# appendix A

Construction of sites

## 5.3.1.1.

### CONSTRUCTION OF THE TESTING FRAME

The testing frame was constructed from two unused pin-boards (referred to as Board A and Board B) See Figure 1: Pin board before alteration. Initially the shape and specific requirements of the testing frame were derived from the characteristics and opportunities offered by rope and rope-like materials.

Board A acts as the backdrop to the testing frame. The OSB was cleaned, sanded by hand and finished with white PVA paint. Holes were drilled into the backboard in order to allow for the fixing of rope and hardware. The 8mm diameter holes are set 200mm (centre to centre) and run on a horizontal and vertical grid. This allows for the shaping of three dimensional textile space

Board B acts as the main frame onto which hardware and rope can be fixed. The OSB board was removed from the existing frame, the frame was cleaned and holes were drilled into the inner part of the frame. The 8mm diameter holes were spaced 100mm centre to centre. Holes 1-19 were placed at the top and bottom of the horizontal frames and holes A-J were placed vertically down the sides of the frame. The numbering system was incorporated for documentation purposes. Finally Board B was painted white.

To complete the testing frame Board A and Board B were fixed together. The feet of the frames were bolted together using M6 bolts and two pieces of 32x32x600 mm timber batons. The tops of the frames were fixed by spanning two pieces of 2.6x25x25x450mm mild steel equal angles between the two frames and fixing them with self-tapping screws. These materials were left unfinished and unpainted.

The completed testing frame is 2020mm wide, 1670mm high and 435mm deep. See Figure 2: Completed testing frame in use (right). The completed testing frame includes the addition of M6 eye bolts as fixing points. For physical parameters of the testing frame see section 5.3.1. on poster 10 (page 54+55).

Figure 1: Pin board before alteration

Figure 2: Completed testing frame in use

## 5.3.2.1.
### CONSTRUCTION OF THE TESTING BOX

Where the testing frame acts as quite a rigid test site, the testing box allows for more fluidity and malleability of the textile. This is due to the increased amount of fixing points and the fact that the grid is aligned. Not only does the grid allow for the fixing of eye bolts but the aligned holes also mean that threaded rods can pass through both of the side panels simultaneously.

For physical parameters of the testing box see section 5.3.2. on poster 10 (page 54+55 ).

The testing box was constructed using 16 mm MDF. The form of the box was designed to be 'neutral'. Therefore the dimensions of the box was not based on the testing site for intervention, but was built to be an empty rectangle. This was done to ensure maximum flexibility in terms of spatial response.

Initially the dimensions of the bottom panel of the box was based on the dimensions of an A2 sheet of paper (420mm x 594mm). It was altered to 400mm x 580mm to use the available MDF sheet in the most efficient way. The side panels simply matched these parameters with a height proportionally to the size of the bottom panel. Therefore the side panels were designed to be 300mm high.

The three side panels and bottom panel were drawn out onto the available MDF sheet with pencil. The panels were cut whereafter the sides of the panels were sanded lightly to remove any rough edges. The panels were then glued to each other.  Wood screws were used to secure the panels to each other. Initially it was determined that the box would need to be strong enough to resist pulling, tugging and tension from ropes and strings. Later however it became clear that the nature of the type of testing to take place within the box would change. See Table 5.2. Testing box, observation and response on poster 10 (page 54+55)

After the wood dried a grid was marked out onto the exterior of the box. This grid was then used to drill 6mm holes into the box. After drilling the box was sanded inside and outside to get rid of any pencil lines and excess glue.

M6 eye bolts and later 6mm threaded rod was placed through the holes within the box.

See Figure 3: Testing box in use (right).

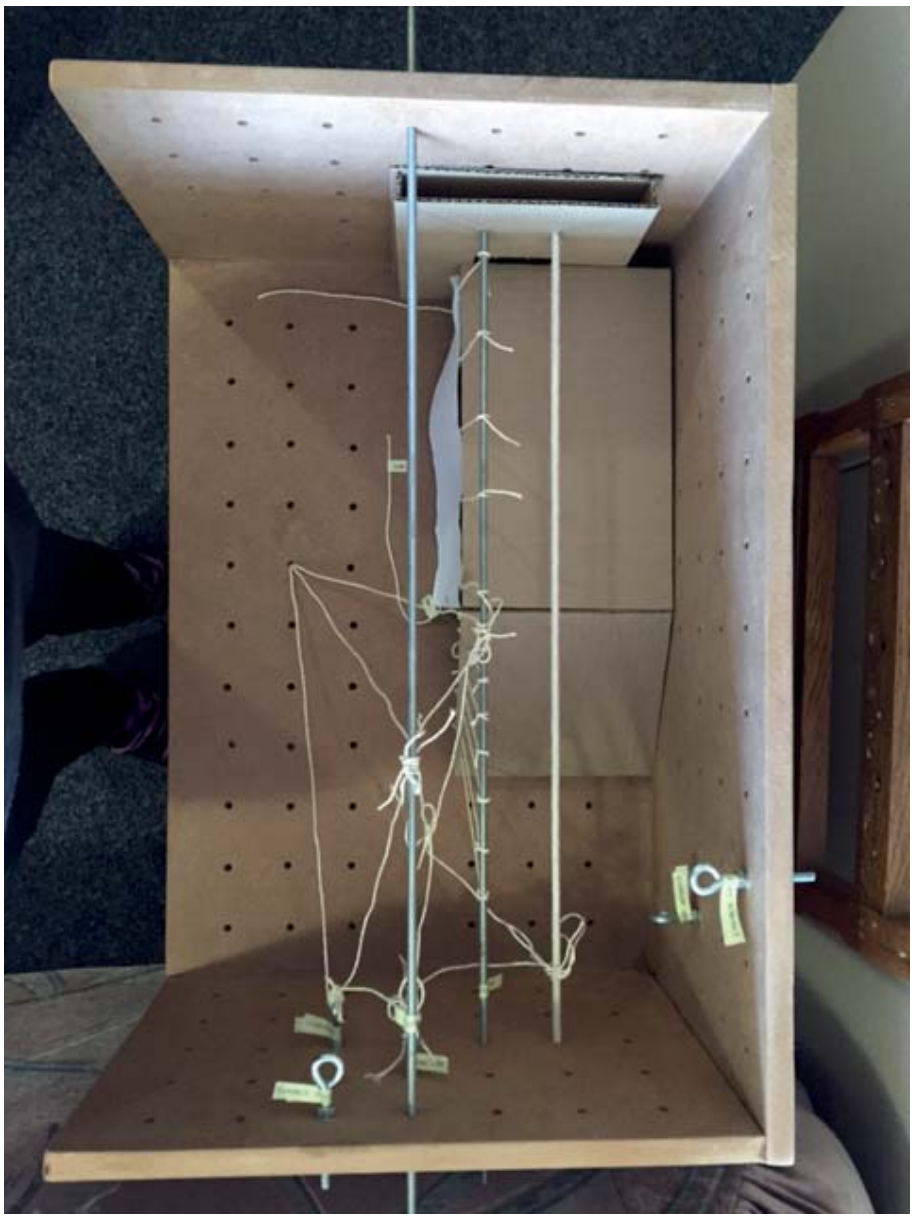
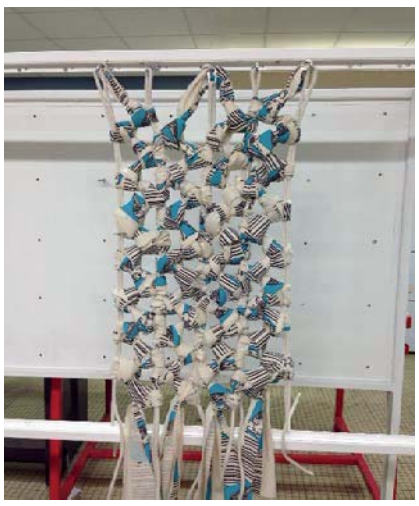
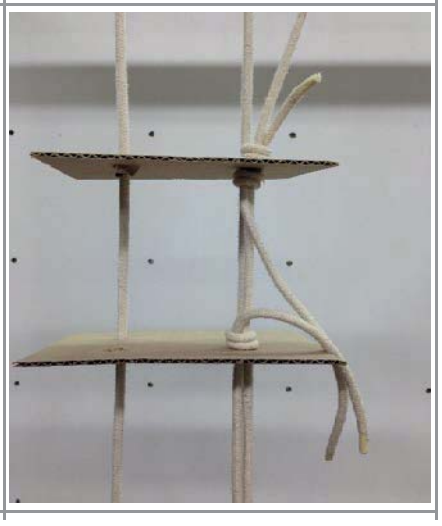
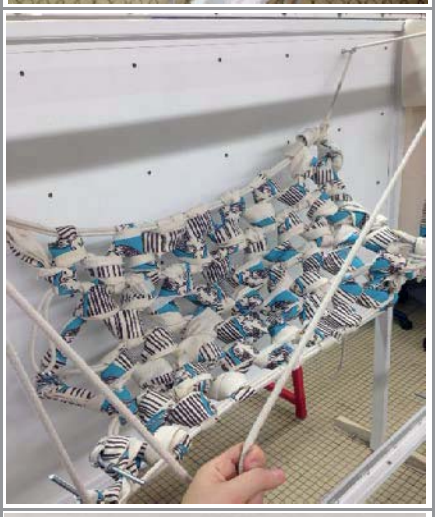


Figure 3: Testing box in use

# appendix B

Data collection and synthesis

| TEST NR | STEP | DESCRIPTION | PHOTO |
|---|---|---|---|
| 1 | 1 | Fix three ropes to upper frame (loop through eye bolt)<br>One primary cord centred (10)<br>Two filler cords (A and B) either side of the primary cord (9,11) |  |
| | 2 | Select FC-A and make an overhand loop knot towards the PC<br>Place PC through the eye of loop FC-A<br>Pull the running end of FC-A to dress the knot | |
| | 3 | Repeat step 2 using FC-B<br>Push knot from FC-B up against FC-A to ensure a snug fit | |
| | 4 | Hang one AC over left V and one AC over right V<br>Ensure that ends meet | |
| | 5 | Select FC-A and make an overhand loop knot towards the AC<br>Place AC through the eye of loop FC-A<br>Dress knot | |
| | 6 | Repeat step 5 using FC-B | |
| | 7 | Repeat steps 2-5 until end of rope is reached | |
| 2 | 1 | Fix five PC (14,16) to the upper frame<br>Fix four FC (13,15,15,17) to the upper frame |  |
| | 2 | Select the first FC and make a simple noose not toward the second PC (angling the FC-A toward the right to reach the second PC). Place running end of first PC through the eye of loop FC-A. Pull the running end of FC-A to dress the knot | |
| | 3 | Repeat step 2 using the second FC and the second PC . Push knot from FC-B up against FC-A to ensure a snug fit | |
| | 4 | Select the FC-C and make a simple noose not toward the fourth PC (angling the FC-A toward the left to reach the fourth PC). Place running end of first PC through the eye of loop FC-C. Pull the running end of FC-C to dress the knot | |
| | 5 | Repeat step 4 using the fourth FC and the fourth PC . Push knot from FC-D up against FC-C to ensure a snug fit | |
| | 6 | Repeat steps 2-4, angling each of the FC to the PC opposite the existing knot criss crossing down the PC one row at a time. Repeat the steps until the remaining PC is covered completely with FC. | |
| 3 | 1 | Fix two rope loops through four eye bolts so that each of the four running ends hang towards the floor |  |
| | 2 | Insert four evenly spaced holes in two rectangular sections of board material | |
| | 3 | Tie an overhand knot about 400mm down the front two rope ends and feed the rope ends through the two front holes of the board. Tie two more overhand knots below the board to secure the board between the two sets of knots | |
| | 4 | Repeat this step using the two back ropes | |
| | 5 | There should now be two boards secured horisontally between hanging rope ends | |
| | 6 | When pulling on the front top rope loop (Between the two widely spaced eye-bolts) the horisontal boards should tip to a diagonal position | |
| 4 | 1 | Fix two rope loops through four eye bolts so that each of the four running ends hang towards the floor |  |
| | 2 | Insert four evenly spaced holes in two rectangular sections of board material and feed the ends of the rope through the board material | |
| | 3 | Add and extra loose piece of rope through each of the four holes | |
| | 4 | Use the loose piece of rope to tie the first half of the Double Fisherman's Knot above the board and the second half of the knot below the board. Slide the knots toward each other to secure the board snuggly between the two knots | |
| | 5 | Feed each of the four main rope ends through the four holes in the second board | |
| | 6 | Add a third loose piece of additional rope through the bottom tier board | |
| | 7 | Repeat step 4 | |

| TEST NR | STEP | DESCRIPTION | PHOTO |
|---|---|---|---|
| 5 | 1 | Fix two rope loops through four eye bolts so that each of the four running ends hang towards the floor |  |
| | 2 | Insert four evenly spaced holes in two rectangular sections of board material | |
| | 3 | Push running ends of the two front ropes through the front holes in the board material, stick each of the two running ends through a washer. | |
| | 4 | Loop each of the two running ends in order to stick them back through the washer and through the holes in the board material | |
| | 5 | Take the two running ends that are now at the top of the board material and tie a fisherman's stopper knot to hold them in place | |
| | 6 | Place two individual loose pieces of rope through each of the loops that are at the bottom of the board product | |
| | 7 | Pull the ropes toward the board to create a snug fit | |
| 6 | 1 | Fix two rope loops through four eye bolts so that each of the four running ends hang towards the floor | |
| | 2 | Insert four evenly spaced holes in two rectangular sections of board material | |
| | 3 | Place the two front ropes side by side through a washer | |
| | 4 | Split the two ropes and place through the two front holes in the board material | |
| | 5 | Once ropes are through the holes bring them together again and place through a large washer (repeat step 3 and 4). | |
| | 6 | Repeat steps 3,4 and 5. | |
| 7 | 1 | Fix two rope loops through four eye bolts so that each of the four running ends hang towards the floor |  |
| | 2 | One at a time, fix the four loose loop ends from Sample 1 to each of the free running ends of the rope by means of an overhand loop | |
| | 3 | Ensure that all loose rope ends are secured | |
| | 4 | Dress the knots | |
| | 5 | There should now be a textile secured horisontally between hanging rope ends where the board product was placed initially | |
| | 6 | When pulling on the front top rope loop (Between the two widely spaced eye-bolts) the horisontal textile sample should tip to diagonaly | |
| 8 | 1 | Fix two rope loops through four eye bolts so that each of the four running ends hang towards the floor |  |
| | 2 | One at a time, fix the four loose loop ends from Sample 2 to each of the free running ends of the rope by means of an overhand loop | |
| | 3 | Ensure that all loose rope ends are secured | |
| | 4 | Dress the knots | |
| | 5 | There should now be a textile secured horisontally between hanging rope ends where the board product was placed initially | |
| | 6 | When pulling on the front top rope loop (Between the two widely spaced eye-bolts) the horisontal textile sample should tip to diagonaly | |
| 9 | 1 | Fix primary cord to main frame with eye bolt and carabiner by means of larks head knot. |  |
| | 2 | Suspend dowel and fix with double stranded clove hitch knot | |
| | 3 | Seperated two strands from each other and and tie two separate clove hitch knots | |
| | | See poster for more images | |

| TEST NR | STEP | DESCRIPTION | PHOTO |
|---|---|---|---|
| 10 | 1 | Fix primary cord to main frame with eye bolt and carabiner by means of larks head knot. |  |
| | 2 | Suspend dowel and fix with double stranded clove hitch knot | |
| | 3 | Seperated two strands from each other and and tie two separate clove hitch knots | |
| | 4 | Add two additional anchor points (eye bolt with carabiner) onto the back board of the main frame | |
| | 5 | Position dowel securely by fixing the additional ropes to the dowel by means of clove hitch knots | |
| | | See poster for more images | |
| 11 | 1 | Use rope fixing structure as created in test 10 |  |
| | 2 | Remove knot at the end of the dowel and shift textile sample 2 over the end onto the dowel (Use the filler cord as fixing point) | |
| | 3 | Add a secondary dowel in the bottom end of the sample, in the loops of the filler cord | |
| 12 | 1 | Use rope fixing structure as created in test 10 |  |
| | 2 | Remove knot at the end of the dowel and shift textile sample 2 over the end onto the dowel (Use the structural cord as fixing point) | |
| | 3 | Add a secondary dowel in the bottom end of the sample, in the loops of the filler cord | |
| 13 | 1 | Fix five Primary Cord's to the upper frame |  |
| | 2 | Fix three Filler Cords consecutively inbetween each of the PC's | |
| | 3 | Select FC-A and make a Simple noose knot towards the first PC. Place the running end of the second PC through the eye of loop FC-A. Pull the running end of FC-A to dress the knot | |
| | 4 | Repeat step 3 using FC-B and the second PC. Ensure that FC-B is ontop of FC-A in the diagonal cross formed by the two filler cords. | |
| | 5 | Repeat steps 3 and 4 with the remaining FC's and PC's. Ensure that the FC joining from the left always crosses over the FC joining from the right. | |
| | 6 | Repeat steps 3-5 until end of rope is reached | |
| 14 | 1 | Fix sample one to testing frame as when constructed | |
| | 2 | Firmly secure bottom end of the sample to the testing frame using structural cords | |
| | 3 | Pull on left and right hand sides of the sample holding on to the strucutral cord | |
| 15 | 1 | Fix sample one to testing frame as when constructed |  |
| | 2 | Firmly secure bottom end of the sample to the testing frame using structural cords | |
| | 3 | Grip structural cord in the middle of the sample and pull towards self | |

| TEST NR | STEP | DESCRIPTION | PHOTO |
|---|---|---|---|
| 16 | | The process is similar to the construction process followed to construct sample 13. Here the spacing between filler cord and structural cord is double. |  |
| | 1 | Fix three Primary Cord's to the upper frame | |
| | 2 | Fix three Filler Cords consecutively inbetween each of the PC's | |
| | 3 | Select FC-A and make a Simple noose knot towards the first PC. Place the running end of the second PC through the eye of loop FC-A. Pull the running end of FC-A to dress the knot | |
| | 4 | Repeat step 3 using FC-B and the second PC. Ensure that FC-B is ontop of FC-A in the diagonal cross formed by the two filler cords. | |
| | 5 | Repeat steps 3 and 4 with the remaining FC's and PC's. Ensure that the FC joining from the left always crosses over the FC joining from the right. | |
| | 6 | Repeat steps 3-5 until end of rope is reached | |
| 17 | 1 | Firmly secure bottom end of sample 16 to the testing frame using structural cords | |
| | 2 | Pull on left and right hand sides of the sample holding on to the strucutral cord | |
| 18 | 1 | Firmly secure bottom end of the sample to the testing frame using structural cords | |
| | 2 | Grip structural cord in the middle of the sample and pull towards self | |
| 19 | 1 | Fix sample one to testing frame as when constructed | |
| | 2 | Firmly secure bottom end of the sample to the testing frame using structural cords | |
| | 3 | Take hold of all four corners of textile sample two and pull away from each anchor point | |
| 20 | 1 | Fix five Primary Cords to carabiner within upper frame. Fix to carabiner using Cow hitch knot. |  |
| | 2 | Fix five Filler Cords to side of frame. Select the uppermost FC and make a Simple noose knot towards the firts PC. Feed the PC through the eye of the loop of the FC. Pull the running end of FC to dress the knot | |
| | 3 | Repeat step 2 with the same FC and remaining PC's | |
| | 4 | Repeat step 2 and 3 with the remaining FC's and PC's | |
| | 5 | Dress the knots | |
| 21 | 1 | Firmly secure bottom end of sample 16 to the testing frame using structural cords | |
| | 2 | Pull on left and right hand sides of the sample holding on to the strucutral cord | |
| 22 | 1 | Firmly secure bottom end of sample 16 to the testing frame using structural cords | |
| | 2 | Grip structural cord in the middle of the sample and pull towards self | |

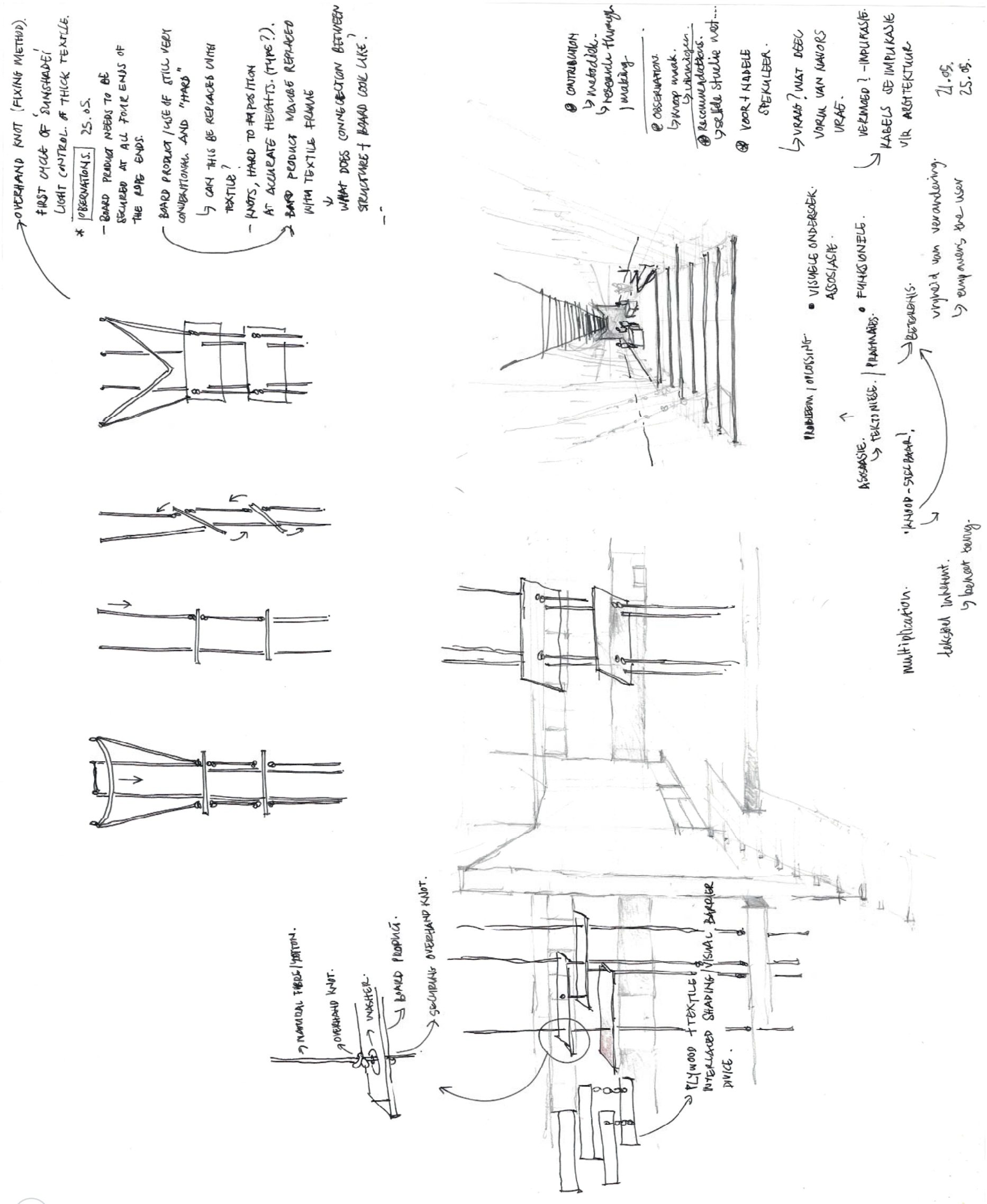
| Term | Key |
|---|---|
| Primary cord | Pr |
| Secondary cord | Se |
| Structural cord | SC |
| Filler cord | FC |
| Resultant V | V |
| Cord type set | CTS |
| Sampe unit | U |
| Anchor point | AP |
| Facing side | FS |
| Backing side | BS |

**TERMS:**

**CORD TYPE SET**: Any collection of cords within one sample that are of the same material
**PRIMARY CORD:** The main carrying cord in any cord type set
**SECONDARY CORD**: The cord secondary to the primary cord in any cord type set
**STRUCTURAL CORD:** Any cords forming the structure or carrying the weight of any filler cord, cord type set.
**FILLER CORD:** Any cords forming the infill or body of a sample and is fixed by means of knotting to any structural cord, cord type set. The Filler cord does not carry the weight of the sample unit
**ANCHOR POINT**: Any point or fixing place to which a textile can be fixed using various configurations of rigging hardware
**FACING SIDE:** Facing side is the side of the sample unit that you see while knotting.
**BACKING SIDE:** Backing side is the side of the sample unit that faces away from you while knotting.

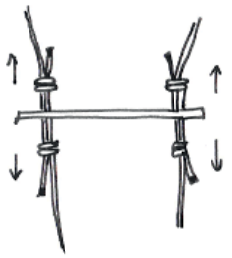
# appendix C

Raw data



(2).

CHANGED KNOT TO DOUBLE FISHERMANS KNOT.



OBSERVATIONS. (3)

- IN ORDER TO PUSH KNOTS TOGETHER TO SECURE BOARD PRODUCT, USE DOUBLE FISHERMAN KNOTS, THIS IS SUCCESFULL FOR THE FIRST LAYER, BUT DOESN'T WORK IF USING THE SAME ROPE FOR THE SECOND LAYER.
- ↳ THUS, SECOND LAYER NEEDS 3rd PIECE OF LOOSE ROPE.
- RUNNING END OF ADDITIONAL ROPE STICKS OUT PAST THE ~~KNOT~~ KNOT BUTT END.
- WHAT WILL THE EFFECT ON THE KNOTS BE IF PRESSURE IS APPLIED TO THE BOARD?
- BOARD PRODUCT CAN BE ACCURATELY POSITIONED ON THE ROPE.

↓

- WHEN ADDING THIRD ROPE, KNOTS DO NOT SLIDE CORRECTLY. ONLY TOP LAYER FUNCTIONS CORRECTLY.

→ LOOPING ROPE A THROUGH ROPE B WITH WASHER A BOTTOM STOPPER AND FISHERMAN'S KNOT AS TOP STOPPER.

OBSERVATIONS:

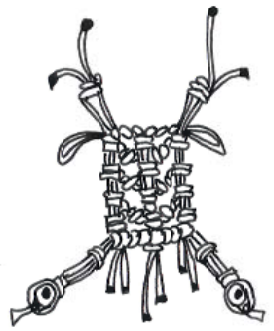
- KNOT PUSHES SECURELY AGAINST THE TOP SIDE OF THE BOARD.
- SECOND LAYER, TO FIX, BECOMES PROBLEMATIC WITH 2 ROPE ENDS. (2)

→ LOOP 2 ROPE ENDS THROUGH WASHER AND HOLES IN BOARD PRODUCT

OBSERVATIONS:

- NO TENSION, NOT SECURE, NOT EVEN
- NOT STRONG

(1)

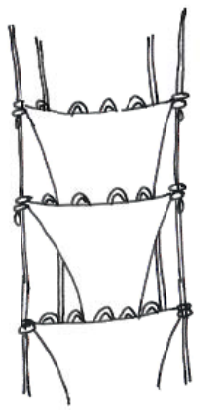


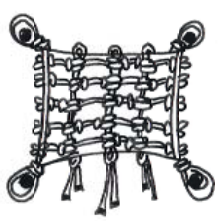
(4) → SAMPLE ONE KNOT AND FIXING POINT ELONGATED

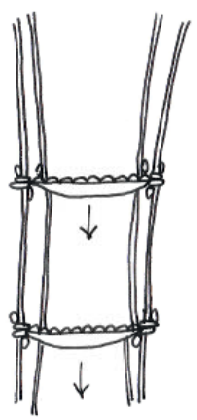
SEE (3). (5)

CURRENTLY LOOSE ENDS VISIBLE ON SAMPLE PIECE ARE HANGING EXPOSED.

↳ DESIGN / ITERATE SAMPLE TO 'HIDE' ~~TO~~ RUNNING ENDS OF ROPE.







(5)

- ALSO, TEXTILE STRUCTURE/SPACE DEFINING ELEMENT NOT AESTHETICALLY PLEASING. [EXAGERATE SAGGING].

TEXTILE SAMPLE TOO THICK AND HEAVY.

↓

THUS A NEED FOR A LIGHTEER TEXTILE.

(5) OBSERVATIONS:

- SPANNING TEXTILE 2 BETWEEN TENSILE STRUCTURE RESULTS IN SAMPLE "SAGGING" TOWARDS THE CENTRE (LOOKS LIKE A HAMMOCK)
- MOVING STRUCTURAL FIXINGS DOES NOT SOLVE THIS PROBLEM. AS PRIMARY CORDS RUN FROM LEFT TO RIGHT ? NOT FROM FRONT TO BACK, ANOTHER CAUSE COULD BE THAT STRUCTURE ROPES ARE NOT PULLED TAUGHT ENOUGH RESULTING IN SAGGING.

OVERALL OBSERVATION:

- SIZE OF FLAT TEXTILE SAMPLE DETERMINES POSITION OF ANCHOR POINTS ON FLOOR/MEZANINE.

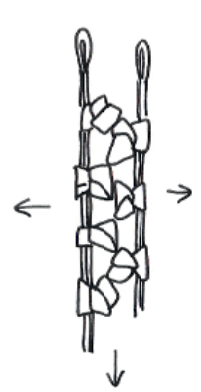
FISHERMANS KNOT + OVERHAND LOOP KNOT.

→ FIX 'FLAT' THICK TEXTILE (SAMPLE 1) BETWEEN 4 (DOWN) ROPES.

→ THIS FLAT TEXTILE THEN REPLACES THE HARD BOARD PRODUCT.

(4). OBSERVATIONS:

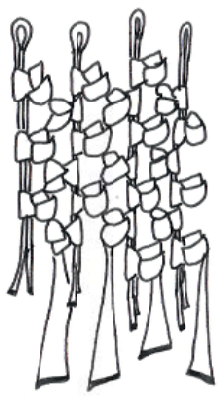
- TYPE OF KNOT USED TO FIX SAMPLE CREATES VERY LONG CONNECTION POINTS. NOT GREAT AESTHETICALLY.
- BOARD IS SIMPLY 'REPLACED' BY FLAT TEXTILE - THUS DOESN'T EXPLOIT CHARACTER OF TEXTILE TO THE FULLEST.
- LOOSE RUNNING ENDS OF SAMPLE UNEAT.
- —27.05.
- —25.05.
- —26.05.



→ TO MAKE RIND. SEE ⑥.

- OVERHAND LOOP KNOT FOR THICK TEXTILE SAMPLE.
- ONE SEGMENT CAN BE REPEATED TO FORM ENDLES WIDTH + HEIGHT FOR SAMPLE.

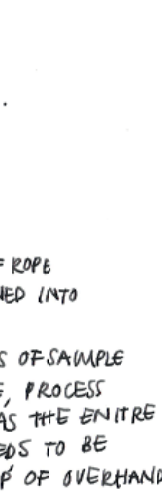
(DRAWING OF KNOTTINGPACE).

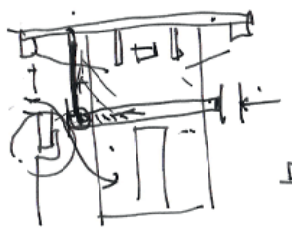


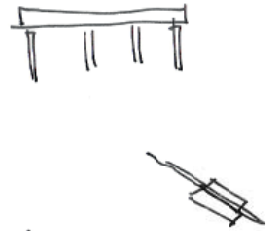
* OBSERVATIONS:

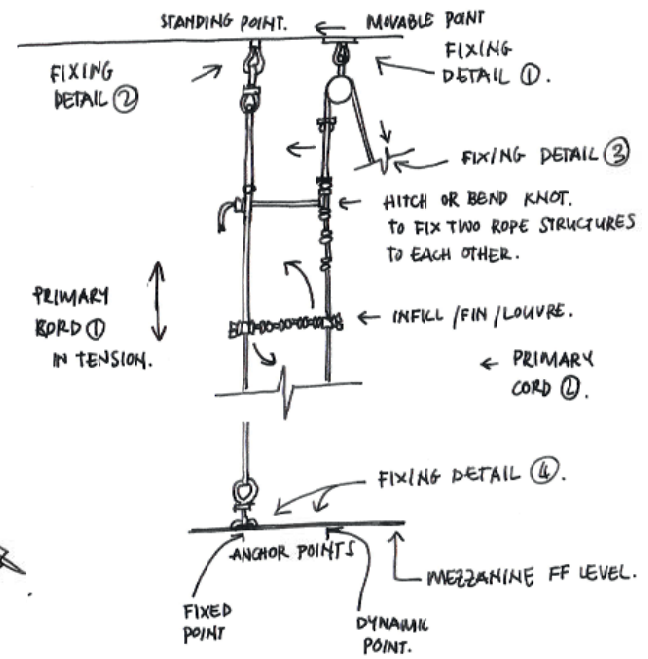
- RUNNING ENDS OF ROPE NEED TO BE DESIGNED INTO KNOTTING PROCESS.
- WHEN LONG PIECES OF SAMPLE NEED TO BE MADE, PROCESS WILL BE TEDIOUS AS THE ENTIRE RUNNING END NEEDS TO BE FED THROUGH 'LOOP' OF OVERHAND LOOP KNOT.
- PRIMARY CORD LENGTH TO BE DETERMINED BEFORE MAKING PROCESS, FILLER CORD CAN SIMPLY BE ADDED ONTO THE END BY STITCHING IT ON.
- TEXTILE COULD POTENTIALLY BECOME VERY HEAVY.
- TEXTILE STILL VERY 'FLAT'!
- HEAVY = 'WEIGHTY' TEXTILE PANEL.

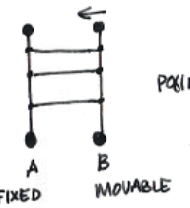
DESIGN NEED FOR LIGHTER TEXTILE SAMPLE MAYBE USE OF LIGHTER INFILL MATERIAL. OR. THE LOUVRE SYSTEM IS A DESIGN SUGGESTION FOR THE SEMI-PRIVATE SPACE THUS CAN BE LESS DENSE.



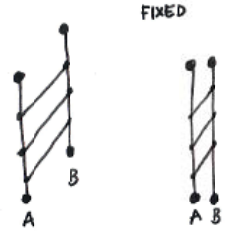






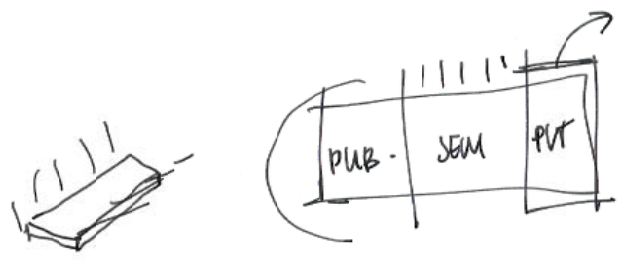




POSITION ① OPEN



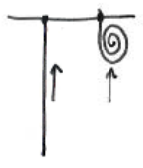

POSITION ② CLOSED

een kan nie sonder ander nie.
'FACILITATE'.






WAT WIL TEKSTIELE DOEN?
TYDBLIK.



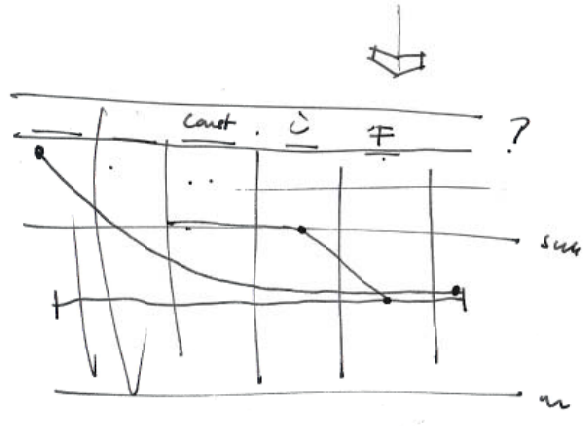
EKOLOGIESE VOORDEEL?

KOMPOSISIE.
INVLOED
IMPAK.
KONSTRUKSIE.

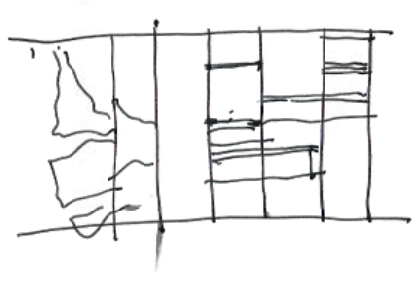
WAT JY SIEN. } ASSOSIASIES. → BETEKNIS.

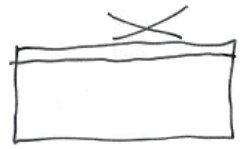
HARD. SAG.

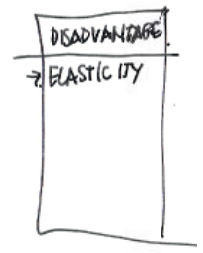
HOEKOM?
WAT HET EK BEREIK.
VOORDELE.
RIGIDITY.
↳ BYVOEG.




METAPHYSICAL.








28-05.
27-05.

* CONCLUSION AFTER TEST (5).

RESULTS IN ~~TOW~~ TWO ~~BRE~~ BRANCHES OR CYCLES.

(A) DESIGN A 'LIGHTER' (WEIGHT) TEXTILE. → ~~LESS~~ DENSE 'MORE OPEN' → THINNER TEXTILE/ROPE.

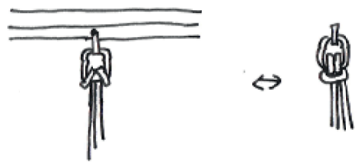
(B) DESIGN A MORE RIGID TEXTILE.

↓

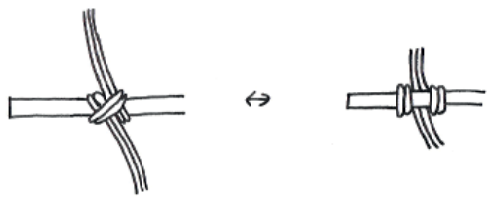
TEST (6). (B) RE-INVESTIGATING RIGIDITY. → MAGNETS, WIRE, TIMBER, STEEL. } FRAME, SUPPORT, FIXINGS, LOOPS

EXTRA - USE OF TIMBER DOWEL (19MM X 910MM. AS 'STRUCTURE' TO ENHANCE TEXTILE FORM:

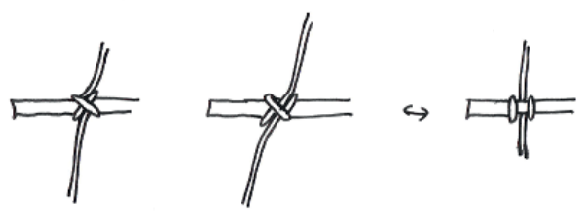
FIXING ROPE TO FRAME. [LARKS HEAD / COW HITCH]

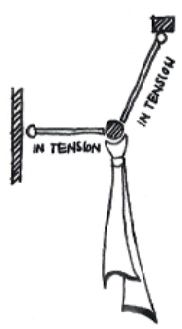


FIXING ROPE TO DOWEL. [CLOVE HITCH [DOUBLE] CORD

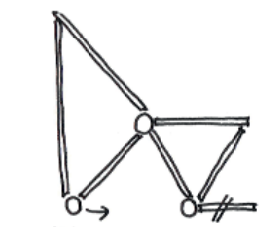


FIXING SINGLE ROPE

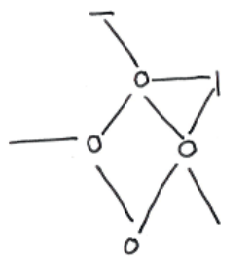




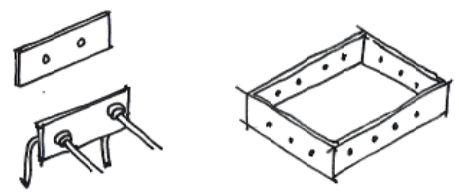

DOWEL AT REST.



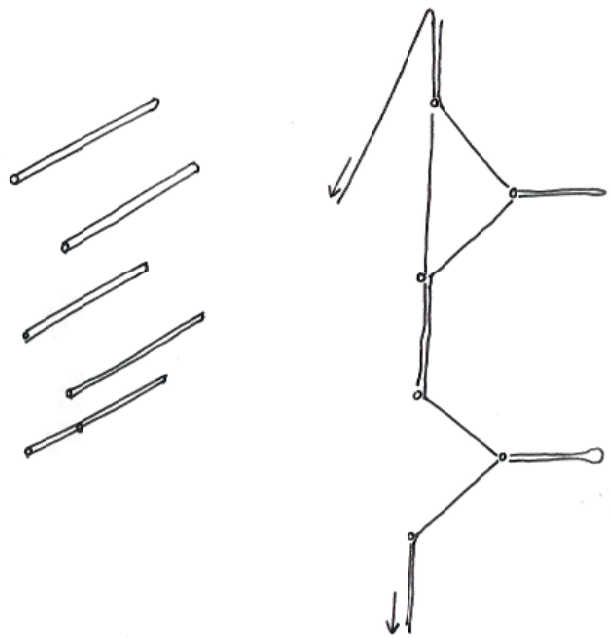
NOT AT REST.



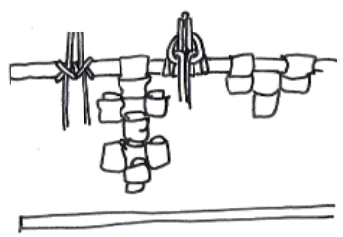
* POTENTIAL INCORPORATE FRAME



* POTENTIAL RIGID STRUCTURE.



(6) CONTINUED.



→ DRAWING OF KNOTTING BACK.

→ FIX DOWEL THROUGH TEXTILE SAMPLE.

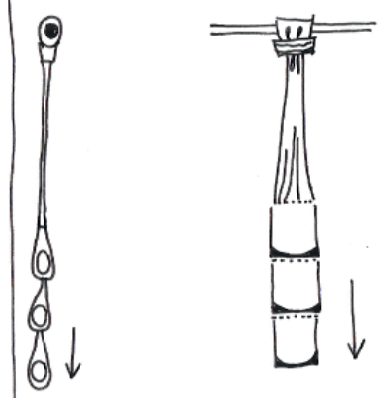
→ TEXTILE PC RUN PARALLEL TO DOWEL.

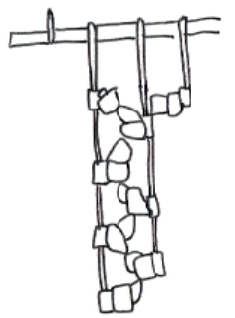
OBSERVATIONS.

- TEXTILE IS STRETCHED EASILY DECREASING IN STRUCTURAL INTEGRITY WITH EACH PULL.
- DOWELS FLATTEN OUT THE TEXTILE SAMPLE MAKING IT MORE RIGID.
- DOWEL MIGHT NEED TO RUN THROUGH, CROSSING THE PC AT A RIGHT ANGLE.

→ BUT WHEN PULLING DOWELS AWAY FROM EACH OTHER, SAMPLE BECOMES FLAT HORIZONTAL ELEMENT.
BUT BECAUSE PC HORIZONTAL WITH DOWEL SAMPLE STRETCHES. (WOULD EVENTUALLY COME APART).

* WEIGHTED TEXTILE.





- LOOP DOWEL THROUGH OPEN ENDS OF TEXTILE SAMPLE.

OBSERVATIONS.

- TEXTILE SAMPLE OBVIOUSLY 'LONG'
- WHEN PULLING AT BOTH ENDS OF SAMPLE (WHERE FIXED TO DOWELS) SAMPLE STRETCHES OUT INTO FLAT HORIZONTAL PLANE/ELEMENT.
- SAGGING IN TEXTILE IS REDUCED.
- SAMPLE MUCH MORE STURDY WITH PC ASSISTANCE.
- KNOT USED FOR FIXING NOT BEST SELECTION, FIX WITH DIF. KNOT.
- LOOPS OF SAMPLE OBVIOUSLY NOT MOST SECURE WAY OF FIXING TOP PART OF SAMPLE,

↓

- FINISH: ENDS OF SAMPLE IN PREPARAT. TO BE FIXED TO OTHER ITEMS.

29-05.
31-05.

SPATIAL,
THREE DIMENSIONAL
ELEMENT THAT DEFINES SPATIAL ZONES. → GO BACK TO CHING
EXPLOITING THE CHARACTER OF TEXTILES
↳ HORISONTAL + VERTICAL PLANES.
} CAN TEXTILES FORM PLANES THAT COMBINE THESE?
} 3-DIMENSIONAL SPACE DEFINING ELEMENTS.

SYLVIE KRUGER

A SPACE CAN BE DEFINED BY A SIMPLE VERTICAL / HORISONTAL PLANE

THERE IS NOTHING WRONG WITH YOUR TELEVISION SET. DO NOT ATTEMPT TO ADJUST THE PICTURE. WE ARE CONTROLLING TRANSMISSION. IF WE WISH TO MAKE IT LOUDER, WE WILL BRING UP THE VOLUME. IF WE WISH TO MAKE IT SOFTER, WE WILL TUNE IT TO A WHISPER. WE WILL CONTROL THE HORIZONT. WE WILL CONTROL THE VERTICAL. WE CAN ROLL THE IMAGE, MAKE IT FLUTTER. WE CAN CHANGE THE FOCUS TO A SOFT BLUR OR SHARPEN IT TO CRYSTAL CLARITY FOR THE NEXT HOUR. SIT QUIETLY AND WE WILL CONTROL ALL THAT YOU SEE AND HEAR. WE REPEAT: THERE IS NOTHING WRONG WITH YOUR TELEVISION SET. YOU ARE ABOUT TO PARTICIPATE IN A GREAT ADVENTURE. YOU ARE ABOUT TO EXPERIENCE THE AWE AND MYSTERY WHICH REACHES FROM THE INNER MIND TO THE OUTER LIMITS.

– THE OUTER LIMITS, 1963.

TU. TE.
PCS PCS PCS
PCM PCM PCM

STRAND IN A PLANE

BUT NOT A SINGLE DIMENSIONAL FIELD.

TEXTILE IN A SINGLE VERTICAL PLANE.

IF STRAND MOVED, SECOND DIMENSION CAN BE CREATED.
MORE STRAND OUT OF THIS PLANE, THEN THE ONLY LIMITATION IS THE MIND + THE LENGTH OF THE ROPE.

'THE QUESTION OF WHAT KNOT IS BEST FOR A PARTICULAR NEED IS PERHAPS THE MOST IMPORTANT OF ALL TO BE CONSIDERED.'
ASHLEY 1944:8.

(SUFFICIENT)
• PLANAR IRREGULARITIES/ INTERRUPTIONS. [ON TU + TE LEVELS.]

FC
FC
NFC
FC
FC.
PC.

RIGID ELEMENT?

A TEXTILE IS NEVER SIMPLY A FLAT PLANE LIMITED TO ~~ONE~~ A SINGLE DIMENSIONAL FIELD.

• SPAN / STRETCH
• TEMPORALITY
• COVER / DRAPE
• CONTAIN — HARD FORMS — SOFT FORMLES.

• THUS COULD ONE SAY, THAT DUE TO THE TEMPORAL NATURE OF TEXTILES, THAT IF THE TEXTILE 'ELEMENT / OBJECT' IS REMOVED FROM THE SPACE, THE THE SPATIAL ZONE CANNOT CONTINUE TO EXIST.
• IN THIS WAY THE TEXTILE IS NOT SIMPLY ADDITIVE / SECONDARY BUT FORMS THE PRIMARY CONTRIBUTOR TO THE FORMATION OF THAT SPATIAL ZONE.

IT COMPLETELY CHANGES / REDUCES THE NATURE OF THE CREATED SPATIAL ZONES TO REMOVE THE TEXTILE ELEMENT.

DIE VRAAG IS NIE: KAN 'N ANDER MATERIAAL DIESELFDE FUNKSIE DIEN NIE (WANT IN WERKLIKHEID IS ENIGE IETS 'N NOONTREKLIKHEID). DIE VRAAG IS, WAT WORD VAN DIE RUIMTE AS TEKSTIEL ELEMENT VERWYDER WORD. KAN DIE RUIMTE VOORTBLEEF SONDER DIE ELEMENT??

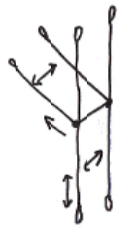
PERHAPS, ANOTHER MATERIAL COULD PERFORM THE SAME UTILITY FUNCTION BUT, CAN IT PERFORM THE SAME AESTHETIC FUNCTIONS?
(THESE 2 ASPECTS TOGETHER MAKES TEXTILES UNIQUE).

PC.
FC CAN BE DESIGNED TO FORM PATTERN + COLOUR COMBINATIONS.
NOT SIMPLY HAPTIC, BUT PATTERN PLAYS A ROLE IN THE UNDERSTANDING OF DESIGN.

① ② ③

03_06

(14) * PLANAR IRREGULARITIES WITHIN TEXTILE UNIT.

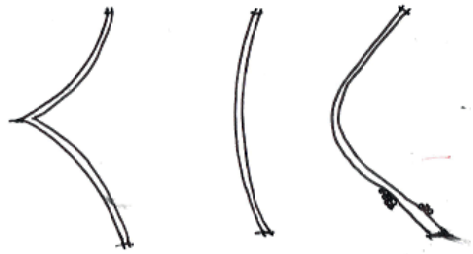


OBSERVATIONS.

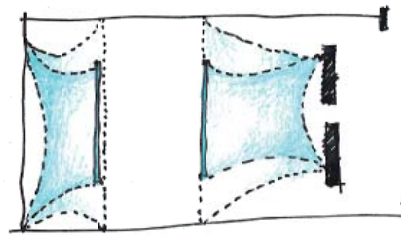
- WHEN EXERTING A FORCE ON VERTICAL ELEMENT, STRUCTURAL INTEGRITY IS DECREASED.
- UNIT WILL NOT BE STRUCTURALLY ADEQUATE WITHOUT RIGID REINFORCING. THE ROPE RUNNING FROM THE TOP TO THE BOTTOM
  ↳ SO 2: ADD RIGID ELEMENT TO THE UNIT.
  OR
- CAN THE FC BE USED TO CREATE PLANAR IRREGULARITIES RATHER THAN THE FC'S.?
  OR.
- CAN UNITS BE USED TO CREATE ELEMENTS WITH PLANAR IRREGULARITIES. OR WILL THE SAME PROBLEM OCCUR?

(14) EXISTING TEXTILE UNITS.
* PLANAR IRREGULARITIES.

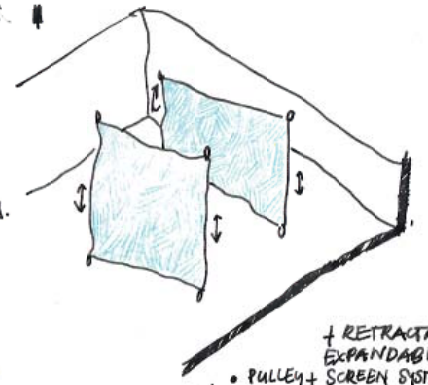
(SAMPLE 2).
EXISTING PLANE.

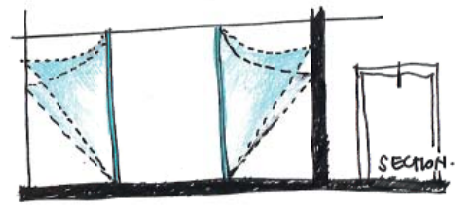


- KEYWORDS
- RETRACT, RECEDE
- EXPAND
- STRETCH
- DRAW IN
- COMPRESS



PLAN.

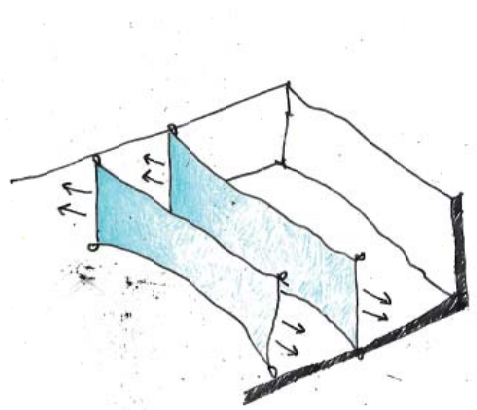


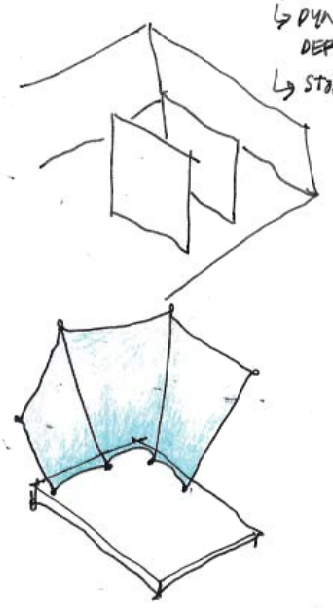


SECTION.

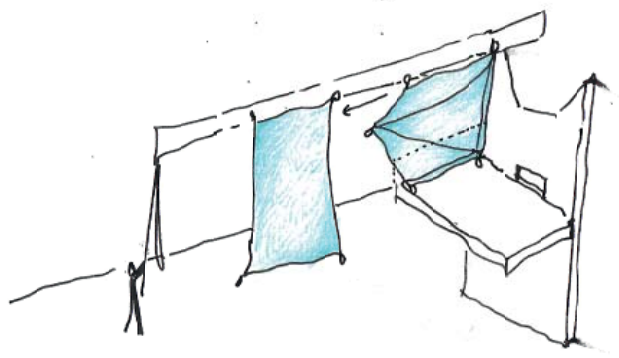
+ RETRACTABLE. EXPANDABLE
- PULLEY + SCREEN SYSTEM.
- COLOUR COORDINATED HOOKS + ANCHOR POINTS

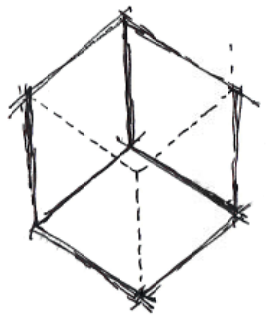
RETRACTABLE + EXPANDABLE SCREEN AND PULLEY SYSTEM
↳ DYNAMIC SPATIAL DEFINITION.
↳ STORAGE.













FIXING OF TEXTILE ELEMENT PRIMARY CORD.

⊛ INVESTIGATION BETWEEN TEST 13 + 14.

07-06
04-06

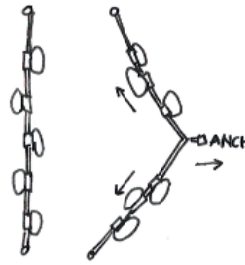
- GEBRUIKSFUNKSIE - ASSOCIATION
  VS.

REALISE THE POTENTIAL.

ONTGIN.

TEST 15

* EXISTING TEXTILE SAMPLE 2.




P FILLER CORD + PC PARALLEL.
→ PLANAR IRREGULARITIES.

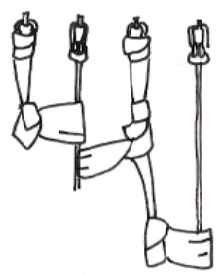
→

OBSERVATIONS:

- WHEN PULLING ON PC (3) CENTER THE TEXTILE FORMS A ROUNDED SHAPE (CONVEX).
- FILLER CORD COMPRESSES TOWARD EACH OTHER FORMING AN OPENING AT THE ANCHOR POINT.
- PRIMARY CORD (3) SLIDES THROUGH LOOPS IN FC.
- WHEN RELEASING PC (3) TEXTILE SAMPLE APPEARS UNEVEN.
  ↳ FORCE NEEDS TO BE APPLIED ON PULLING PC(3) DOWN TO CORRECT SAMPLE PATTERN.

- PC THAT ASSISTS WITH PLANAR IRREGULARITY NEEDS TO BE LONGER THAN OTHER PC'S.
- PC NEEDS TO BE WEIGHTED OR FIXED TO A PULLEY SYSTEM IN ORDER TO RETURN TO PREVIOUS FORM.

TEST 16

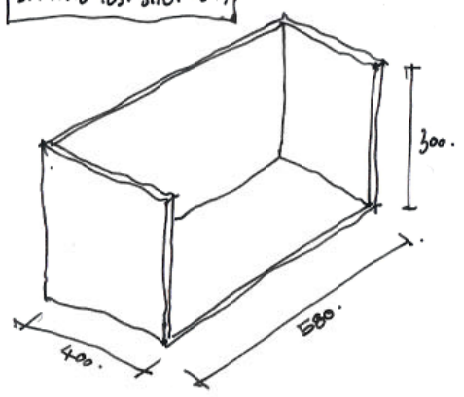


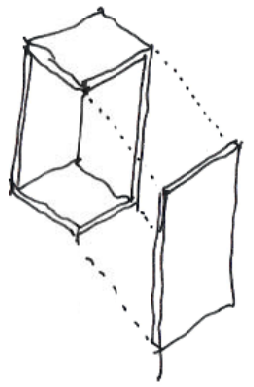
→ ELONGATED NOOSE KNOT.
→ TIE THE KNOT LOOSER THAN SAMPLE 2.

* OBSERVATIONS

- WHEN PULLING ON PC CENTER A LARGE WHOLE IS FORMED AT THE POINT OF PULL.
→ KNOTS SLIDE EASILY ON PC BUT DOES NOT LOOK GOOD, AND IS NOT STRONG.
→ TEXTILE APPEARS VERY LOOSE + FRAGILE.

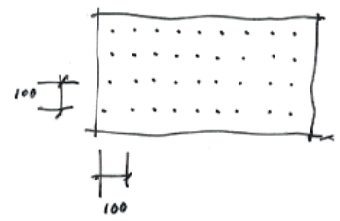
→ SITE 2.
SPATIAL TEST SITE. (BOX)



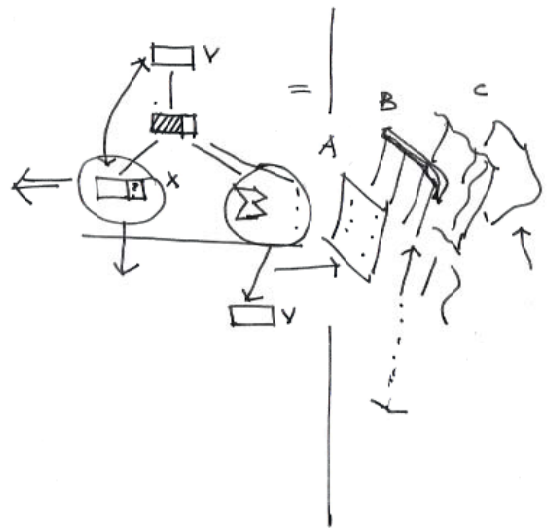



PANEL WITH HINGE + CLIP IN ORDER TO ENCLOSE 'CUBE'

GRID WITH HOLES FOR FIXING.




EVEN SPACING, CORRELATION BETWEEN BASE + SIDE PANELS. IN ORDER TO ENSURE FIXING SPACE THAT CORRESPONDS.

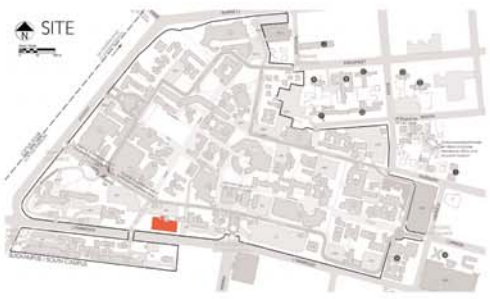



08_06.

# appendix D

Initial design charrette

## TEXTILE SPACE MAKING AND THE ISSUE OF DECORATION:
## a digital presentation lounge for boukunde




### THEORETICAL ISSUE

Within the discipline of interior design, the act of decoration is more often than not observed as inferior and superfluous. The dissertation investigates how designing with textiles (alternative construction and design) could challenge the negative associations that interior designers have with the act of decorating. It aims to create decoration with aesthetic and use functions. In so doing, emphasizing the importance of decoration within interior design, to celebrate the differences between architecture and interior design. This aims to diminish the interior design's inferiority complex.

### REAL WORLD ISSUE

Within the department of Architecture, Interior architecture and Landscape architecture at the University of Pretoria, much emphasis is placed on environmentally sustainable design. Although these principles are often present in the final design product, it is not reflected in the manner of presentation, as this is still largely paper-based. Currently digital presentations are structured in a more formal manner, typically in locations such as lecture halls, whereas paper-based presentations and critiques usually take on a more organic structure.

It is proposed that a digital presentation space be created for the department of Architecture, within the main atrium of the Boukunde building. This location within the building allows for the organic structure present in paper-based presentation.

### PROPOSED INTERVENTION

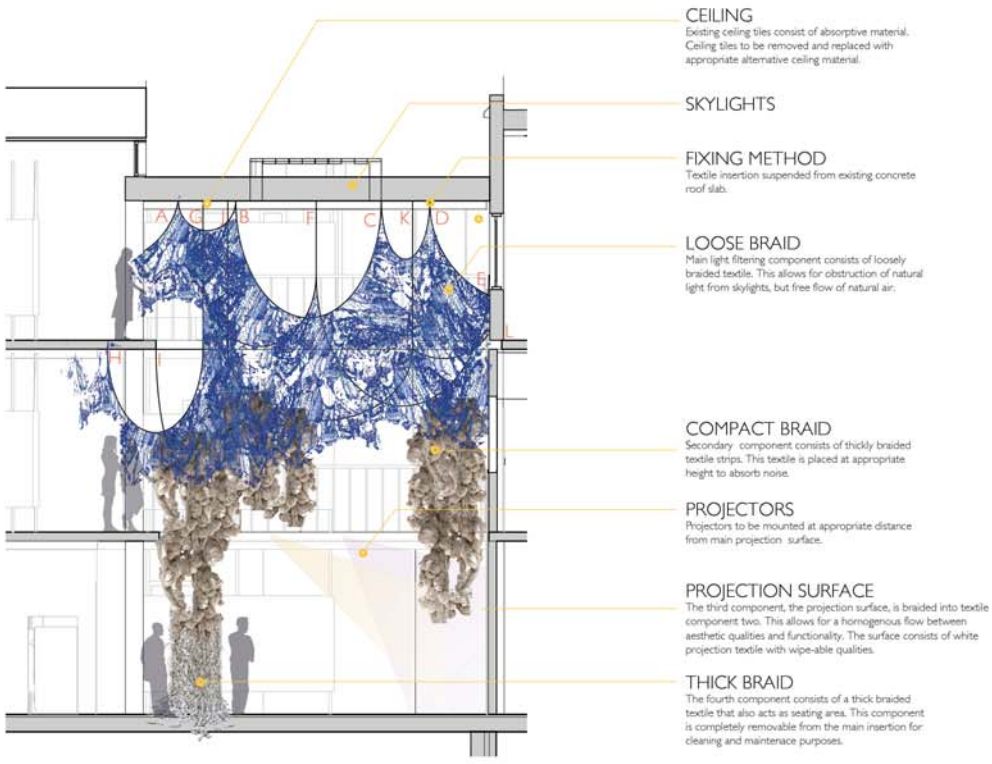
The proposed intervention consist of a series of textile components that create the digital lounge. The word lounge in the title signifies the organic nature of the presentation space, as apposed to the structured nature of conventional lecture halls.

Each layer of textile component is composed in a unique way and ensures textural quality as well as functionality and an aesthetically appealing environment. Each textile component, as in the list, is indicated on the section below.

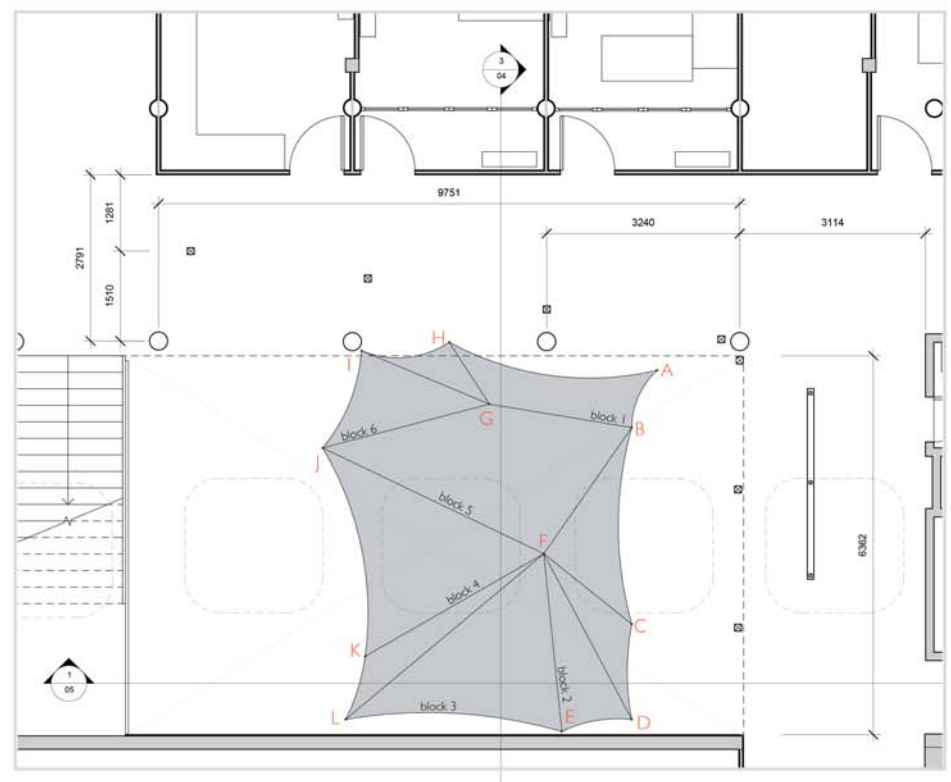
Textile components:
1. Loose braid
2. Compact braid
3. Projection surface
4. Thick braid

### CONCEPTUAL APPROACH

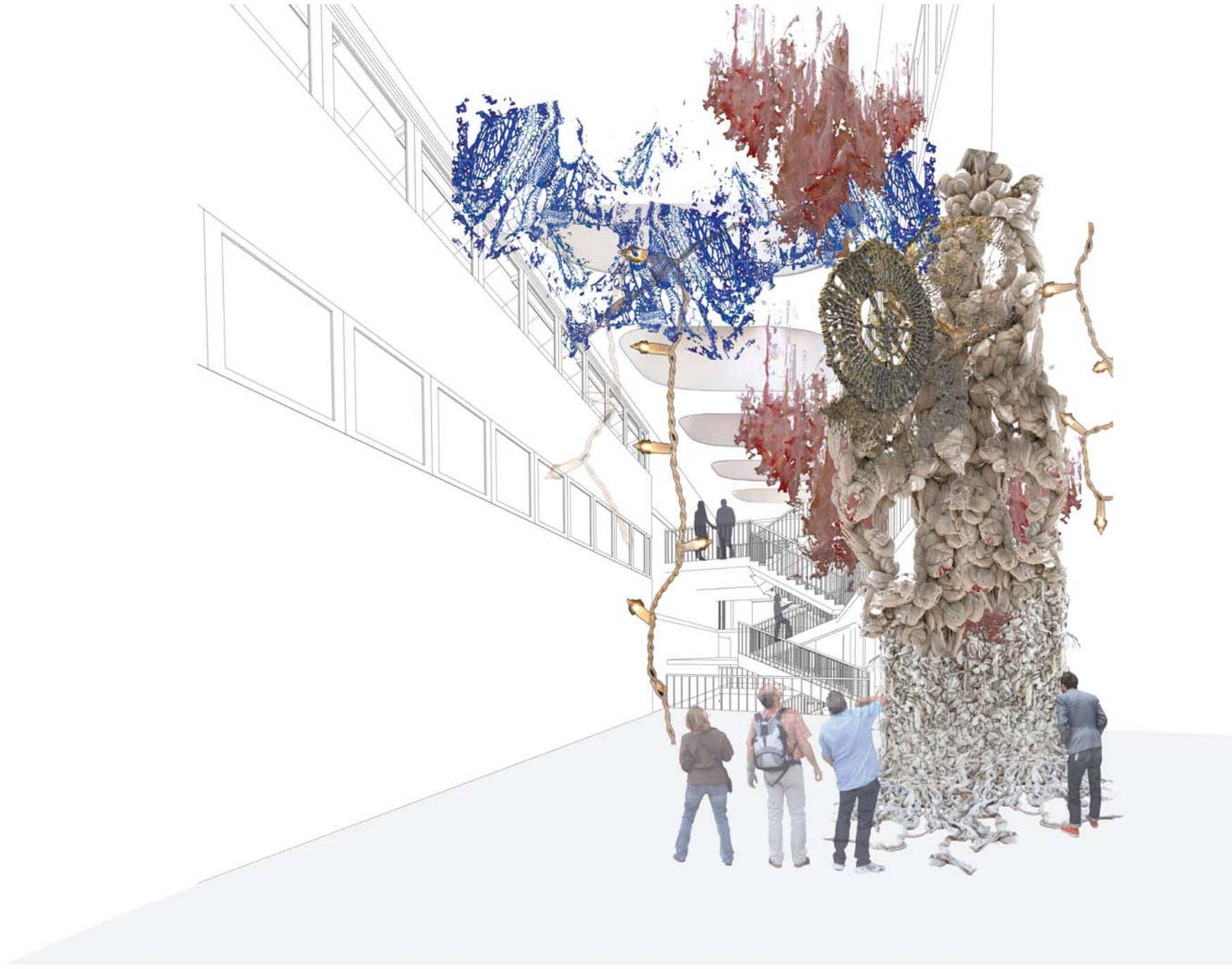
The proposed design incorporates ideas such as the traditional versus the alternative. These elements are found within the design in the following ways:

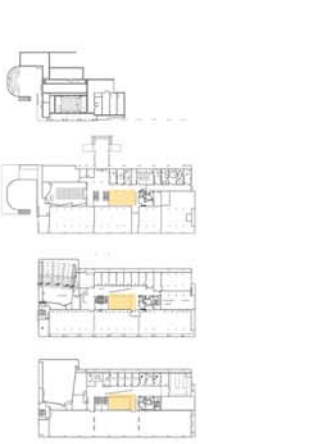



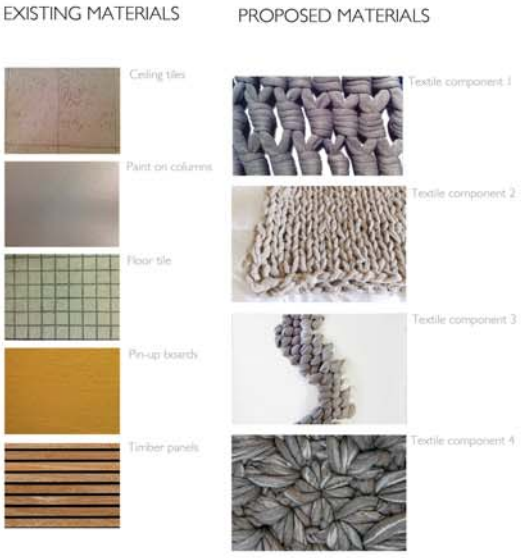

SECTION SCALE 1:50
Section indicating placement and scale of textile intervention. Points A-L indicate fixing points.

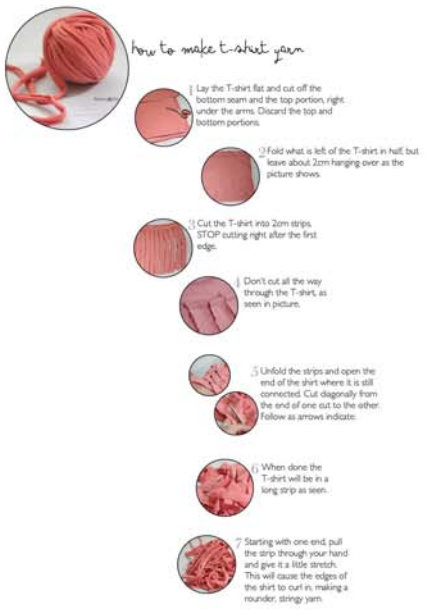



PLAN SCALE 1:50
Layout plan indicating placement and scale of textile intervention. Points A-L indicate fixing points.

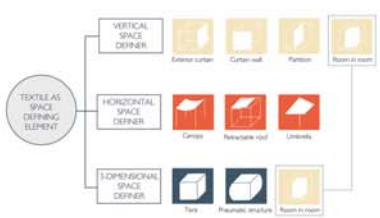







THEORETICAL APPROACH

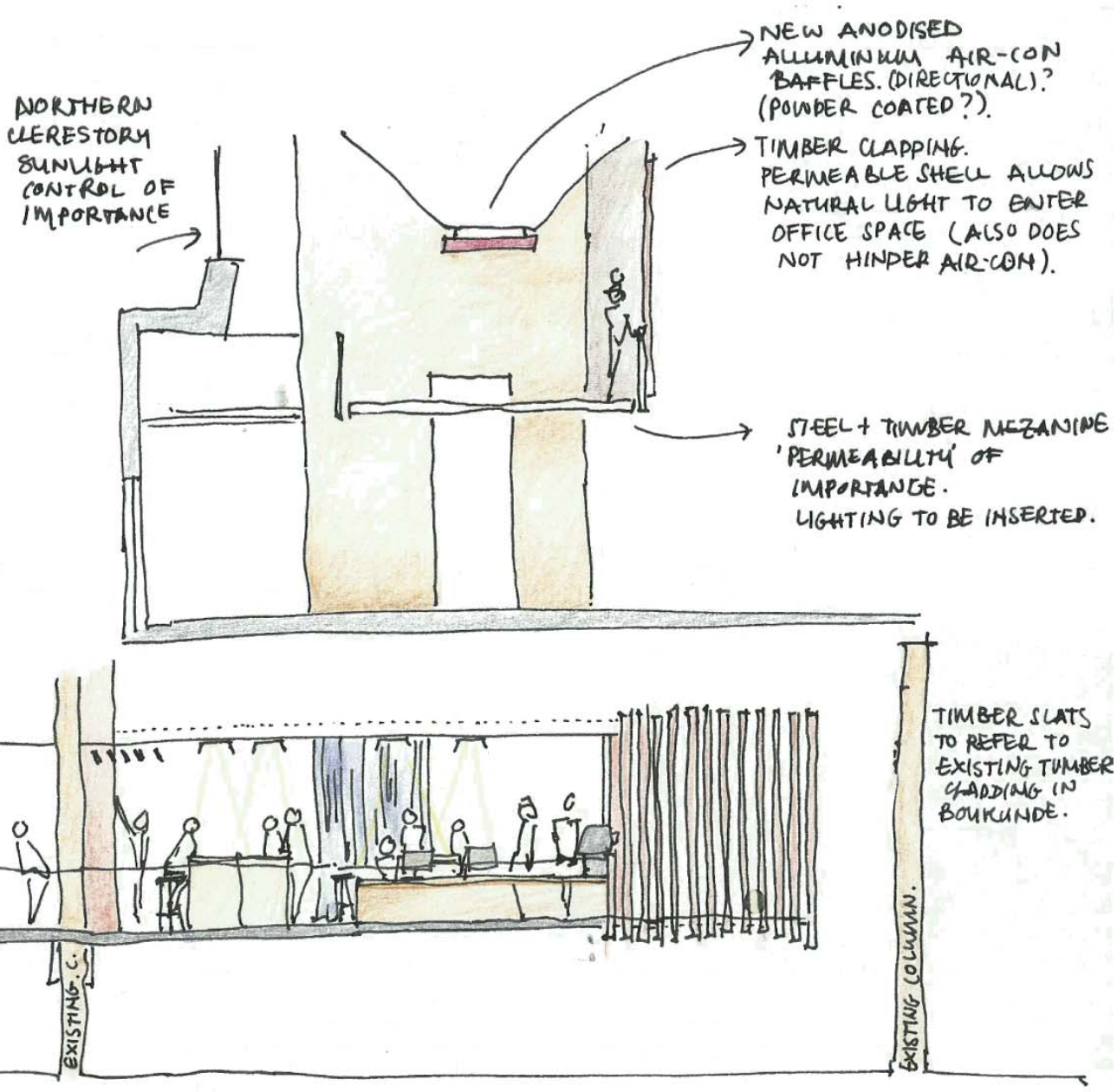


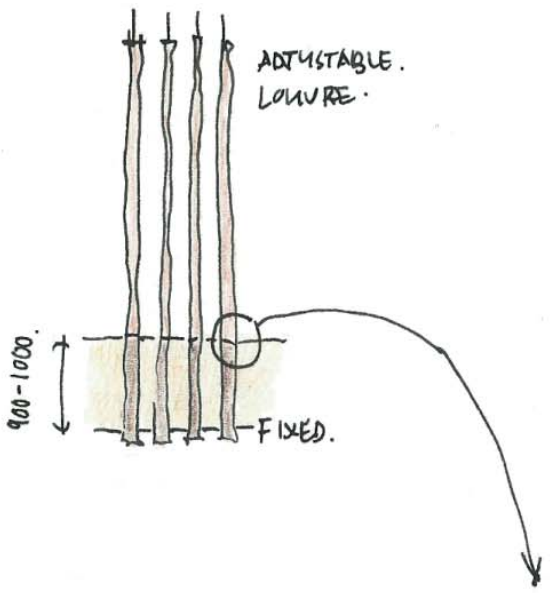
# appendix E

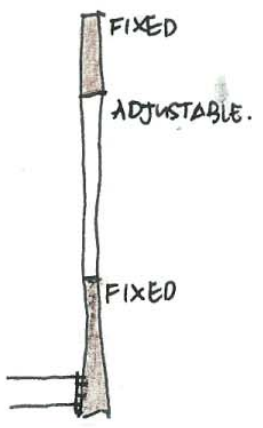
Design charrette

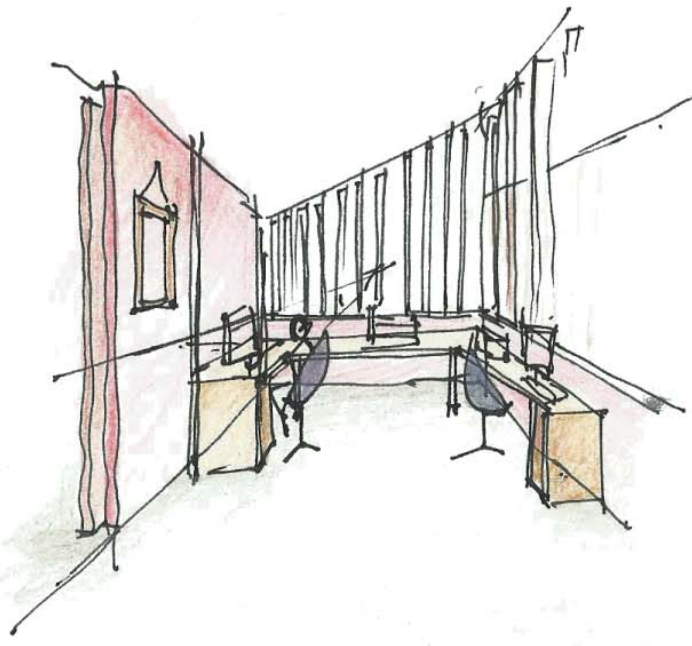
NOTES:

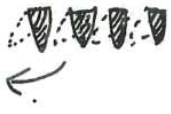
- 'ANALYSIS' OF EXISTING BOUKUNDE MATERIALS/ COLOUR PALETTE.
- SUGGESTIONS FOR PAINTING OF COLUMNS.
- PROMINENT/ICONIC ELEMENTS PRESENT WITHIN BOUKUNDE?
- REQUIRED LUX LEVEL FOR STUDIO?

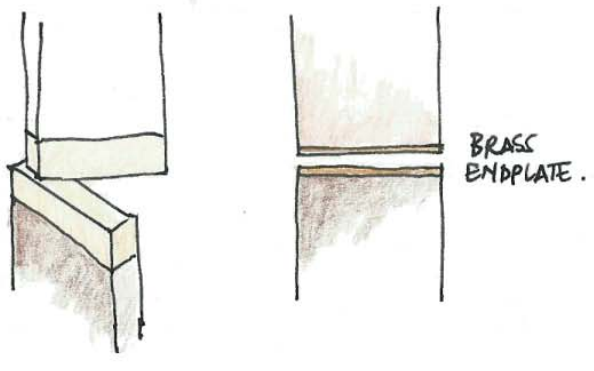


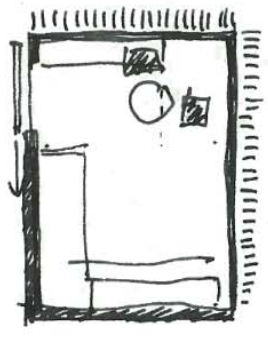







*“We are the Borg. Lower your shields and surrender your ships. We will add your biological and technological distinctiveness to our own. Your culture will adapt to service us.*
*Resistance is futile.”*

Star trek – First contact (1996)