

TACTILE MAPS

TABLE OF CONTENTS

INTRODUCTION TO MAPS	3
GLOSSARY OF TERMS	5
WHAT DO MAPS LOOK LIKE TODAY?	10
WHAT IS A TACTILE MAP?	12
ANIMAL MAPS	14
RUBBINGS	19
ARTISTS WHO MAKE TACTILE MAPS	21
MATERIALS	38
ACTIVITY	44
OBJECTIVES	54

INTRODUCTION TO MAPS



What does it mean to be oriented? How do we come to find our way in the world?

Maps help us understand the world around us and give us a sense of direction.

Most maps are centered on SIGHT.

One of the earliest mapmaking devices was the horizon line. Sailors used the horizon line to navigate the ocean. The sun's position to the horizon told them what time of day it was and what direction they were sailing.



GLOSSARY OF TERMS

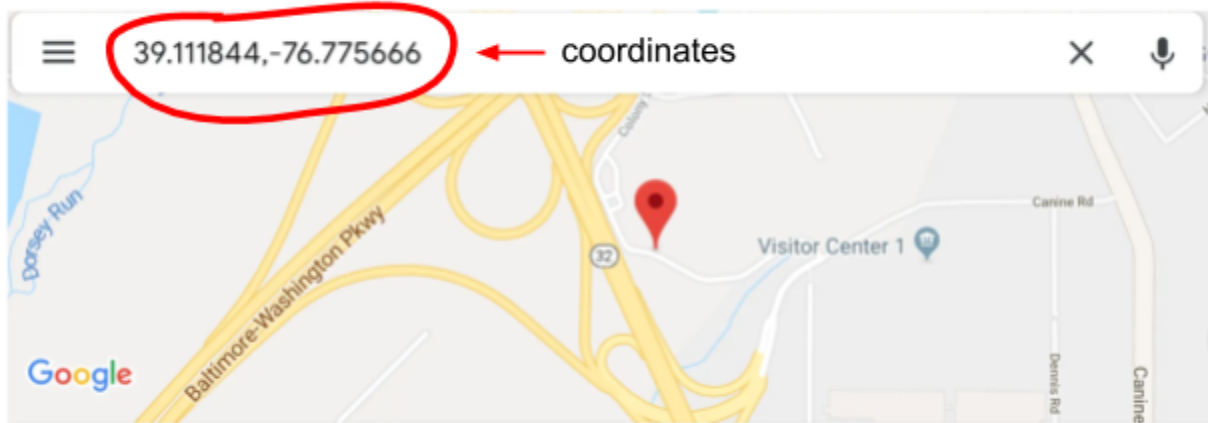
What are the map making tools that we use to navigate our surroundings?

Cartography: The science of drawing maps.



World Map from 1664

Coordinates: Linear and/or angular quantities that designate the position of a point in relation to a reference frame.



Latitude: measures north-south position between the poles. All horizontal red lines are latitude.

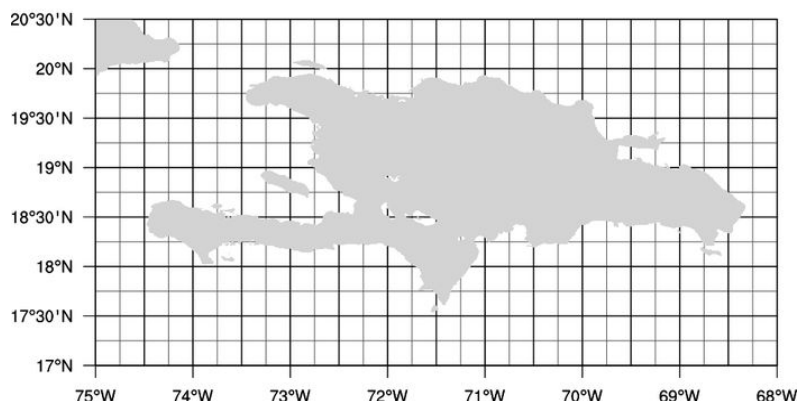


Longitude: measures east-west position. All vertical red lines are longitude.



Landmark: Monument or fixed object that may be used to determine the location or direction in navigation

Grid: a network of evenly spaced horizontal and vertical lines used to identify locations on a map.



Legend: also known as the key, this explains what the symbols on your map represent

Map Legend Road Signs

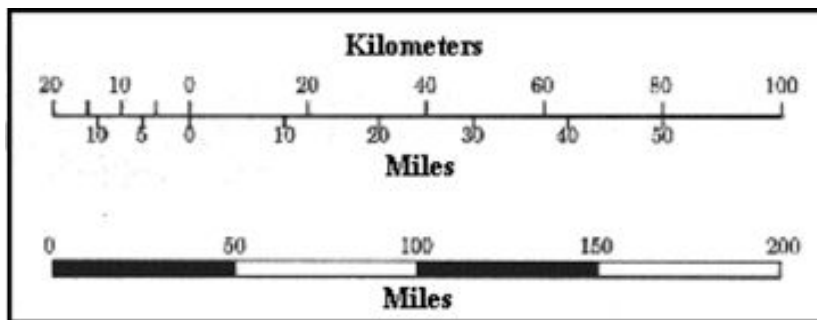
★ State Capitals	— Toll Roads & Bridges
● County Seat	— Interstate Highways
● Cities 500,000+	— U.S. Highways
● Cities 100,000-499,999	— State Roads
● Cities 50,000-99,999	— Major Rivers
● Cities 10,000-49,999	— Intermediate Rivers
● Cities 0,9-9,999	— Motor Way
🌊 Lakes	--- Track
🛣️ Interstate	— Pipeline
🛣️ U.S. Highway	— All Wather Roads
🛣️ State Highway	

Compass: indicates the cardinal directions of North, South, East, and West



Scale: This indicates the ratio of a distance on the map to the corresponding distance on the ground.

The scale tells you how much space your map covers. For instance, an 8 1/2" paper with a map of the world covers 10,000 miles, while the same size map of California covers 1,000, and the same size map of your home may only cover 25 feet, and the same size map of your hand would be the "actual size"



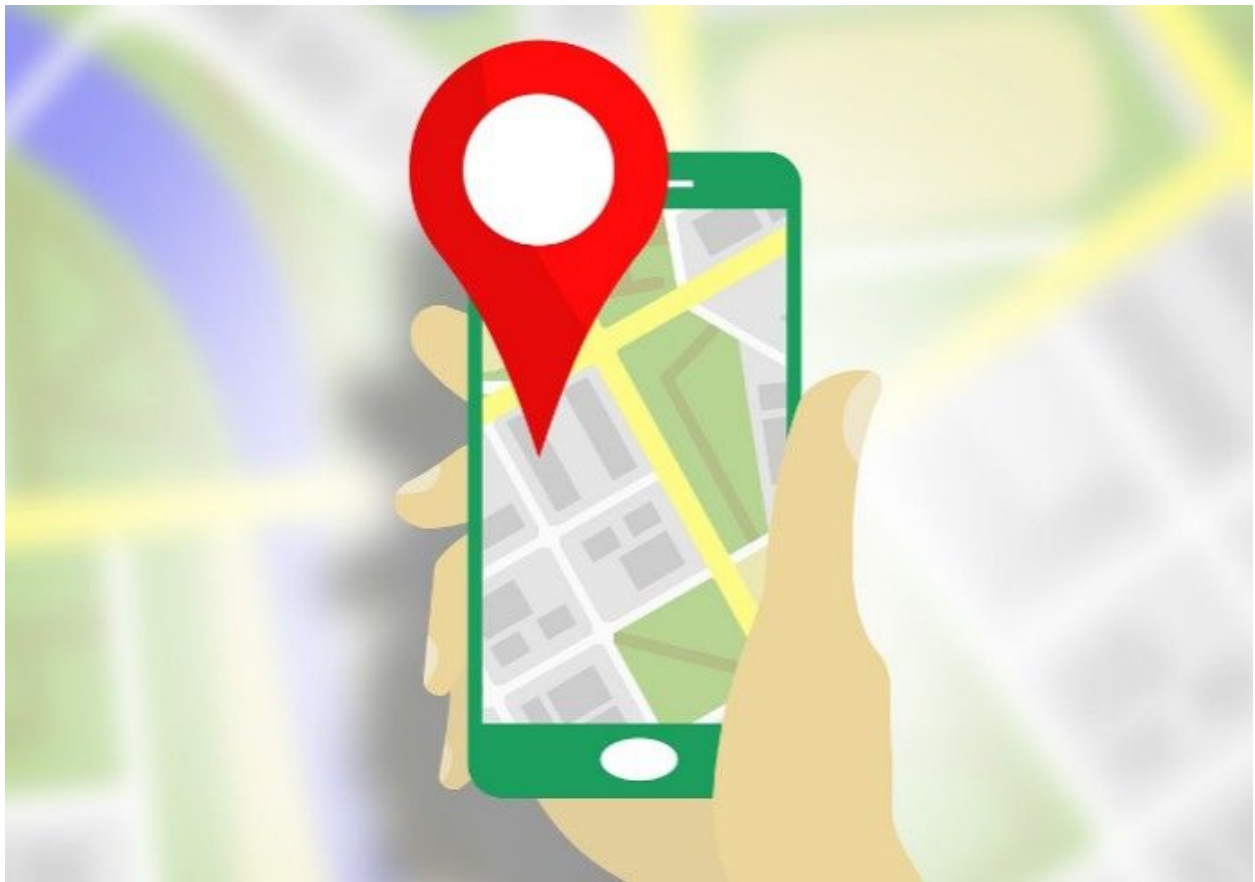
Follow this link to learn more about mapmaking terms:
<https://www.bbc.co.uk/bitesize/guides/z3jbdmn/revision/1>

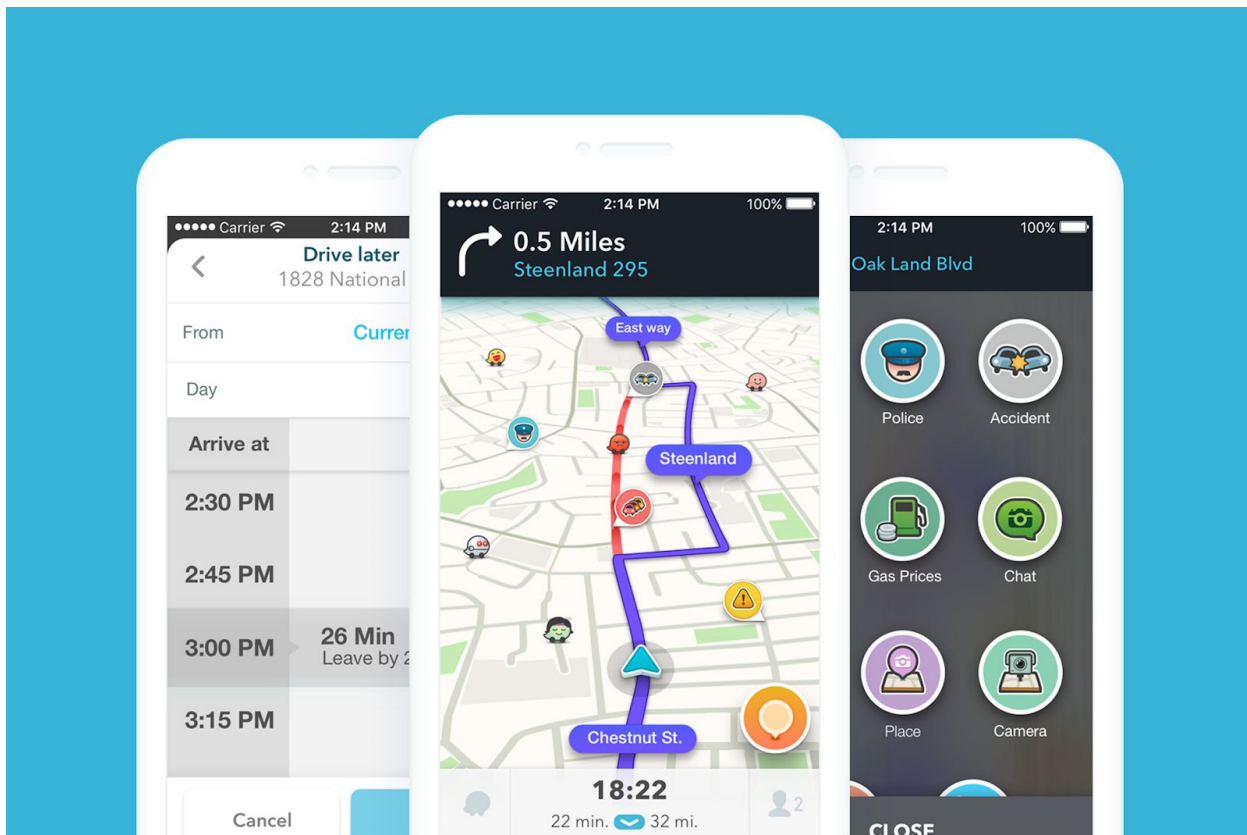
WHAT DO MAPS LOOK LIKE TODAY?

Today, we often use Global Position System (GPS) technology to navigate through space. An automated voice tells you where to go.

When we follow GPS maps we use HEARING as well as sight.

Because these directions are automatic, sometimes we follow them mindlessly.





An image from a Waze map app

WHAT IS A TACTILE MAP?

Let's return to the function of maps:

Maps help us understand the world around us and give us a sense of direction.

Tactile maps are centered on exploring our environments through TOUCH.

We stare at our walls, carpets and computers everyday, but what do these materials *feel* like?

Touching slows down the experience of moving through space and has the potential to make the familiar strange.

A person who is blind can use a tactile map to help them navigate their surroundings.



Think about navigating your surroundings through touch.

In my apartment the kitchen floor is made of smooth cold square ceramic tile. My living room has thick plush carpeting. The hallway to my bedroom has wood floors.

If I'm standing on soft thick carpeting, I know I'm in my living room. If I'm standing on cool smooth tile I'm either in my kitchen or bathroom

ANIMAL MAPS

How do animals become oriented in space?

How do animals know where to find food or how to get back home?

Instead of using paper maps, animals rely on their senses to give them information about the space and surfaces around them.

Bats rely on their HEARING more than their vision to navigate through space.

Snails are almost completely blind and deaf and use their heightened sense of SMELL to find food.



Many insects use “feelers” or antennae to detect odors.



“Catfish are said to be the most finely tuned creatures on earth. Unlike most fish, they don’t have scales, so their smooth skin gives them a heightened sense of touch. In addition, tiny hairs that run along the catfish’s side are very sensitive to vibrations. So much so, catfish are rumoured to be able to detect earthquakes days in advance.”¹ Follow this link to learn more: <https://6senses.weebly.com/touch-and-vibration.html>



¹ <https://6senses.weebly.com/touch-and-vibration.html>

In his video piece called “Mapping the Studio” the artist Bruce Nauman records nocturnal activities of cats and mice in his studio.



2

² <https://www.artsy.net/artwork/bruce-nauman-mapping-the-studio-i-fat-chance-john-cage-2>

Now that we've looked at how animals use different senses to navigate through space, think about how humans might explore their environments through touch.

RUBBINGS

Rubbings give us information about the textures of surfaces.

When we create a rubbing, we make a map that is the “actual size” of the surface we are mapping.

Grave rubbings were used to help people preserve records of their family history.

Preserving family records helps us better understand where we come from.

Read about the history of rubbing here:

<https://www.nytimes.com/1975/07/27/archives/tombstones-manhole-covers-and-the-ancient-art-of-rubbing-the.html>

Watch a video about gravestone rubbing techniques:

<https://www.youtube.com/watch?v=BjlpNupjoCs>



ARTISTS WHO MAKE TACTILE MAPS

Consider the different ways these artists map their surroundings through touch.

What materials are they using?

Are they making their work at home? Outdoors? In public?

Many of these artists make rubbings of the objects and spaces around them.

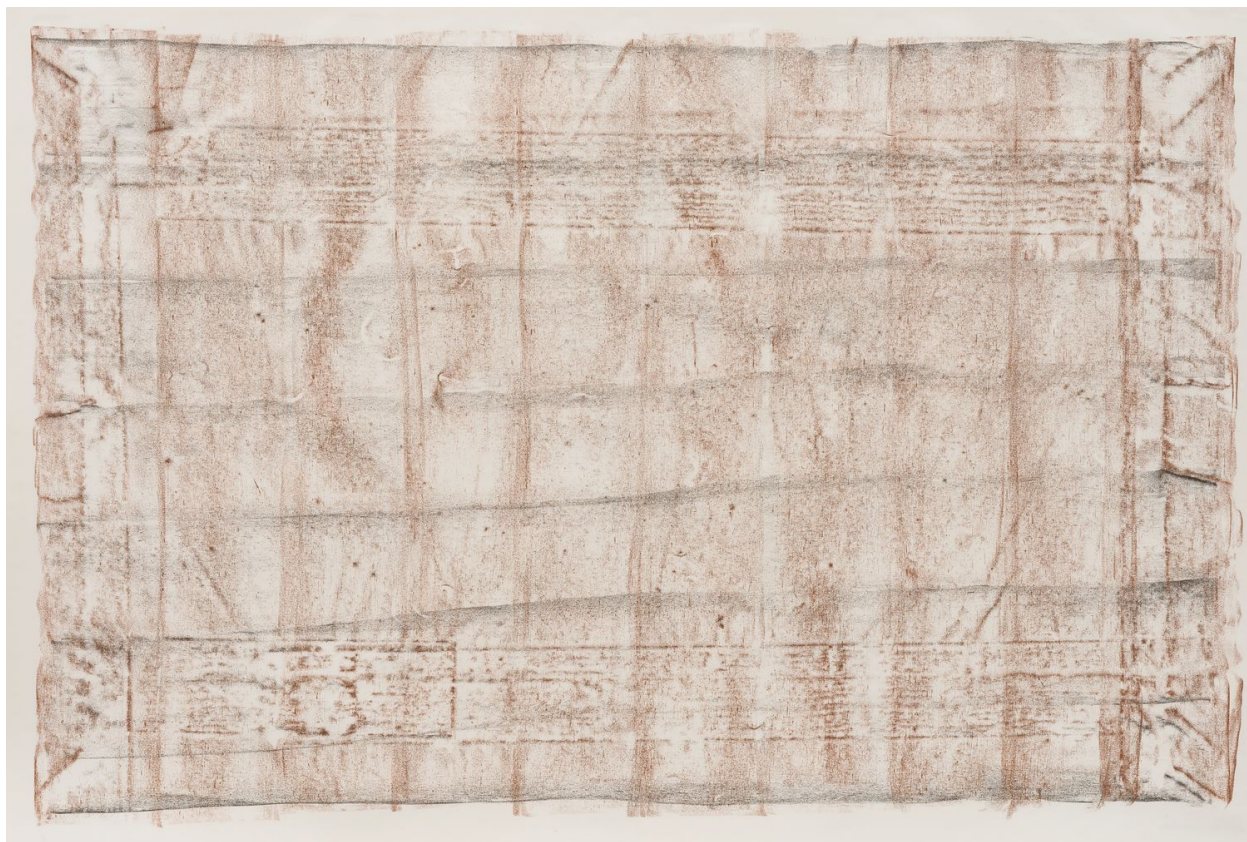
How do different types of drawing utensils and drawing surfaces affect the rubbings?

Which rubbings feel more detailed? Which rubbings feel more abstract?

Consider why these artists would want to explore their surroundings through touch.

What might artists learn about their surroundings from creating rubbings, or in one case, from climbing around their apartment?

ROBERT OVERBY



Robert Overby, *Brown and Black Rubbings, no. 3*, from the *New York Color Rubbings series*, 1972
Chalk on paper.

Overby creates rubbings of walls, floors and other architectural spaces. Overby treats these spaces as drawing surfaces, mapping their form and texture. Referencing, copying and repetition are often themes in his work.

SAM FALLS



Untitled (Studio Floor), 2012

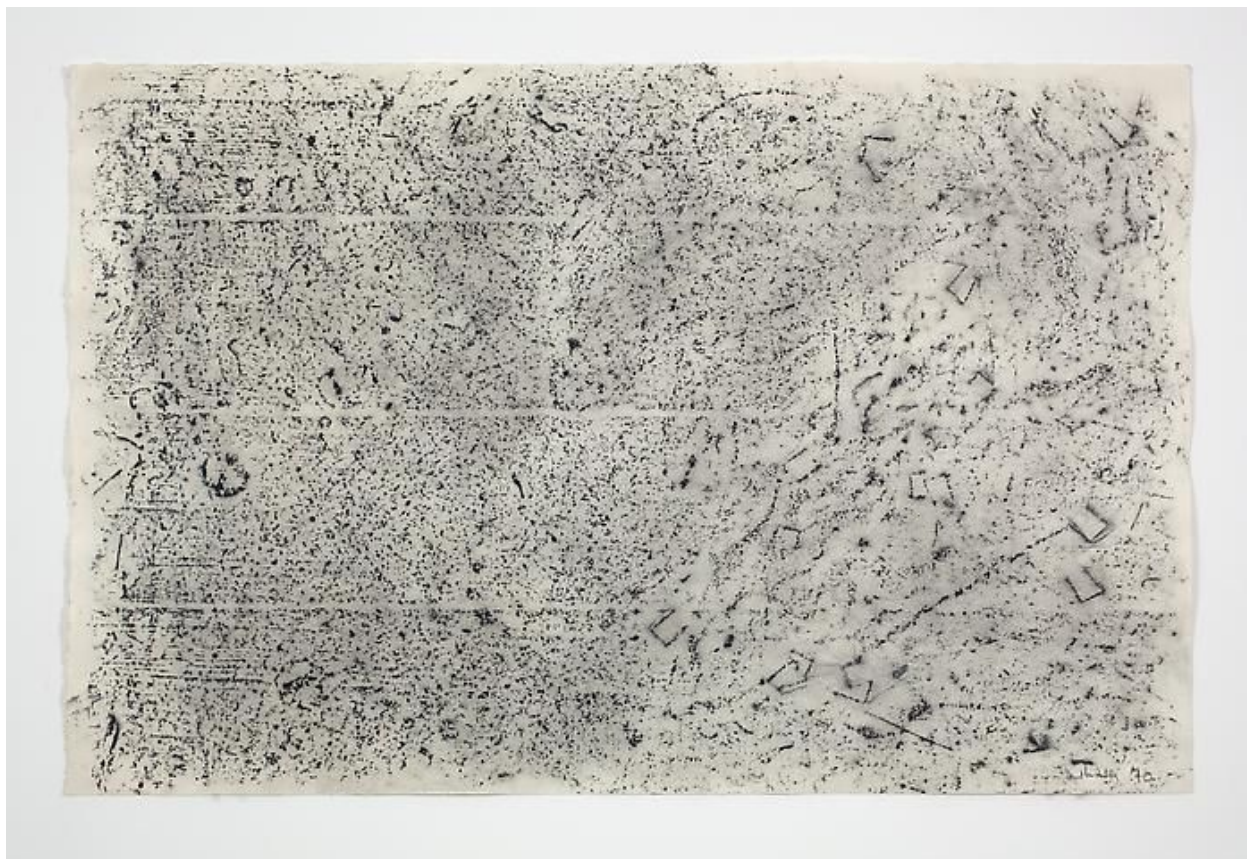
Similar to Overby, Sam Falls creates a rubbing of his floor and maps its texture.

In an interview Falls says: “I am always trying to draw out the inherent qualities of time and make them visible”.³

When Falls records the marks and traces on his floor, he maps how a surface changes over time.

³ <https://www.conceptualfinearts.com/cfa/2018/10/18/sam-falls-303/>

JACK WHITTEN



4

Studio Floor #1 (1970)
Carbon stick rubbing on paper
13h x 20w in (33.02h x 50.8w cm)

Jack Whitten is known for experimenting with different tools to create textured drawings and paintings.

Follow this link to watch a video of Jack Whitten speaking about his process:
<https://www.youtube.com/watch?v=GFVsd450nCU>

As you look at these works, think back to gravestone rubbings that document the texture and actual size of a surface.

⁴ <https://www.alexandergray.com/series-projects/jack-whitten>

KATIE HERZOG



“Rubbing the Internet Archive consists of a 10 foot high by 84 foot wide rubbing of the exterior of the Internet Archive building in San Francisco that Herzog made using rubbing wax on non-fusible interfacing.”⁵

The Internet Archive is a digital library. Most of us don’t think about the Internet Archive as a physical place. By creating this tactile map, Herzog reminds us that the images we look at online often come from a physical location.

Follow this link to read more about non-fusible interfacing:
<https://www.joann.com/buying-guide-interfacing/1479260P194.html>

⁵ <https://klowdenmann.com/katie-herzogs-rubbing-the-internet-archive-in-library-as-incubator-project/>

HEIDI BUCHER



Heidi Bucher, *Borg*, 1976. Textile, latex, mother-of-pearl pigments, and bamboo, approx. 230 x 350 x 100 cm. Photo: Mayo Bucher

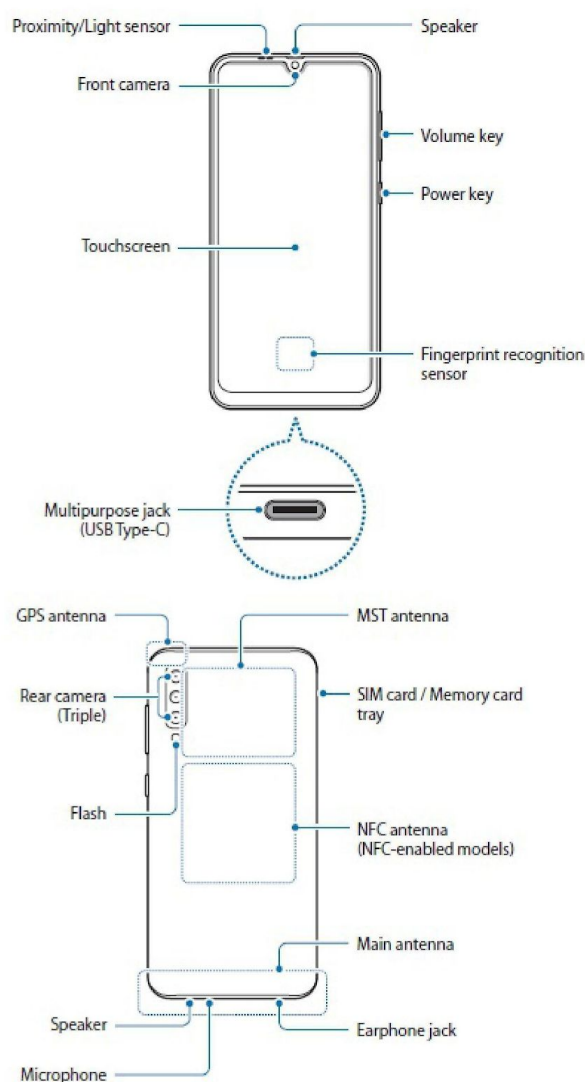
Bucher creates three dimensional maps of the spaces around her. She covers walls in gauze and liquid latex. Once the materials have dried, she peels off the surface. The surface becomes a “skin”, an extension of the body.

Follow this link to watch a video of Bucher making one of her rubbings:
<https://www.youtube.com/watch?v=S3KUK4vPw6Q>

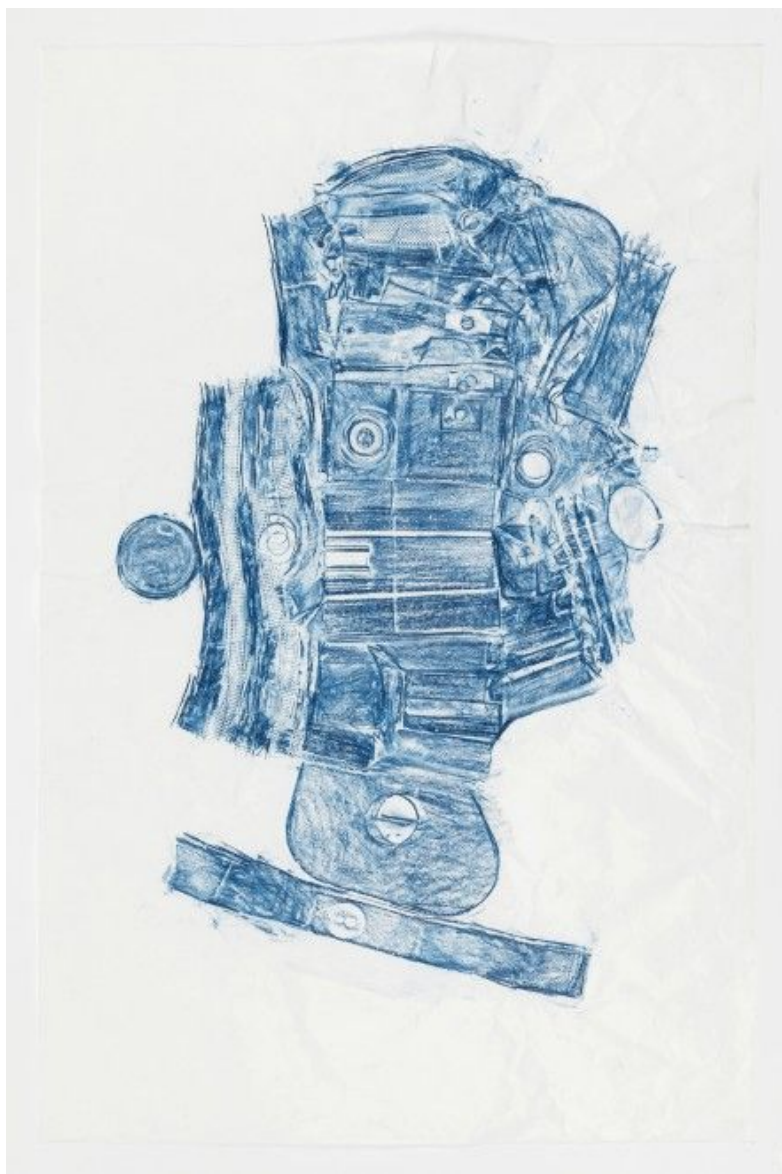
While the previous artists map walls and other architectural spaces, these artists create rubbings of objects around them.

Think about these rubbings as schematics, maps of the different components that make up a device or object.

This is an example of an iPhone schematic. It helps us see the various parts and where they are located.



JENNIFER BORNSTEIN



This is a wax-crayon rubbing of a 16-millimeter camera.⁶

When Bornstein creates a rubbing of her camera she makes a schematic, a map of all its various parts. She shows where each part is located on her camera.

⁶<http://artobserved.com/2015/11/new-york-jennifer-bornstein-new-rubbing-and-psychological-and-performance-tests-at-gavin-browns-enterprise-through-december-6-2015/>

DO HO SUH



Rubbing/Loving Project: Metal Jacket, 2014
Colored pencil on mulberry paper

Suh creates rubbings of Korean military supplies.

These rubbings, similar to Jennifer Bornstein's camera rubbing, become schematics, guides that help us understand the different components of an object.

In this image, we are able to see the different forms and textures that make up the surface of a metal jacket.

Suh actually served in the Korean military and has a personal relationship to the materials he is rubbing.

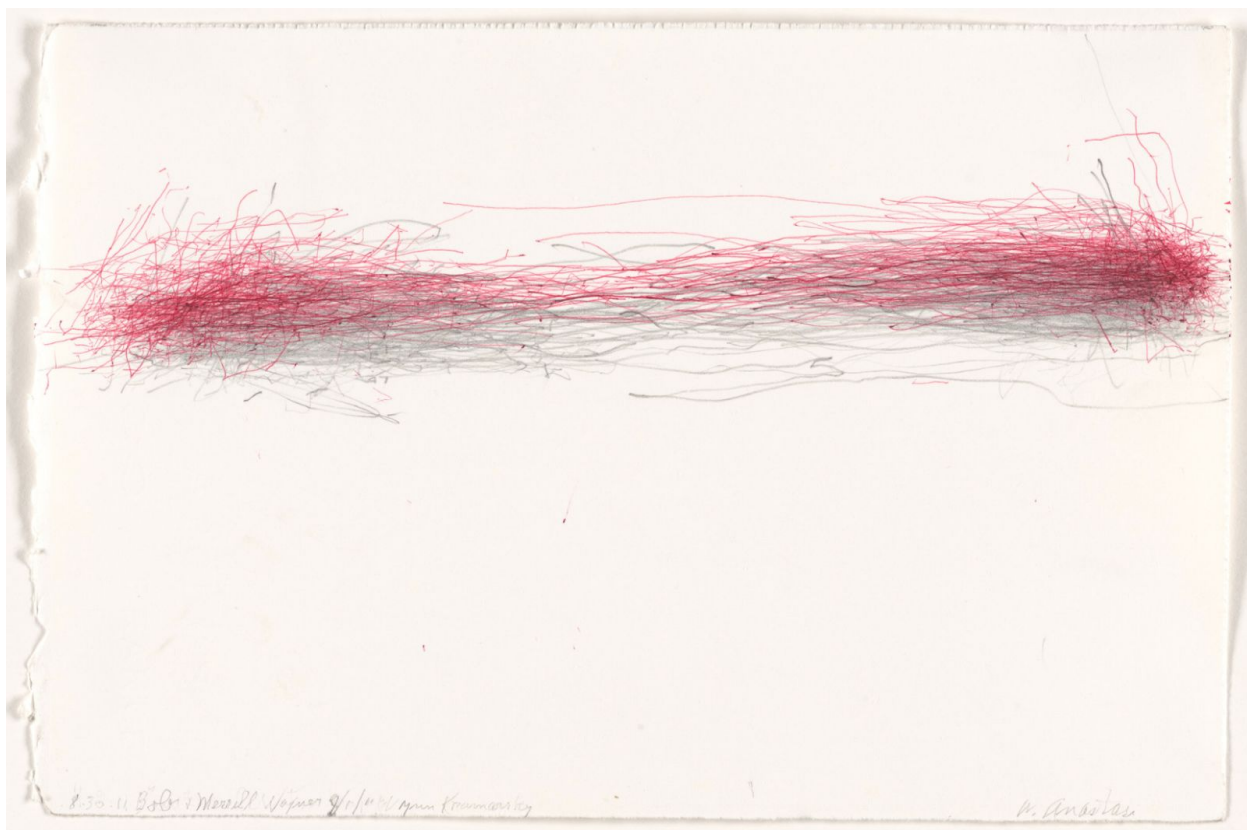
Think back to grave rubbings and how they relate to memory, helping us understand where we come from.

Through rubbing these military supplies, Suh reflects on his identity and experiences.

Follow this link to learn more about Suh's work:

<https://art21.org/read/do-ho-suh-some-one-and-the-korean-military/>

Here are some other ways to map your movement through space.

WILLIAM ANATASI

Without Title (Subway Drawing), 2011

Medium: Ballpoint pen and pencil on paper

Anatasi makes these drawings while he rides the subway in New York. He puts a piece of paper on his lap and lets the subway move his pen along the paper. These drawings become maps of the subway's movement.



Follow this link to watch a video of Anastasi making one of his Subway drawings:
<https://www.youtube.com/watch?v=DKSwFcJ9PYM>



Untitled (Pocket Drawings), 1969

“Anastasi folded these sheets into eight squares, making them small enough to fit into his pocket. As he walked, he held a tiny, soft pencil against the exposed paper inside the cramped space of his pocket; the resulting marks graph his movements.”⁷

⁷ <https://www.moma.org/collection/works/90658>

LUCY GUNNING, CLIMBING AROUND MY ROOM



8

In her video, “Climbing Around My Room” the artist Lucy Gunning moves through her apartment trying not to touch her floor. She explores her space through touch, climbing around and scaling the boundaries of her apartment.

⁸ <https://www.greenenaftaligallery.com/artists/lucy-gunning>

Let's start making our own tactile maps!

We will use rubbings to create tactile, actual size maps of the surfaces around us.

The following sections will introduce you to the materials, activity and objectives.

MATERIALS

1. A drawing surface

Look around your room and see what's available. Try to choose lighter colored surfaces so that you will be able to see your tactile map.

Here are some examples of drawing surfaces:







2. A drawing utensil

Here are some examples of drawing utensils that you might find around your house:



3. Tape is recommended



ACTIVITY

1. Explore your surroundings.

Look for anything with an interesting texture (door, window, keyboard, floor, air conditioner, laundry basket etc).

2. Choose a surface to map. Place a piece of fabric or paper on the surface.



I recommend attaching your drawing surface with tape so things don't move around.

3. Finally, start mapping!



I recommend using the side of your drawing utensil.

Keep rubbing until you start to see different textures and forms.

Apply more pressure to darken your map and make things more visible.

As you are making your rubbing, think about maps as tools that help us understand the world around us.

Imagine moving through space as a catfish with a heightened sense of touch, feeling the vibrations and textures of the things around you.



Once you've made your first tactile map, keep experimenting.

Map different surfaces in your room.

Try using different drawing utensils.

Try using different drawing surfaces.

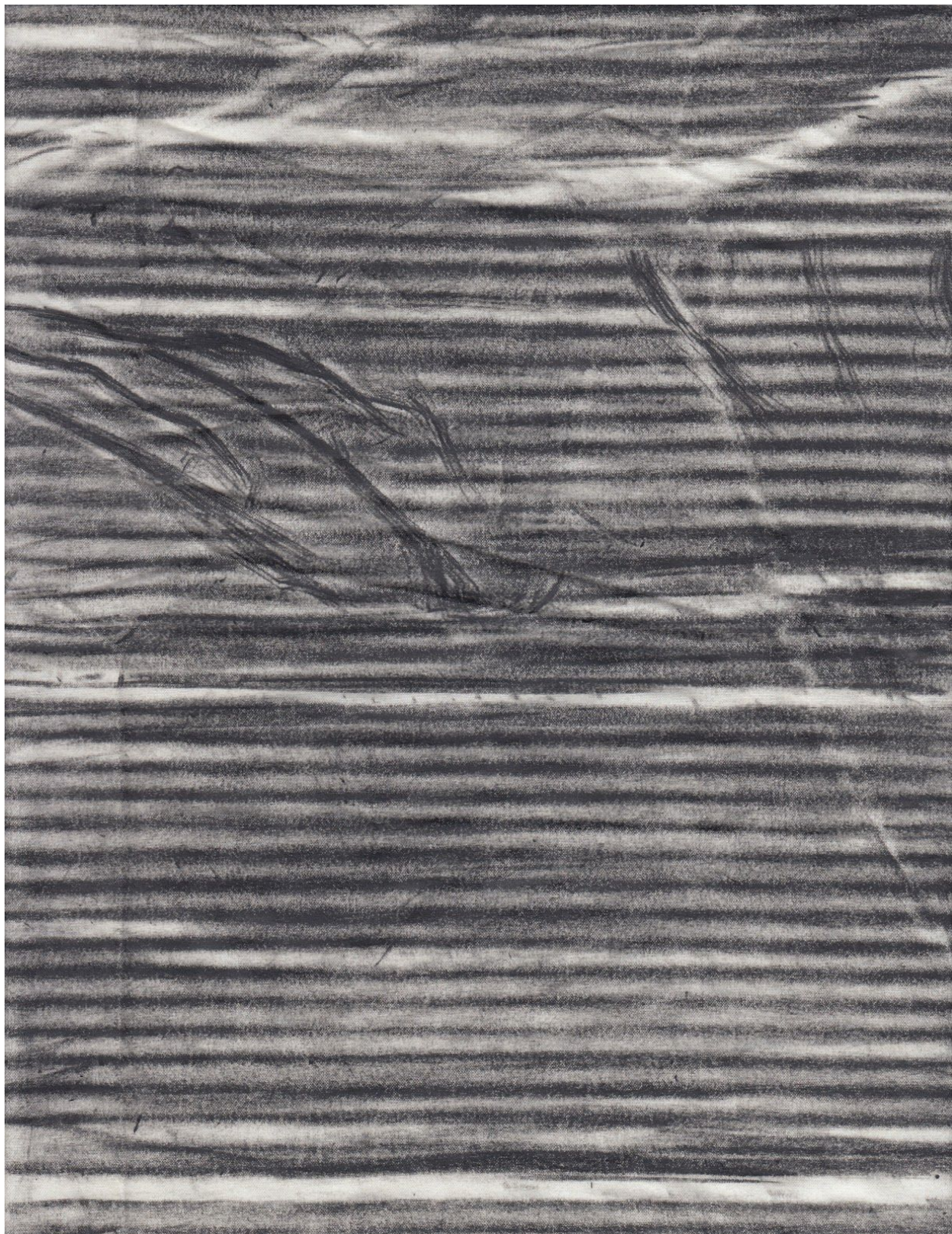
Try mapping for longer periods of time.

Listen while you are mapping. Do different surfaces generate different sounds?

Try making tactile maps while closing your eyes or with the lights off.

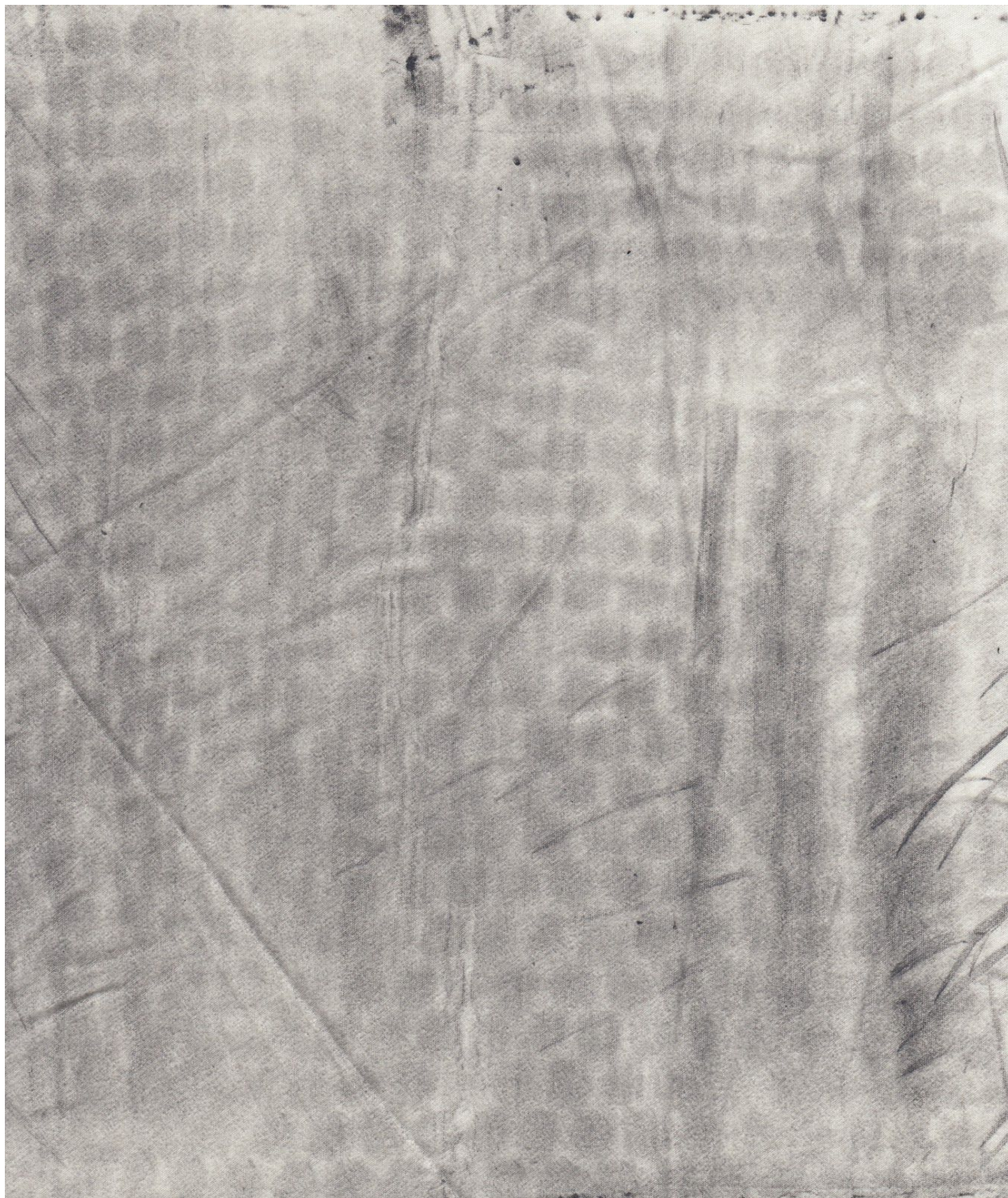
Here are some examples of tactile maps that I created in my living room:

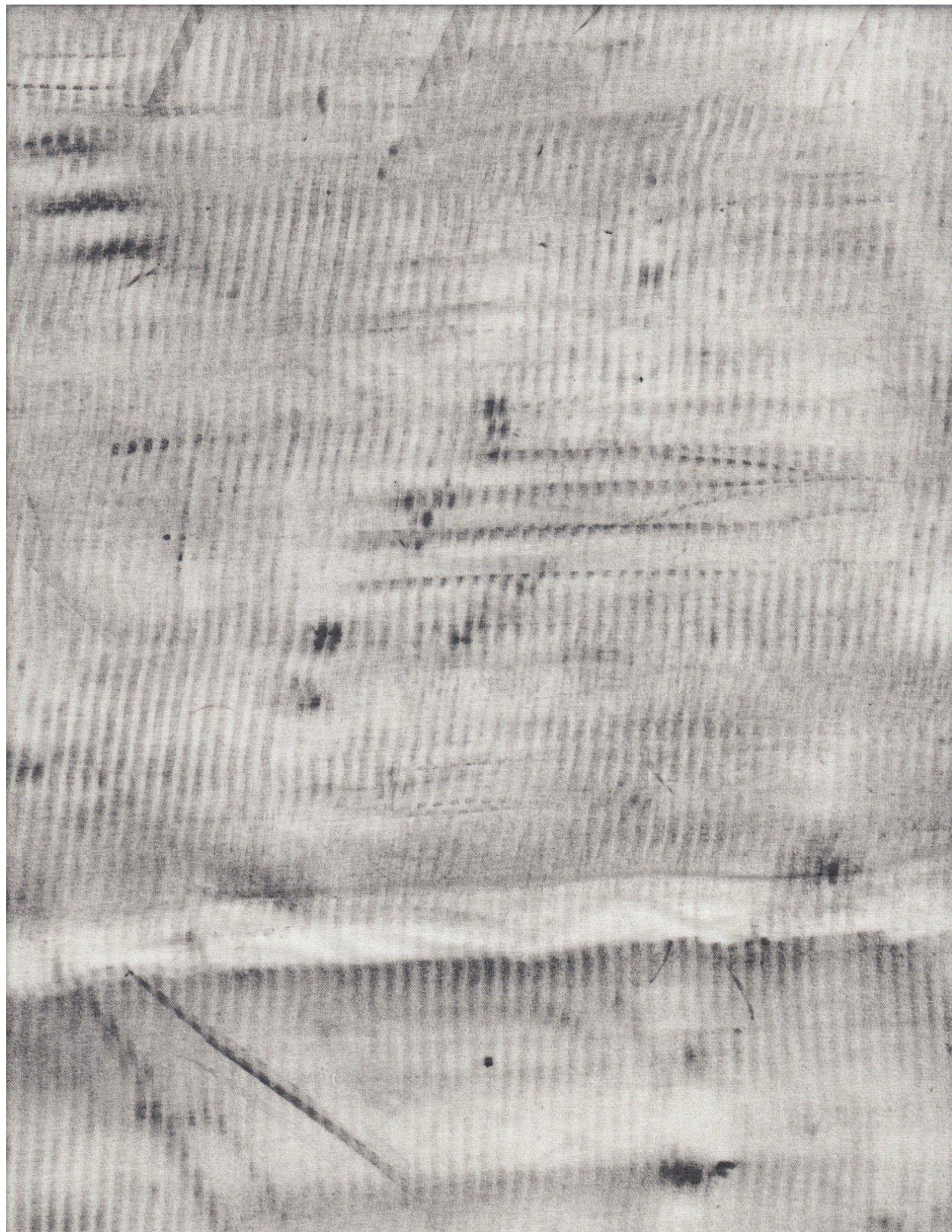






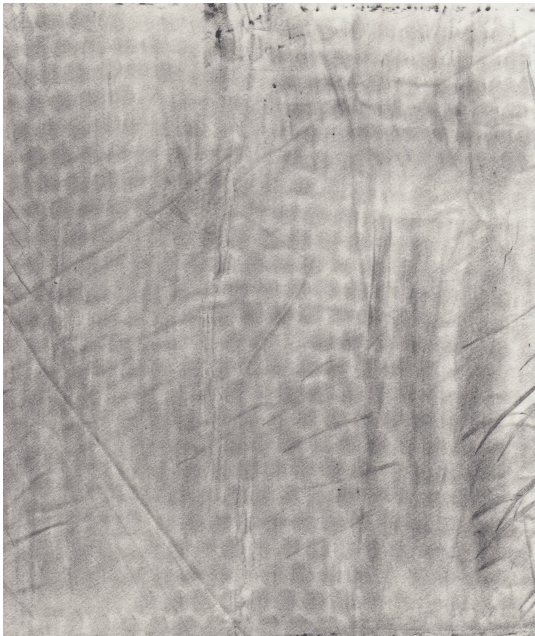
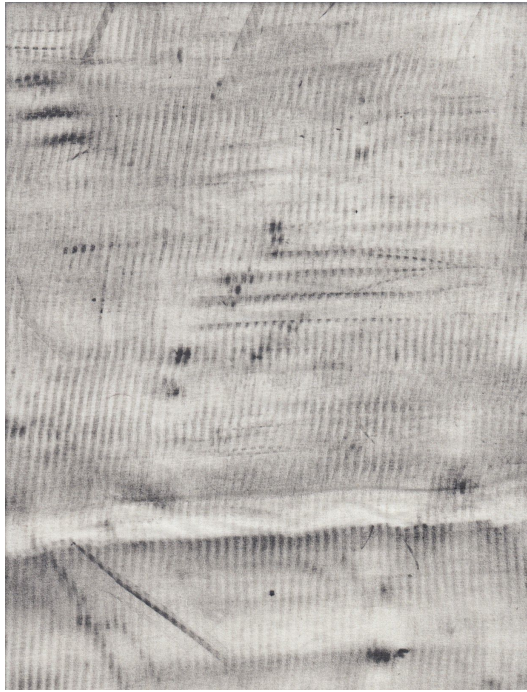






OBJECTIVES

First, place your tactile maps next to each other.



Describe your different maps.

What types of patterns and shapes did you create?

Write down a list of associations that you have when you look at your maps.

Do they conjure a memory, a familiar place?

If you used a variety of drawing utensils and drawing surfaces, write about how different materials generated different tactile maps.

Next, reflect on your experience making your tactile maps.

Did you find anything surprising? Challenging?

What was your favorite part about making tactile maps?

What did you learn about your surroundings?

I hope you've enjoyed learning about maps and making your own tactile maps!