

## Spring Portfolio (Please watch video first)

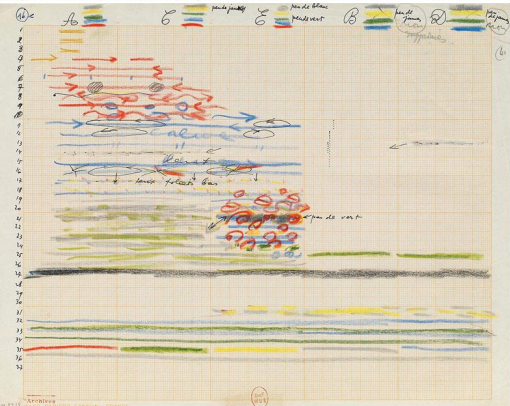
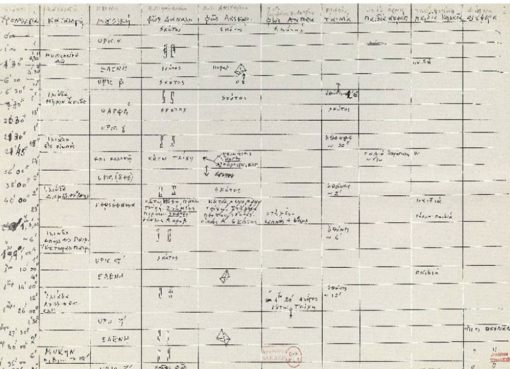


# MACHINE KNITTING

## Swatches and techniques

Inspired by graphic scores and sound synthesis

Graphic scores

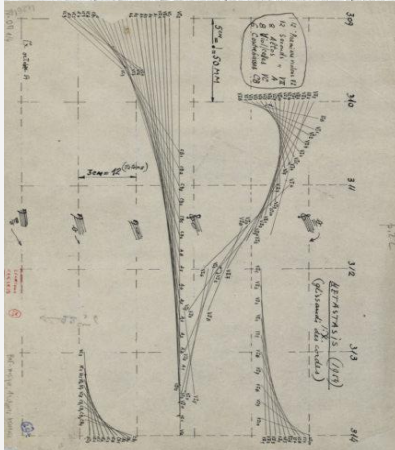
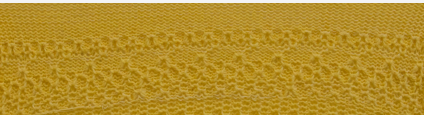


Atmospheric stripes, plating feeder, eyelets and ladders



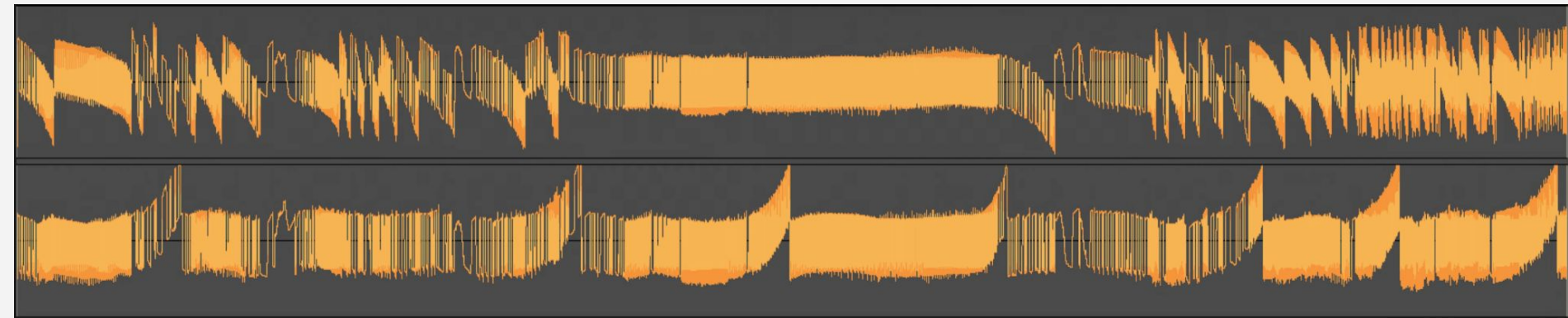
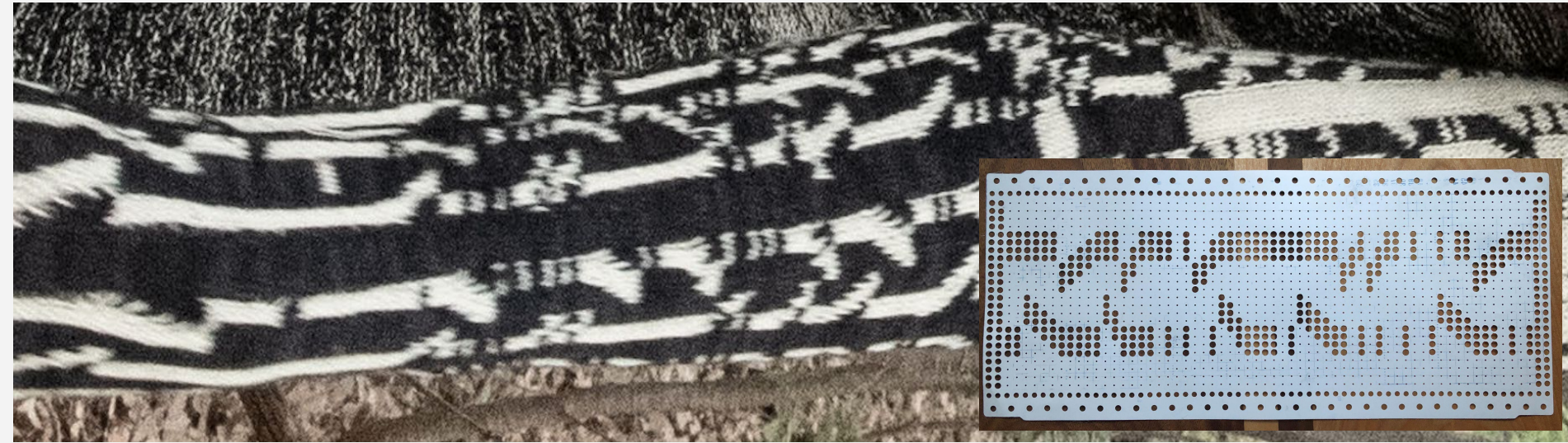
# MACHINE KNITTING

Vertical transfer, shaping and tuck stitch



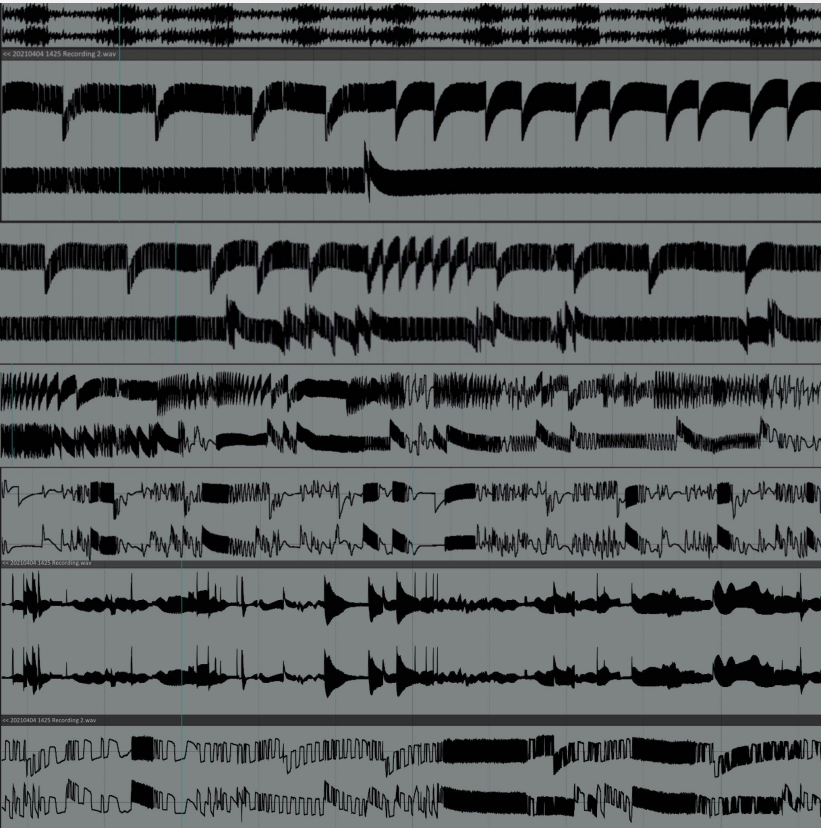
# MACHINE KNITTING

Punch card



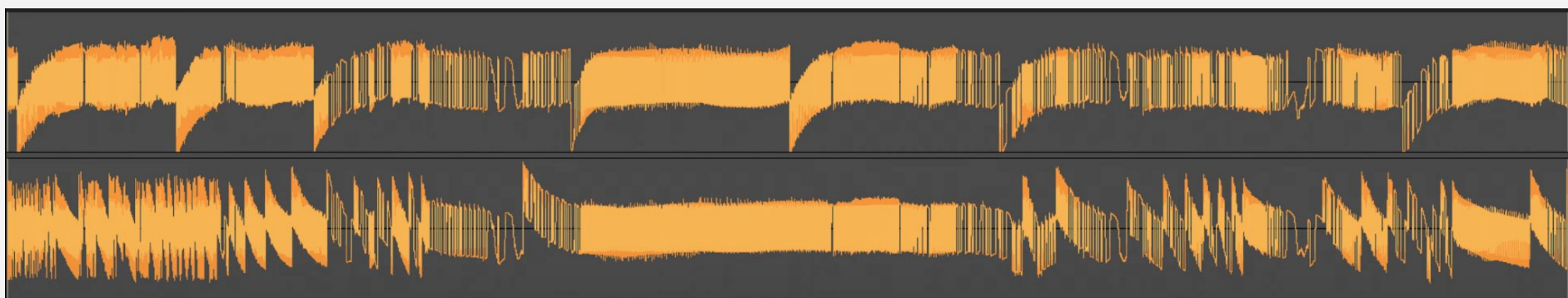
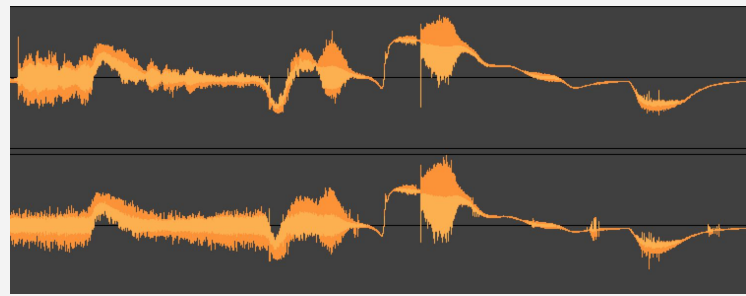
# MACHINE KNITTING

## Garment



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Garment



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Garment



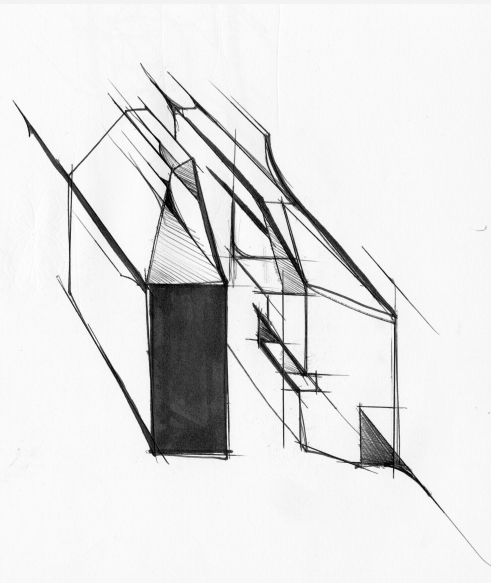


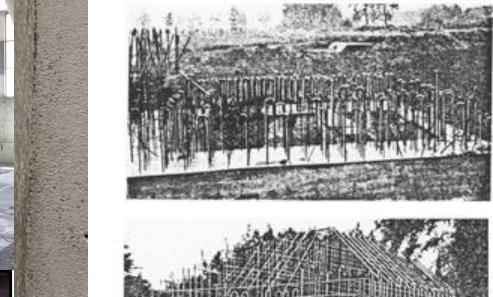
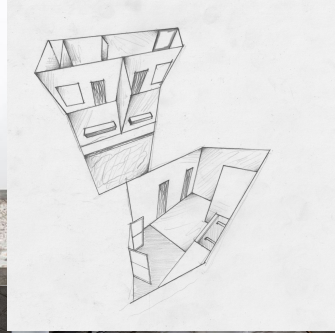
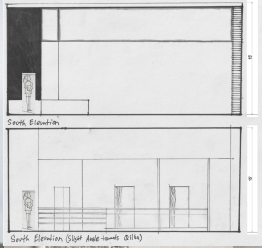


# FABRIC SILKSCREENING MUSEUM PRINT

Bunker 599 “New Dutch  
Waterline”  
RAAAF + Atelier Lyon  
2010

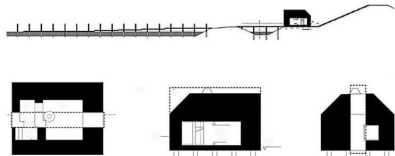
Diefdijk 5, 4122 KP Zijderveld, Netherlands

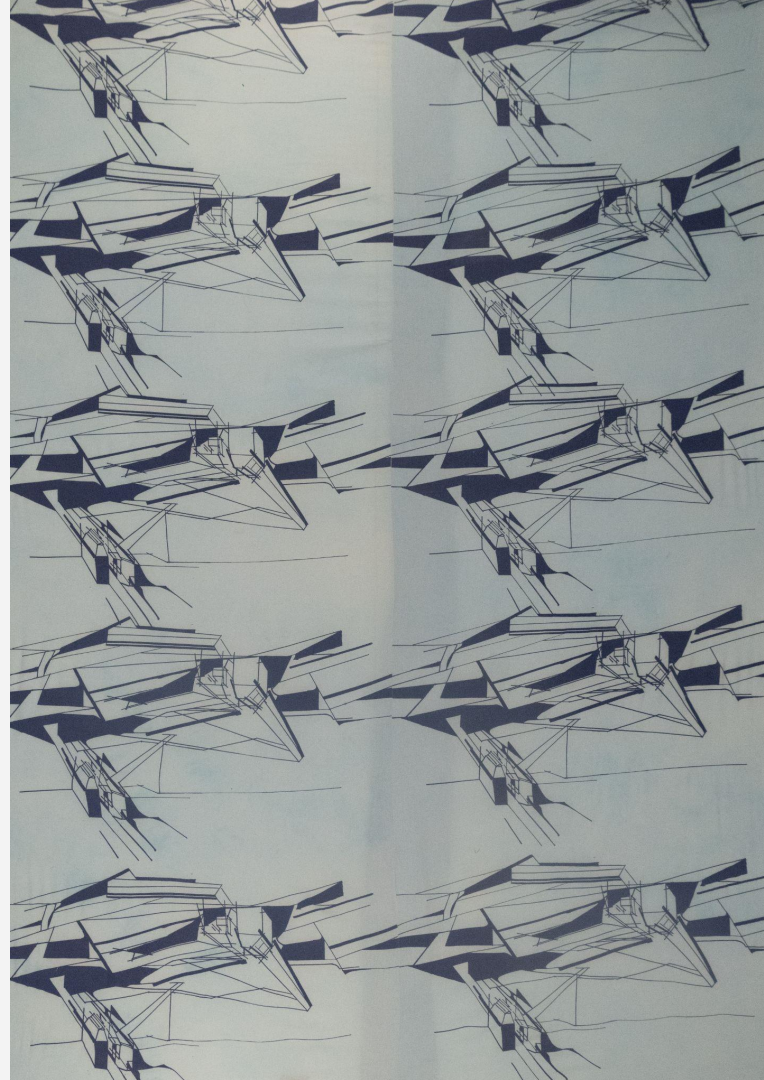
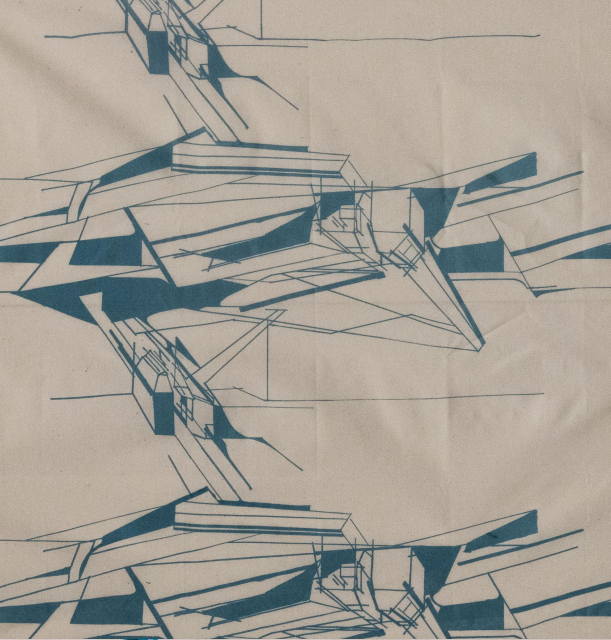




Plafond

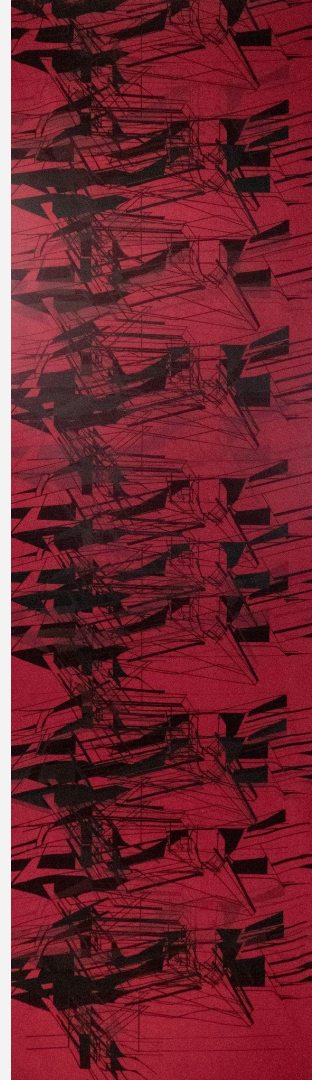
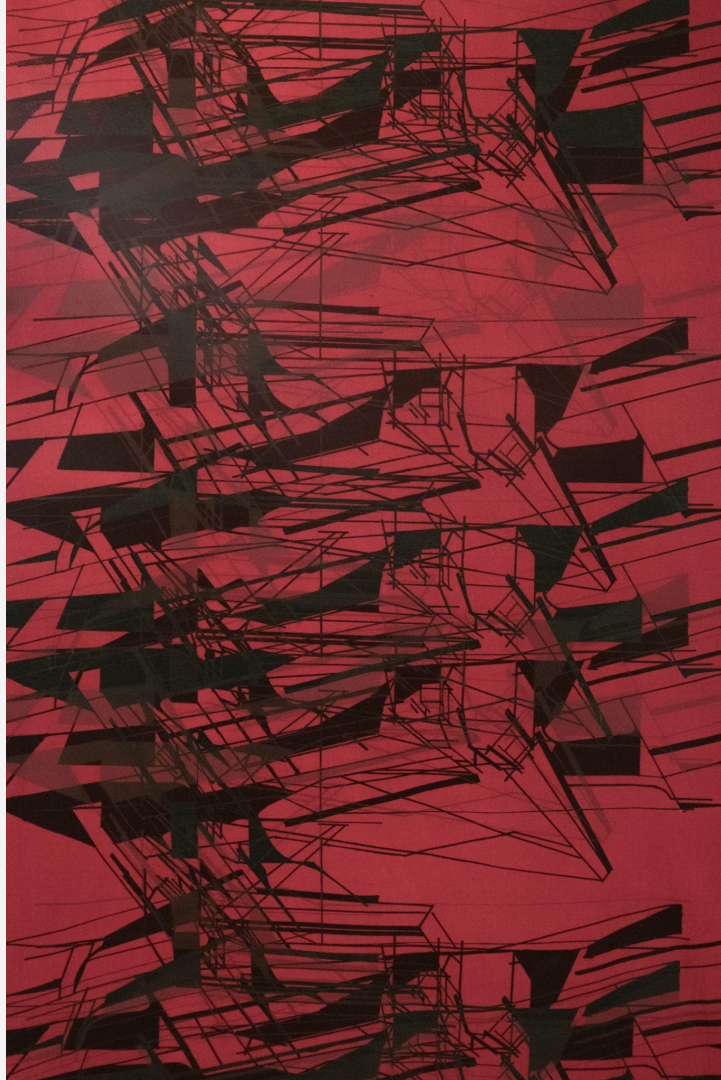
Lengte doorsnede



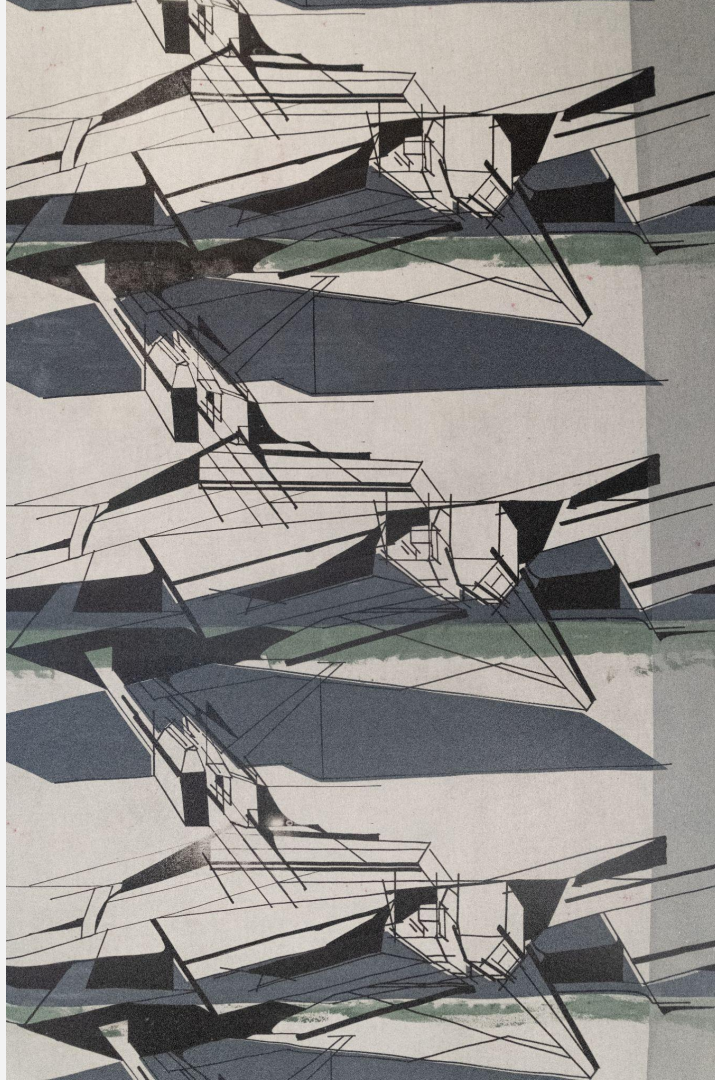




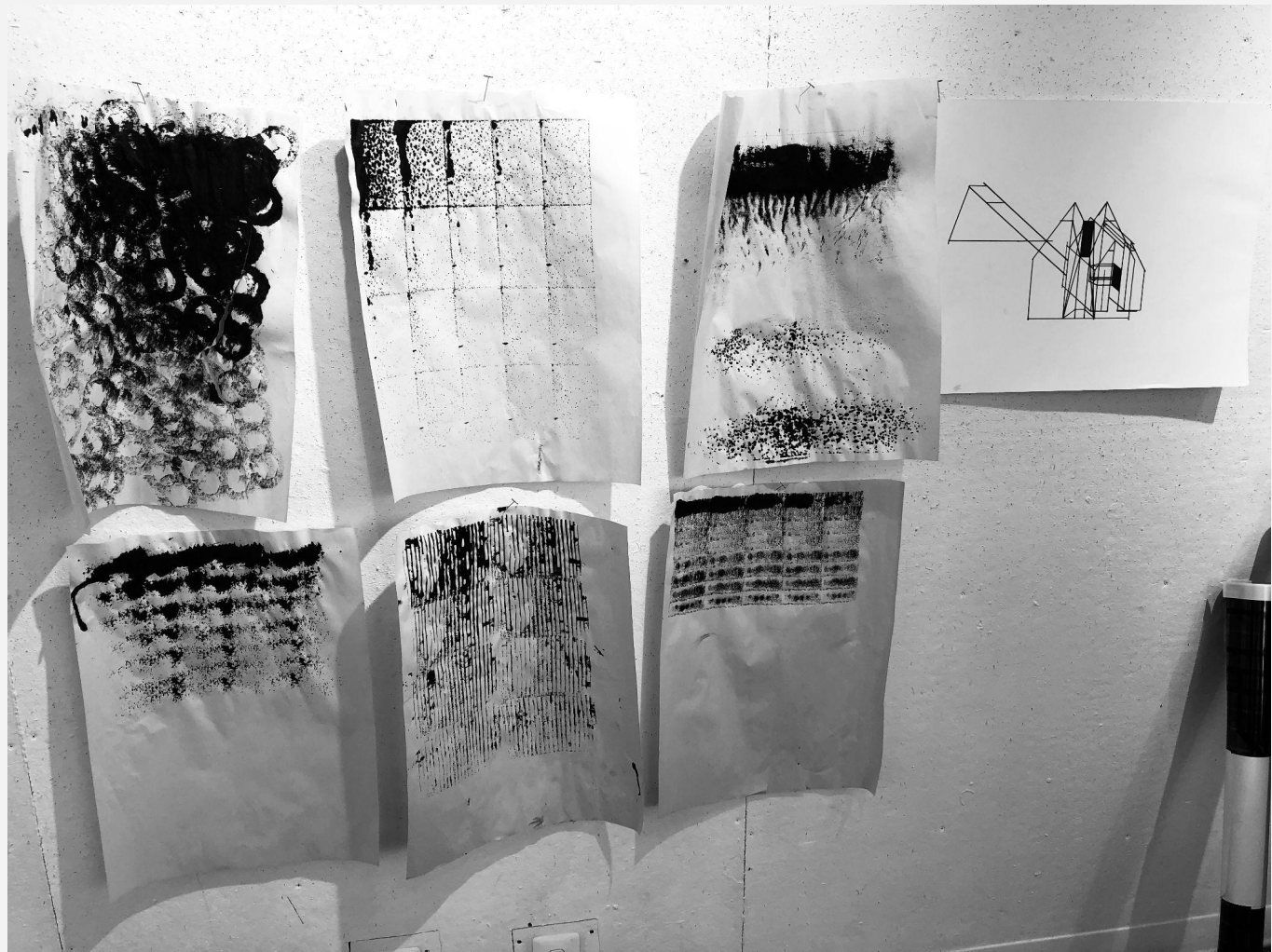
**FABRIC SILKSCREENING**  
**MUSEUM PRINT**



**FABRIC SILKSCREENING**  
**MUSEUM PRINT FINAL**



# FABRIC SILKSCREENING ENGINEERED PRINT









# FIBERS AND DYING

## Assignment 1



### PROTEINS



MOHAIR



MULBERRY SILK



TUSSAH SILK



UNDYED MERINO WOOL



ROMNEY TOP



SILVER ALPACA

### CELLULOSE



BAMBOO FIBER



SILVER HEMP



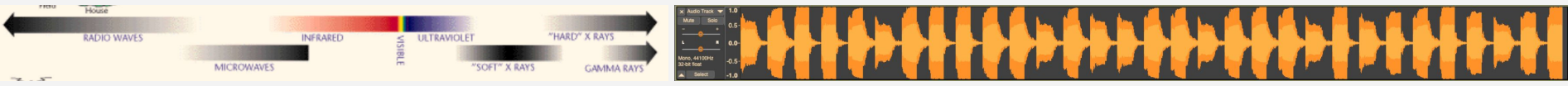
UNPROCESSED COTTON

# FIBERS AND DYING

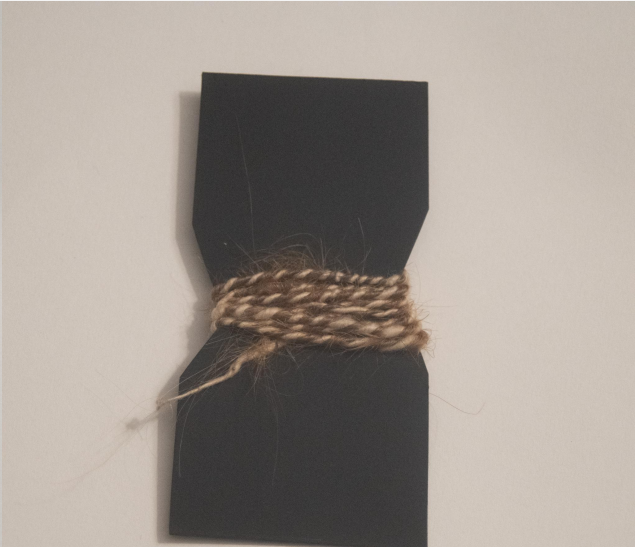
## Assignment 1

Inspired by the electromagnetic spectrum and waveform of dmft (dial up) tones. Translating digital waveforms into organic blends of fibers is a conversation between the synthetic and organic.

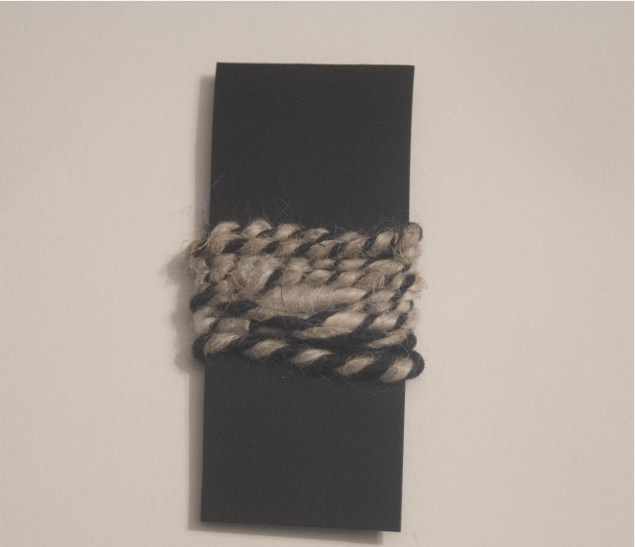
Designing blends of yarn for use in sound absorption panels in terms of application



**INFRARED**  
BAMBOO FIBER + (TUSSAH SILK + UNPROCESSED COTTON)



**DMFT**  
MARTINS HAIR + (BAMBOO FIBER + UNPROCESSED COTTON)



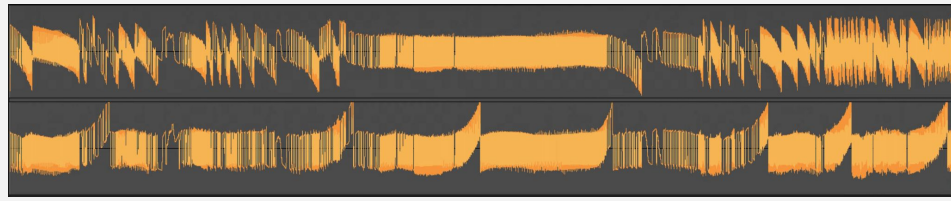
**ULTRAVIOLET**  
DYED WOOL + (HEMP + BAMBOO FIBER)

# FIBERS AND DYING

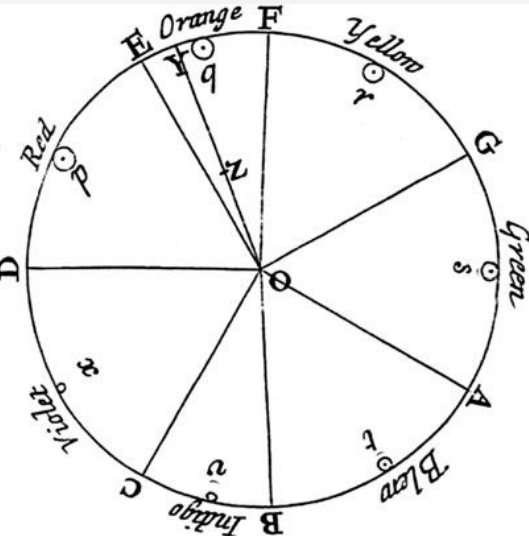
## Assignment 2

### Translation of Sound into Color and Texture

Audio Waveforms. Visualization of the the amplitude of audio over time.



Newton's Color Theory as a system for translating sound into color and creating sound from color. This diagram translates musical notes A-G into colors.



Ryoji Ikeda  
Data-matrix visualizations and visualizing oscillations  
Translating sound into oscillations of lines. Higher frequencies produce more lines



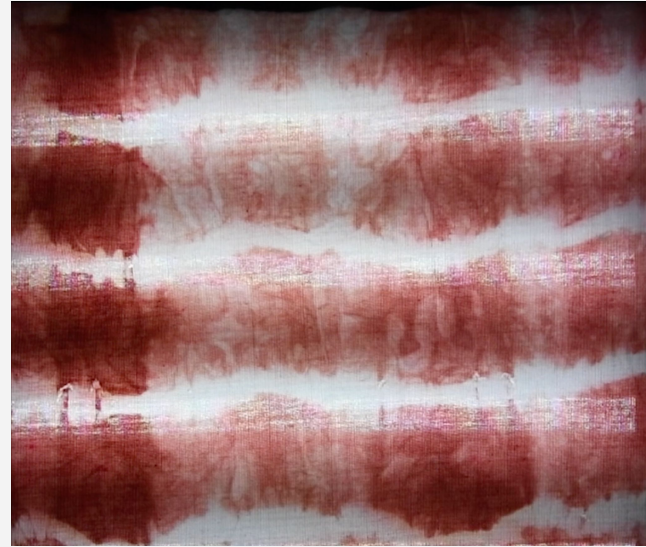
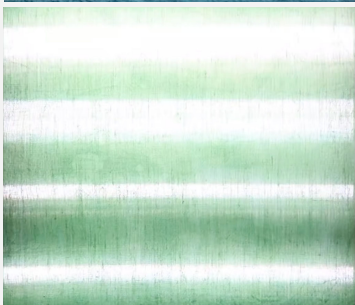
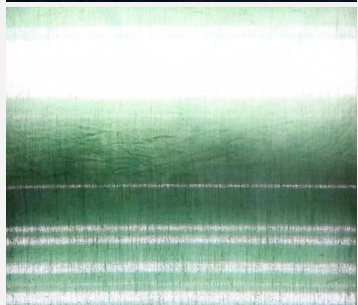
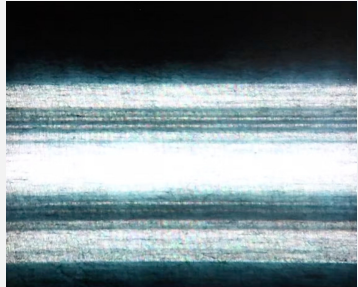
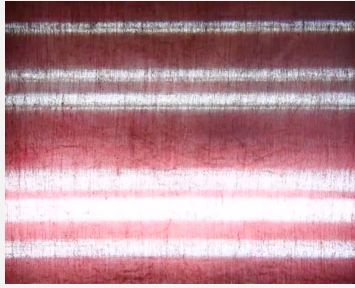
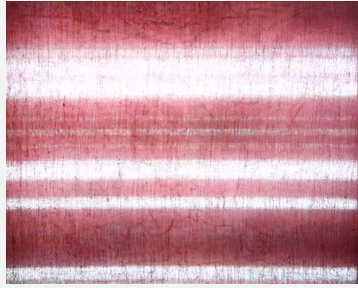
## FIBERS AND DYING ASSIGNMENT 2

Translating sound into color and pattern into sound using Newton's Color Theory and video synthesis.



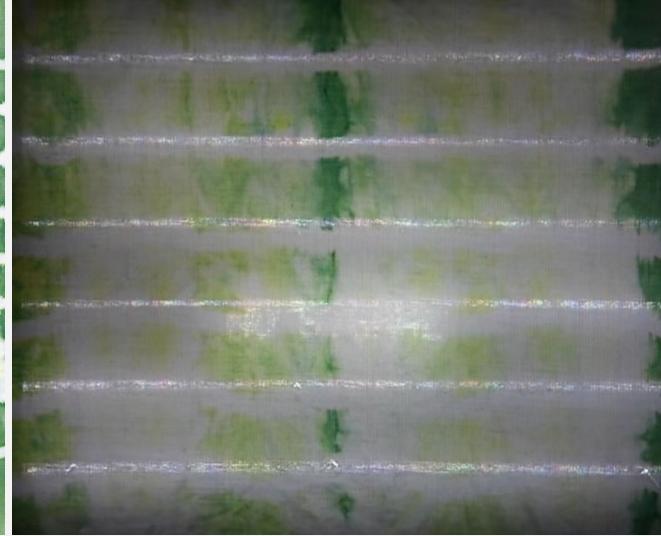
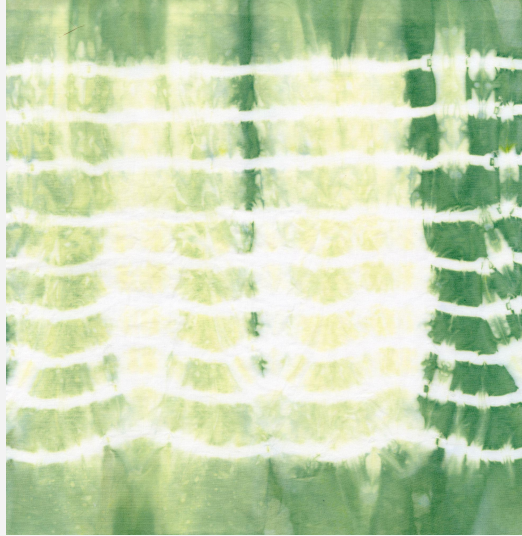
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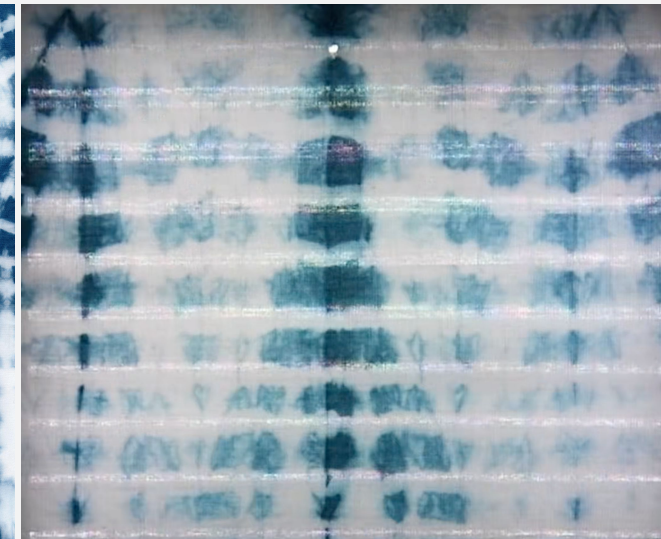
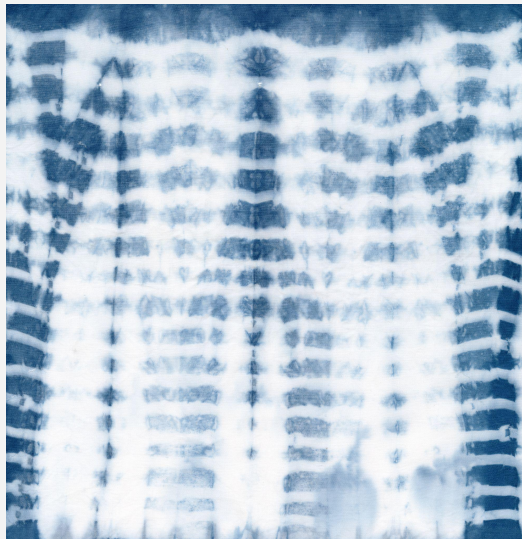


The ties on the red sample translated to the note A in the 3rd octave.

The ties on the green sample translated to the note A in the 3rd octave.



The ties on the blue sample translated to the note F in the 3rd octave.





Here I represented RGB by dyeing a yarn blend of Martin's hair, tussah silk and unprocessed cotton. I used MX dyed and table dyed this sample.



## FIBERS AND DYING ASSIGNMENT 2

Here I'm using various dyed wools and the wet felting technique to mimic felt made out of compost or recycled materials. In previous research I now know various types of wool and felt can have sound dampening characteristics. An appropriate application for using either organic sheeps wool (of which there is an excess of at the moment) or recycled materials turned into felt, is sound absorption panels, as they are made up of layers of wool. The holes in this particular felt sample will add space between layers as to not make the layered felt too dense, which would reflect sound instead of absorb it. This would also be a much more sustainable way of manufacturing sound absorption panels.

