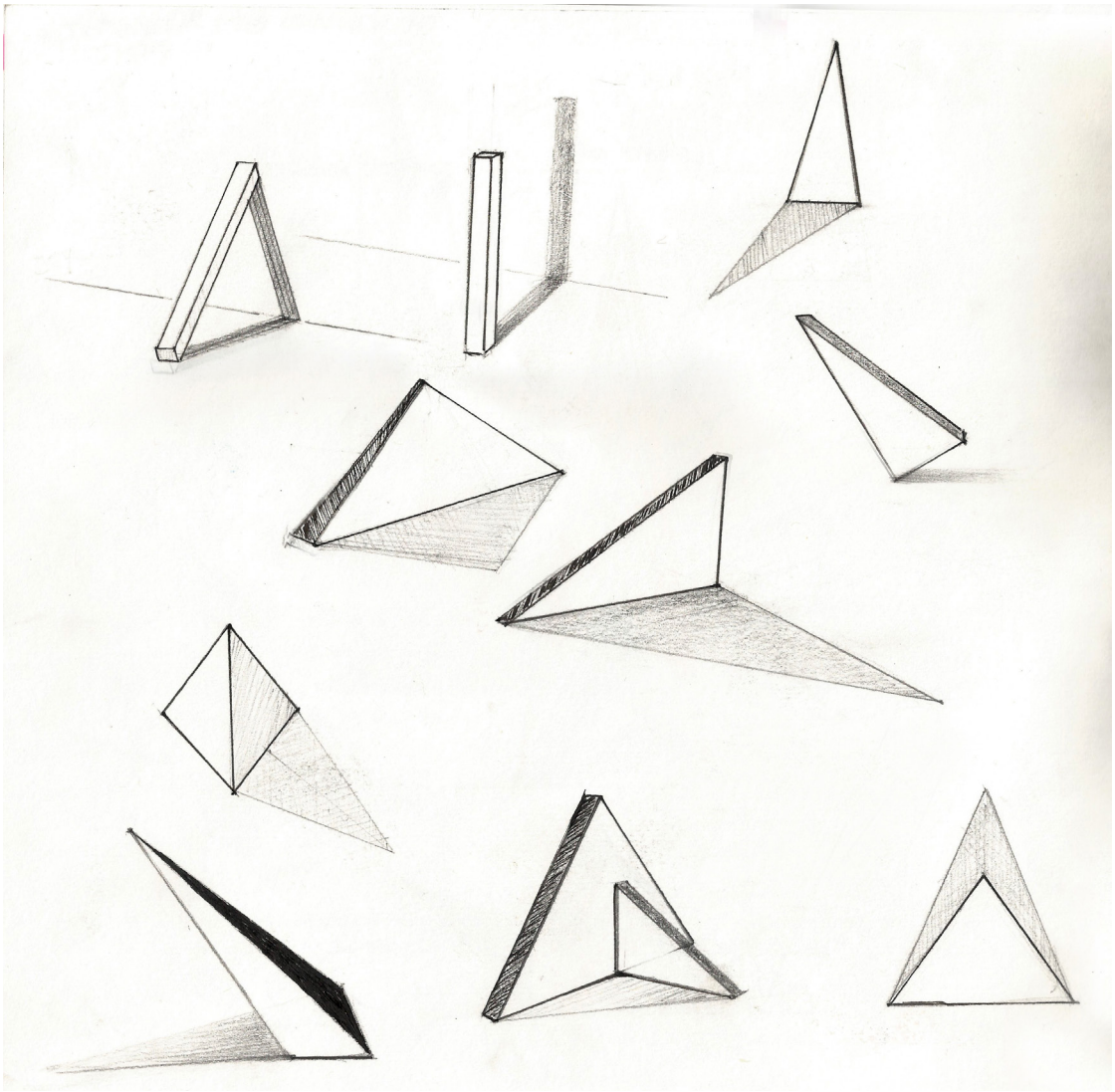
With one of the objects I used, the wooden stirring stick to be more specific, the shadow casted was precise, conspicuous, and seemed as if it was part of the main object. I wanted the triangle shadows in my animations to have the same look and feeling to support the idea that the shadow is part of us, yet is also separate from us.

The use of color for me was debatable. This is because, it can have different emotional impacts on the viewers depending on their cultural background and constructs. Adding it to my animations might consequentially force the viewers to focus on the meaning of the color rather than the meaning behind the movement of each triangle. As a result, I began animating in black and white, and left the decision of any color addition for post production, at which point I would be able to test whether it would strengthen or weaken my message.

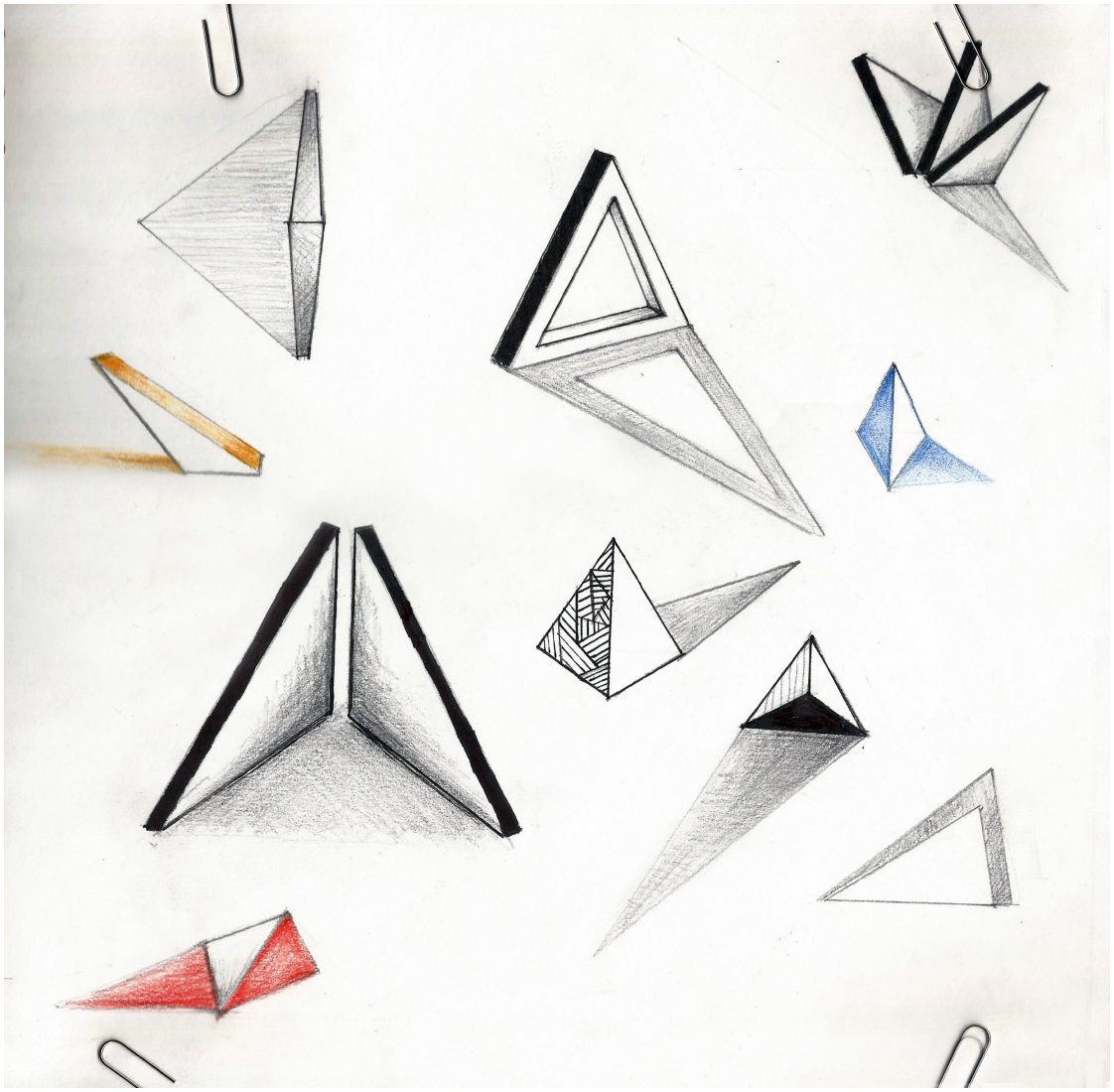


SKETCHING FOR INSPIRATION

Turning my shadow experiment photographs into sketches to inspire my visual style for the output project.



3D TRIANGLES IN 2D SPACE
Sketching different triangular forms
and their shadows at different angles

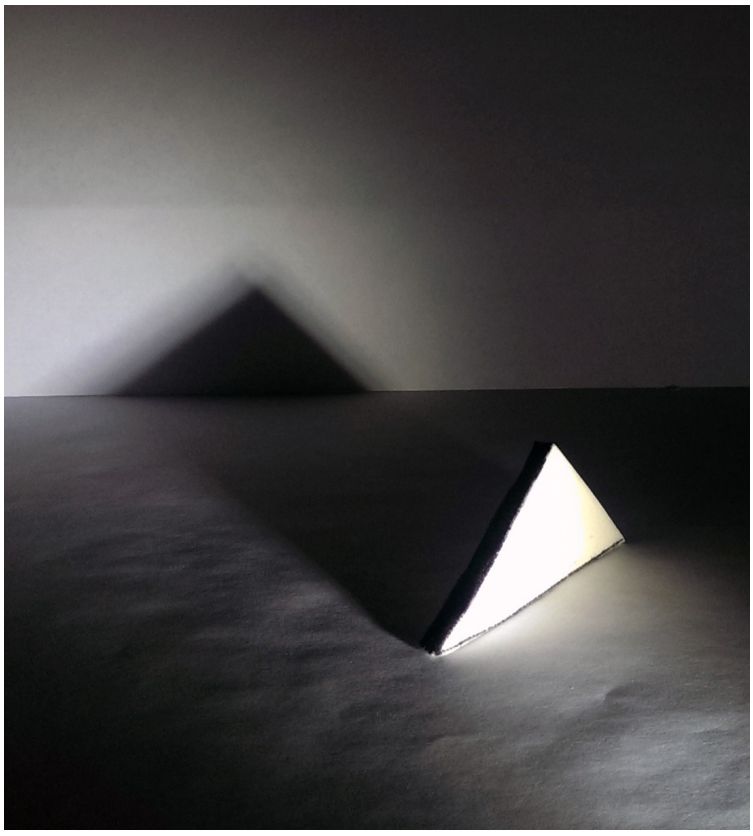


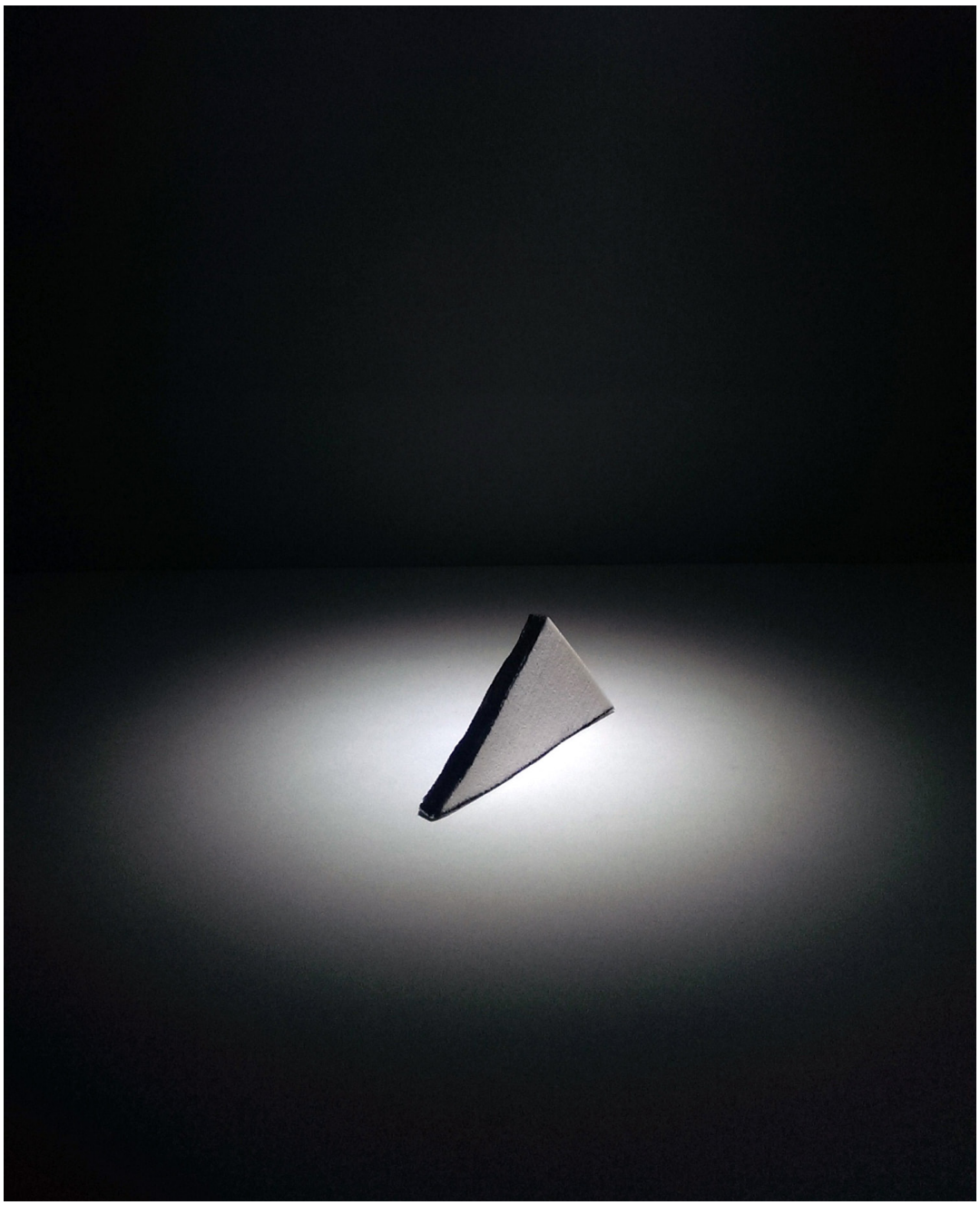
DEVELOPING THE VISUAL STLYE

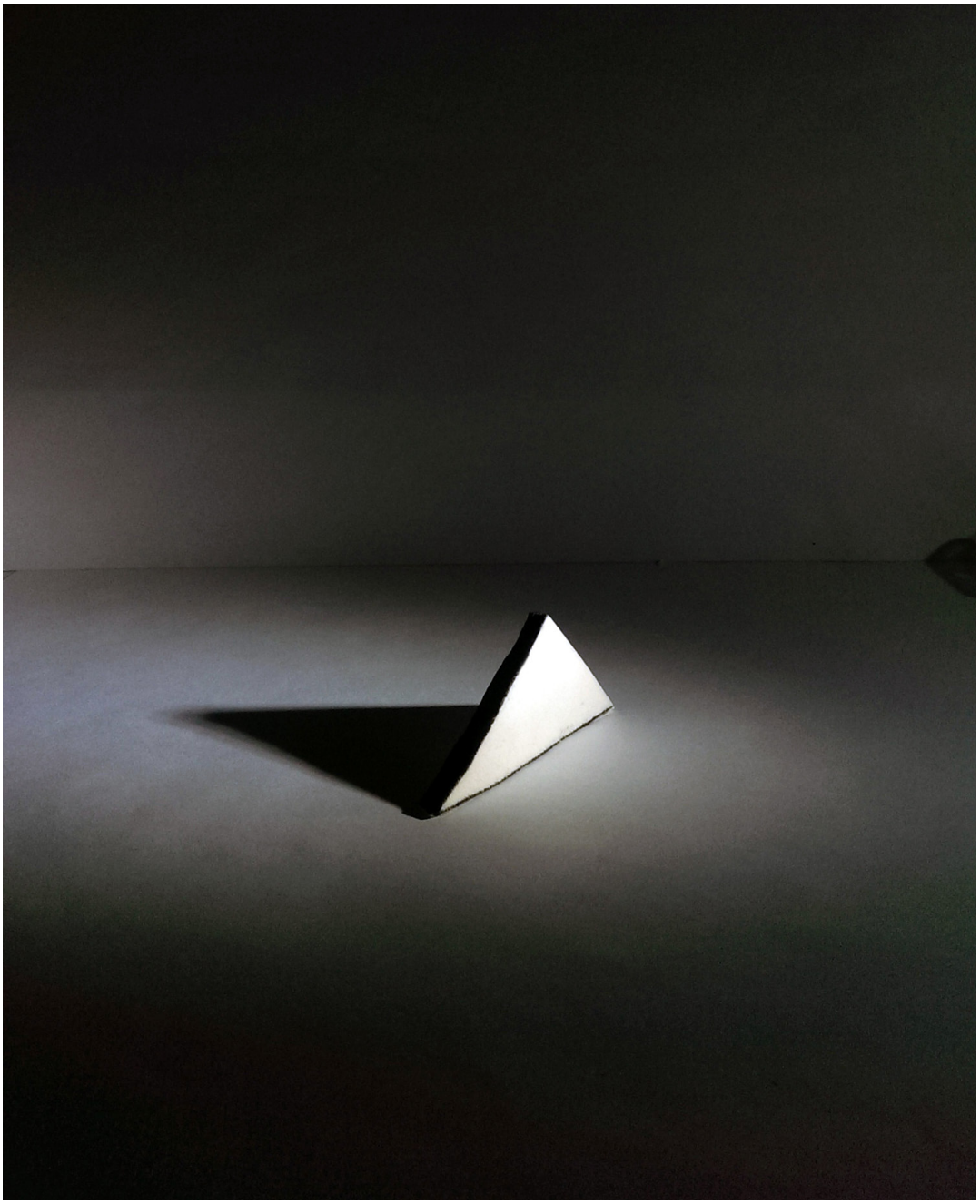
Testing the use of color against the use of black and white triangles in sketches

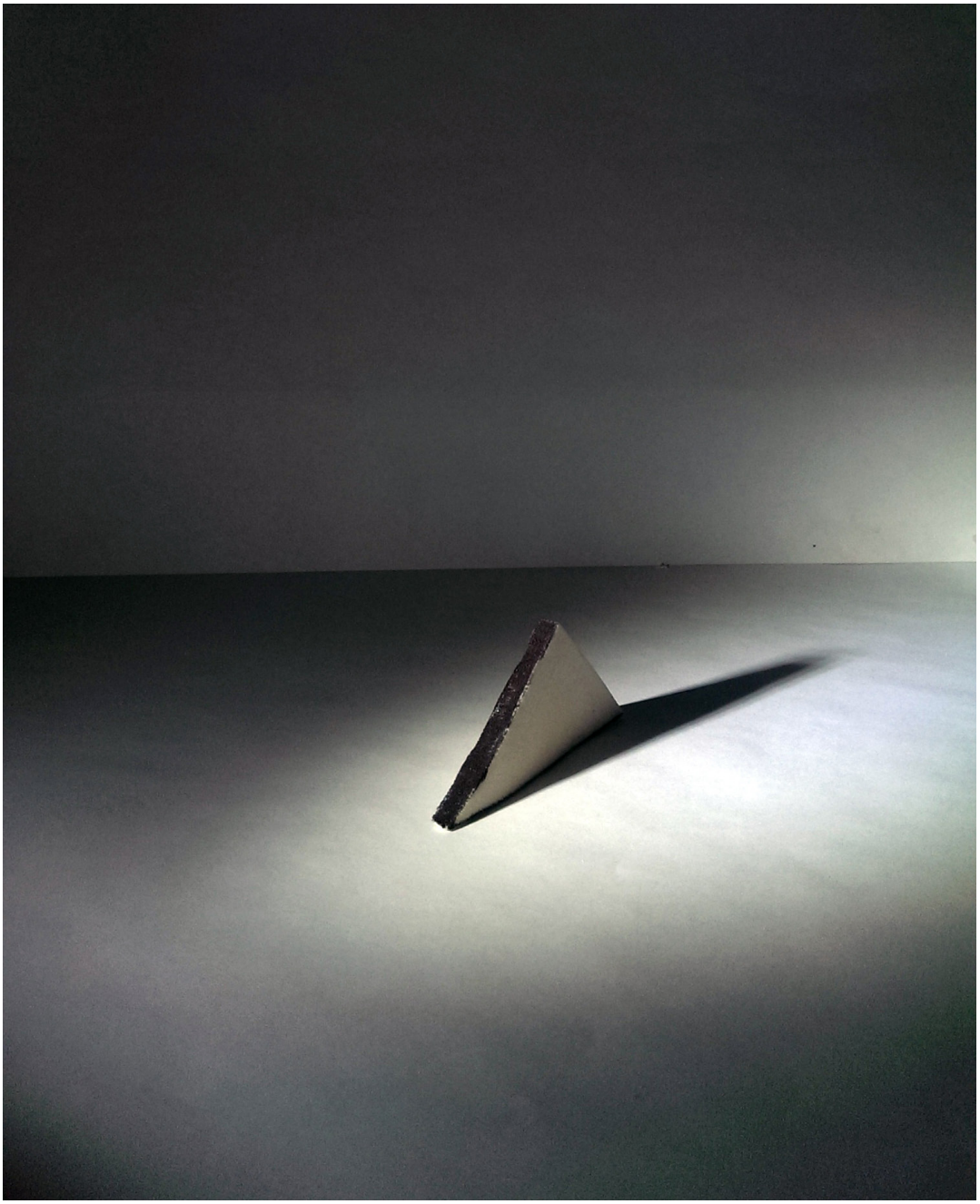
UNDERSTANDING SHADOWS

To be able to create a storyboard I had to first understand how the shadow falls on objects and how they change shape according to the changes in light. I made a model of a triangle out of sponge, and cast light on it using a torch. I then documented in images and film the behavior of the shadow at different perspectives.
This helped me understand how the shadow will move along with my moving triangles in each animated short.







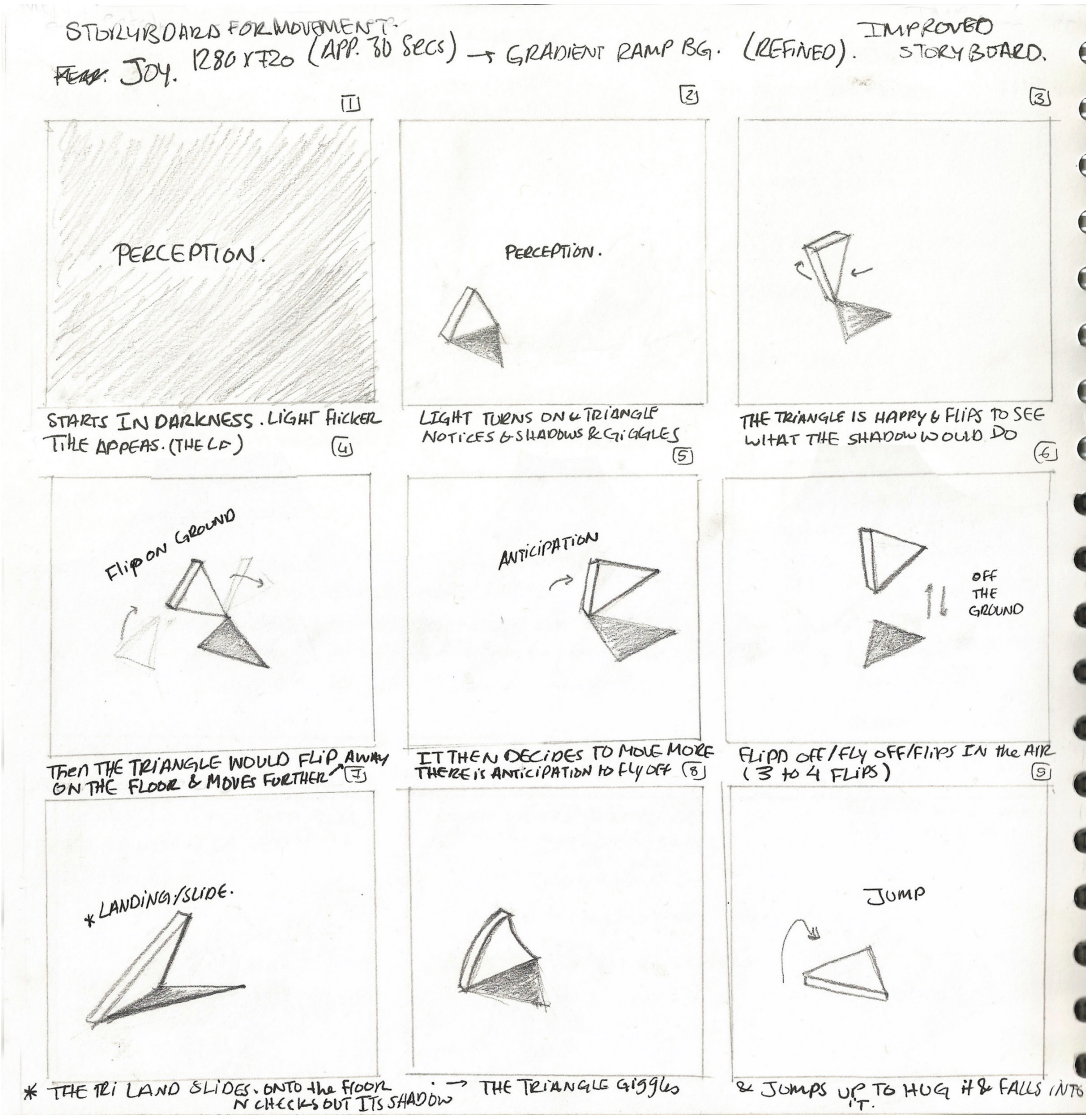


STORYBOARDS

In the storyboarding stage, I sketched out one storyboard for every triangle and its emotion. I had to carefully consider how the triangle would move and behave in order for it to best represent its assigned emotion. I used my notes of observed behaviors as a reference for their movement, the gestures they will act out, and the order in which they will. I also took into consideration the perspective from which every triangle will be seen and the direction it will be moving in.

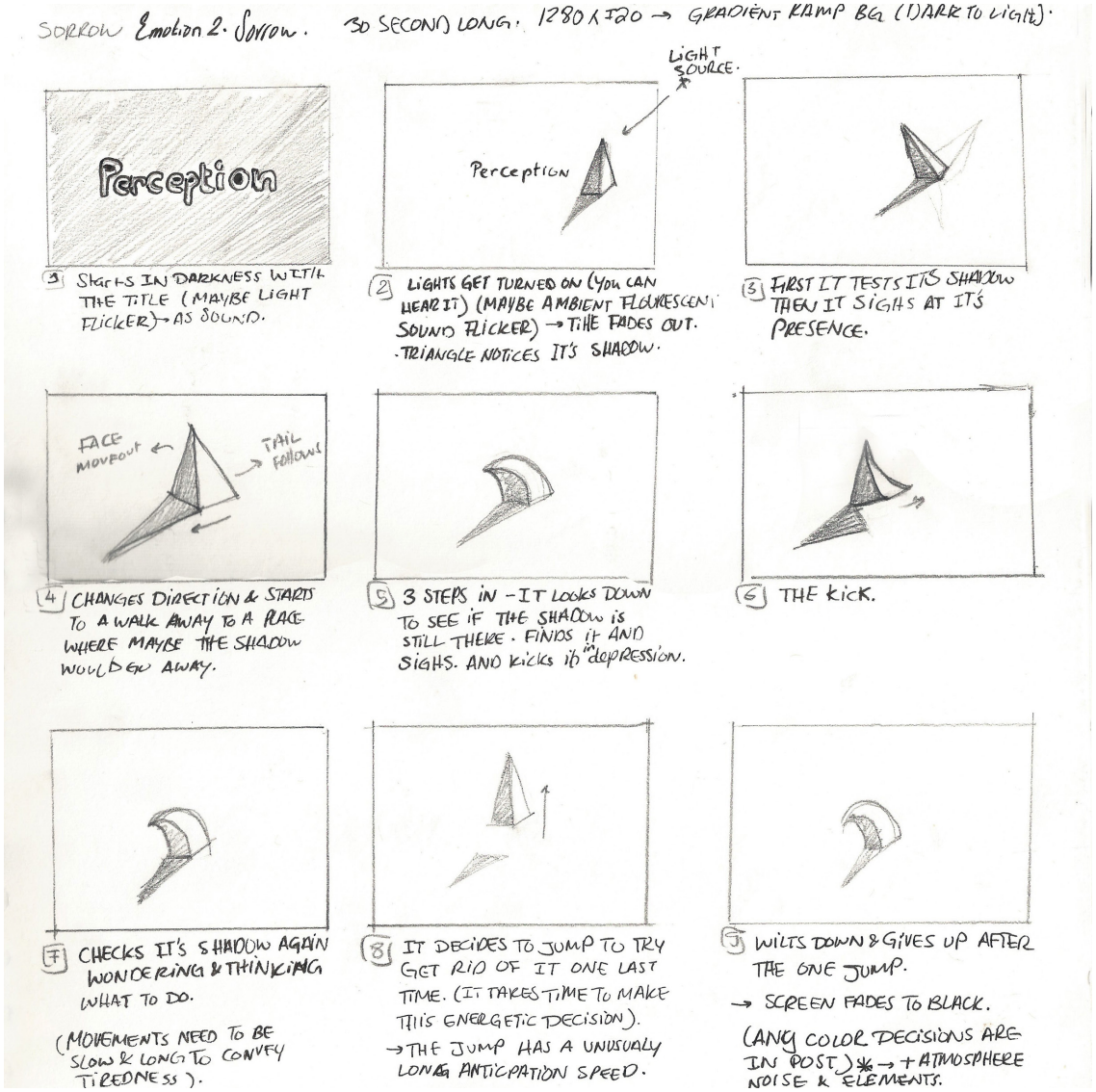
In all four animations, I sketched out a similar beginning. The triangles stand in darkness until the lights are switched on. Each triangle then notices its shadow and starts to react to it according to the emotion it is assigned. The title appears right at the beginning before the lights are turned on.

There are similar movements or gestures across all three animations. These gestures based on my research and observation, do occur within the three different emotions. Although neither sound effects nor text were employed to support their meaning, they should be understandable through different means (e.g. speed). The speed at which similar gestures are acted out within different emotions varies and so it was one of my responsibilities to make sure that the speed at which the movement is animated matches the sentiment of the emotion. Another way to be able to correlate a common gesture to a certain emotion is by looking at the gestures that precede and follow it. This has been noted down and put into consideration whilst I was drawing all three storyboards.



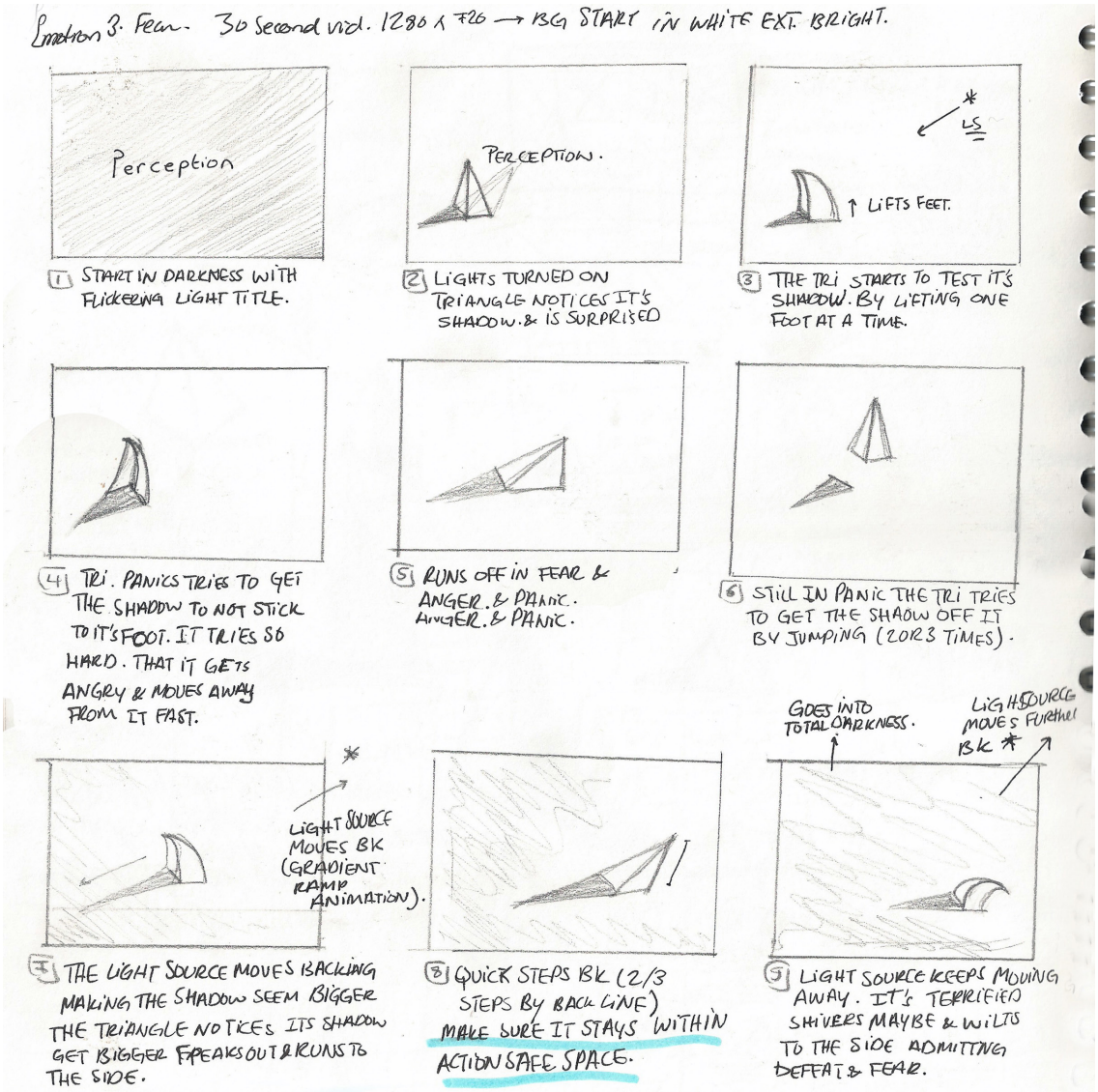
STORYBOARD FOR JOY

An eight frame storyboard that shows the main keyframes of a thirty second animation of a triangle in joy



STORYBOARD FOR SORROW

An eight frame storyboard that shows the main keyframes of a thirty second animation of a sad triangle



STORYBOARD FOR FEAR

An eight frame storyboard that shows the main keyframes of a thirty second animation of a triangle in fear

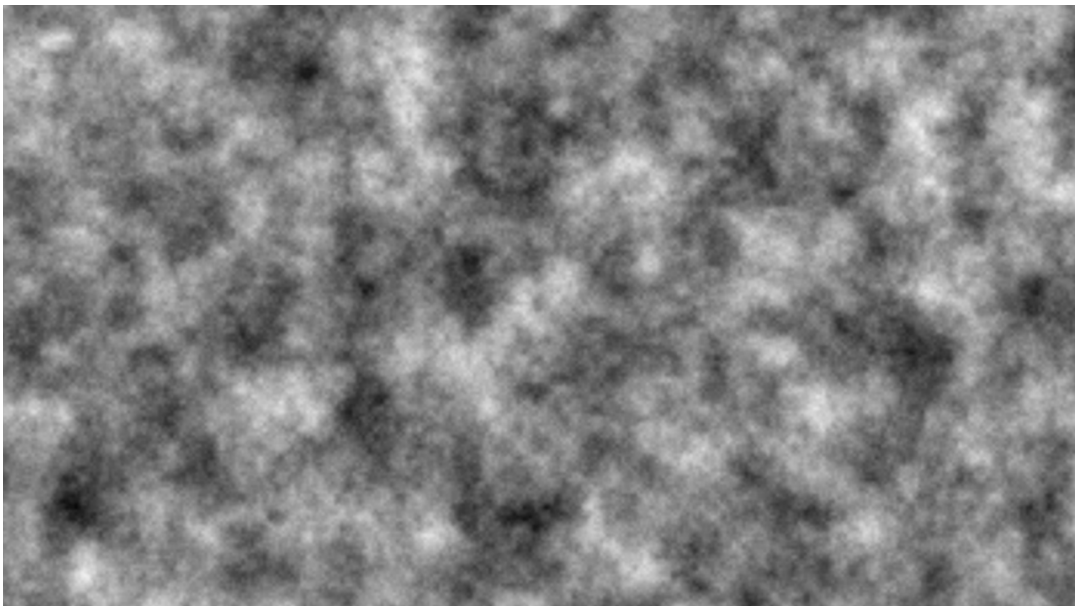
ILLUSTRATION & ANIMATION

Having settled on my visual style and drawn my storyboards, I started to digitalize my ideas. I drew three triangular forms in illustrator, one for each animation. My aim was to illustrate them to look consistent but with a slight bit of difference, making them distinguishable. I illustrated one only in strokes, the other was in dotted lines and the third in strokes and a black solid face. I kept the stroke width and color in all three similar.

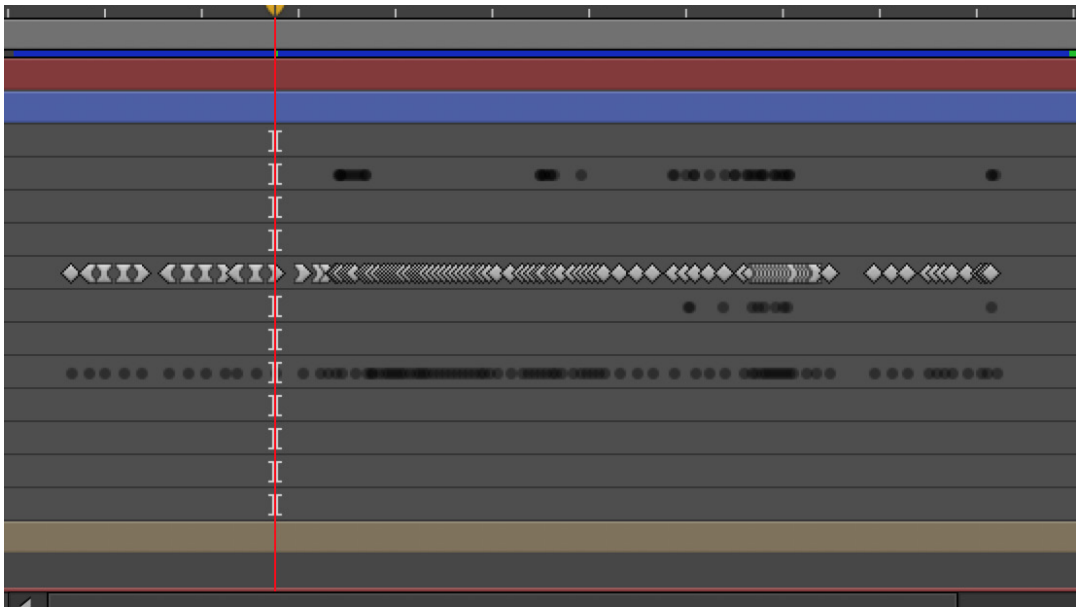
I then exported them into After effects as Ai layers, and set up three compositions, one for each emotion. All the compositions had a resolution of 1280 x 720, a length of 30 seconds, and a frame rate of 25 fps.

As part of the visual style, I wanted all three triangles to look as if they were alive, and the best way I thought of to do so, was by keeping their lines constantly moving even when they were static. I used a displacement map effect on all my Ai and shadow layers. This displacement map used a solid layer with fractal noise as the map for displacement. I wrote an expression to keep the fractal noise constantly evolving through out the 30 second animation in each composition to keep all the lines in constant motion.

When it came to animating the gestures of the triangular forms and their shadows, some were animated with interpolation and others were digitally animated frame by frame. It largely depended on the complexity of the movement. The triangular form representing «Joy» was animated frame by frame, whilst the one representing «Fear» and «Sorrow» were mostly animated with interpolation.



The fractal noise layer used as the displacement map



Frame by frame animation for the composition encompassing a triangle in joy

TESTING FOR MOTION

After completing my animations, I wanted to check whether they did translate my concept, and whether the gestures of the triangular forms did express the emotions they were allocated. I also wanted to know what possibly could be added or taken away from the animation to strengthen my message.

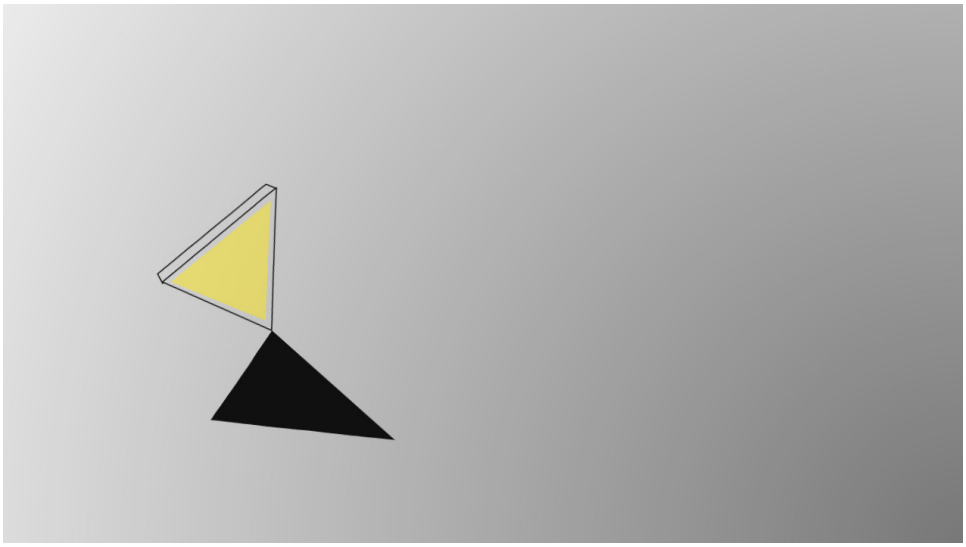
I showed my three films to several people, after having told them what the topic was about, and asked them to explain to me what they saw. I then asked them about what they thought might have made the motion much easier to grasp, or understand. Based on their feedback, I adjusted and improved my animation.

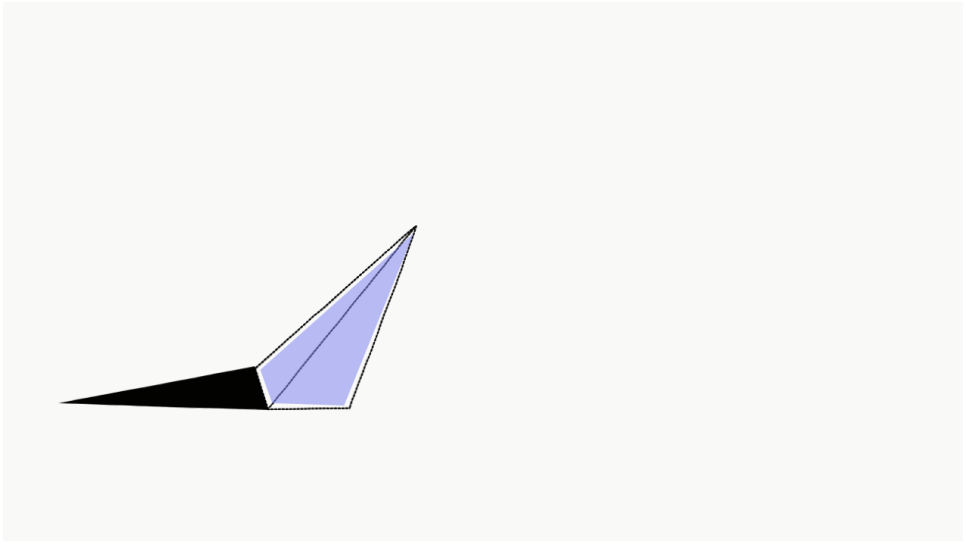
TESTING FOR COLOR

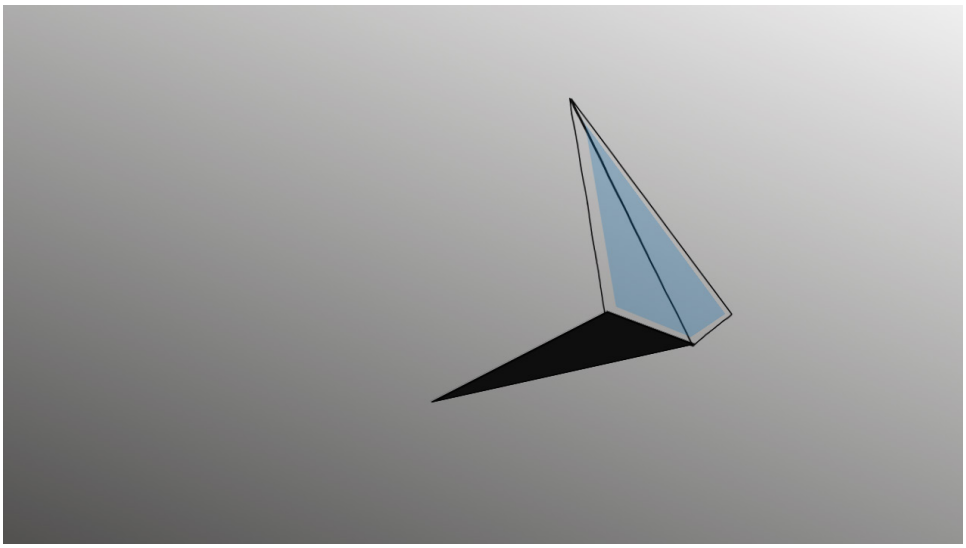
I then moved onto post production, and started to employ color. I used color psychology to assign each triangular form a color that matches the emotion it was allocated.

I assigned the color yellow to joy, purple to fear and blue to sorrow. However, based on further testing and gathering of feedback, I was able to conclude that the colors distracted the viewers from noticing the movements and gestures. Some became unwilling to look at the movement and decided to base their answer of what they saw solely on the colors. As a result, I eliminated it from the animations.

The three images on the opposite page show screenshots of how colors were employed in the animations in post production.







TESTING FOR SOUND

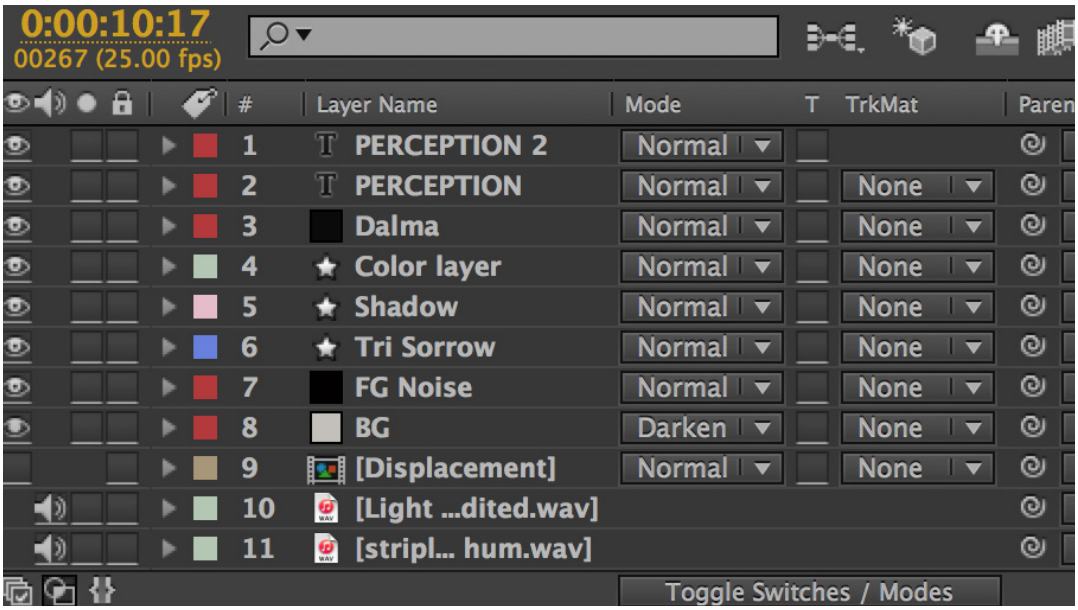
Whilst testing the animations for motion and color, I realized that although the animation was only 30 seconds long, it was hard to keep my viewers focused on the screen. As a result, I decided to try and add sound to the animations to see if it would hold my viewers focus.

Since, however, it is in my concept that I do not use sound effects to support the action happening or the gestures taking place, I decided to only add a sound bed as ambient noise. This would be enough to draw my viewers attention, without ruining the main idea behind the project.

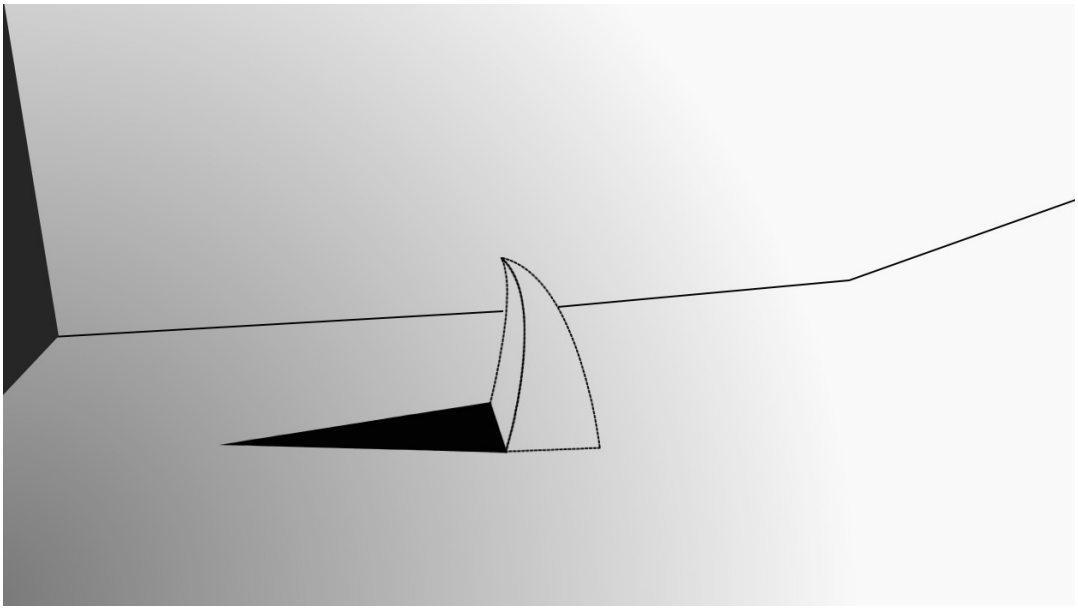
Since the lights in my animations are white as if fluorescent, the use of a fluorescent hum as an ambient sound bed was most appropriate. I went onto freesound.org and downloaded a fluorescent light hum that any fluorescent light would produce.

I then tested the animations again on different people first with and then without the use of the ambient sound bed, and almost all of them suggested that I kept the sound. One of them said "The sound draws you in, and makes you want to look. As if you become sat with the triangle in its little world". From my observation, it did considerably draw their attention back to the movement and helped them focus better on the gestures displayed. Based on this feedback, I decided to keep the sound bed in the animation and chose to use another sound effect of a light being switched on for when it does in each film.

Finally, as part of my post production, I wanted to test whether adding a static atmosphere (not affected by the displacement map of fractal noise) around the triangular forms would make them seem more alive. The feedback of doing so however was negative. Instead of focusing on the movements and gestures, the viewers tried to link what the triangular forms were doing with the space they were in. They had to improvise to imagine a narrative that was not there to make sense of what was happening. Based on this feedback, all background layers were eliminated.



This is a screenshot from after effects showing the two sound files that were used in the animation.



This is a screenshot of my animation when I was experimenting with adding an abstract, static atmosphere.

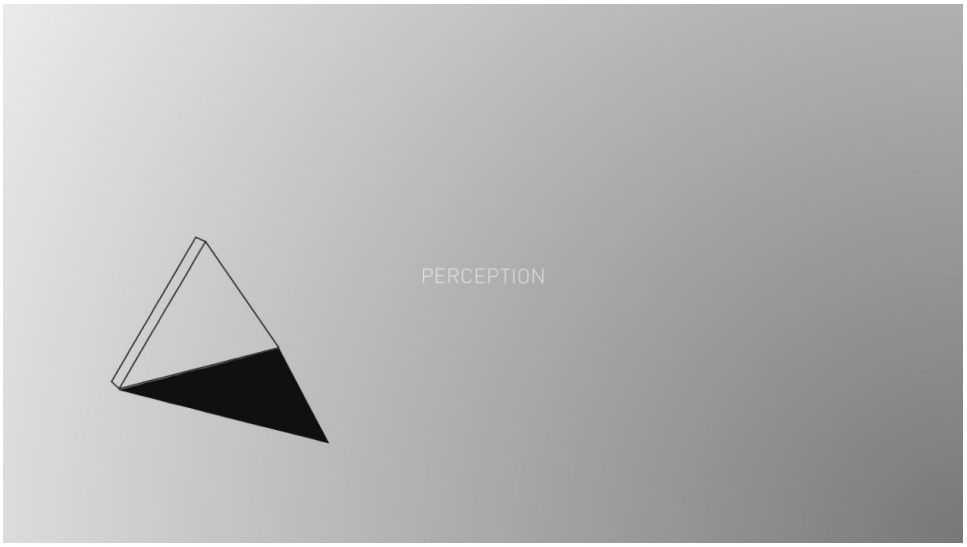
MY LEARNING OUTCOMES

Throughout this project I was able to challenge myself to only use visuals to translate an emotion. Before this unit I was unaware of the power that lies within graphic design and visual literacy. Having graduated as a media design student and having mostly studied filmmaking, I was always under the impression that sound or editing, and continuity is what translated ideas and emotions. As demonstrated by Lev Kuleshov's montage experiment, it is the placement of two sequential shots that cause the viewers to derive meaning out of what they see.

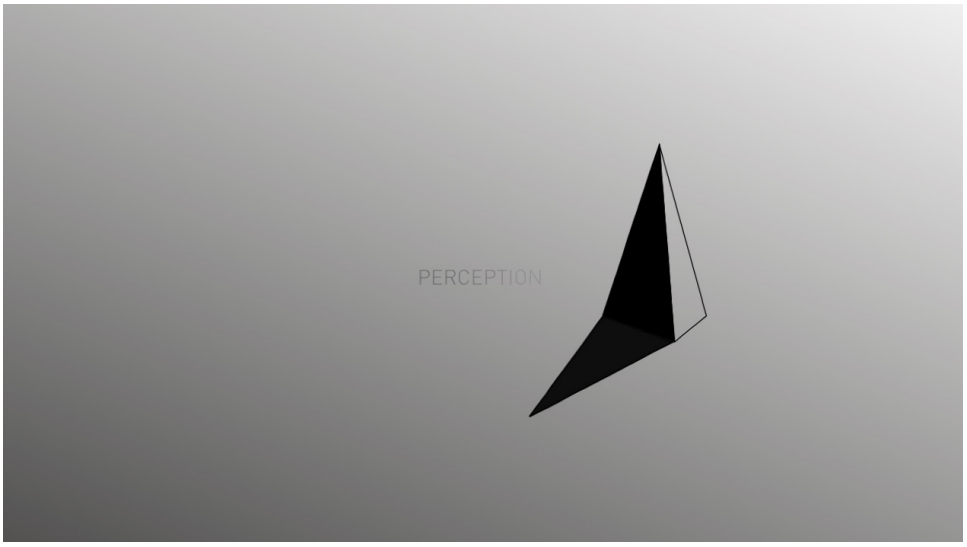
Although depending on illustrated graphics to send a message to an audience felt like a risk, and a huge step out of my comfort zone, it was very enriching to work on. Going out into public spaces and relying on notes to document human behavior, rather than use images and video taught me to become more observant, critical and reflective with what I see. Translating those observations through a triangle, also required me to critically dissect the triangle's form and structure. I no longer saw the triangle as a complete form or shape, but rather a set of points, lines, angles and edges.

Using animation as the medium for my output project, helped me expand my animating skill set. I was able for the first time to animate a shape as if it were a character. To do so, I had to look deeper into the principles of animation as well as relevant movements to my storyboards (e.g. walk cycles, jumps, twists). Translating those movements in a limited shape, without facial expressions, made me more confident in taking up future graphic moving image projects that do entail character animation.

Furthermore, I learned through testing my project on my audience that alot of what a project is about is delivered through the process rather than through the end result. My testing phase, spiked my interest in experimenting with so many different things in the future. Thus, I eventually realized that experimentation is indeed an essential and critical aspect of the creative process.


PERCEPTION


PERCEPTION


PERCEPTION

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