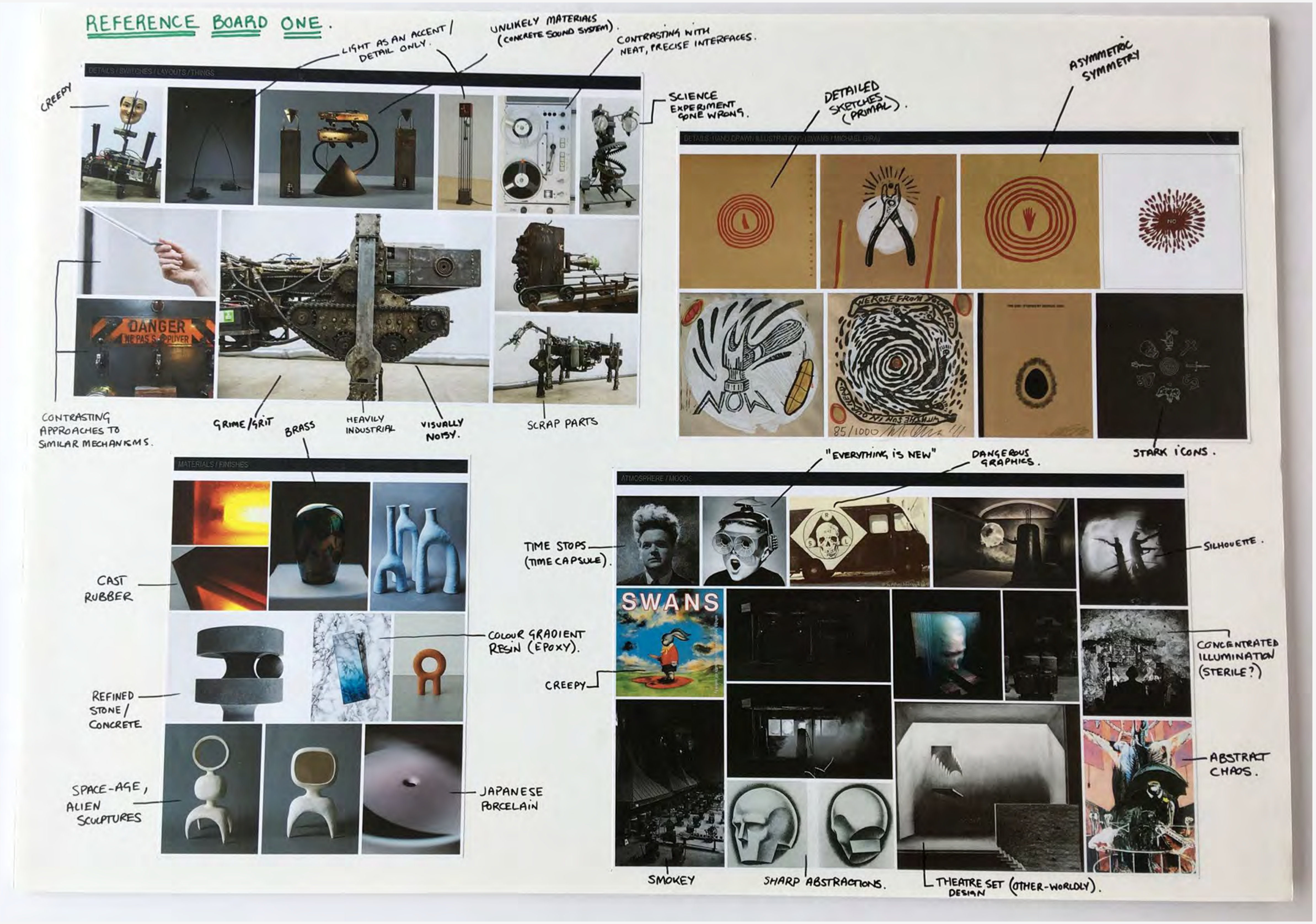
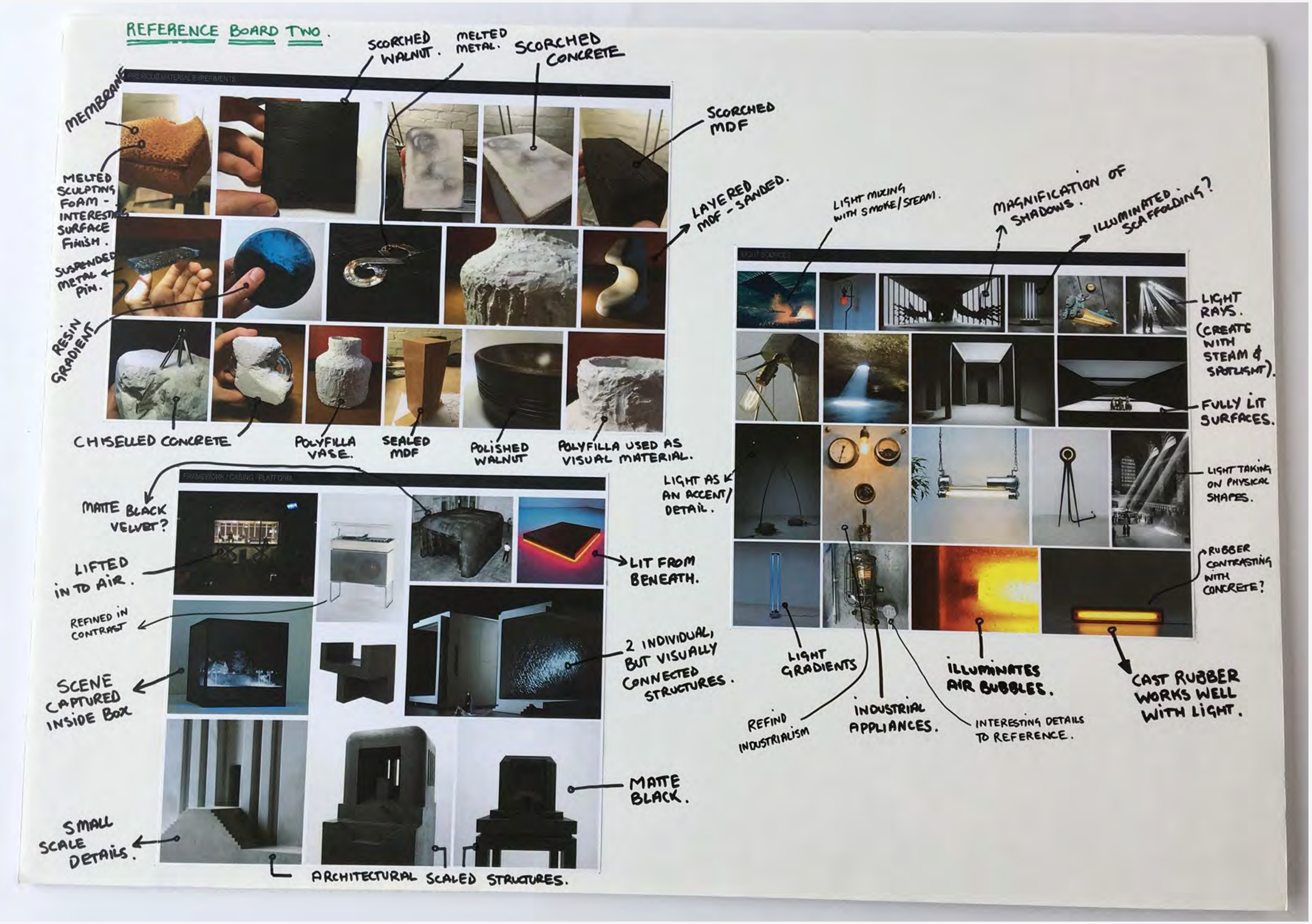
Do Nothing Project

Alistair Byars & Jay Van Den Hoven

REFERENCE BOARDS AND THEMES


REFERENCE BOARD ONE.
LIGHT AS AN ACCENT / DETAIL ONLY.
UNLIKELY MATERIALS (CONCRETE SOUND SYSTEM).
CONTRASTING WITH NEAT, PRECISE INTERFACES.
CREEPY
SCIENCE EXPERIMENT GONE WRONG.
DETAILED SKETCHES (PRIMAL).
ASYMMETRIC SYMMETRY
DANGER
CONTRASTING APPROACHES TO SIMILAR MECHANISMS.
GRIME/GRIT
BRASS
HEAVILY INDUSTRIAL
VISUALLY NOISY.
SCRAP PARTS
"EVERYTHING IS NEW"
DANGEROUS GRAPHICS.
STARK ICONS.
TIME STOPS (TIME CAPSULE).
SILHOUETTE.
CAST RUBBER
COLOUR GRADIENT RESIN (EPOXY).
SWANS
CREEPY
CONCENTRATED ILLUMINATION (STERILE?)
REFINED STONE / CONCRETE
ABSTRACT CHAOS.
SPACE-AGE, ALIEN SCULPTURES
JAPANESE PORCELAIN
SMOKEY
SHARP ABSTRACTIONS.
THEATRE SET DESIGN (OTHER-WORLDLY).


REFERENCE BOARD TWO.
SCORCHED WALNUT.
MELTED METAL.
SCORCHED CONCRETE
MEMBRANE
SCORCHED MDF
MELTED SCULPTING FOAM - INTERESTING SURFACE FINISH.
LAYERED MDF - SANDED.
SUSPENDED METAL PIN.
RESIN GRADIENT
CHISELLED CONCRETE
POLYFILLA VASE.
SEALED MDF
POLISHED WALNUT
POLYFILLA USED AS VISUAL MATERIAL.
MATTE BLACK VELVET?
LIFTED IN TO AIR.
REFINED IN CONTRAST
LIT FROM BENEATH.
SCENE CAPTURED INSIDE BOX
2 INDIVIDUAL, BUT VISUALLY CONNECTED STRUCTURES.
MATTE BLACK.
SMALL SCALE DETAILS.
ARCHITECTURAL SCALED STRUCTURES.
LIGHT MIXING WITH SMOKE/STEAM.
MAGNIFICATION OF SHADOWS.
ILLUMINATED SCAFFOLDING?
LIGHT RAYS. (CREATE WITH STEAM & SPOTLIGHT).
FULLY LIT SURFACES.
LIGHT AS AN ACCENT/ DETAIL.
LIGHT TAKING ON PHYSICAL SHAPES.
RUBBER CONTRASTING WITH CONCRETE?
LIGHT GRADIENTS
ILLUMINATES AIR BUBBLES.
CAST RUBBER WORKS WELL WITH LIGHT.
REFIND INDUSTRIALISM
INDUSTRIAL APPLIANCES.
INTERESTING DETAILS TO REFERENCE.


EROSION
GRADUAL DESTRUCTION
ENVIRONMENTAL DECAY
STRONG BRUTALIST FORMS
BALANCE BETWEEN strength & SUBTLETY
PERFECTION Vs IMPERFECTION
MAN MADE STRUCTURES DISINTEGRATE OVER TIME
MONOLITHIC FORMS
SYMBOLS & LETTERING
MONOLITHS MADE SOFT & FLEXIABLE
WORD & SENTENCE USED TO CONVEY
PROJECTED TEXT
YOUR OLDEST FEARS ARE THE WORST ONES
WITH YOU INSIDE ME COMES THE KNOWLEDGE OF MY DEATH
CIVIC RESPONSIBILITY AND LOYALTY
BALANCE & TENSION
TRANSPARENT
CHAOTIC
REPETITION & RYTHMIC TEXT


NATURAL MATERIALS
SALT
SAND
NATURAL ORDERS
MATERIAL CONFLICT
GLASS & SAND
Physical Objects of ritual
Natural Material / structures
DEath & Re-Birth
HARSH Structures
Disintegrate the text
RITUALISTIC
SYMBOLIC TEXT
OCULT / RELIGIOUS IMAGES
The Seven Bodies of Man
connection on Etherial level
— ELEMENTAL DECAY OF THE HUMAN IMAGE

Initially we were interested in exploring ideas around destruction and violence, we felt that the strongest visual spectacle could be created by contrasting clean, crisp elements side by side with more chaotic destructive ones. Early on in the idea generation stages, we began looking at processes of decay, where solid man made structures such as ancient churches, towers and buildings were gradually destroyed by natural forces.

This led us to consider the effects and possible simulation of environmental decay: synthetically reconstructing the process on a scale that we could work with. Along with these ideas on how the machine would function, we began to look at brutalist architecture, sculpture and installation to generate an aesthetic language that we could use throughout the process.

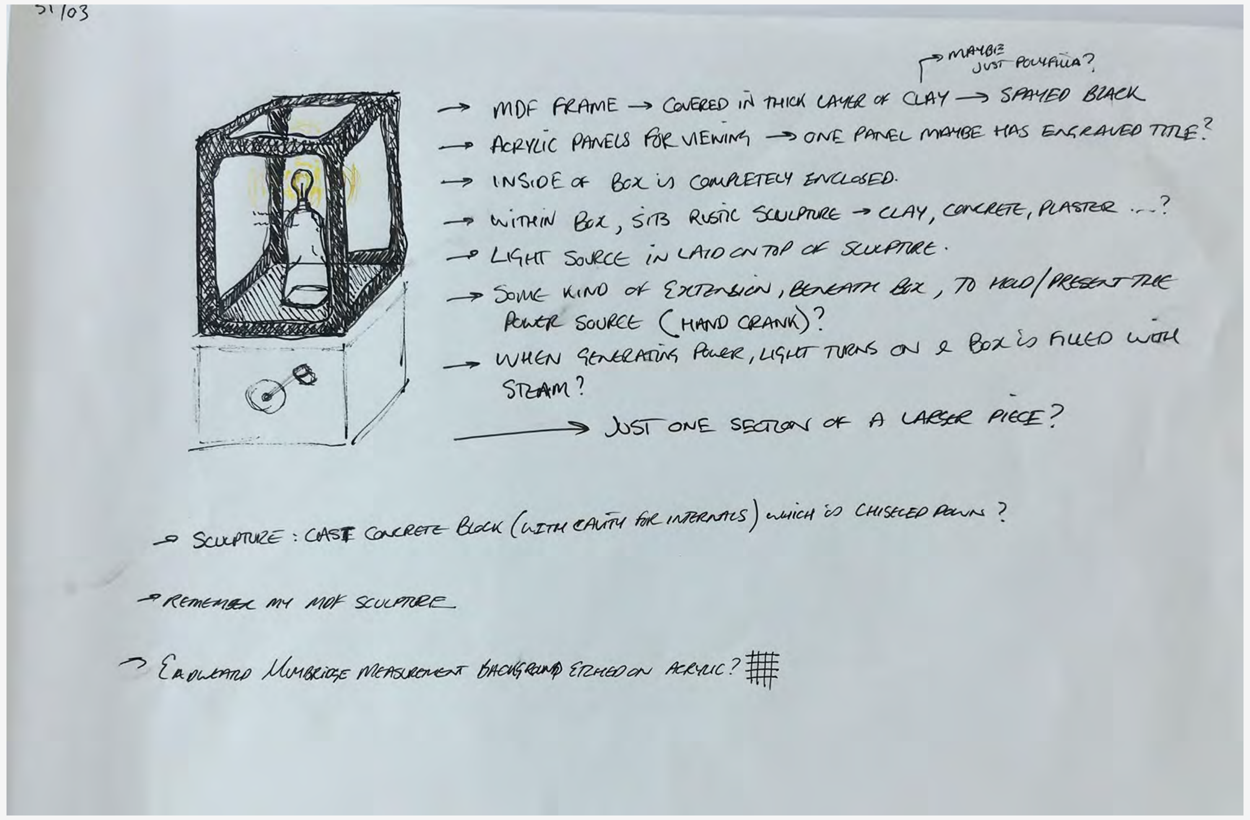
The idea of a monolithic form was appealing due to its unavoidable presence and dominating form. We felt that both the image of the pristine monolith and the image of the destroyed monolith held a significant weight. The idea of turning something so perfect and powerful into a deformed, crooked structure rang true to earlier ideas about decay. The natural process of decay and degradation were something that we wanted to explore further.

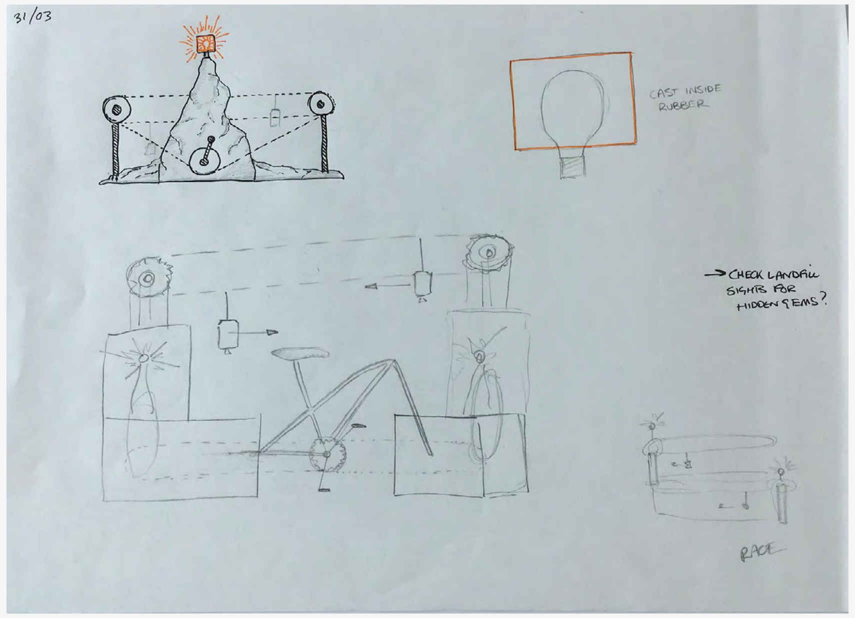
The use of text in sculpture and design caught our attention in its ability to directly provoke emotion in the observer. Words, sentences and symbols could all be used to convey certain meaning. The idea of using language of some kind, either in text or symbolic form, appeals to us. Using it both repetitively, chaotically and coherently - we felt that it could bring another dimension to the piece.

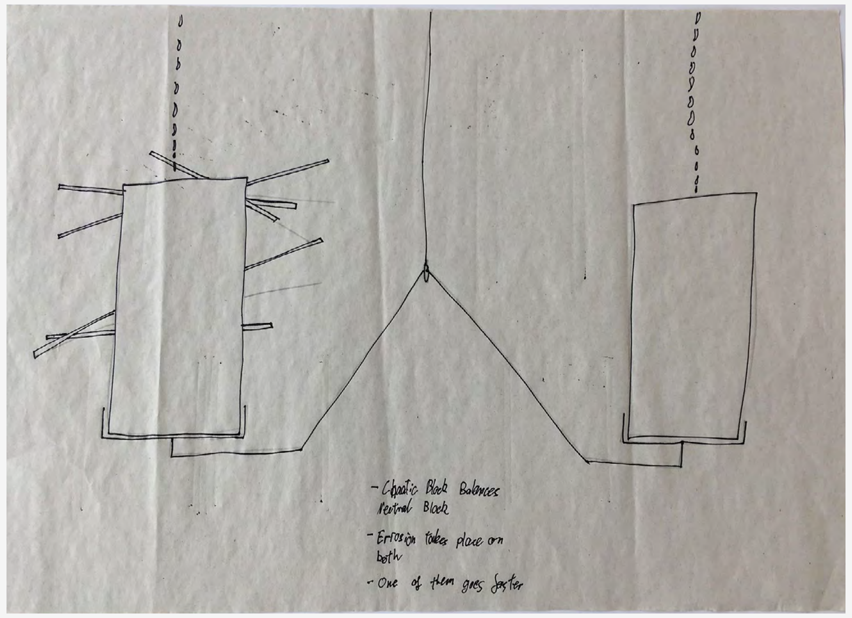
Having been thinking about using natural processes like erosion and decay we started looking at natural materials that took part in these processes. Salt, sand, water and soil were explored as both materials to use in the machine and materials to be used by the machine. This lead us onto ideas around the human form and the environmental decay of the human image. Where the human is represented in its fragile form while the natural decaying process goes on around it.

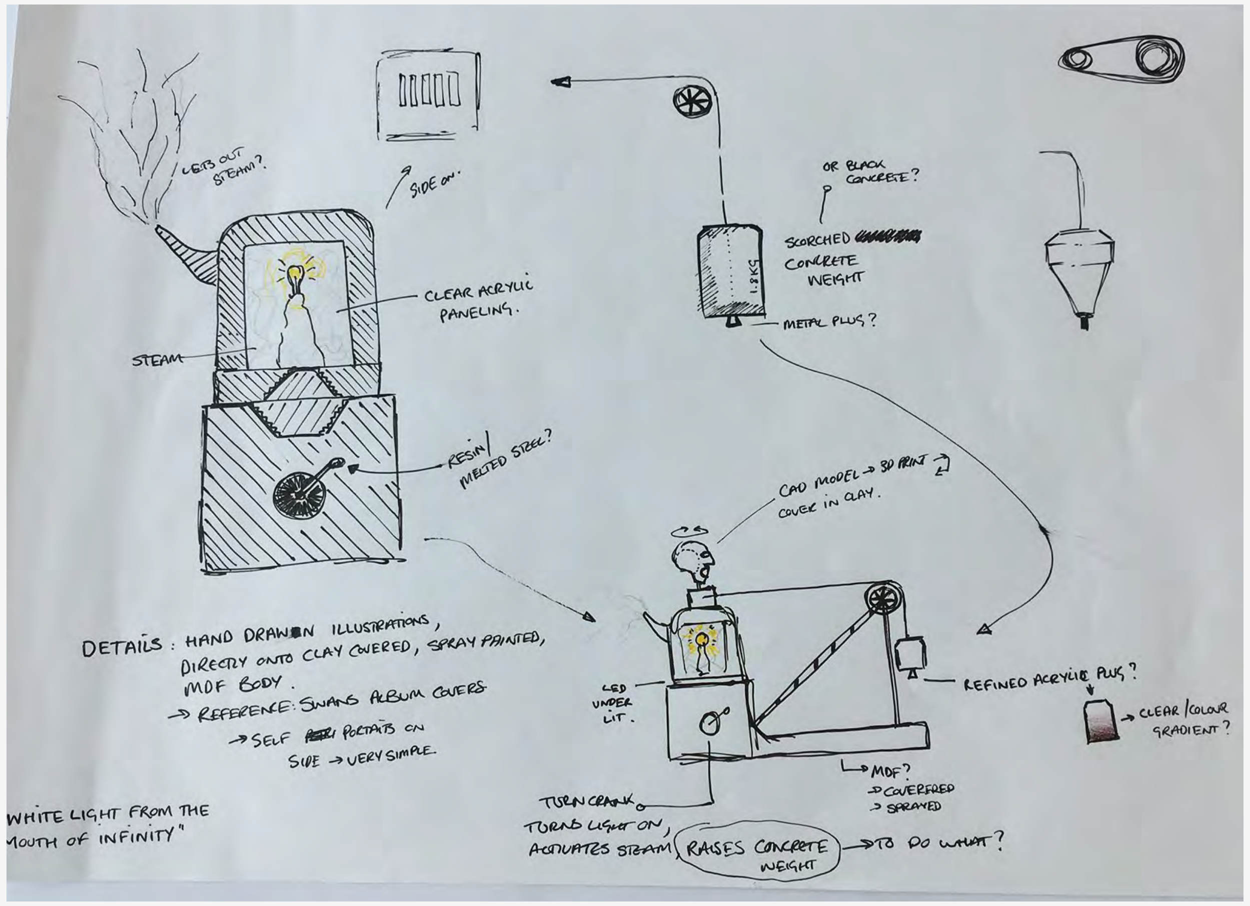
The industrial aesthetic was also something we wanted to explore. We felt this would allow us to indulge in the raw powerful aesthetic while also allowing us to experiment with new materials and techniques that are not normally found under such conditions.

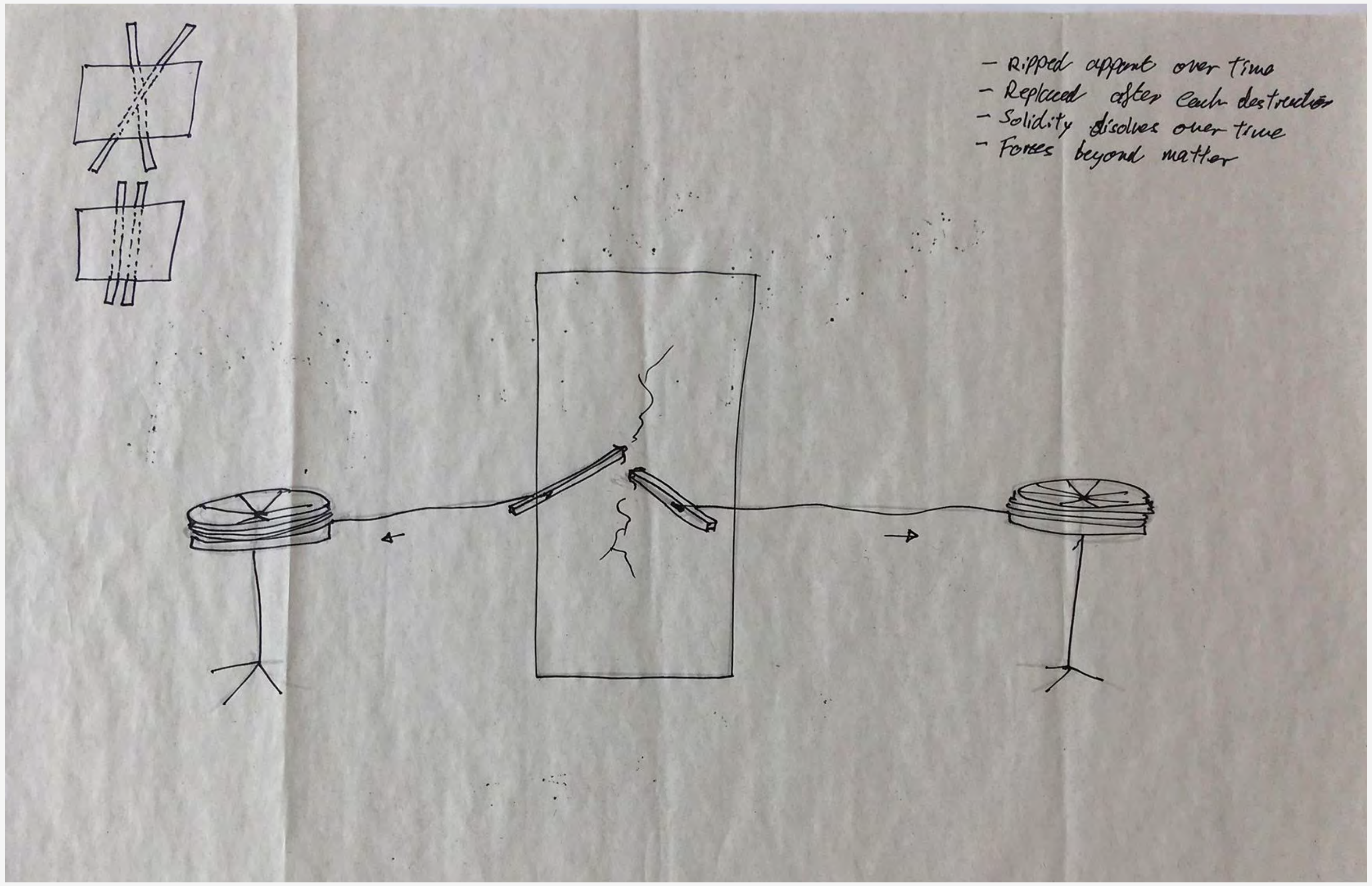
CONCEPT GENERATION

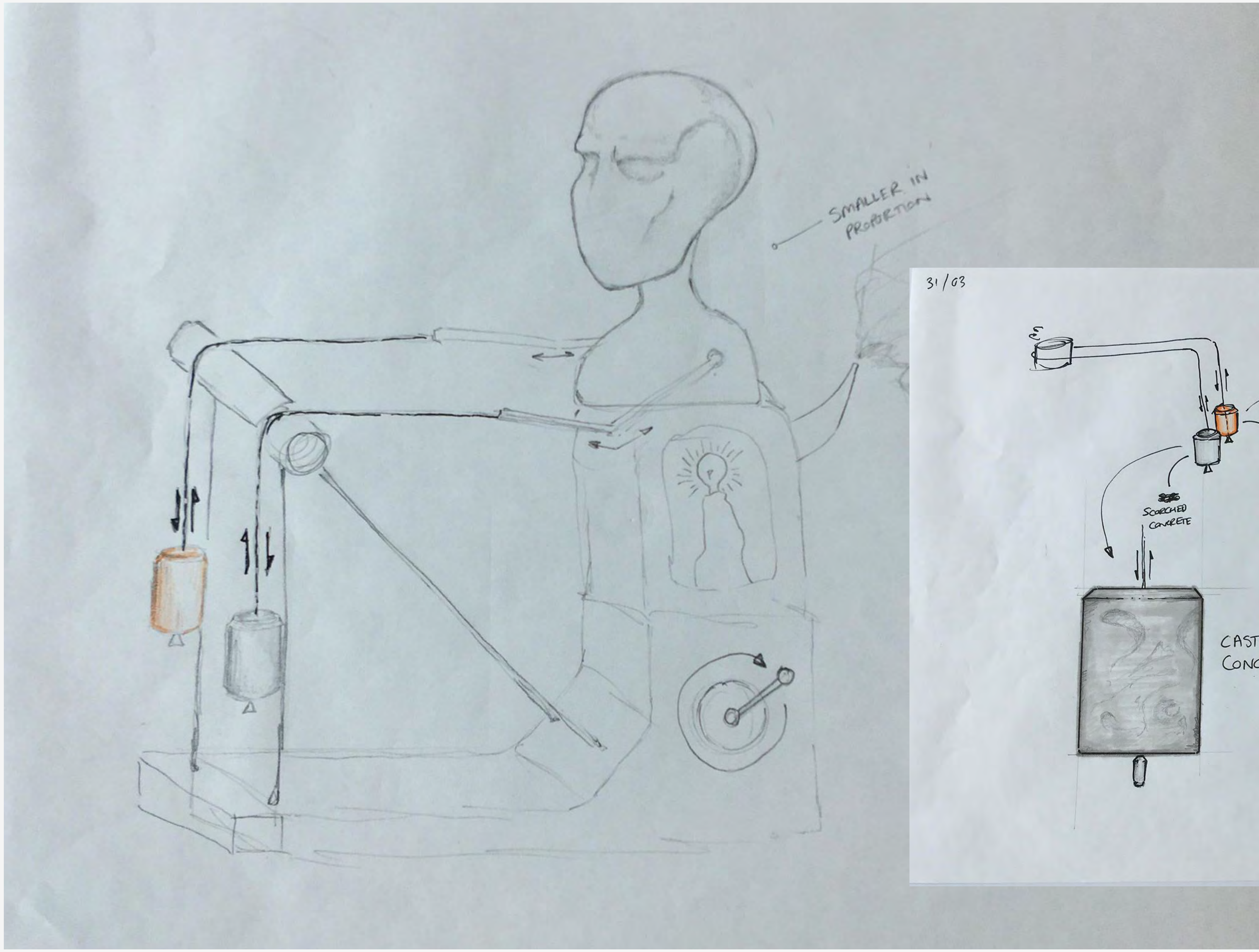

31/03
→ MDF FRAME → COVERED IN THICK LAYER OF CLAY → SPRAYED BLACK
→ MAYBE JUST POLYFILLA?
→ ACRYLIC PANELS FOR VIEWING → ONE PANEL MAYBE HAS ENGRAVED TITLE?
→ INSIDE OF BOX IS COMPLETELY ENCLOSED.
→ WITHIN BOX, SITS RUSTIC SCULPTURE → CLAY, CONCRETE, PLASTER ...?
→ LIGHT SOURCE IN LAID ON TOP OF SCULPTURE.
→ SOME KIND OF EXTENSION, BENEATH BOX, TO HOLD/PRESENT THE POWER SOURCE (HAND CRANK)?
→ WHEN GENERATING POWER, LIGHT TURNS ON & BOX IS FILLED WITH STEAM?
→ JUST ONE SECTION OF A LARGER PIECE?
→ SCULPTURE: CAST CONCRETE BLOCK (WITH CAVITY FOR INTERNALS) WHICH IS CHISELED DOWN?
→ REMEMBER MY MDF SCULPTURE
→ EADWEARD MUYBRIDGE MEASUREMENT BACKGROUND ETCHED ON ACRYLIC?

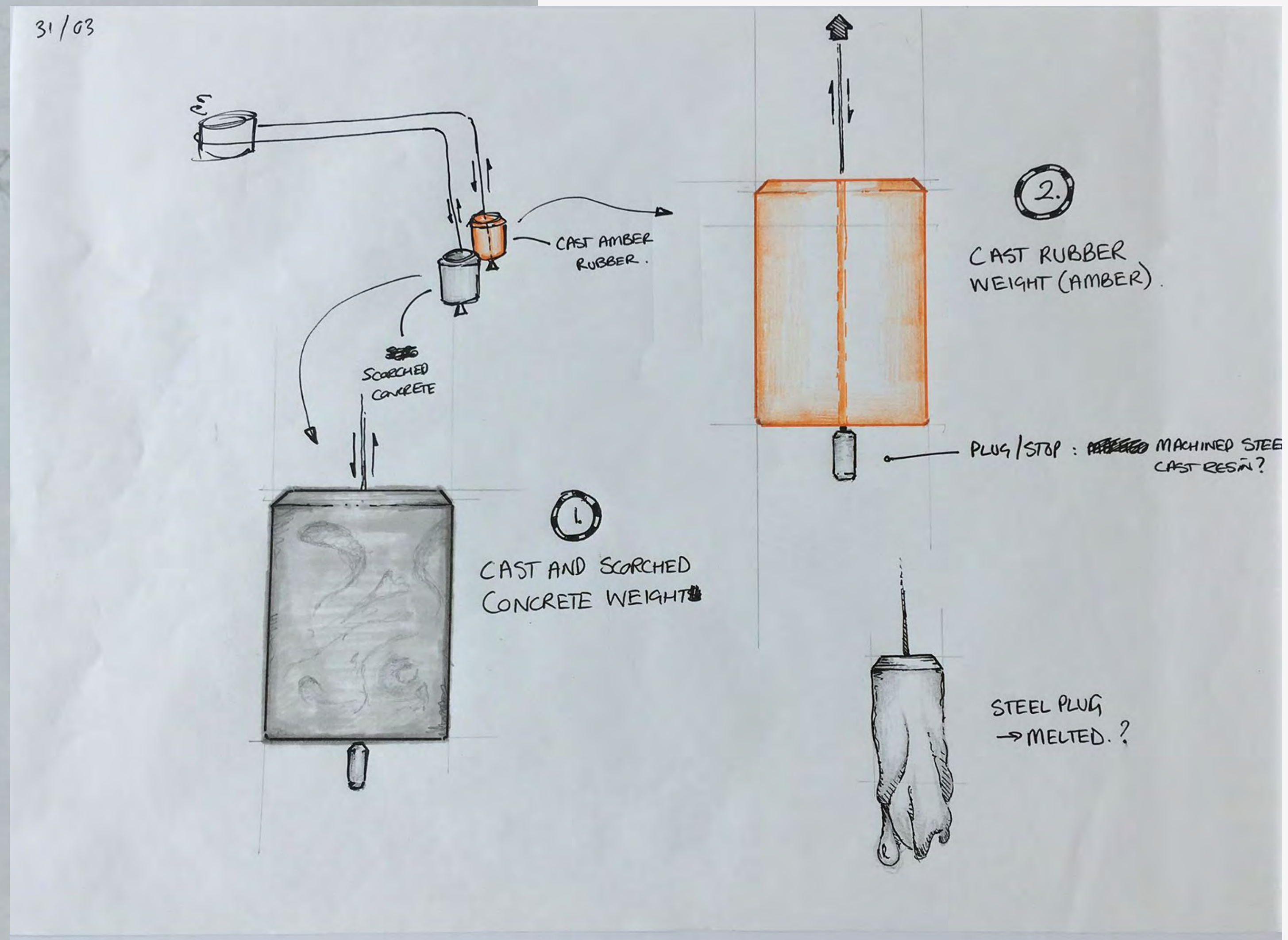

31/03
CAST INSIDE RUBBER
→ CHECK LANDFILL SIGHTS FOR HIDDEN GEMS?


- Chaotic Block Balances Normal Block
- Erosion takes place on both
- One of them goes faster


LETS OUT STEAM?
SIDE ON.
CLEAR ACRYLIC PANELING.
STEAM
RESIN/MELTED STEEL?
OR BLACK CONCRETE?
SCORCHED CONCRETE WEIGHT
1.1KG
METAL PLUG?
CAD MODEL → 3D PRINT → COVER IN CLAY.
DETAILS: HAND DRAWN ILLUSTRATIONS, DIRECTLY ONTO CLAY COVERED, SPRAY PAINTED, MDF BODY.
→ REFERENCE: SWANS ALBUM COVERS
→ SELF PORTRAITS ON SIDE → VERY SIMPLE.
LED UNDER LIT.
REFINED ACRYLIC PLUG?
→ CLEAR/COLOUR GRADIENT?
→ MDF? → COVERED → SPRAYED
WHITE LIGHT FROM THE MOUTH OF INFINITY"
TURN CRANK, TURNS LIGHT ON, ACTIVATES STEAM, RAISES CONCRETE WEIGHT → TO DO WHAT?


- Ripped appart over time
- Replaced after each destruction
- Solidity disolves over time
- Forces beyond matter

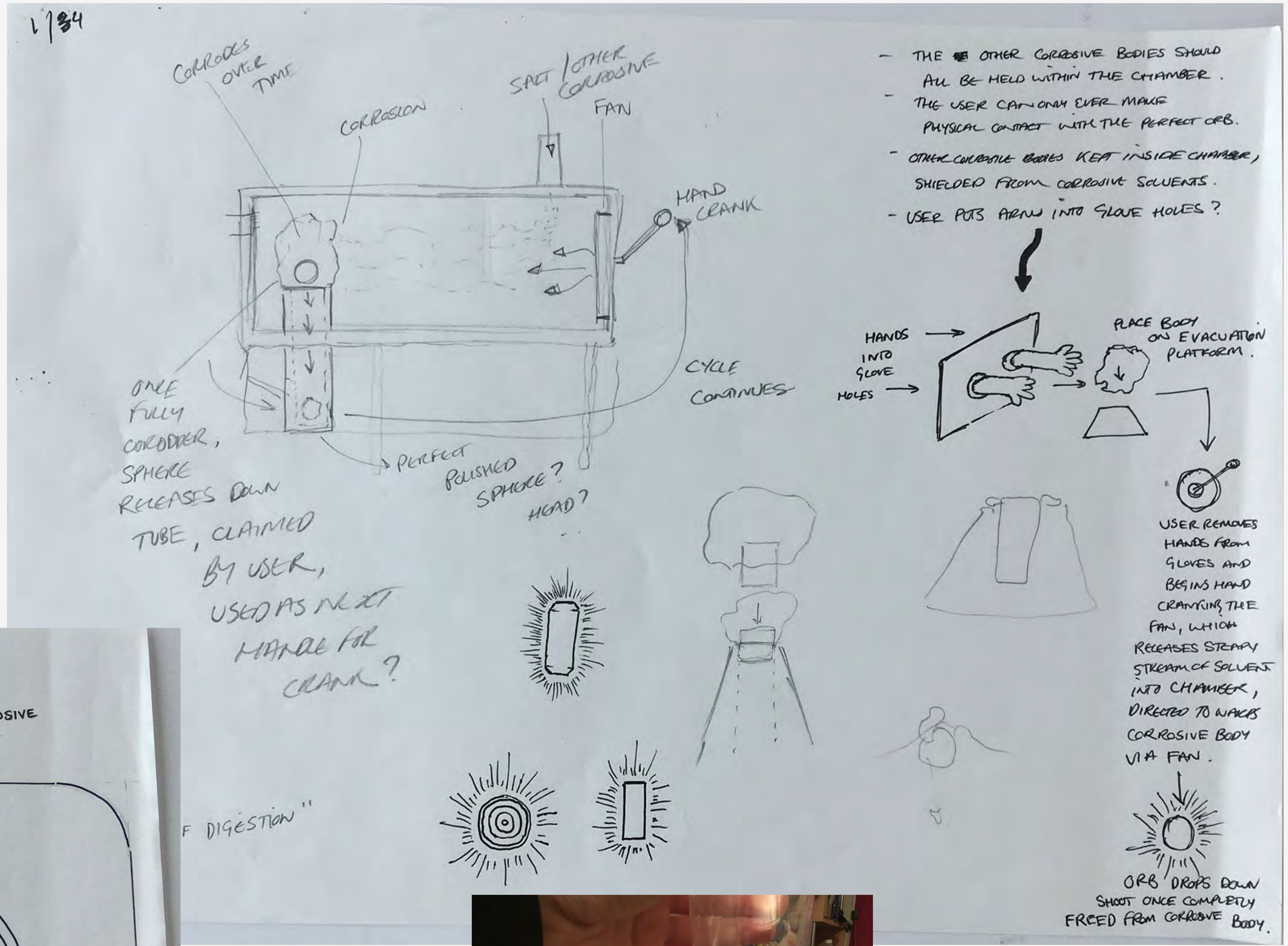

SMALLER IN
PROPORTION

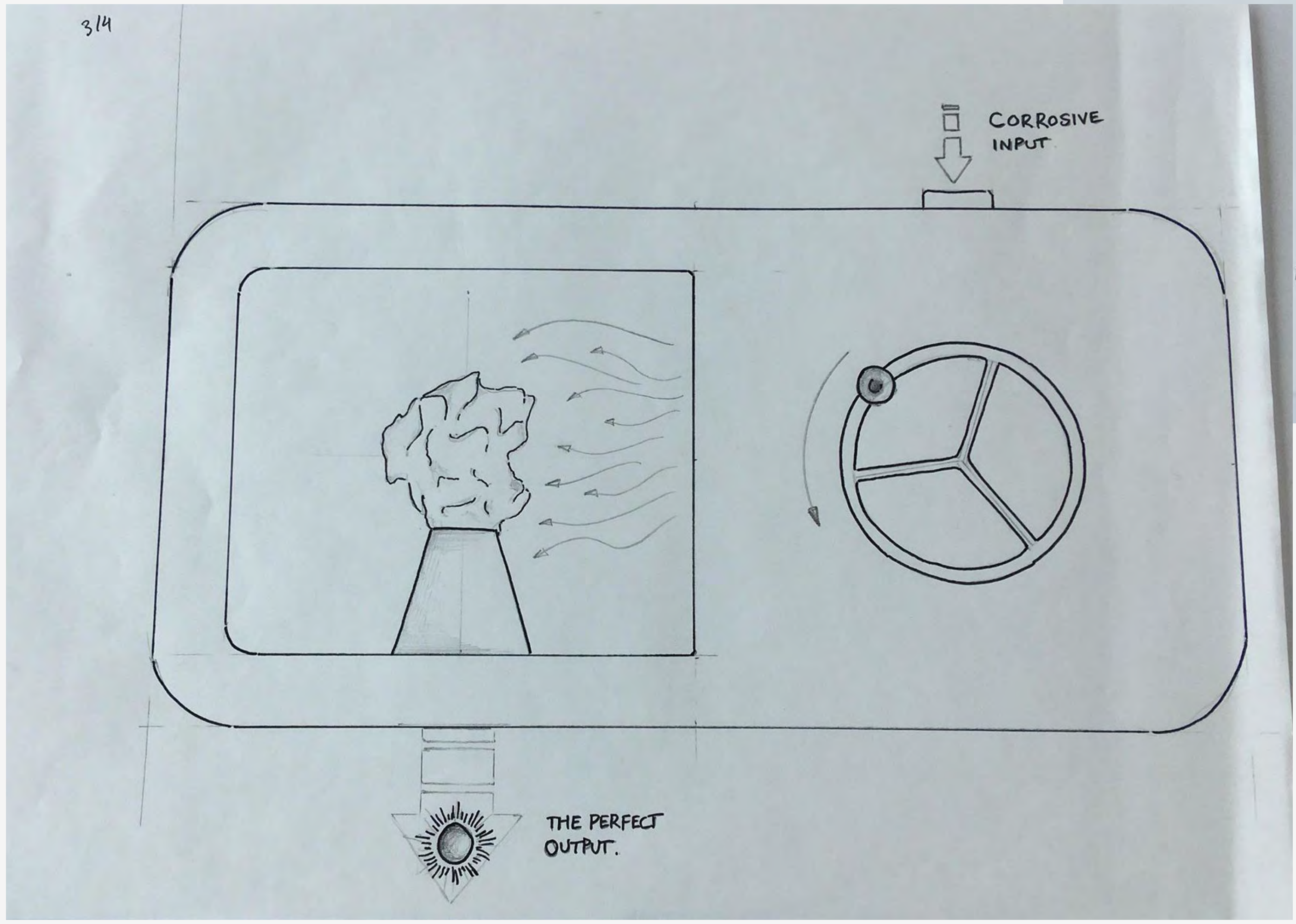

31/03
CAST AMBER
RUBBER.
SCORCHED
CONCRETE
2.
CAST RUBBER
WEIGHT (AMBER).
PLUG/STOP : MACHINED STEE
CAST RESIN?
1
CAST AND SCORCHED
CONCRETE WEIGHTS
STEEL PLUG
→ MELTED. ?

ACETONE DISINTEGRATION CHAMBER

This concept aims to explore the process of corrosion and environmental destruction. Possibly the least violent form of destruction and decay, we wanted to capture the gradual erosion of material when in contact with another. In this concept, the object is subjected to an assault of corrosive material (sand, salt, possibly even acetone or hydrochloric acid).

The corrosive agent is powered by a fan at one end of the chamber that blows the agent onto and around the object. In theory the object would have inside of it, a perfect sphere which would be released down a hatch once enough initial material around it had been removed by the corrosion process. The user would then be able to collect the perfect object that had been released by the process, mirroring the natural smoothing and polishing of rocks in rivers due to erosion. The contrast between the perfect polished object and the destructive process that gave birth to it is appealing.





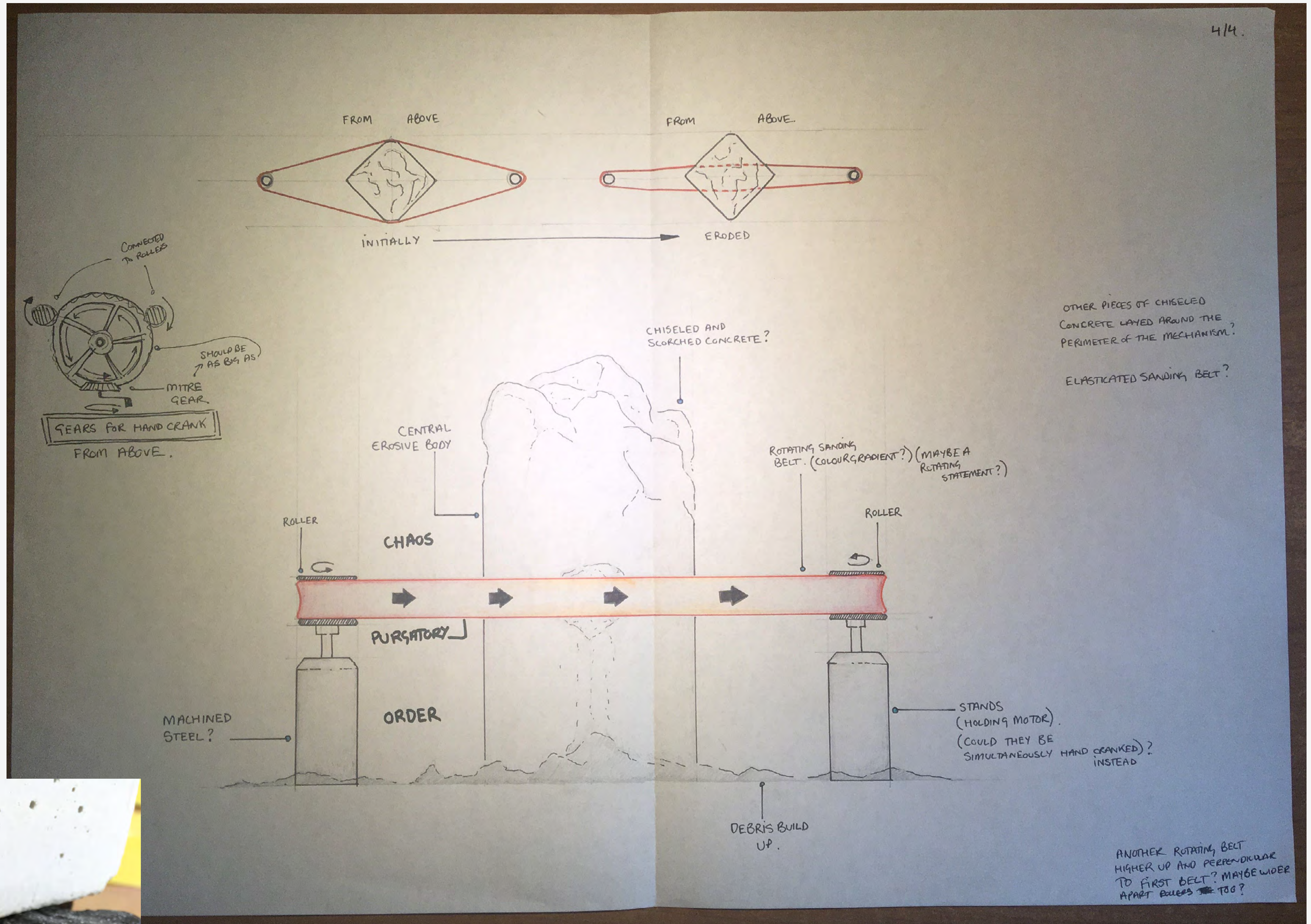
When testing the effectiveness of a fan to blow fluid however, the direction change was negligible compared to what we had hoped.

SANDING BELT AROUND CONCRETE MONOLITH

The sand belt concept took inspiration from the gradual erosion and degradation of perfect structures like desert towers and ancient buildings. The slow destructive process would occur over an extend period of time and would involve a monolithic block of concrete with a coarse sanding belt passing across it.

The idea would be that as the belt runs across the block an area will be worn down by the belt. At the end of the process, the concrete block will be left with a strip of deformed, eroded material around its centre and a pile of dust at its base.

We wanted, again, to explore the process of decay and thought that by contrasting the small area of destruction with the rest of the block in pristine condition we could find a good balance of perfection vs imperfection. The belt rollers would have to be positioned at a specific distance to maintain the same pressure on the block. The belt might also become blunted by use and so the process of decay would work both ways. Although we liked the aesthetic and symbolic ideas here, we wanted to explore something with more energy that would be more forceful and possibly violent.



When sanding a concrete test block, we were able to see that considerable debris could be produced with little force.

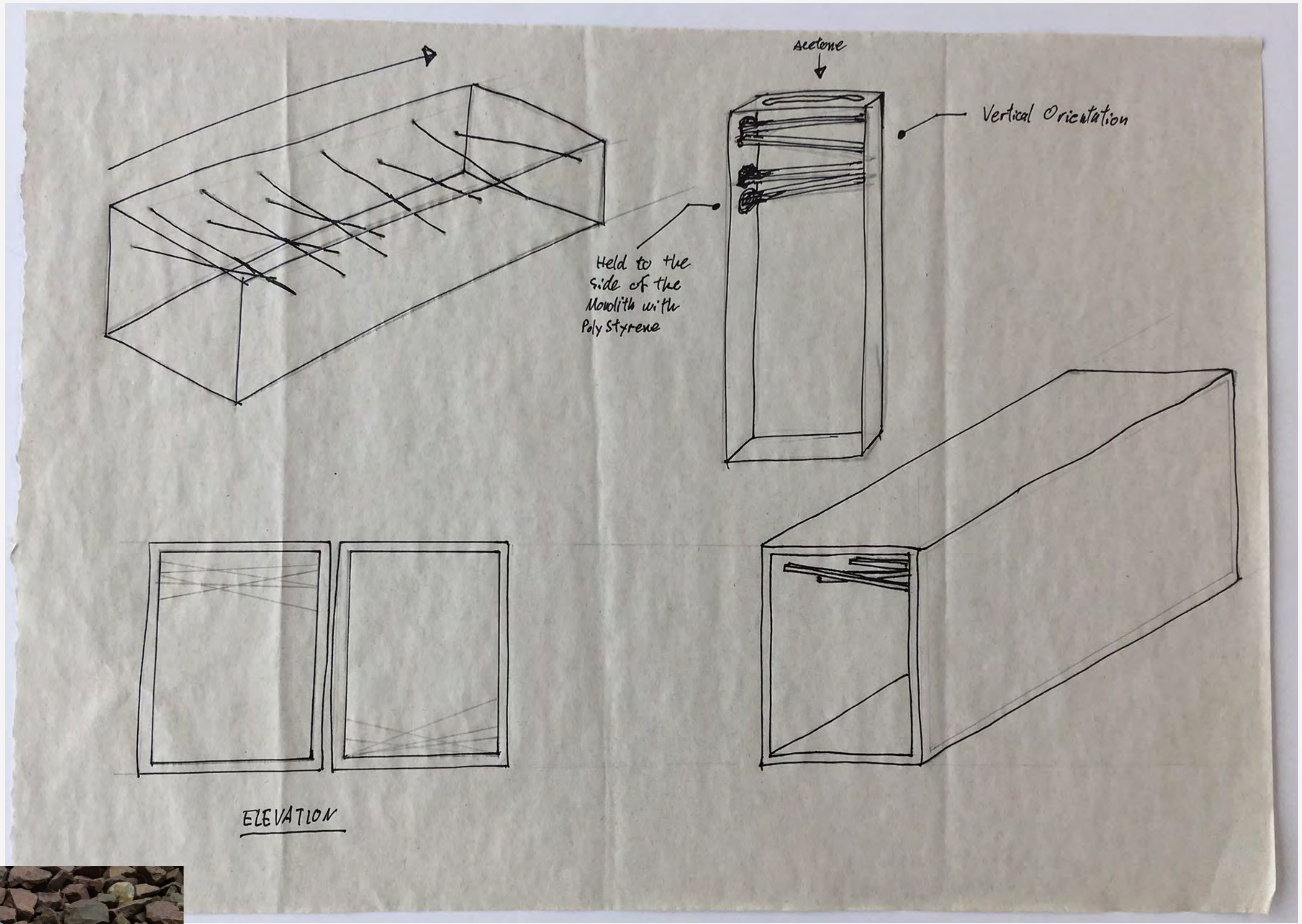
STRUCTURE OF INCREMENTAL DISSOLUTION

This concept involves steel struts being held in place by polystyrene in some sort of structure, a rain of acetone would then be unleashed on the structure dissolving the polystyrene joints and destroying the structure.

The structure could be a single construction in a contained acrylic box, when the time came the sprinkler would be turned on and acetone rain would fall. This would eventually collapse the structure and leave a pile of steel struts in a pool of dissolving polystyrene.

The idea of collapsing a synthetic structure appealed to us as well as the connotations of rain acting as the corrosive force. This idea could even be extended along an enclosed, see through tunnel where struts are positioned between the walls of the tunnel.

The acetone sprinkler would slowly move through the tunnel destroying the suspended structure as it went. We thought about connecting this process to the passage of time and the idea of using such a display as a sort of elemental clock. Although we liked this idea the use of acetone in spray form meant that it would be too dangerous and unreliable for this project.



Testing a small piece of packaging polystyrene and acetone nail polish remover showed us that the use of acetone would give off a terrible smell and its not a great idea to spray a potentially blinding fluid in close proximity to people...

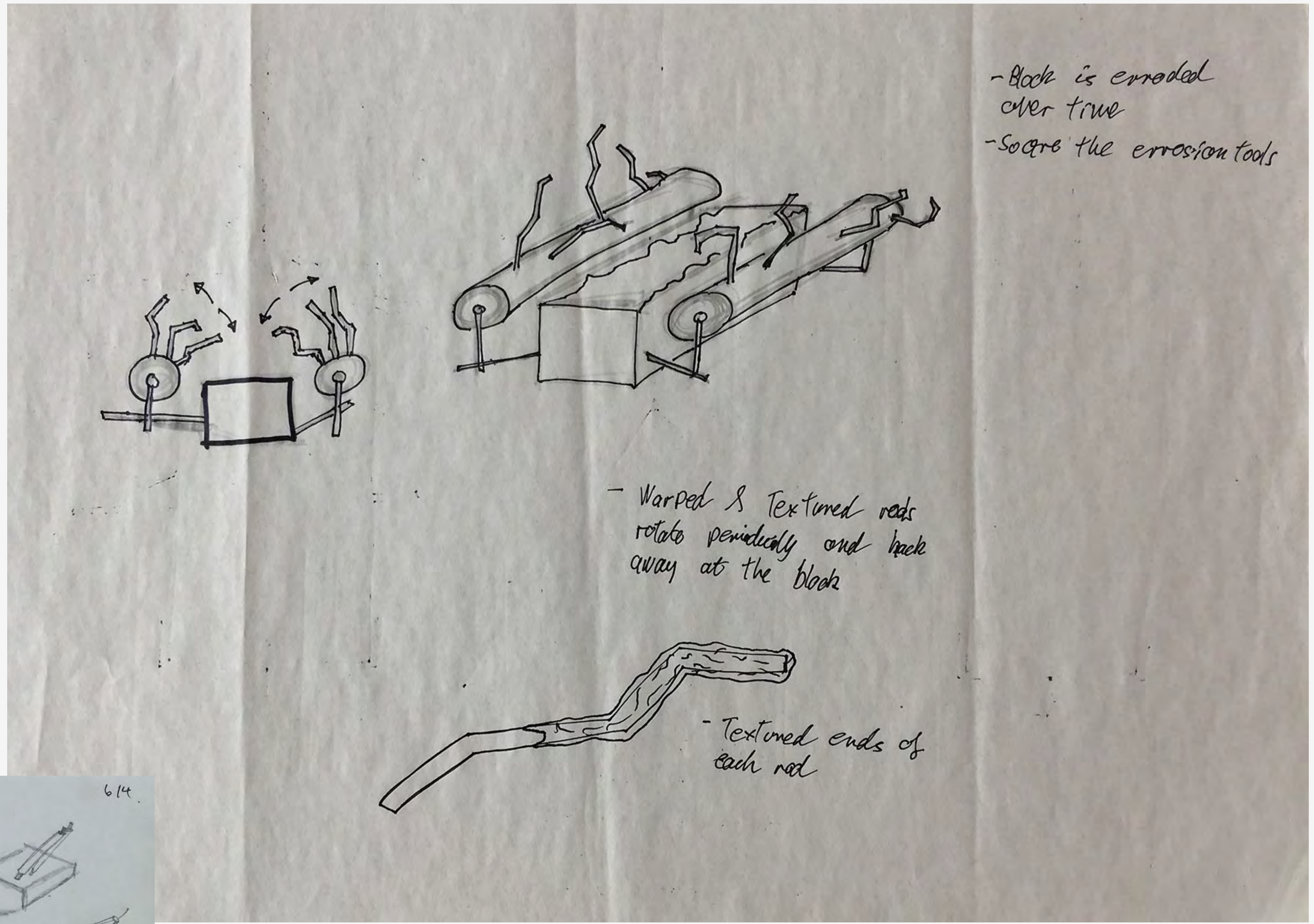
STRIKING MASSES OF CYCLICAL MOTION

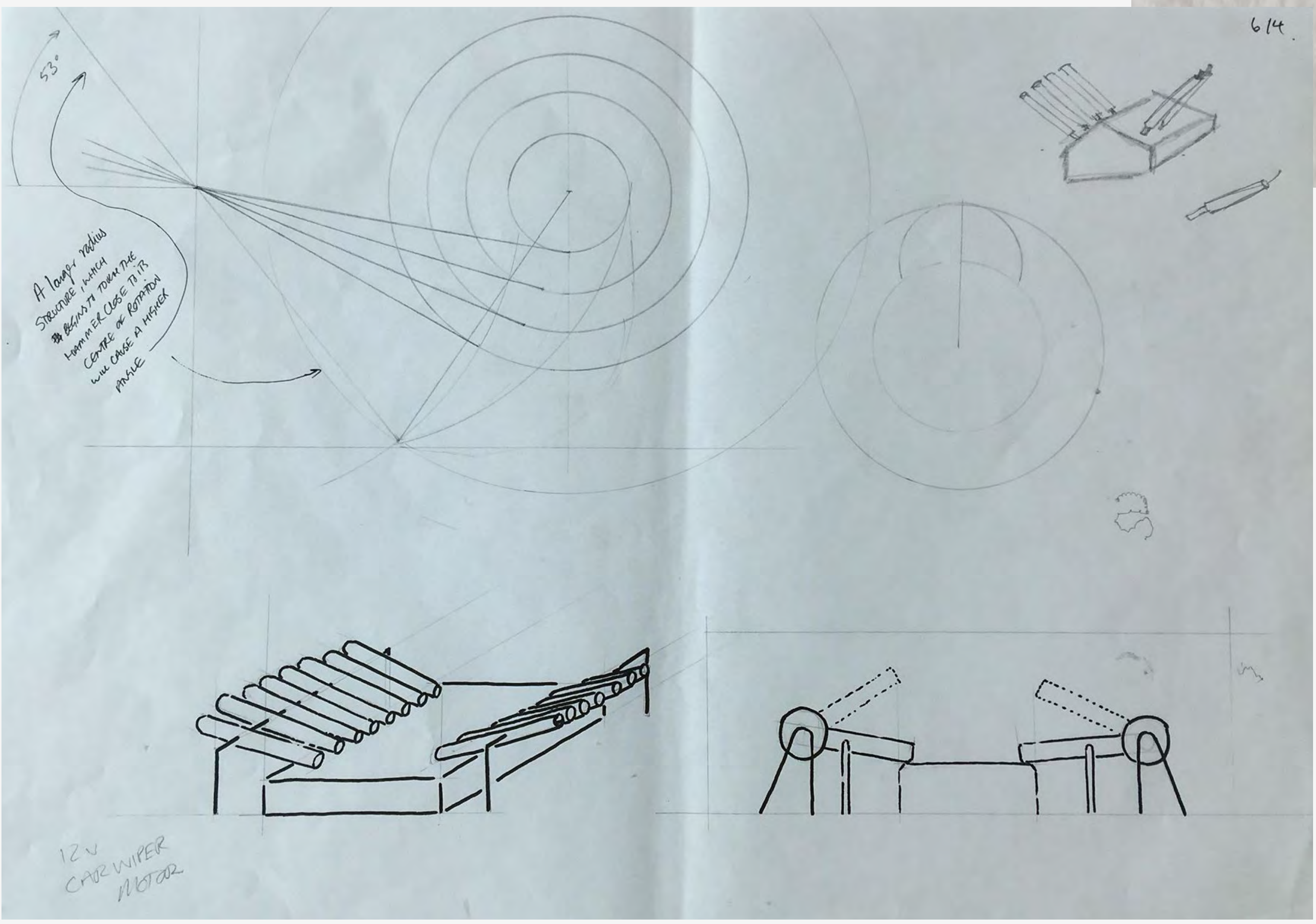
The cyclical striking mass concept consists of a solid concrete block acting as the perfect object while mechanical arms repeatedly fall down onto its top face and edges. The arms will be made from metal and could either be perfectly finished rods or malformed and twisted.

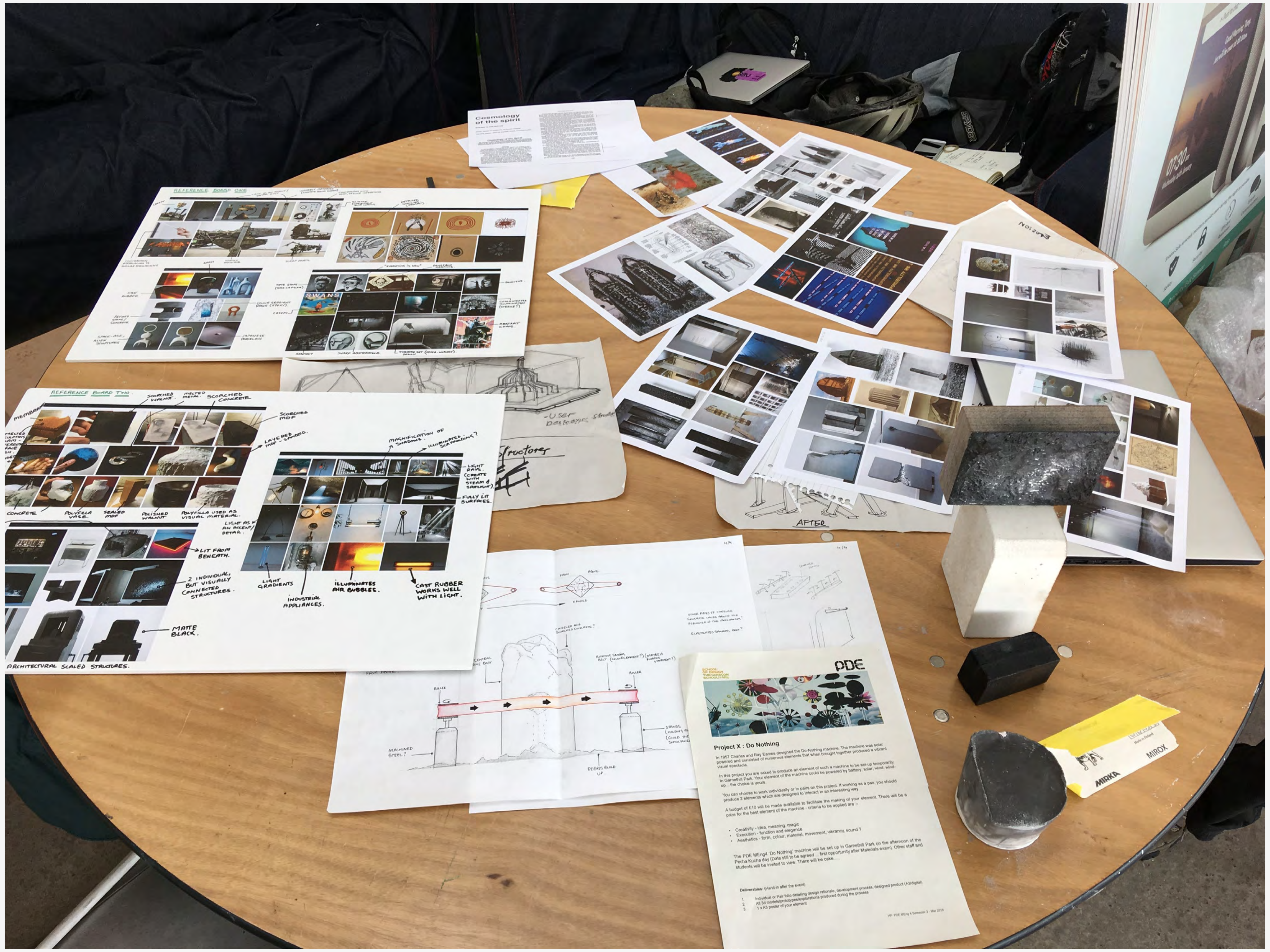
The rods will be lifted and will fall in a cyclical nature as the axles turn. We imagine the rods lifting and falling in order and possibly in unison with the opposite row of rods. The cyclical destruction process ties in to the ideas we were exploring earlier where a perfectly formed man made object would be subject to a gradual decaying process.

The combination of metal and steel fit perfectly with the aesthetic language we were trying to follow. After the destructive process has been complete, the block will be left with a scarred, disfigured side while the underside will remain perfectly intact.

This reflects the earlier exploration of perfection vs imperfection. We felt that this concept had the most promising scope for development on the scale and context that we are working in. The mechanism behind the cyclical lift and drop would likely be fairly easily to test.



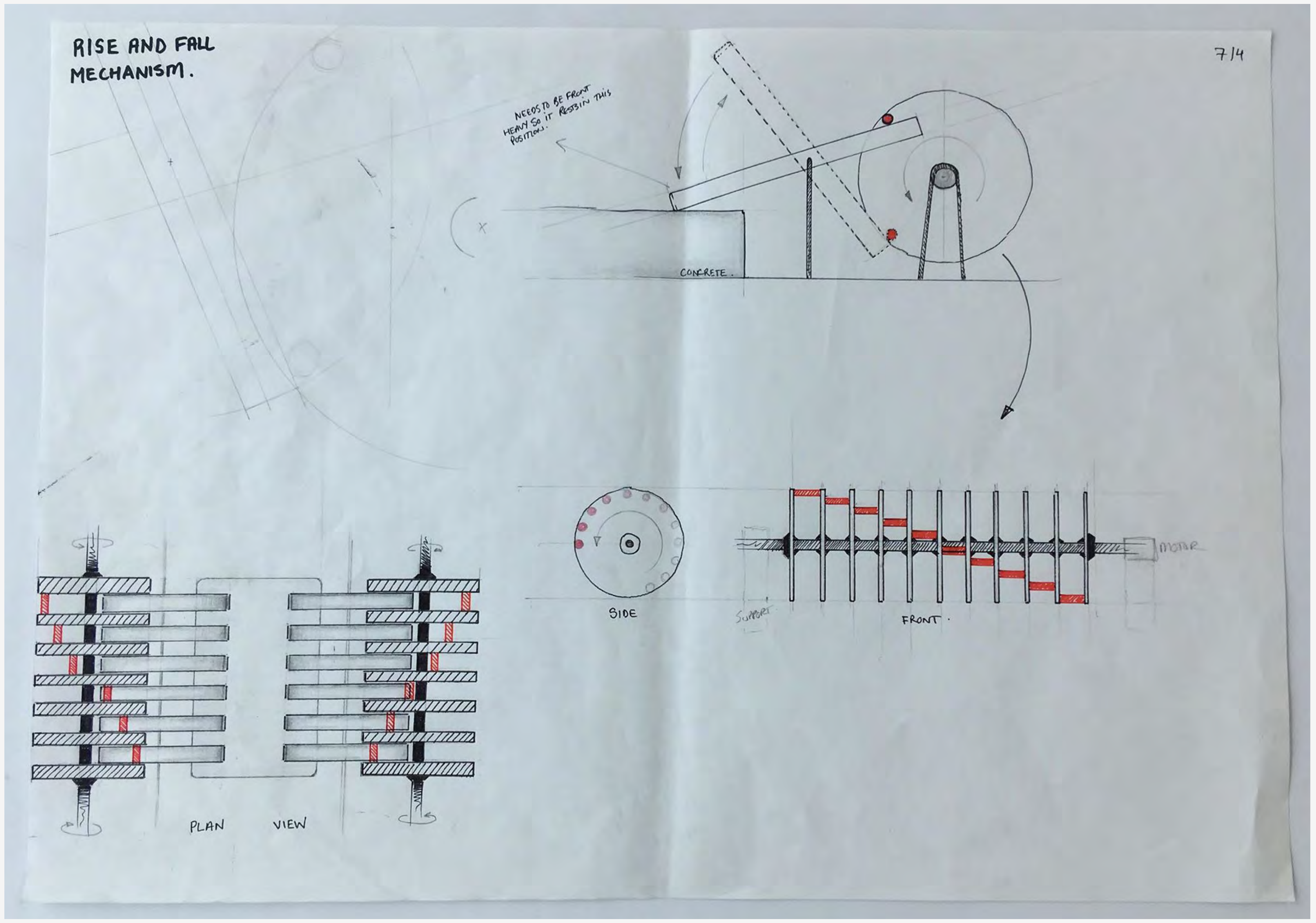


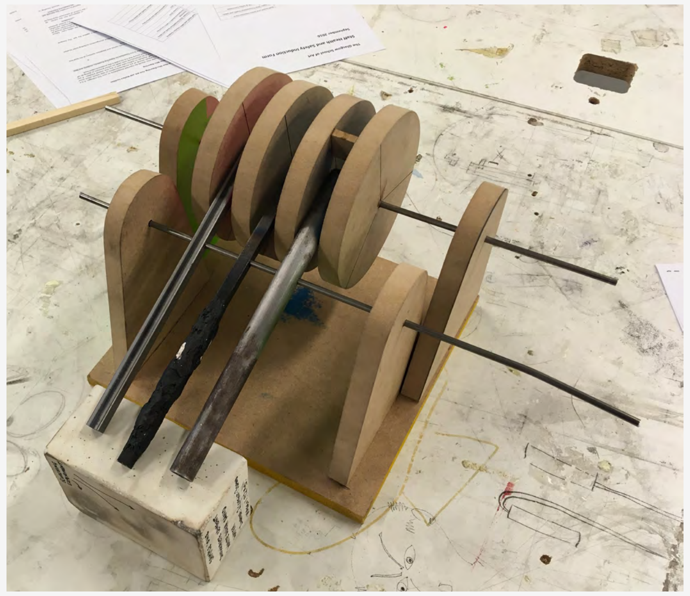


After an extensive discussion and weighing the prose and cons of each concept, we felt that the striking masses of cyclical motion has the least amount of issues, considering our time constraints and so we will look to expand on this concept.

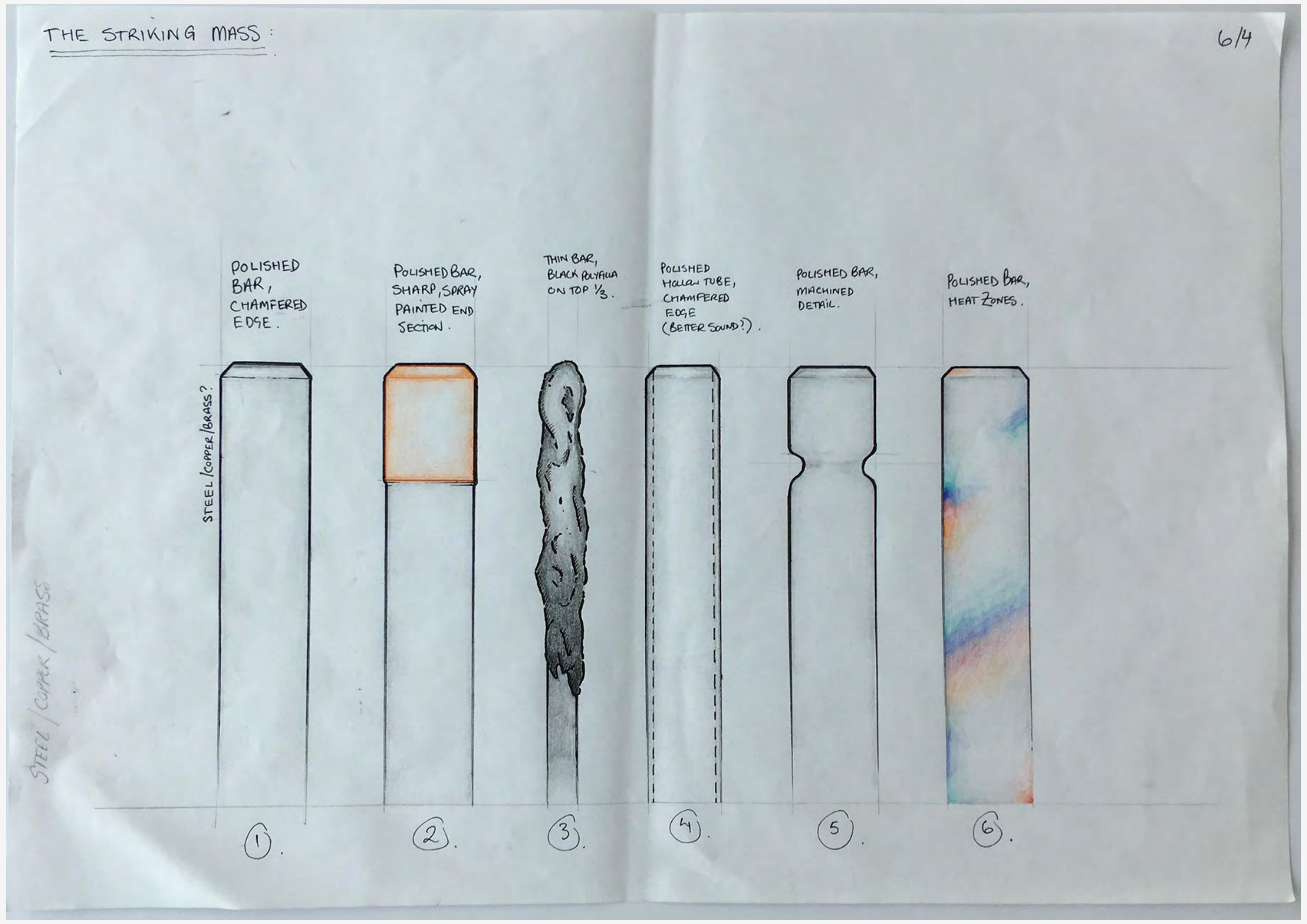
CHOSEN CONCEPT EXPLORATION

The first thing we looked at for this concept was the cyclical mechanism for the tubes to rise and fall in a wave like motion. To do this we put together some more detailed sketches, then created a mock up from MDF and welding rods, as seen below. Between each of the discs there are steps glued in position to allow the tube to rise and fall when the discs are spun. Each step is glued at different positions to allow a patterned motion.

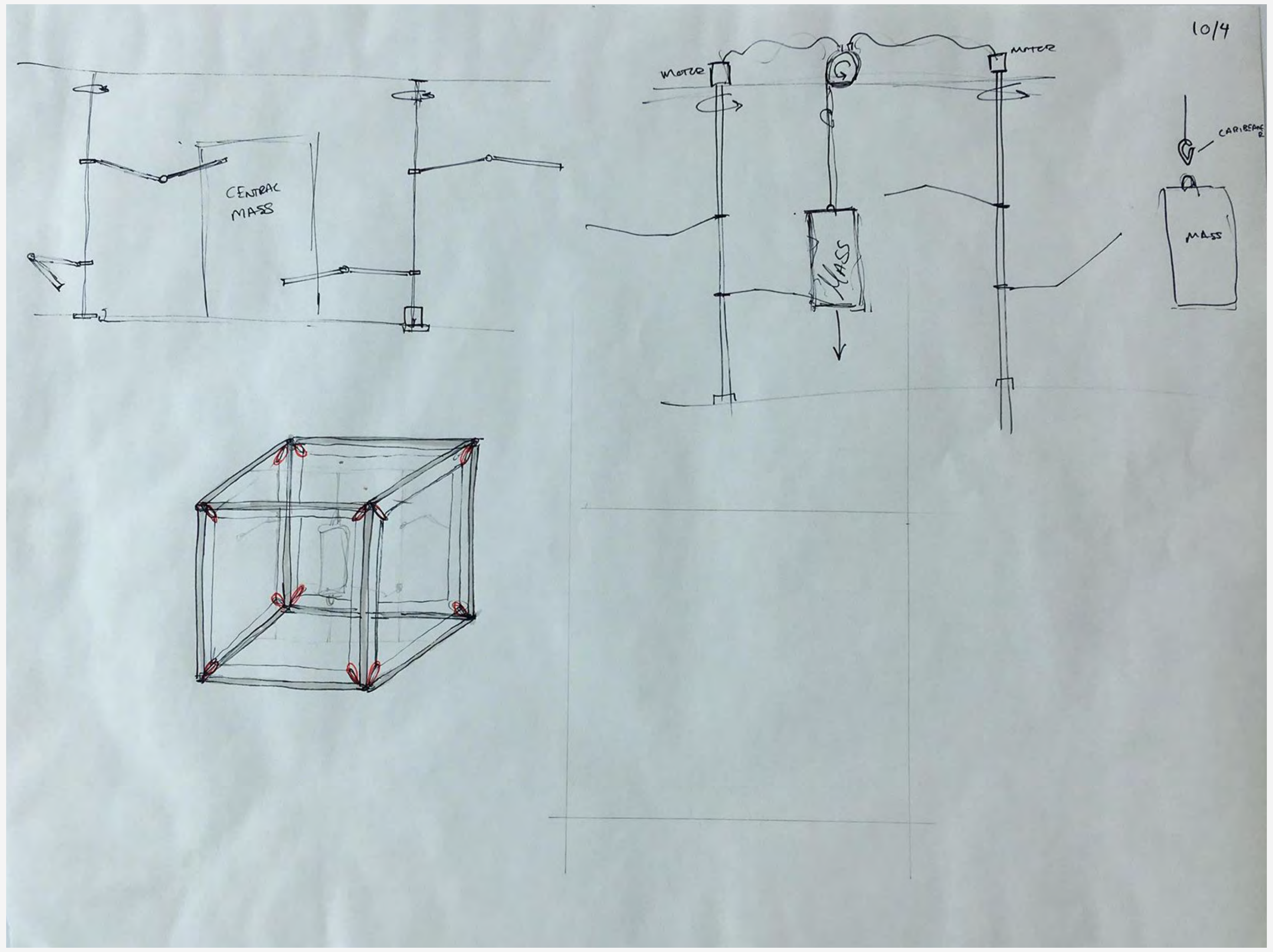




When the rods struck a concrete mass (from Alistair's bookend project), they would bounce multiple times. This quickly became a very irritating noise, for both us and everyone else in the workshop. We realised that a more singular sound was preffered over a bouncing sound made up of multiple small tones. Sketches were produced to show alternative striking masses which may give a more pleasing aesthetic and/or sound.



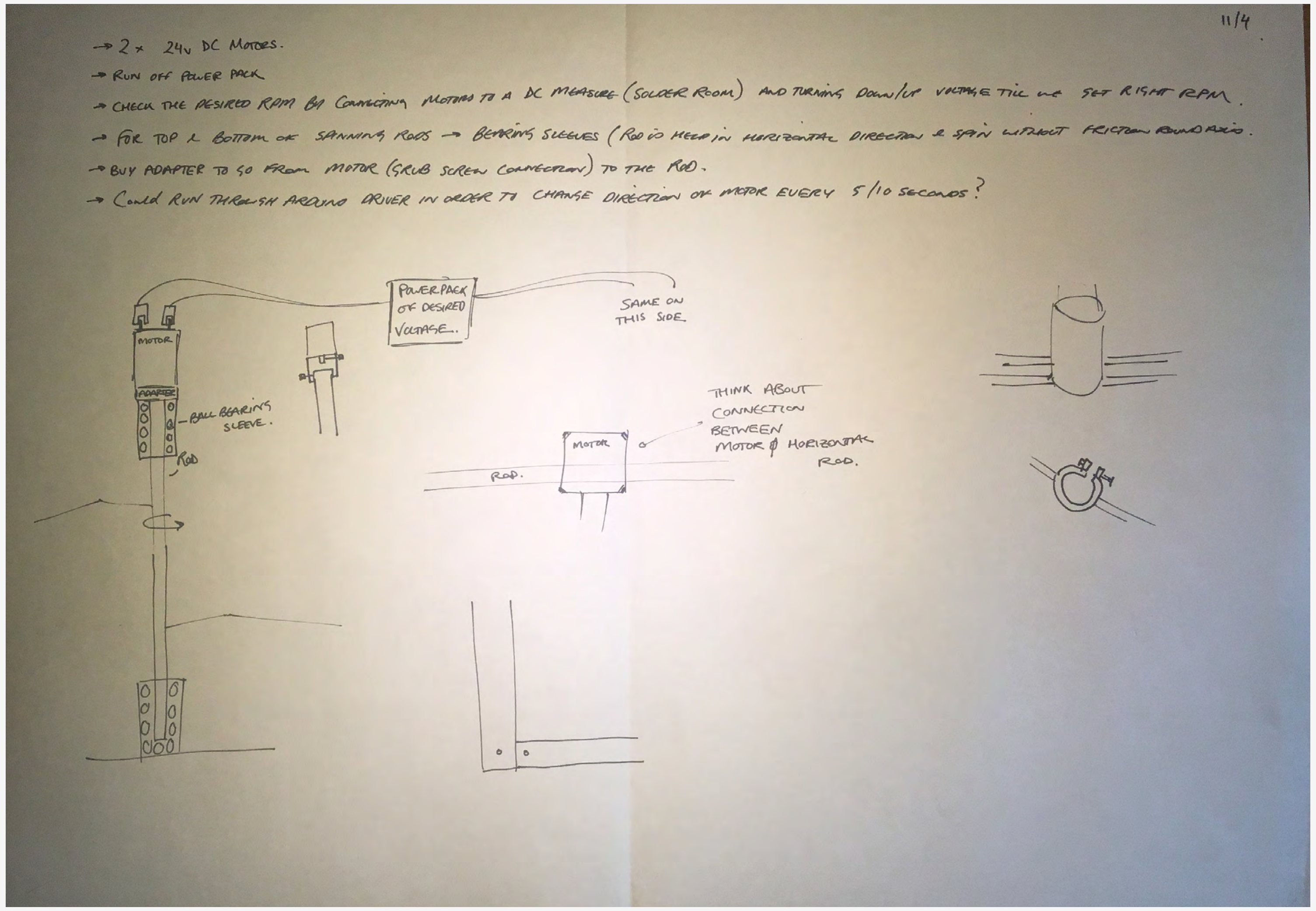
After further discussion, we also came to the conclusion that the mechanism and layout was a bit boring and did not have the intended interest. Rethinking the concept, we considered changing the mechanism to a vertical axle, with rotating arms in the horizontal plane. Coupling this with hinged arms may also bring about a more violent and unpredictable motion when striking the concrete. Again, sketches were made to visualise out thinking and then a rough mock up of this was made as proof of concept for the arms movement. A simple MDF structure held a vertical tube which could be rotated by our fingers or with the attachment of a drill. The arm was fashioned from 2 piece of square tubing, hinged with nuts and bolts and joined to the tube via bolts and washers.

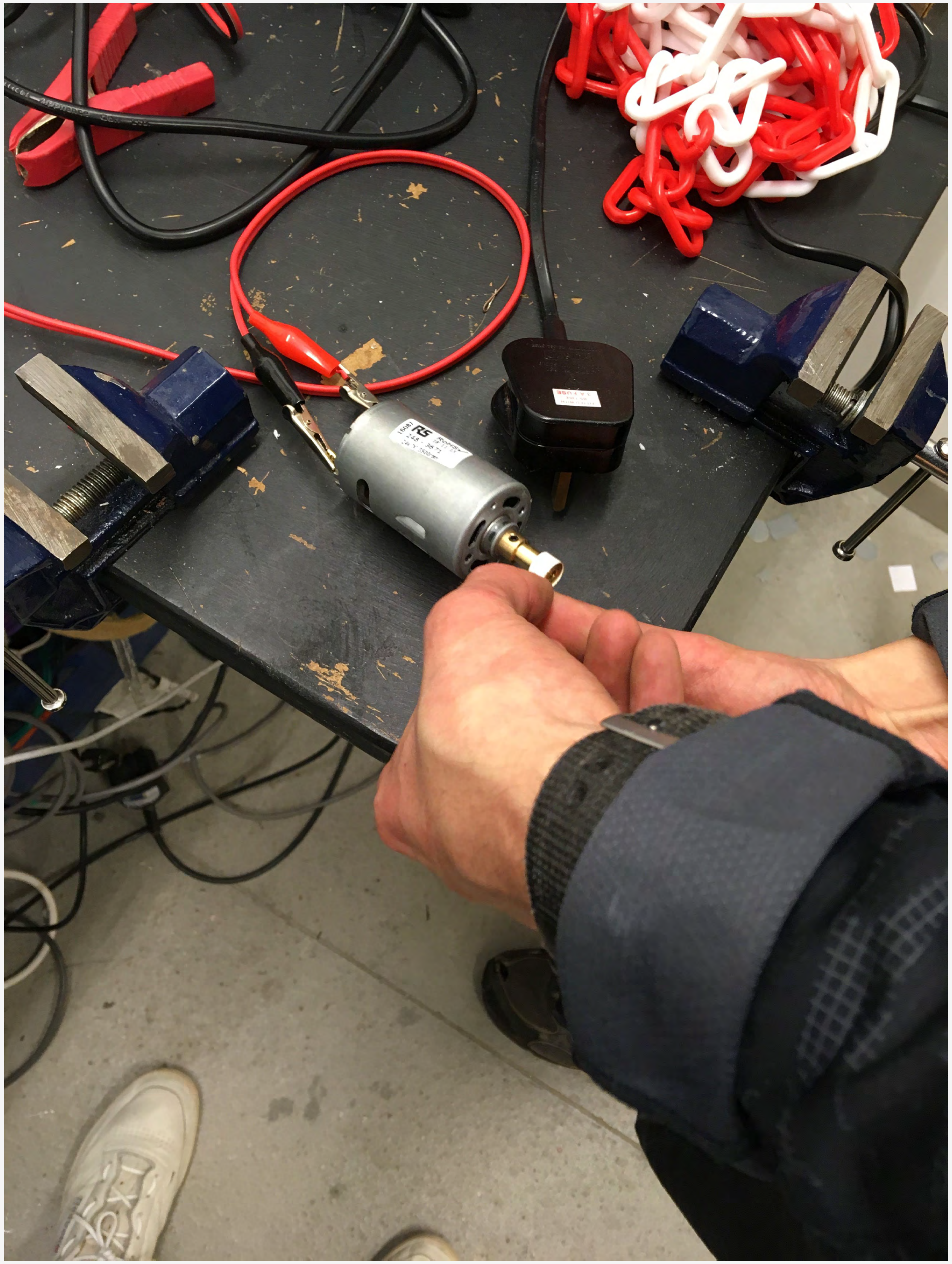


The same concrete mass was used. When rotating the arms with our fingers, we were able to produce enough force to chip away substantial volumes of the concrete. This was the desired outcome as we wanted to reference a sort of human/machine corrosion process. The arm also swung and moved much more unpredictably, as we hoped. We were both happy with this new formatting of the concept and began to think about how this could be constructed as a whole.

The next important area for us to look into was the power supply. Unlike other concepts that were initially discussed, we felt this idea benefited best from a constant and uniform power input, rather than a human input (i.e. hand crank). Overall, we agreed that a simple and reliable power supply was best, which would allow us to concentrate on all other aspects of the machine. Having said this, we were very intrigued by a specific power supply we found during research. Gravity power generation uses the weight of an object to power a generator. We felt that it would be very interesting to attach the concrete body to a gravity power generator, so that as the body slowly lowers, it powers the arms. There is something poetic in the idea of the concrete body powering the thing that slowly destroys it. However, after looking into all the parts needed as well as a fairly complex implementation, we felt that the time just wasn't there for us to pursue this power supply.

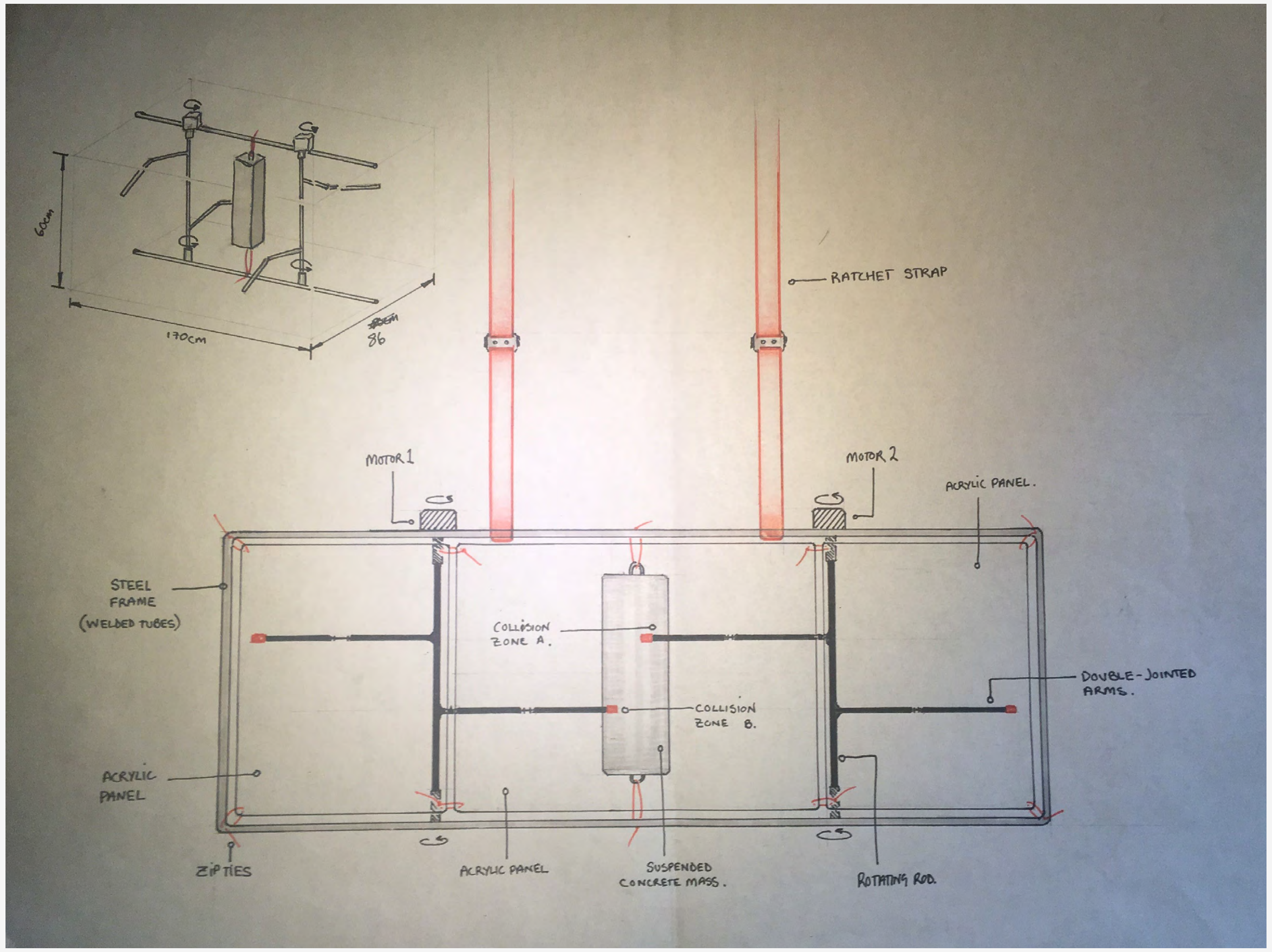
Speaking to Alan from the workshop, he suggested a simple DC motor, of which he had 2 in the workshop which we were allowed to borrow. They were 24V 3600RPM DC motors. Alan seemed to think that these would have enough torque to keep the axle and arms at a constant rotation. He also suggested that we should use ball bearing sleeves at either end of the axle too, in order to minimise friction (shown in rough sketch below). Once we have the arms set up, we could simply attach the motor to a power pack, find the speed we want the arms to rotate at and then purchase the corresponding power supply with the correct voltage.

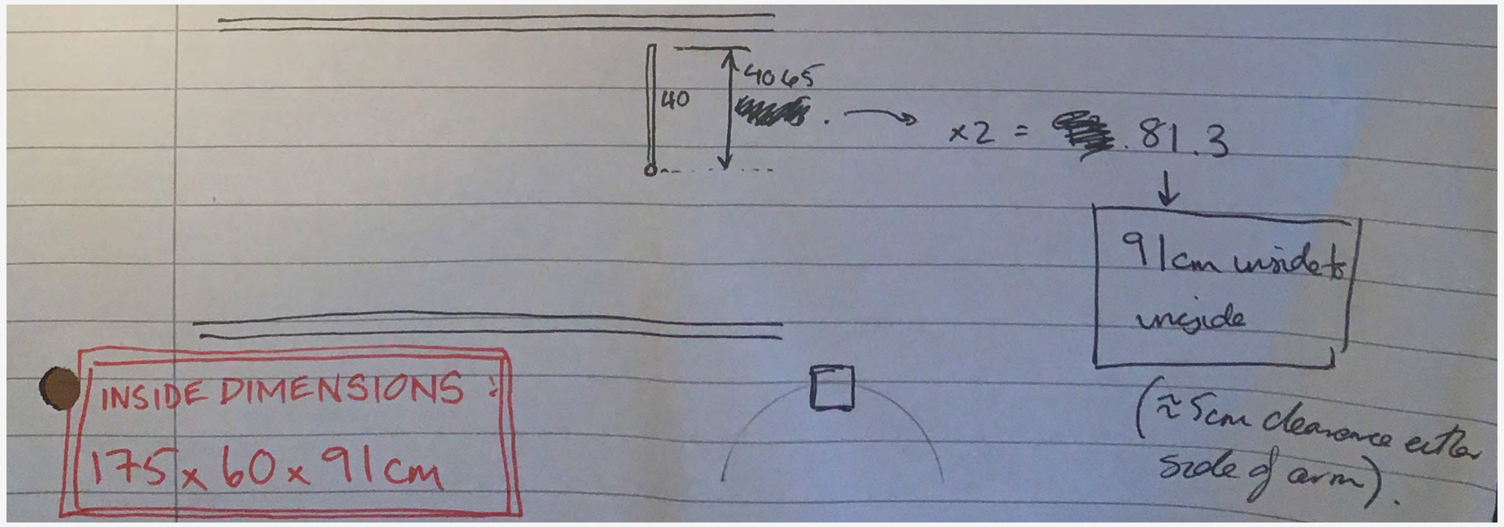




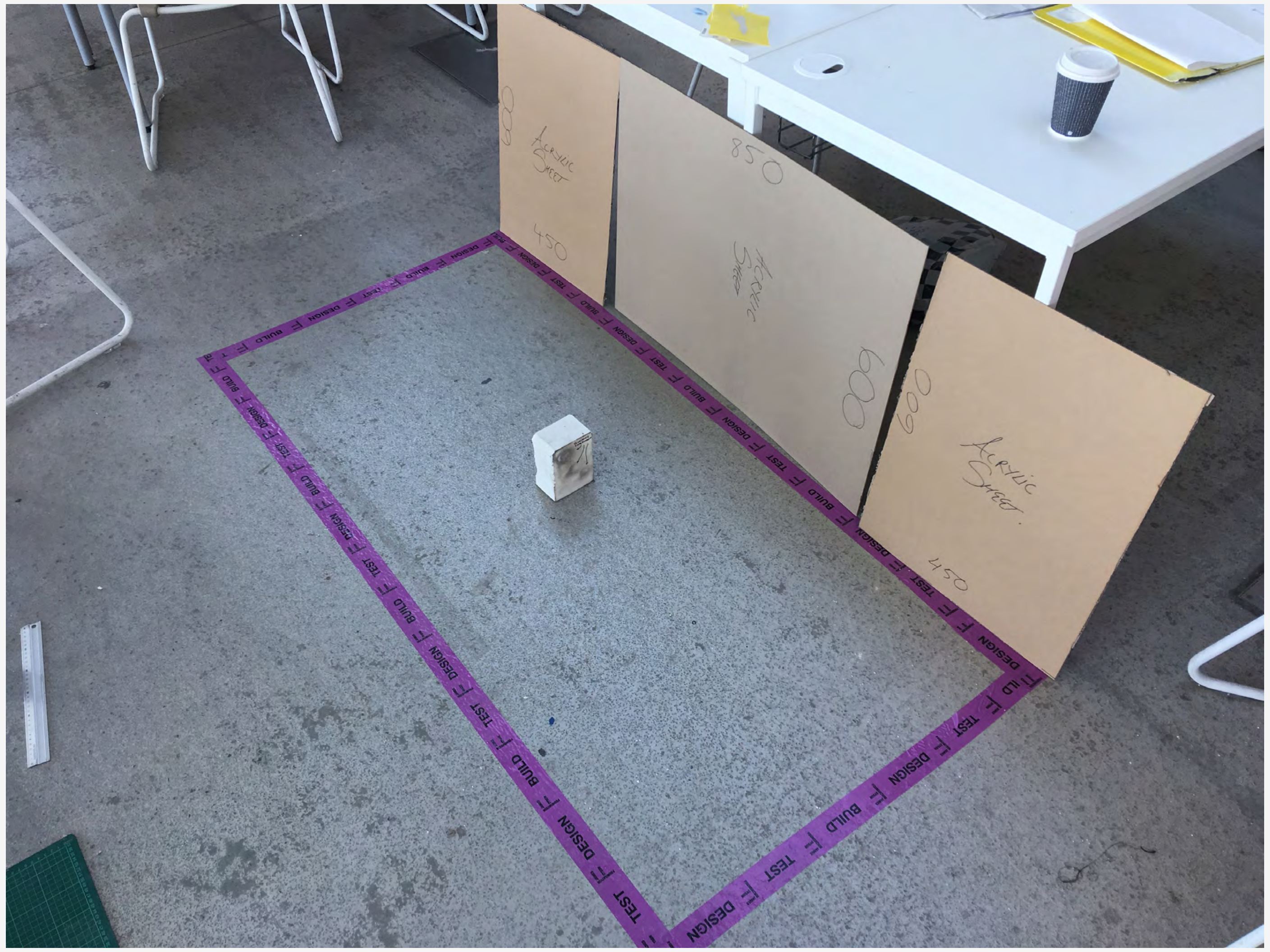
The scale of this machine was very imprtant to us. We want it to have an overwhelming presence. In order for this machine to feel more industrial rather than a small desk top spectacle, we needed a large scale.

Our current formatting of the machine included 2 rotating axles and arms, on either side of a central, concrete column. Seen in the below sketch:





Taking into account the size of each individual component inside the frame, we settled on dimensions of 170 x 85 x 60cm. To give us a better visual representation of this, we taped out the silhouette of the frame on the studio floor and also cut out the acrylic panels that would fill the frames out of cardboard.



Seeing this visual representation on the ground let us see that we needed to have the machine at eye level to fully appreciate it. We firstly thought of simply proping it up on something else, but decided to be a bit more creative and look to suspended it in the park. Iniitally we thought of hanging it from the swings. To get a better idea of the scale in context of the park, we decided to make a full scale mock up of the frame from triangularly shaped cardboard, taped and hot glued together. Some string was used to represent the straps that the frame would hang from. Images of this can be seen on the following page.

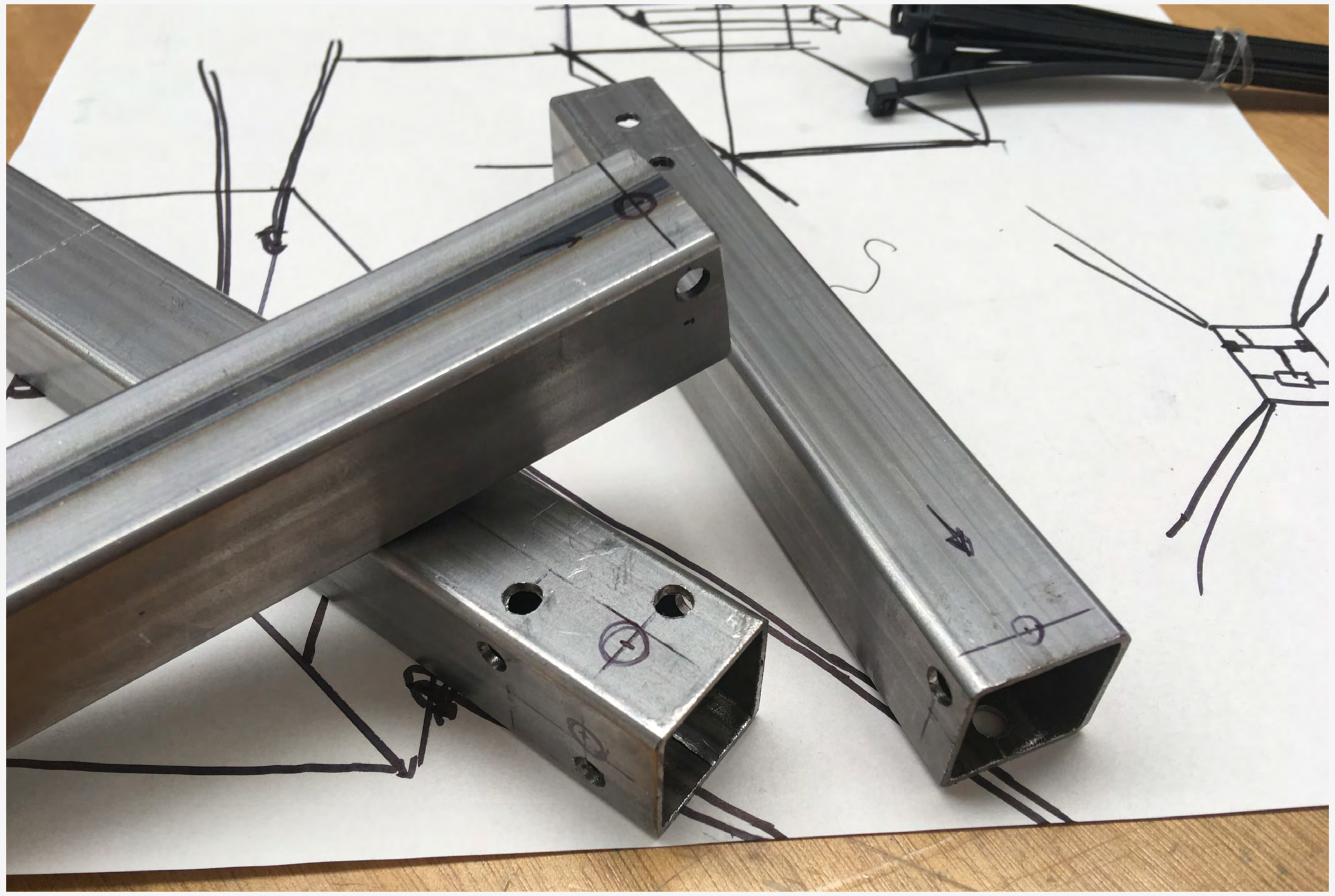
When in context, the frame seemed to cluttered when surrounded by the swings. Instead we tried suspending it between 2 trees. This seems to work much better.

For the framework, we wanted a material with ample strength but reasonable weight. Browsing the metal workshop, we decided that hollow steel tubing was a fair choice (25 x 25mm).

Furthering the idea of corrosion and general deterioration, we created a small sample of the steel in order to play with the application of heat zones on its surface. This created a very nice finish on the steel and, for our purposes at least, would not effect the strength of the steel to any sizeable degree. We also played with the idea of adding polyfilla to surfaces, in order to create a rocky like aesthetic. Both of these can be seen below.

At this point, we realised that the size of the machine may be an issue and so brainstormed some possible ways of connecting the frame together in a strong fashion, that could also be deconstructed and layed flat after the exhibition. Zip ties solved this problem nicely: applying zip ties at the joints in multiple planes would give a secure connection, which is easily deconstructed. Aswell as this, it give a great blunt industrialism, which complements the overarching themes of corrosion and weathering quite nicely.

In order to best format the zip ties to give an acceptable connection strength, we had to test multiple combinations of formats. Trial and error got us to our chosen format, which can be seen below:



Weighing the steel sample.

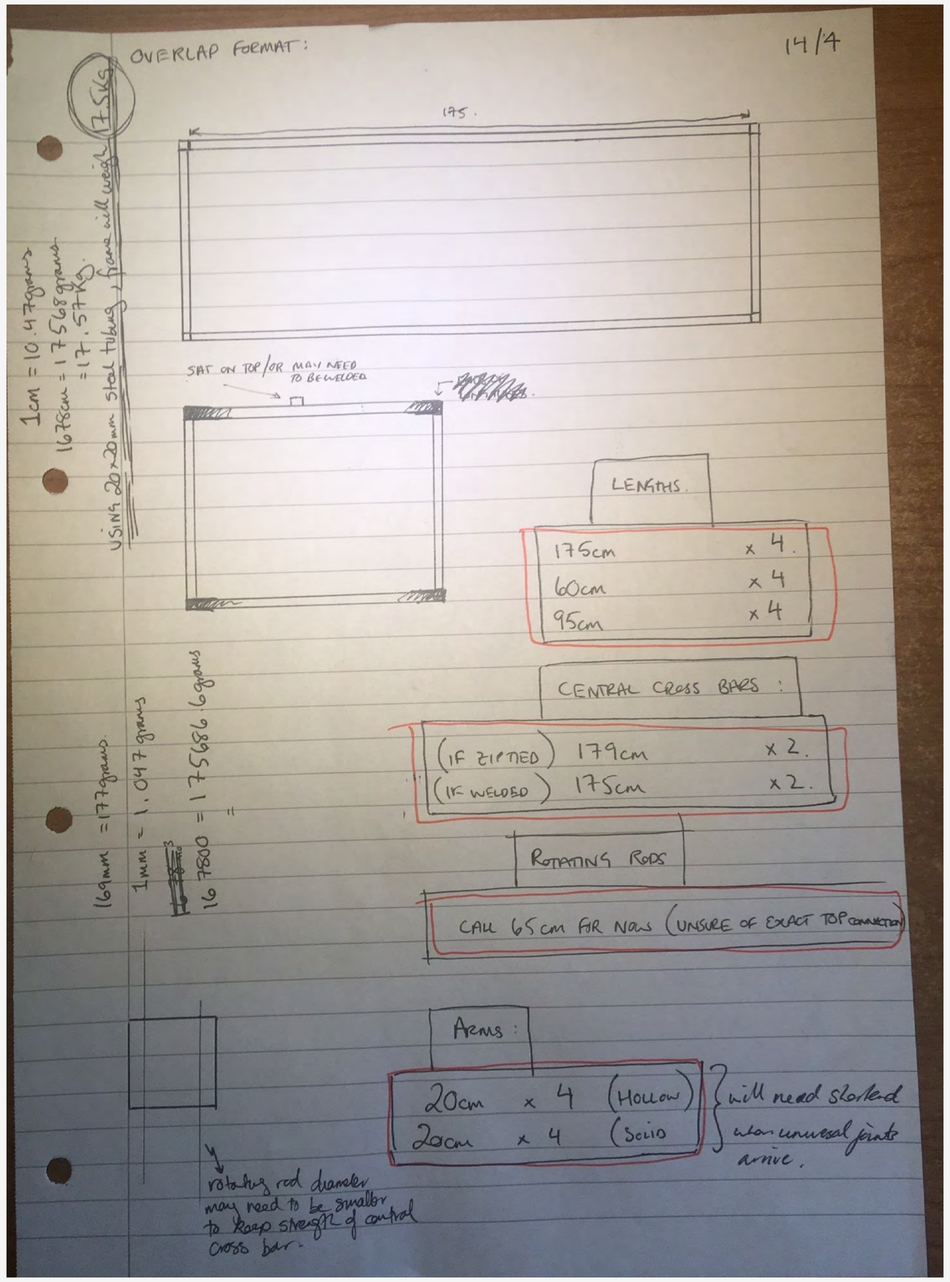
The zip ties were a good solution, but we felt it may still be necessary to introduce some welded connections too, at crucial joints in the structure. These joints were found to be the 2 connection points on either of the beams that directly hold the rotating arms and concrete in place. This would give added strength but still allow for flat storage.

At this point, we have some rough dimensions and also a material choice, so it seemed sensible to calculate the mass of this framework, just to make sure we weren't going to produce a structure of far too much mass. The small steel sample was weighed and from this, the length of steel needed was used to calculate the mass, which was found to be roughly 17.5 KG. Fairly heavy but nothing that 2 trees couldn't handle. 17.5 KG is about a third of an adult.

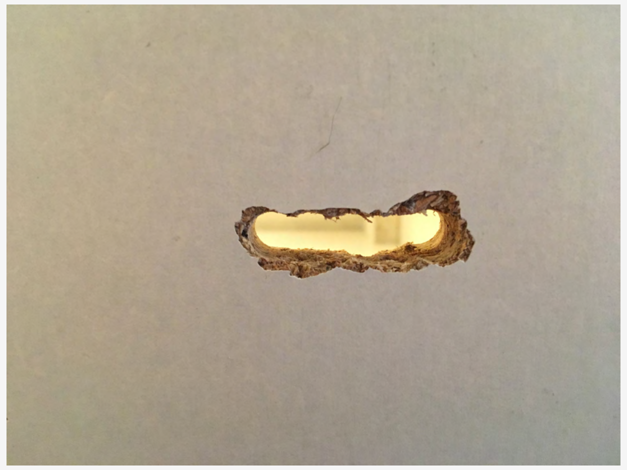
CONCEPT REFINEMENT & PRODUCTION

After discussing the concept with Hugh, it became apparent that some sort of simplifications were desired. As we still wanted to keep the same scale of the rotating arms and concrete mass, we decided to remove one of the spinning axles rather than just scaling everything down. This gave us less work to do and also made the machine slightly more appropriate. This brought the overall length of the piece down from 175cm to 110cm.

We now felt it was an appropriate time to finish the concept refinement and begin producing the machine. A cutting list was sketched out for us to follow when cutting the steel tubing. The positioning of the bars with respect to each other is important. As the top bars at each end will be subjected to the most direct for, it was important that they sat directly on top of the vertical edge pieces, meaning they had direct support from other rods, rather than just the zip ties.



A box mould was made for the concrete from melamine board. The board was screwed together and sealed with silicone. A cut was made on the underside of the box so that the 2 embedded hooks could sit properly in the mould. This cut was covered with plasticine one the hooks were in place. The concrete was poured on the 20th of April. This was important as it means the concrete has roughly 20 days to reach a decent strength, but should still be more brittle than it would be if it was allowed to reach full strength (25 days). This should hopefully help with the chipping action we want to get from the swinging arms.



As is general practice, the box mould was vibrated to remove a substantial amount of the air bubbles from the mould. In our case, we used a vibrating sander to complete this process most efficiently. Due to the height of the cast, there will still be a considerable amount of air bubbles that could not reach the surface before solidification began taking place. The concrete was removed from the mould on the 28th and allowed to dry naturally for the remainder of the time.

The steel lengths were measured and then cut on the mitre saw and 4 butt weld joints were made at the positions which would bear the greatest load. All other joints were zip ties using the method laid out previously.

The arms were simple made by a central steel rod and two, double-jointed arms welded to the central axis. The joints were produced using a straightforward machined screw and nut combination, allowing the outer section of each arm to freely rotate 360 degrees, giving the desired effect of unpredictability in the arm motion.

The axle was placed into the steel structure and held in place by the ball bearing sleeves, which were epoxied in place. In order to connect the motor to the axle, we purchased a motor adaptor. This could be connected to the motors axle via grub screws. It was trickier to connect the adapter to the steel tubing. The material coupling (copper adapter and steel tube) made it hard to weld the two together as the copper would likely melt. The workshop technicians advised that we flash tacked the piece, which would introduce a large heat input for a shorter period of time. This worked well.

We were now able to test the motors performance via the power pack in the workshop.

Unfortunately the motor did not have sufficient torque to even over come the weight of the arms. We made the decision to swap out the motor for a considerable more powerful alternative. We felt that a hand drill might be quite a visually interesting power source and also further the blunt industrialism we were working towards.