



Arya Shah X The Exploration Company

13.8 : a collection inspired by space wear and the space age, reimagining sustainability and accessibility, and climate consciousness through versatile design.



Table of Contents

- 1. Introduction (1)**
- 2. Executive Summary (2)**
- 3. Brand Research (3)**
- 4. Consumer research (4)**
- 5. Market Research and Integration (5-6)**
- 6. Collection Overview (7)**
- 7. Concept Board (Fabric and Color) (8-10)**
- 8. Developmental sketch work (11-17)**
- 9. final collection (18-19)**
- 10. CLO 3D work (20-23)**
- 11. marketing strategy (24-25)**
- 12. References (26-27)**

Executive Summary

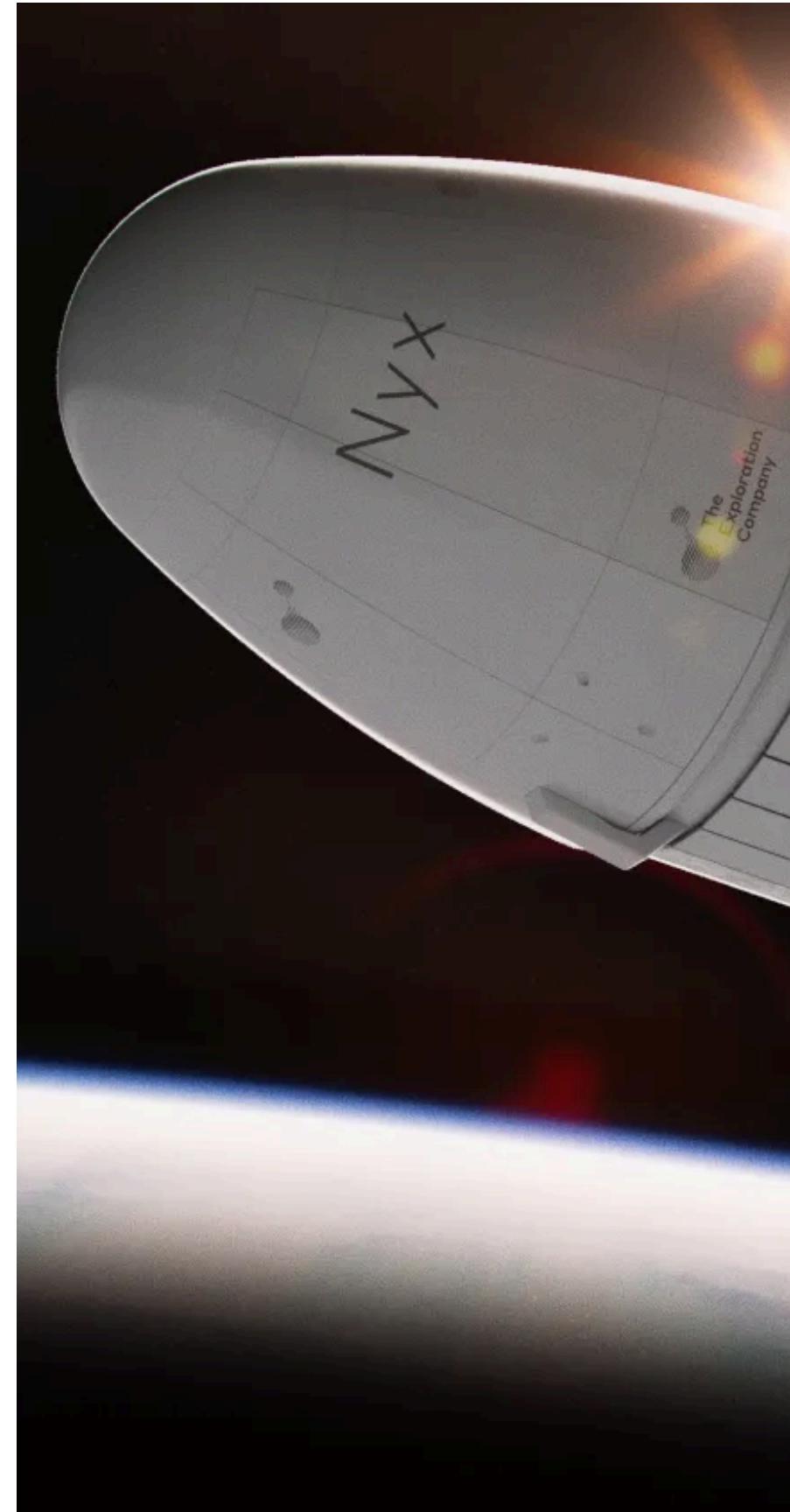
The world is currently experiencing a renaissance of space exploration, there is a growing cultural fascination with the possibilities of outer space, inspiring both technological and design innovations. Space travel is not a far-fetched dream anymore, and as commercial space travel grows, there is a growing demand for functional, and adaptable designs in both technology and fashion is undeniably increasing.

This collaboration between Arya Shah and The Exploration Company reimagines the future of fashion by drawing inspiration from space exploration and the aesthetics of the original Space Age. The collection blends the functionality of space suits with innovative textiles like GORE-TEX®, Outlast®, and Dyneema®, reinterpreting their use for everyday wear. These technical fabrics, were originally created for extreme environments, and give durability, comfort, and versatility, by creating garments that can be worn in multiple ways to change depending on the wearer's circumstances and climate conditions much like in space.

In accordance with The Exploration Company's commitment to sustainability, the collection reflects a deep respect for the environment, employing eco-conscious materials and design principles that promote longevity and versatility. Additionally, the collection embraces an ethos of deconstruction and modular design, my approach to fashion often blurs the intersection of art, utility, and sustainability, using innovative techniques to transform everyday garments into art that challenges norms and push boundaries. This collaboration embodies pioneering functionality with conceptual design and sustainability.

The collection also focuses on accessibility, making sure that these designs are not just for the ultra elite but are available to a wider audience seeking fashion that satiates the demands of a changing world. This collection seeks to captivate forward-thinking consumers interested in both the exploration of outer space and the sustainable redesign of our everyday environments.

The mix of space age aesthetics, functional design, and sustainability offers a new paradigm for fashion, one that is dynamic, adaptable, and ingrained within my values as a designer and The Exploration Company's environmental responsibility.



The Exploration Company

The Exploration Company is a European aerospace startup focused on building reusable, sustainable spacecraft to democratize access to space. Their flagship vehicle, Nyx, is designed for low-Earth orbit missions with a strong emphasis on open architecture, reusability, and environmental responsibility. By developing scalable and cost-effective space transportation solutions, The Exploration Company aims to make space exploration more accessible, transparent, and sustainable for both public and private sectors.

X — https://www.exploration.space/about

OUR STORY

We are at the midst of a space exploration *renaissance*.

Technological advancements like reusable rockets and refillable space vehicles are making space more accessible. Several new space stations are being built around the Earth and the Moon, and the transportation market to reach these new destinations will grow from 5 to 50 billion USD in the next 10 years.

But access to space has been reserved for the *happy few*.

Mission Statement

The development of these new space worlds has historically been done in an exclusive and often confrontational manner. their mission is to enable everyone to participate in the building of our human future. To accomplish this mission, they are developing Nyx – a reusable and in-orbit refillable spacecraft that can be launched from any heavy launcher in the world and can fly to any space station.

Competitors

- Space X
- Blue Origin
- Boeing
- Lockheed Martin
- Northrop Grumman



Target Market

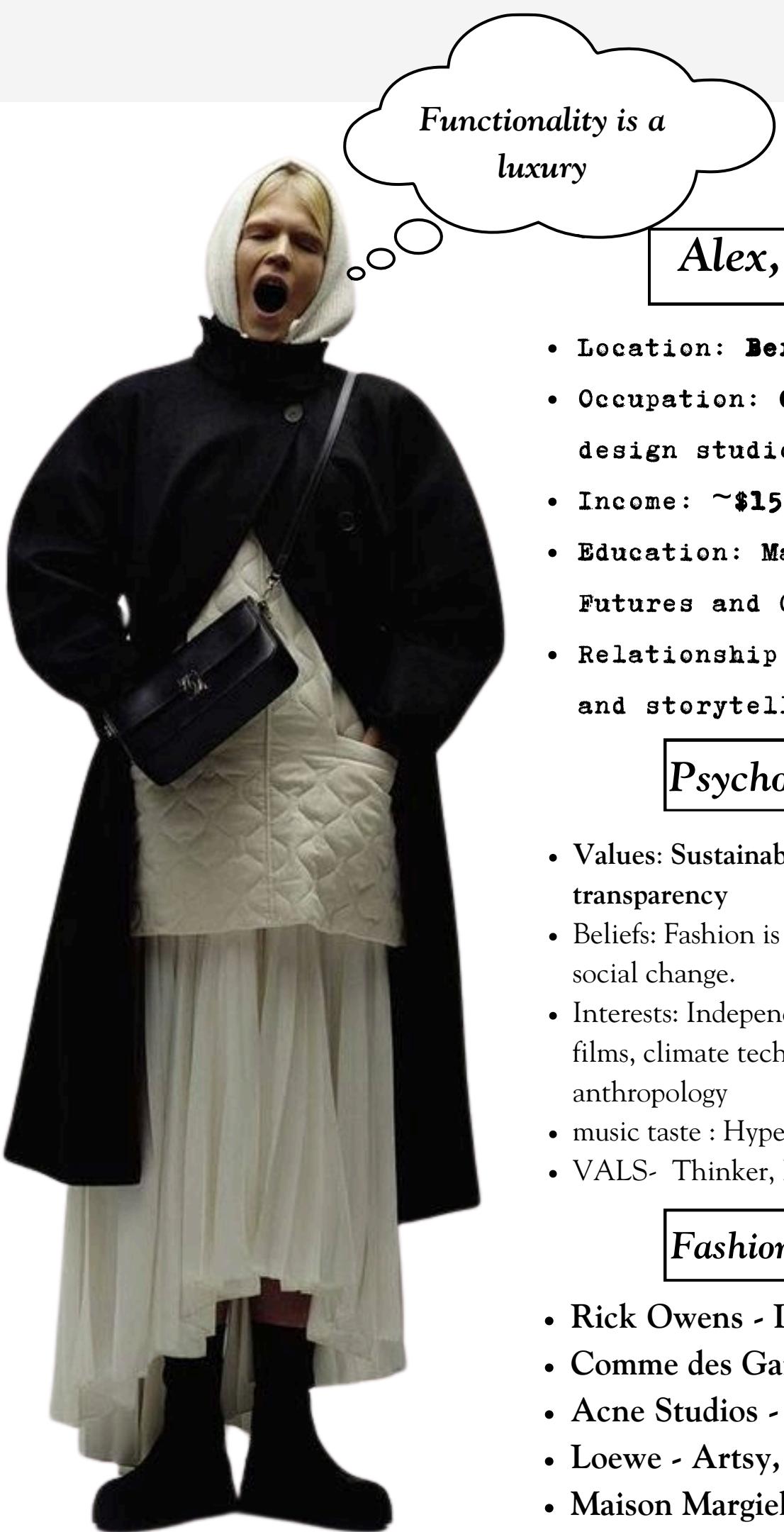
- Space Agencies
- Research Institutes
- Tourism Companies- With the rise of space tourism as a possibility, the eventual market would be tourism companies. The Mission of The Exploration Company is to eventually make this type of travel more sustainable and accessible to a larger audience.

The Exploration Company's Contribution

- **Technical Innovation:** Provides access to advanced, space-grade materials and modular design systems, inspiring adaptable, and durable garments using textiles like GORE-TEX®, Outlast®, and Dyneema®.
- **Brand Ethos:** Shares a commitment to environmental responsibility through reusability and circular systems, reflecting the collection's focus on eco-conscious design.
- **Cultural Relevance:** Embodies the New Space Age, making space travel accessible and making modern technology more accessible, aligning with the collection's mission to make futuristic fashion more wearable and inclusive.
- **Design :** Provides aesthetic and structural inspiration, from modular spacecraft forms and technical details , blending functionality with the collection's conceptual, deconstructed design approach.

Consumer Research

Who is the target Consumer?



Alex, Age 28

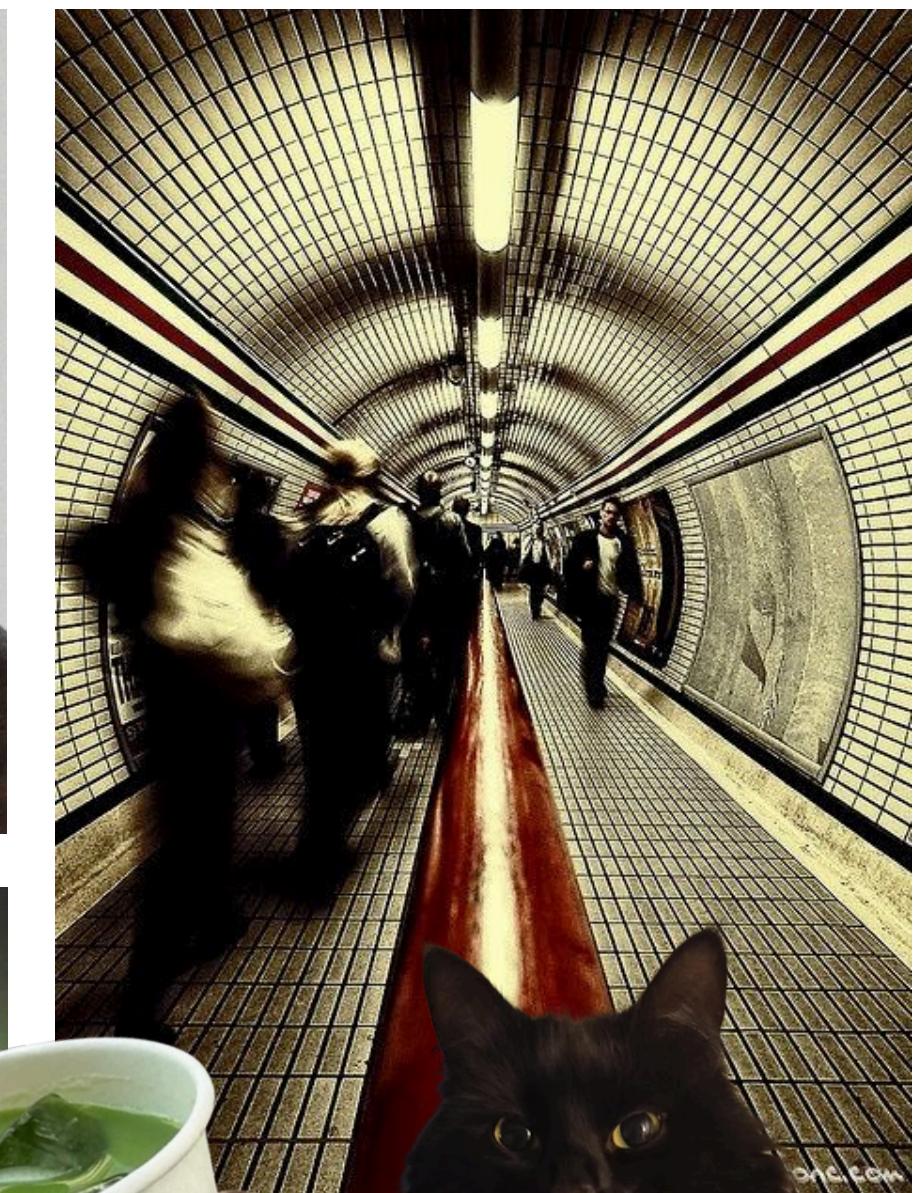
- Location: Berlin, Germany
- Occupation: Creative Director at a design studio
- Income: ~\$150,000/year
- Education: Master's in Design Futures and Critical Theory
- Relationship with Fashion: Collector and storytelling through clothing

Psychographics

- Values: Sustainability efforts and transparency
- Beliefs: Fashion is for critique, progress, and social change.
- Interests: Independent sci-fi and romance films, climate tech, photography, anthropology
- music taste : Hyper pop, Jazz, Indie Rock
- VALS- Thinker, INFP

Fashion Interests

- Rick Owens - Dark, draped, brutalist
- Comme des Garçons - experimental
- Acne Studios - edgy, oversized
- Loewe - Artsy, sculptural
- Maison Margiela - Modular, disrupted



Market Research and Integration

Key Research stats

Sustainability initiative's: 46 % of Gen Z will or plan to leave their jobs or switch industries due to environmental concerns (WGSN)

64 % of global Gen Z are willing to pay more for environmentally sustainable products and services (WGSN) This Collection will highlight modular garments to promote sustainability efforts and functionality to increase garment longevity

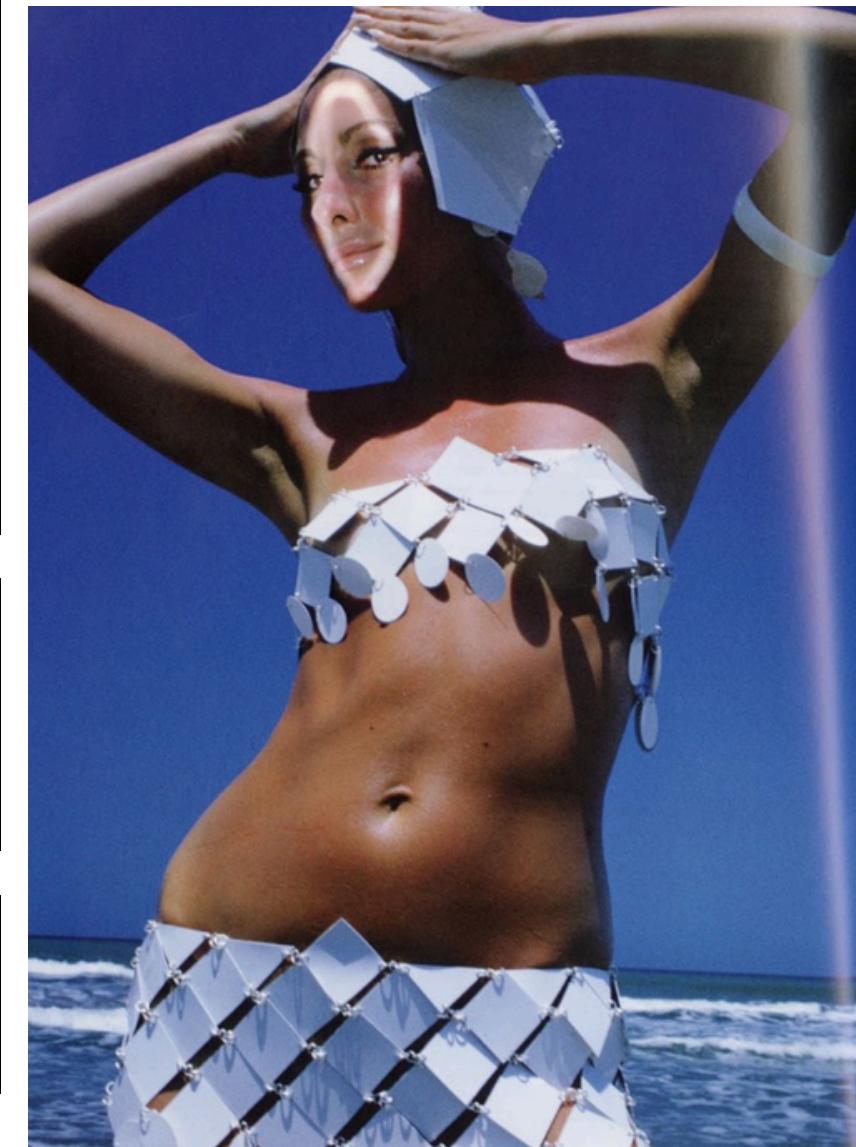
Climate Conscious: 84% of 16-24 year olds globally experience eco-anxiety, brands must offer protection from extreme climates, but also reassurance. This collection will utilize textiles like GORE-TEX®, Outlast®, and Dyneema®, in order to meet consumer needs for durable and climate friendly garments

Market Growth for Technical Textiles : The global technical textiles market was valued at USD 206.14 billion in 2024 and is projected to grow at a CAGR of 4.8% from 2025 to 2030, reaching USD 272.33 billion by 2030.

Generation with the greatest forecasted share of the U.S. sustainable apparel market in 2027 Millennials (Statista)

Intersection of fashion and Space Tech :

Prada X Axiom Space- Space Suits for Nasa's Artemis III Mission Inspired by the 1960's Space Age Fashion (Paco Rabanne, and Pierre Cardin),



Paco Rabanne Space -Age fashion



Prada X Axiom Space Teaser Photos

Market Research and Integration

Global Landscape

As climate change has caused global temperatures to rise, ventilated, and cooling garments will become essential to combat the extreme changes in temperatures.

Since 2020, Europe and Central Asia's workforces are experiencing the fastest increase in exposure to extreme heat (WGSN)

This Collection will offer a solution to eco anxiety and experiment with various cooling techniques and textiles

Politics

As global tensions rise under the current U.S. administration, along with the emerging trade wars post Covid-19, production costs will likely be driven up

This follows existing price rises; the average price of luxury goods has risen by 52% since 2019. (The guardian)

Martinotto says the tariffs could set the industry back 50 years. “European designers could end up selling mostly in Europe,” he says. “American designers could sell mostly in America.”

Quote from (The Guardian)

REPORT | JULY 20, 2023

SHARE

Americans' Views of Space: U.S. Role, NASA Priorities and Impact of Private Companies

55% of Americans expect routine space tourism over next 50 years

BY BRIAN KENNEDY AND ALEC TYSON

This collection's efforts will be primarily focused on addressing the eco-anxiety that many consumers are facing, Supported through the use of various white fabrics (to cool) and through textiles that are adaptable



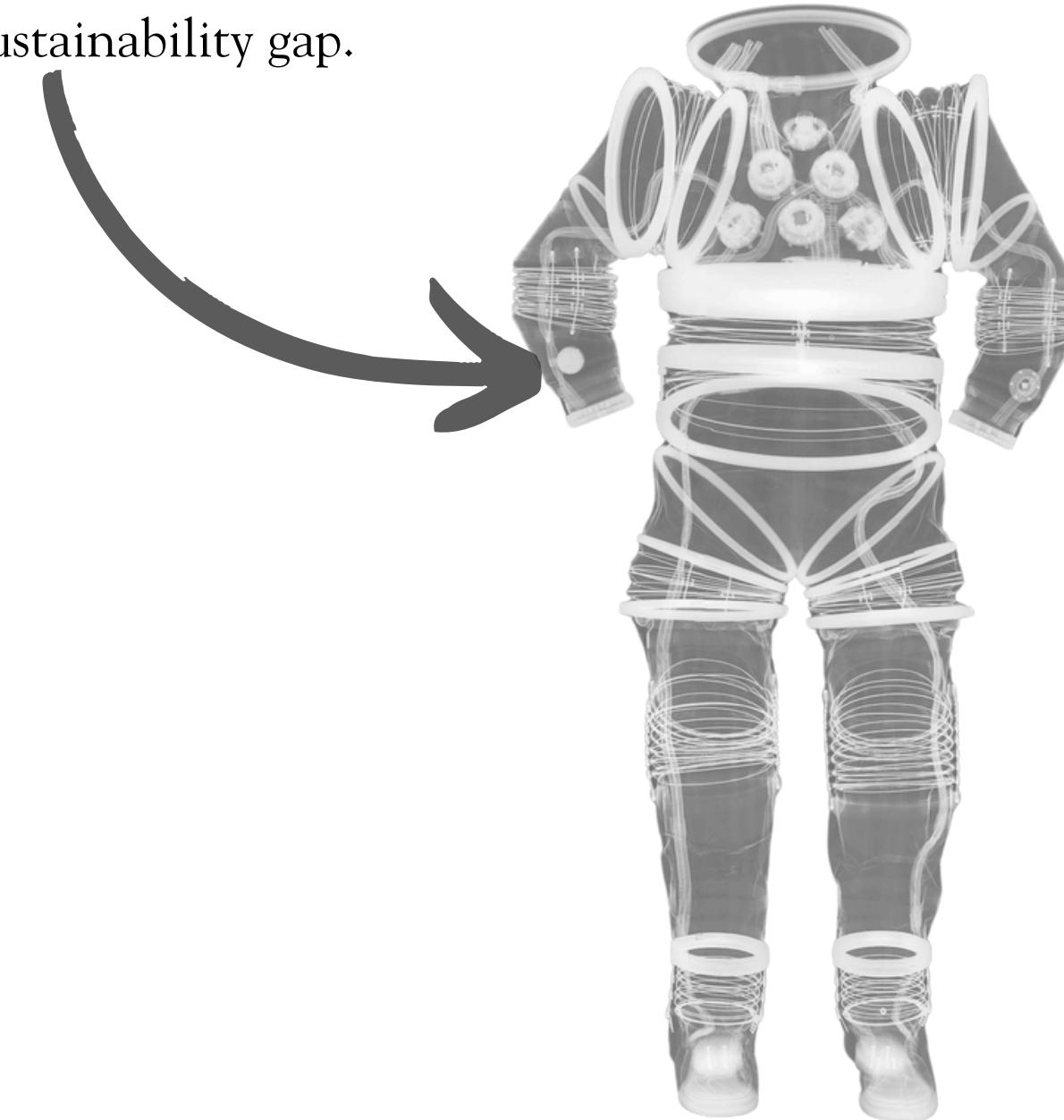
PANTONE®
11-4202 TCX
Star White



13.8 Collection Overview

Collaboration: Arya Shah x The Exploration Company

- Inspiration: Blending 1960's Space Age aesthetics (retro futurism) with a new age futuristic design, drawing influence from space exploration.
- Design: Modular, multifunctional garments crafted from durable textiles like GORE-TEX, designed for comfort, protection, and climate adaptability
- Sustainability: Use of eco-friendly materials and recycled textiles to minimize environmental impact while addressing eco-anxiety. Focus on adaptable fabrics that respond to rising temperatures and climate variability, offering comfort in fluctuating conditions.
- Purpose: Garments that can be transformed in multiple ways, designed to help consumers navigate the challenges of climate change and rising global temperatures, and filling the sustainability gap.



Concept Board: I included futuristic images, x-rays to convey transparency but maintained an aura of anonymity for the wearer.



Color Board- shades of white and gray that evoke a minimal and wearable feeling and acknowledges the association with space travel and new beginnings

PANTONE®
11-0601 TPX
Bright White

PANTONE®
11-4101 TCX
Stalactite

PANTONE®
11-0700 TPG
Lucent White

PANTONE® FHI Paper TPG

L*a*b* 96 0 0
sRGB 243 244 244
HEX F3F4F4
Bibliotheksseite 1.001

PANTONE®
11-4800 TCX
Blanc de Blanc

PANTONE®
19-4209 TCX
Enigma

PANTONE®
7527 C
Creme White

HEX #D1CDC2
CMYK 15 13 22 0
sRGB 209 205 194

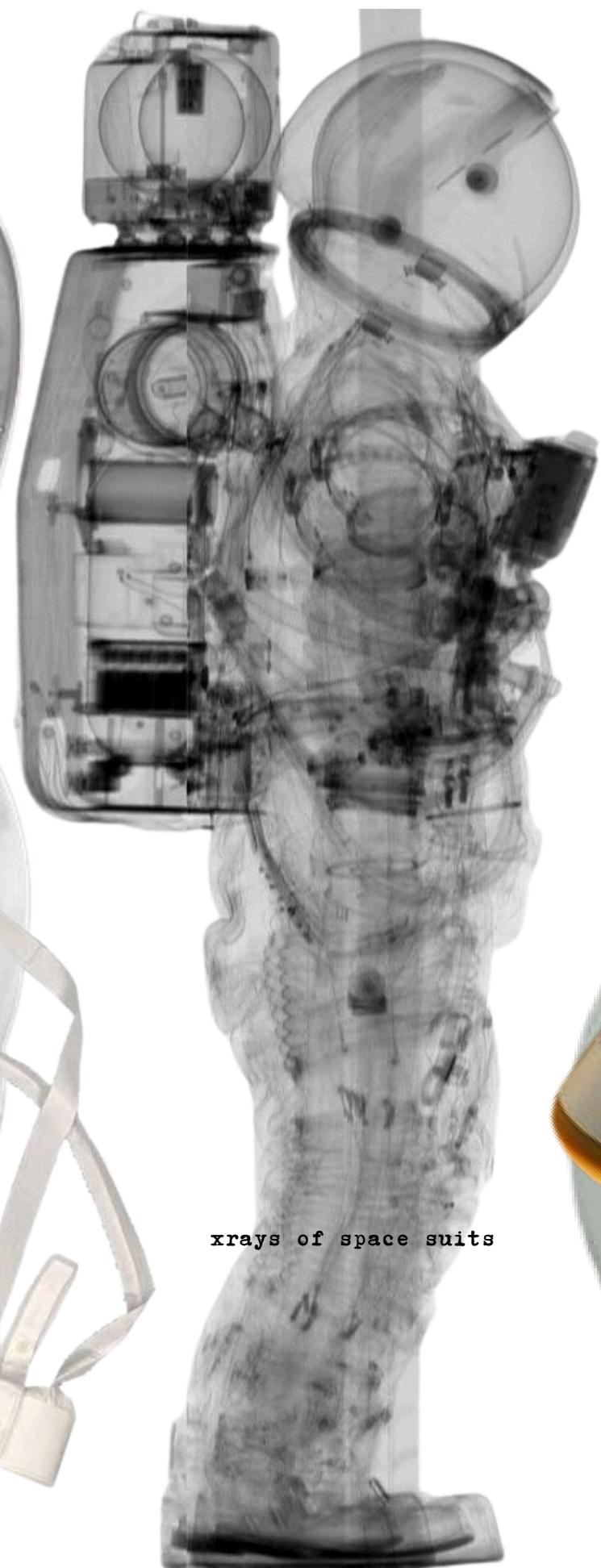
PANTONE®
12-4302 TCX
Vaporous Grav

PANTONE®
18-4331 TCX
Foghorn

Fabric Board: Climate adaptable and durable fabrics



Design Inspiration



1960's space race



Raw, unfinished, transparent

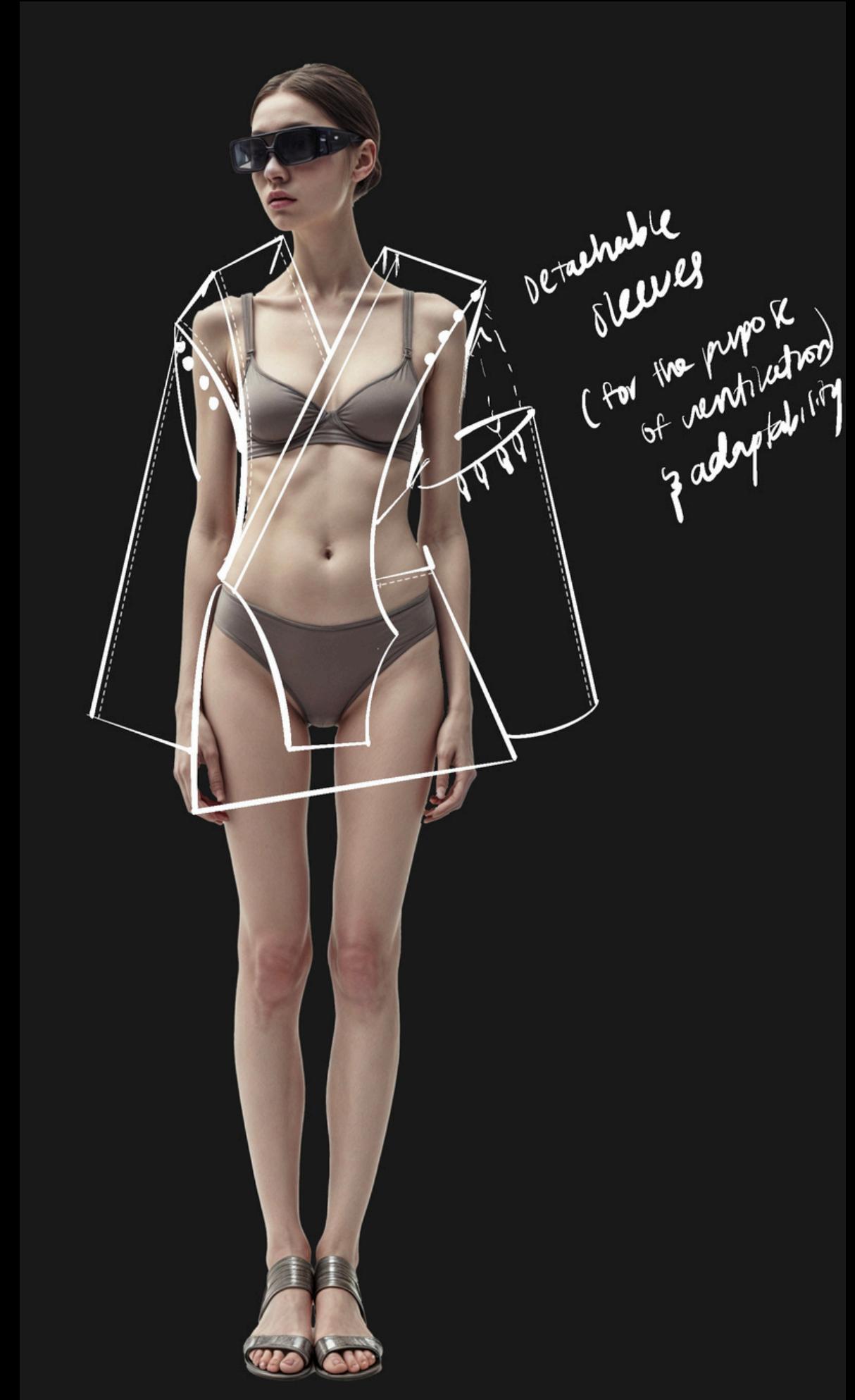
POST ARCHIVE FACTON (PAF)

Left Center Right

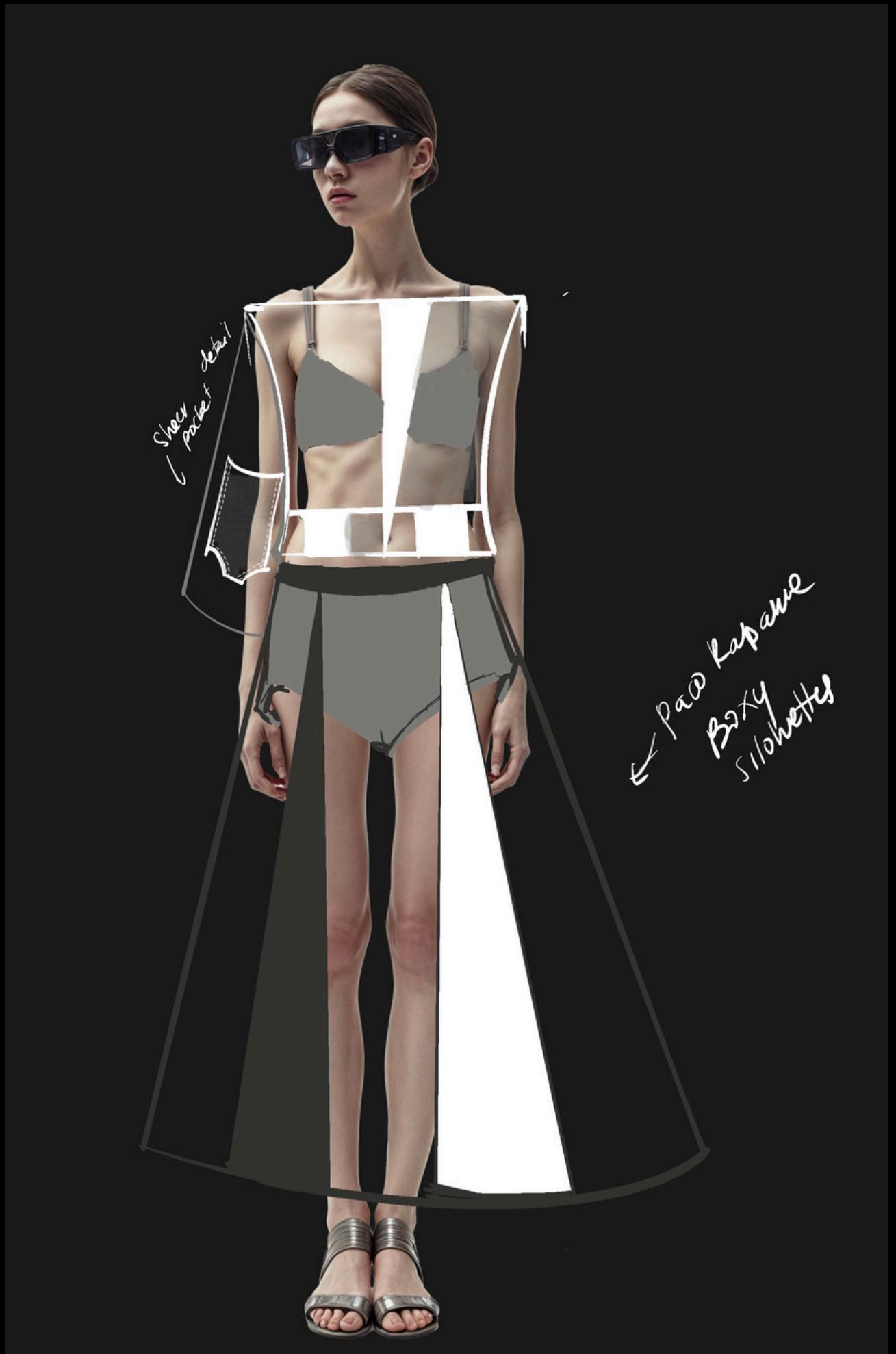
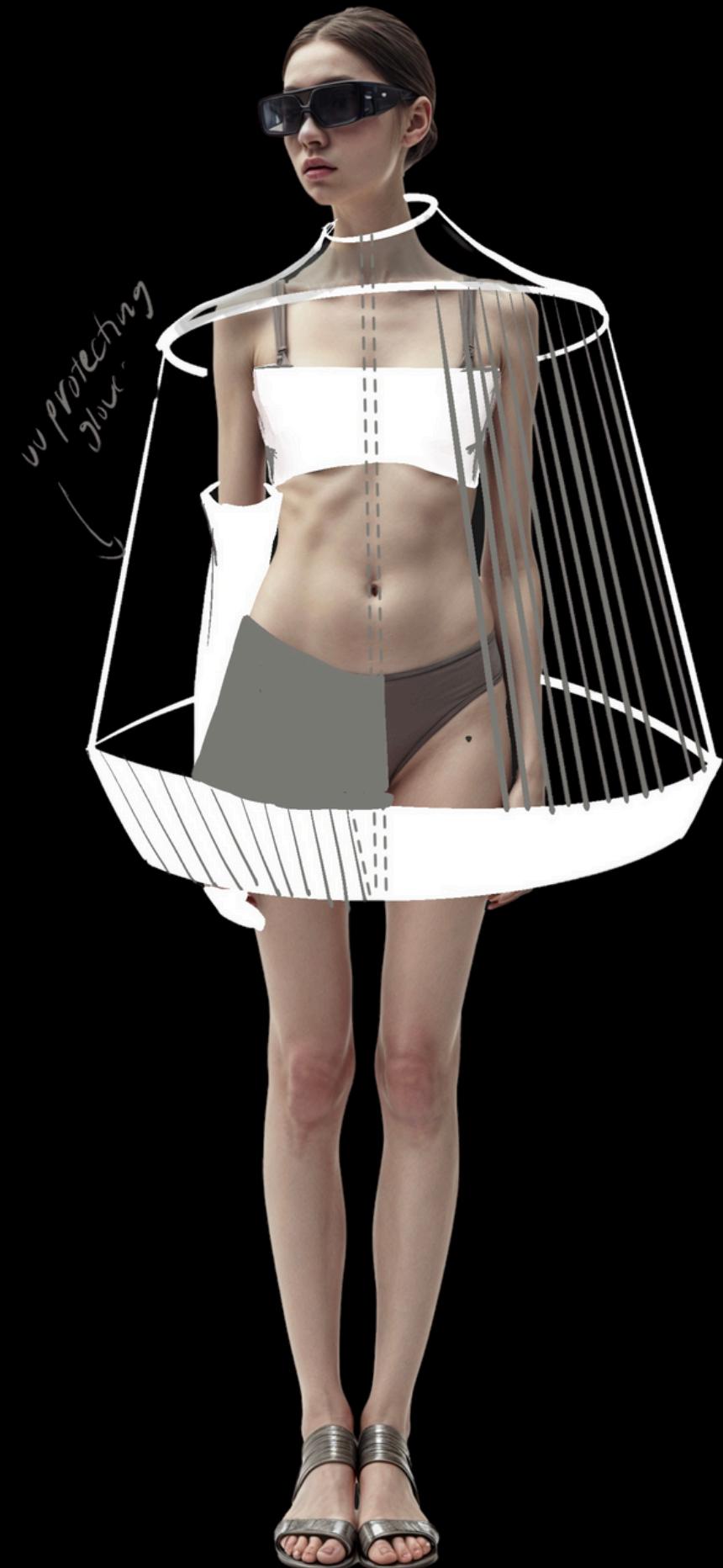
clo experimentation



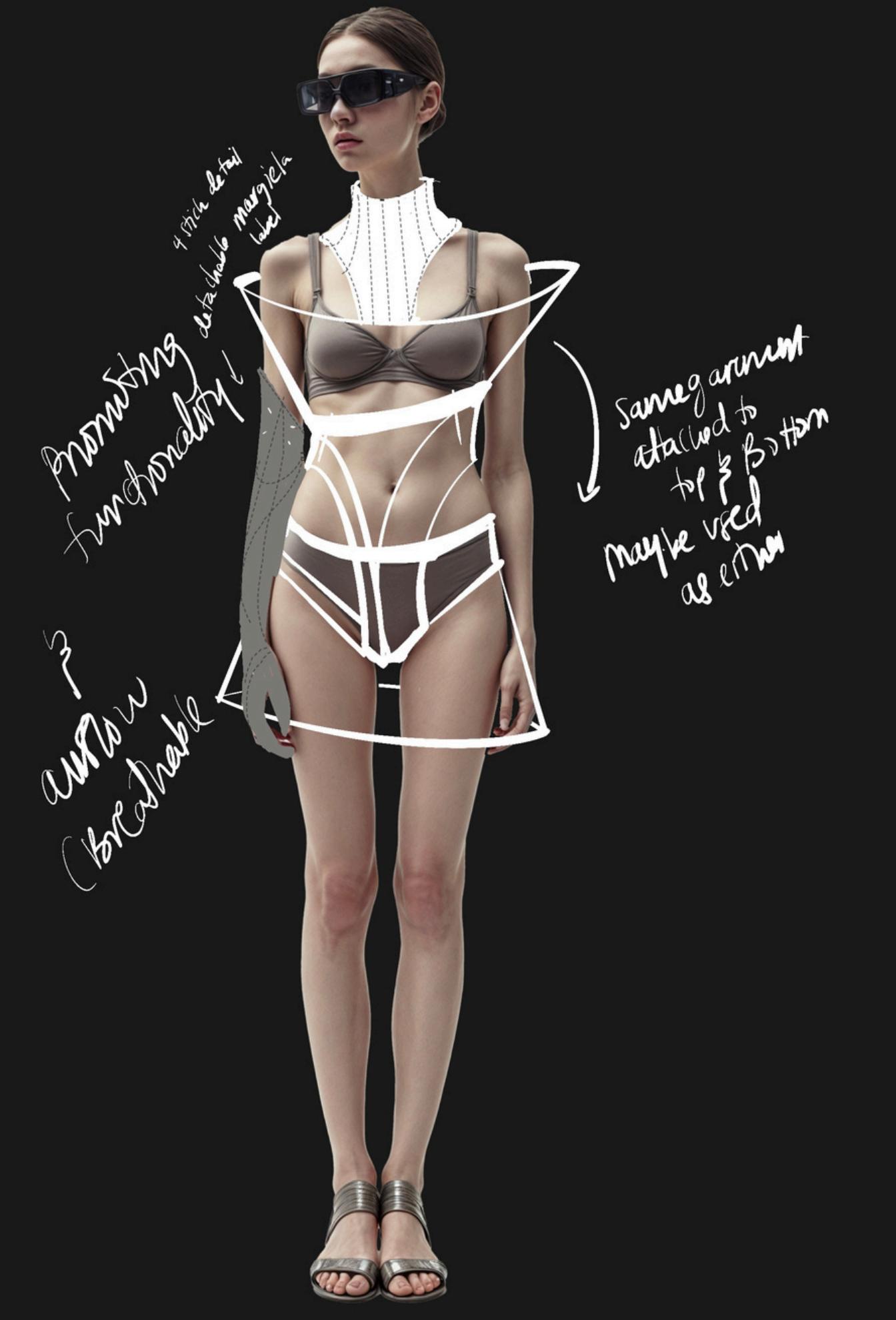
Process Work



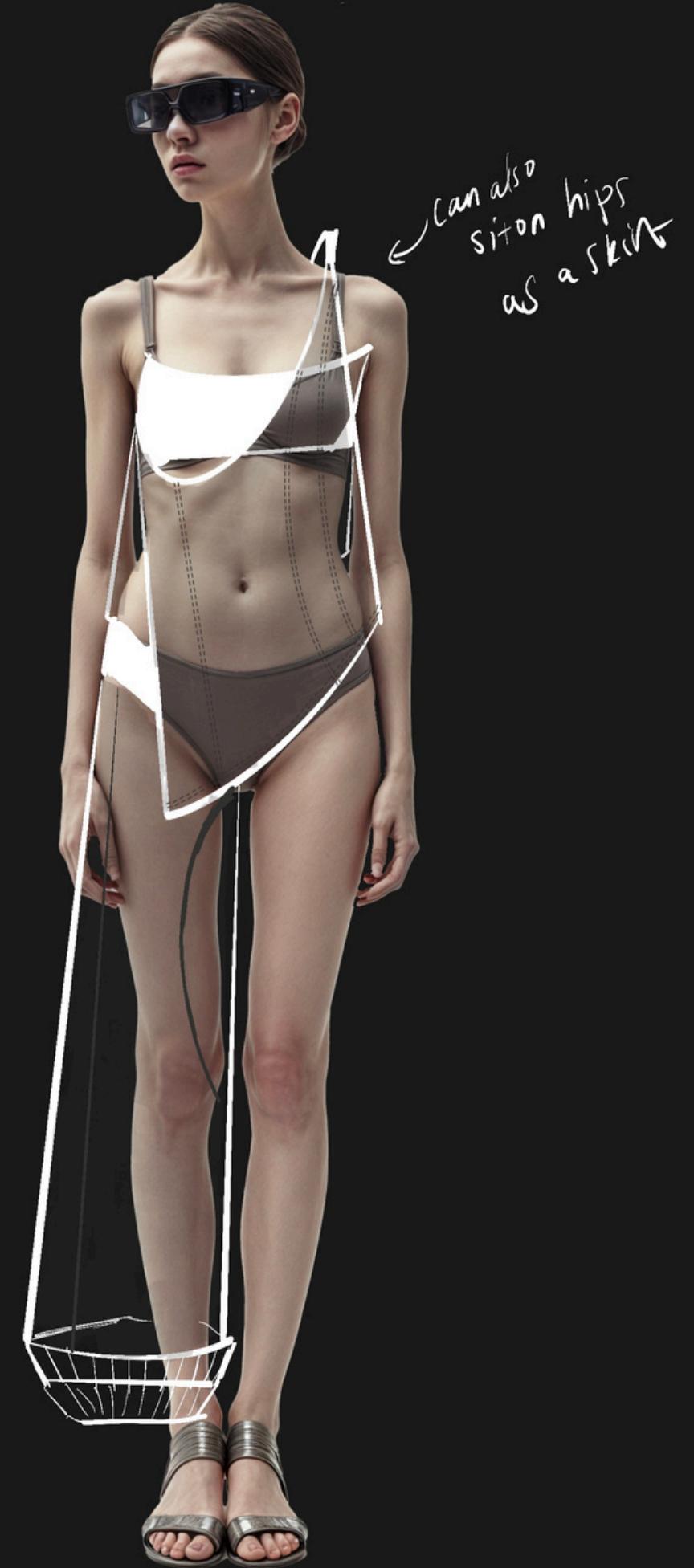
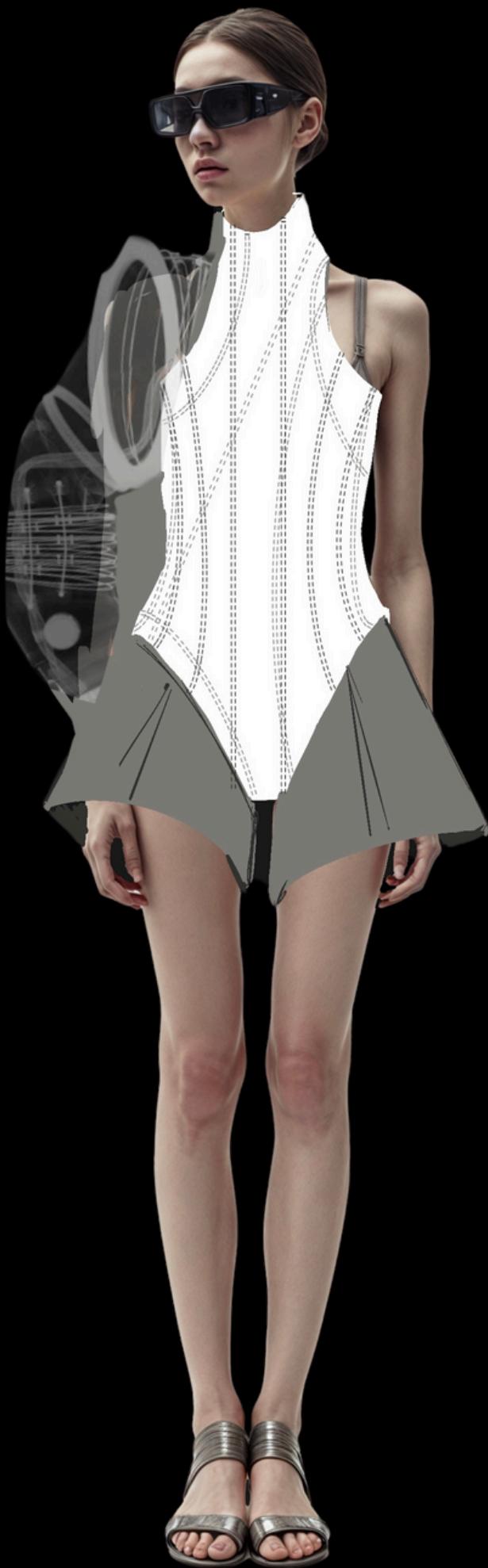
Process Work



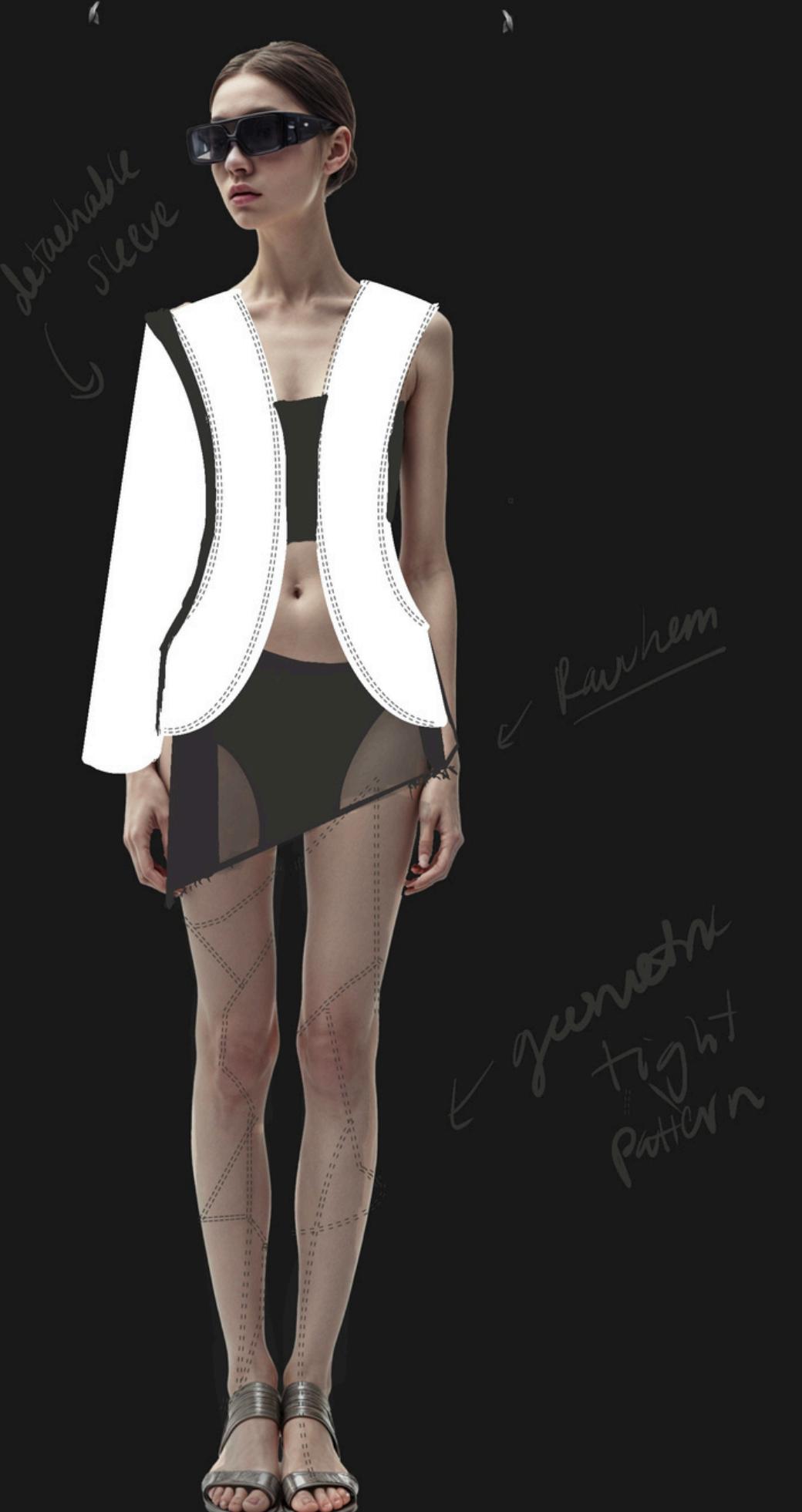
Process Work



Process Work



Process Work

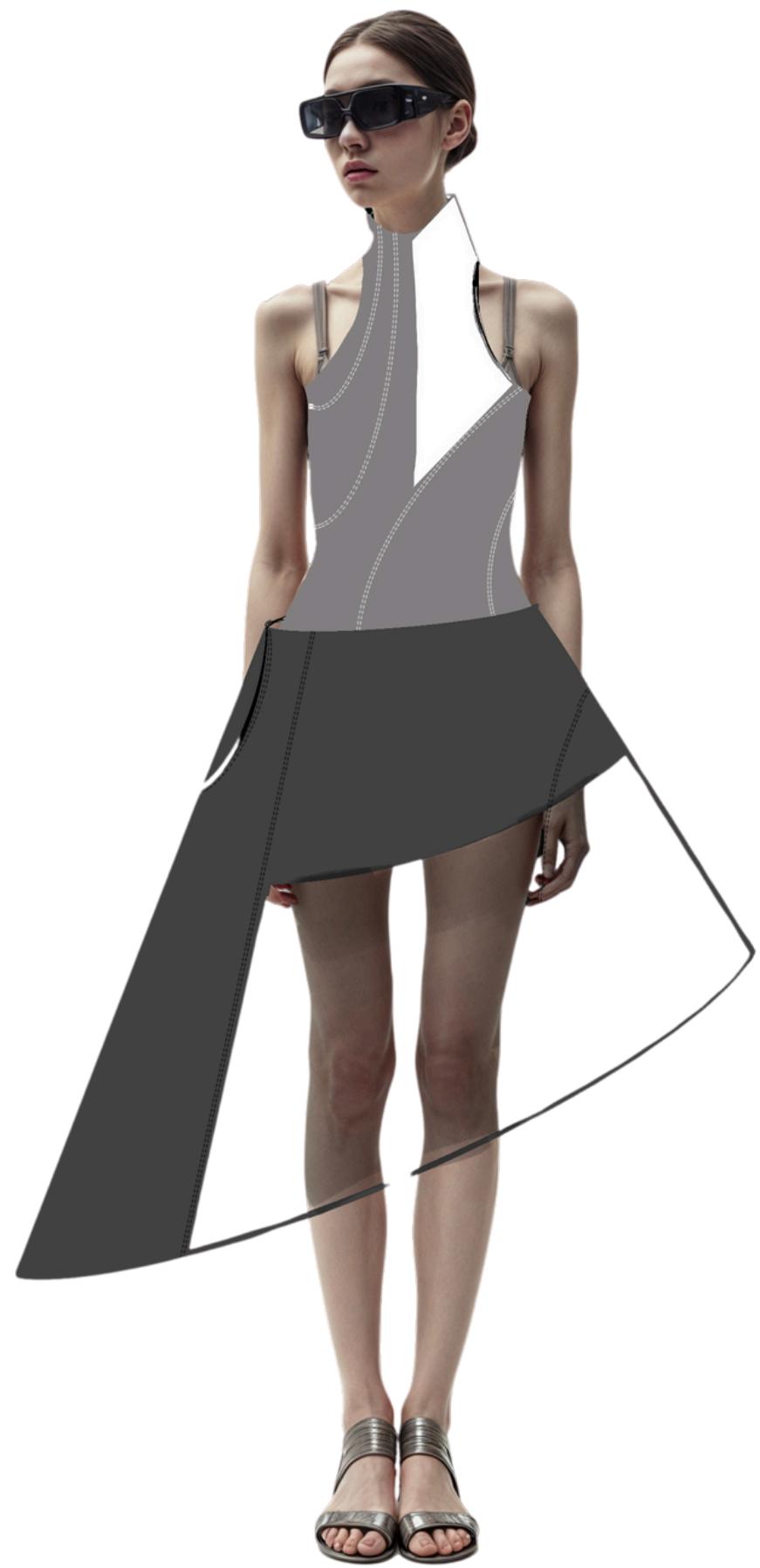


detachable sleeve

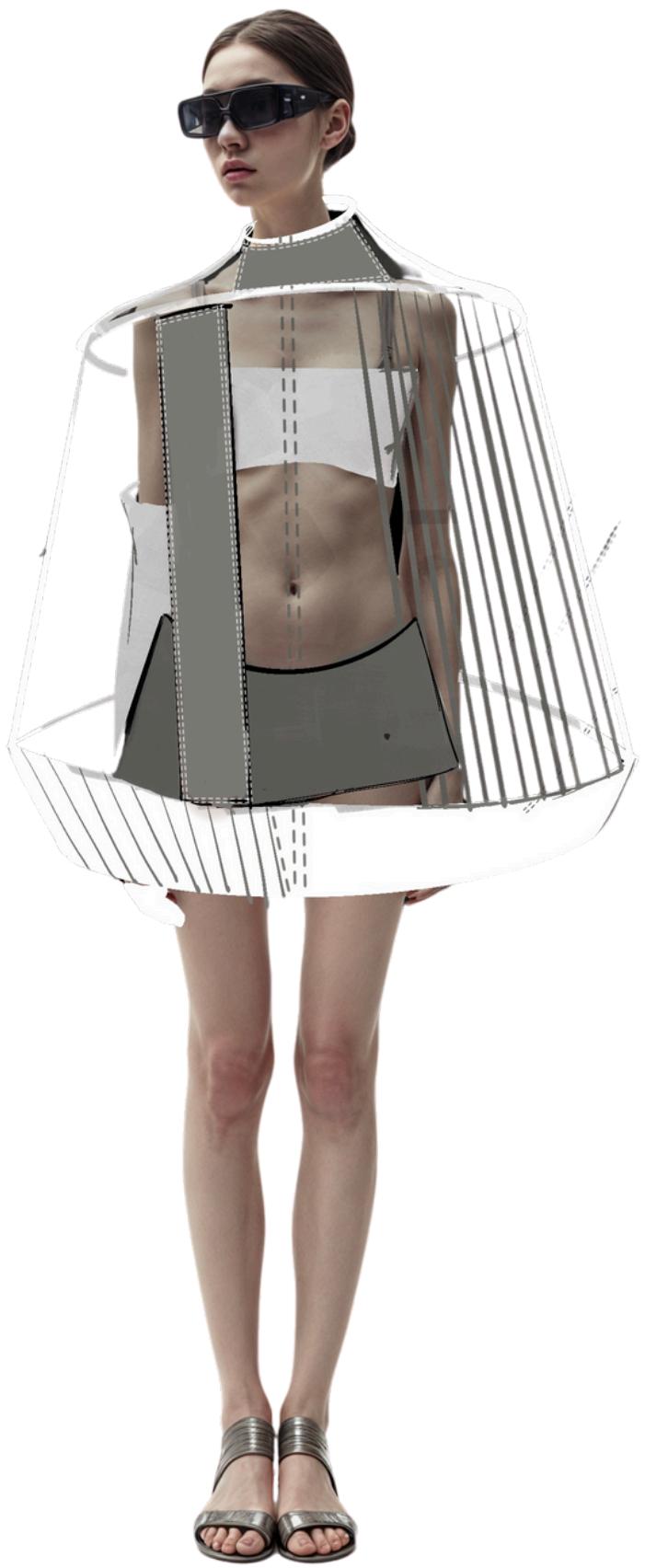
raw hem

gathered
tight
pattern

Final Line UP

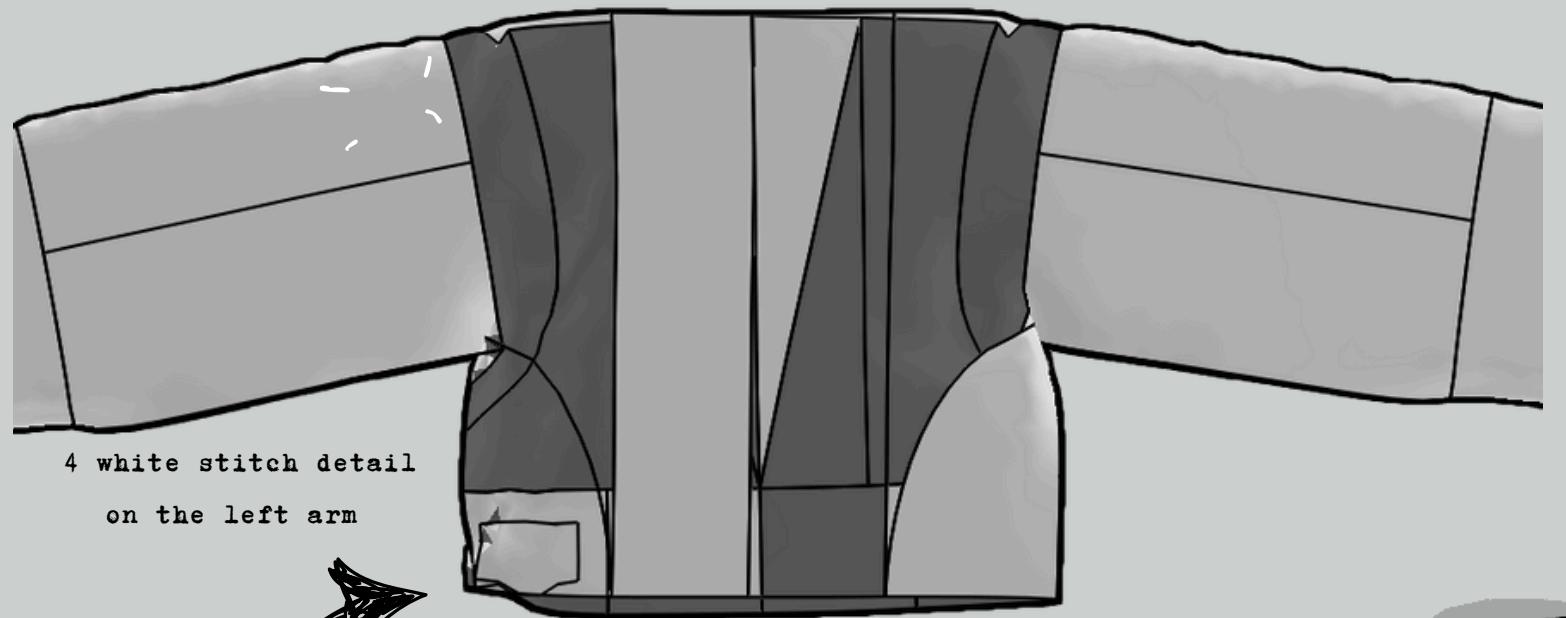


Final Line UP

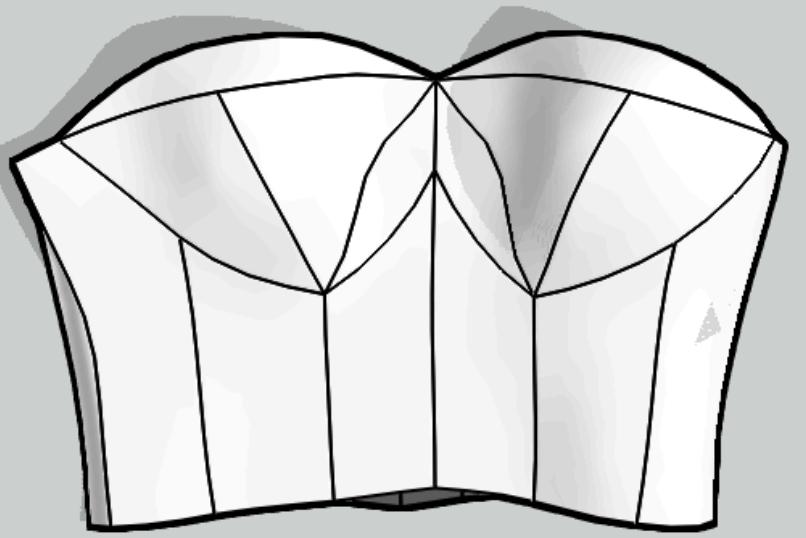
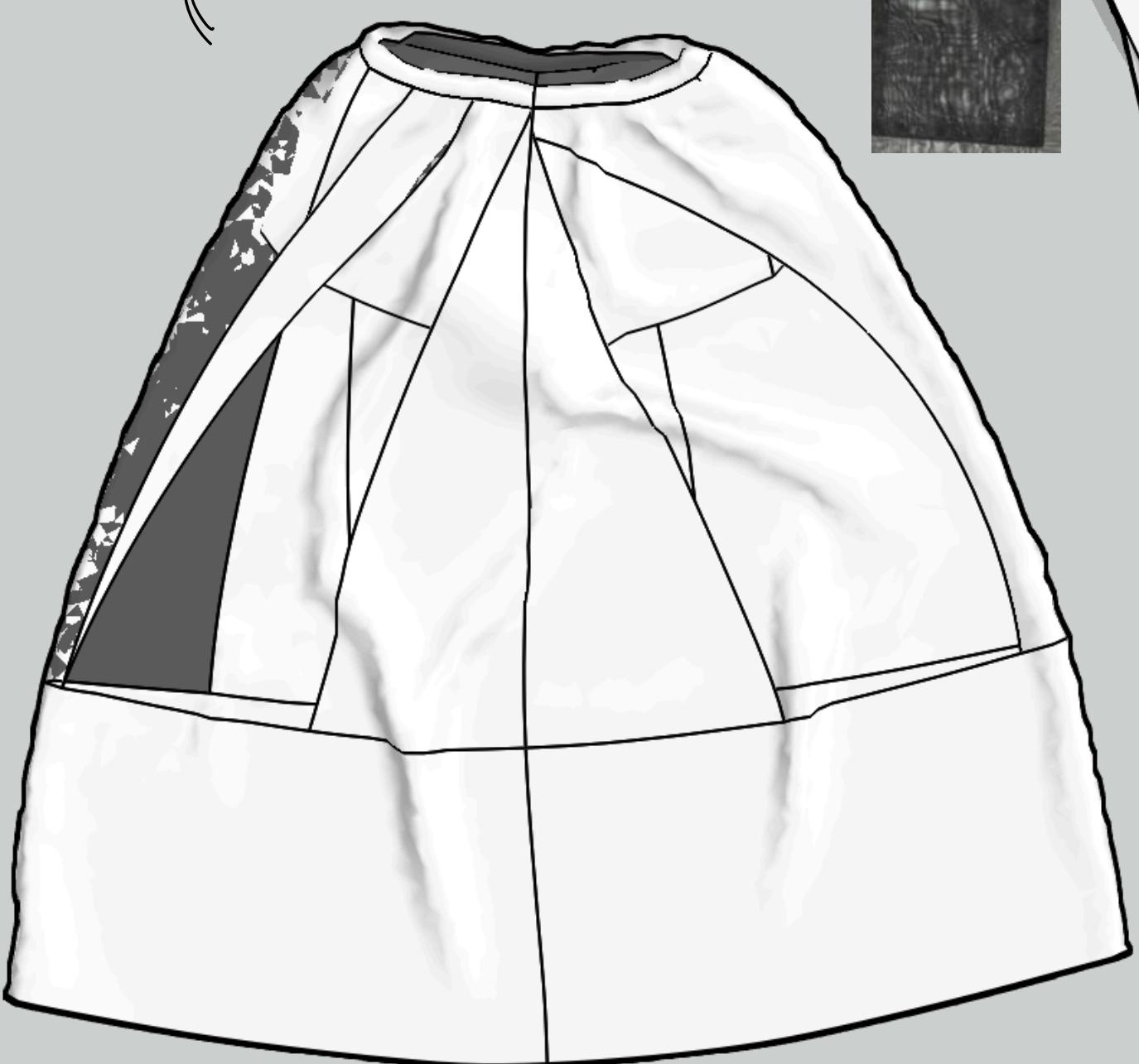


Enhanced Clo-3d Renders



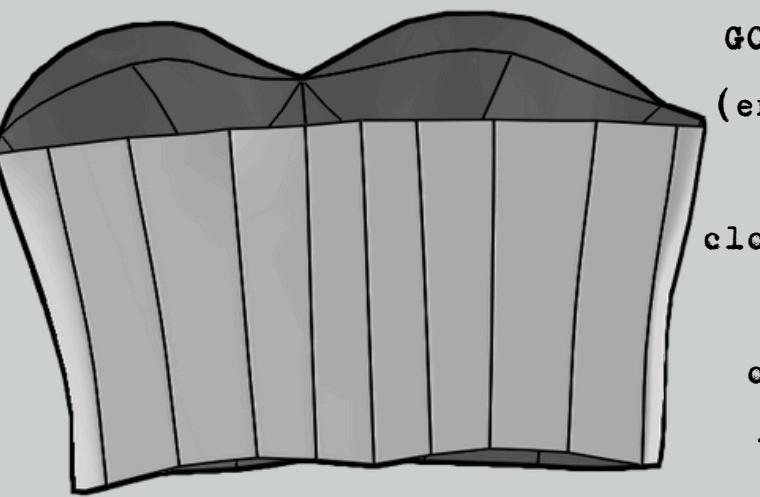


Panels with double
top stitching on all
garments
(contrasting
colors)



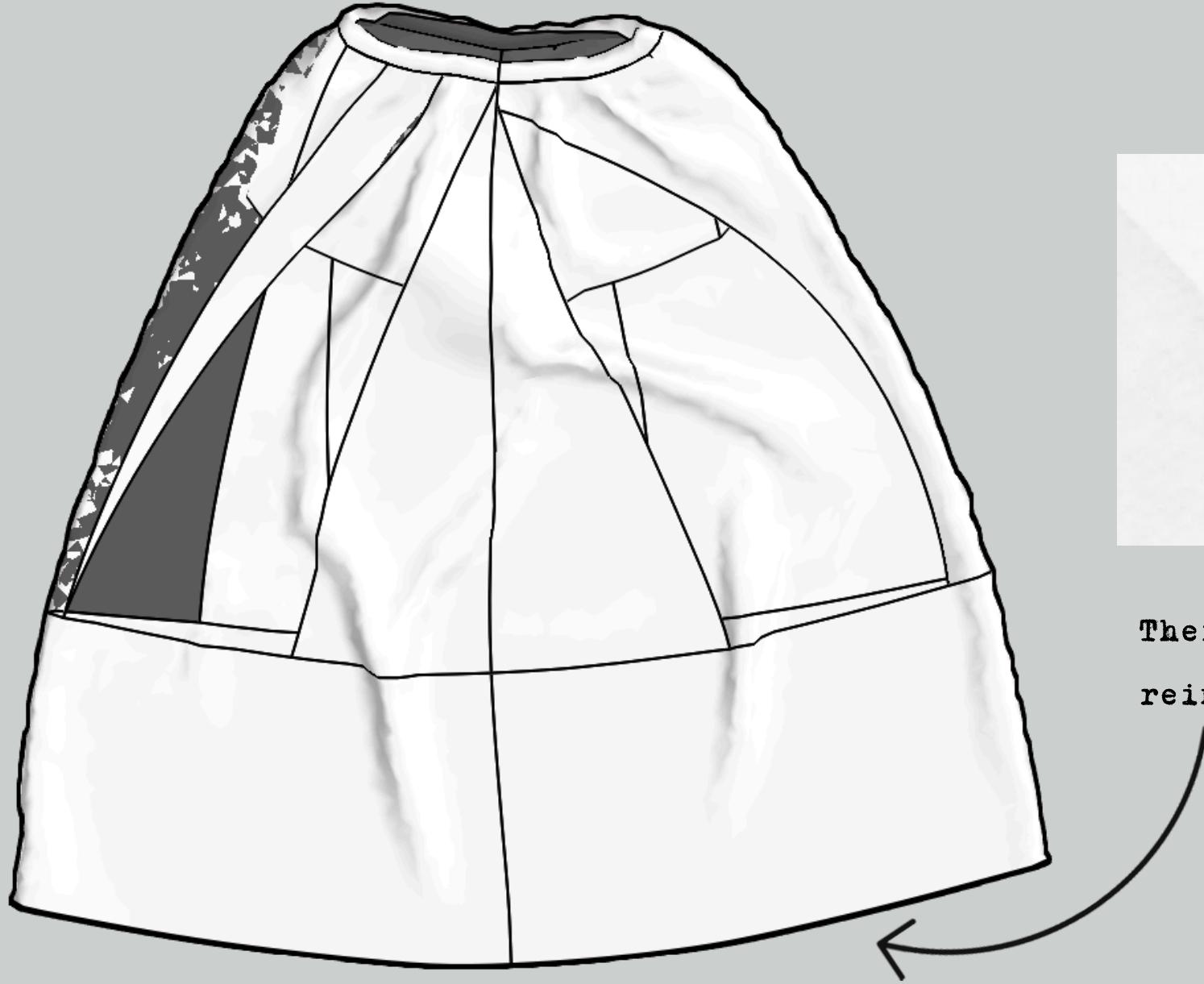
Shorts are connected to
skirt through the
waistband, circle skirt
to allow for
ventilation





GORE-TEX PACLITE® FABRIC WITH
GORE-TEX STRETCH TECHNOLOGY
(ensures that the corset can
be removed without any
closures, and is breathable.

other properties include
-protection against wind
-heat protection
-durability

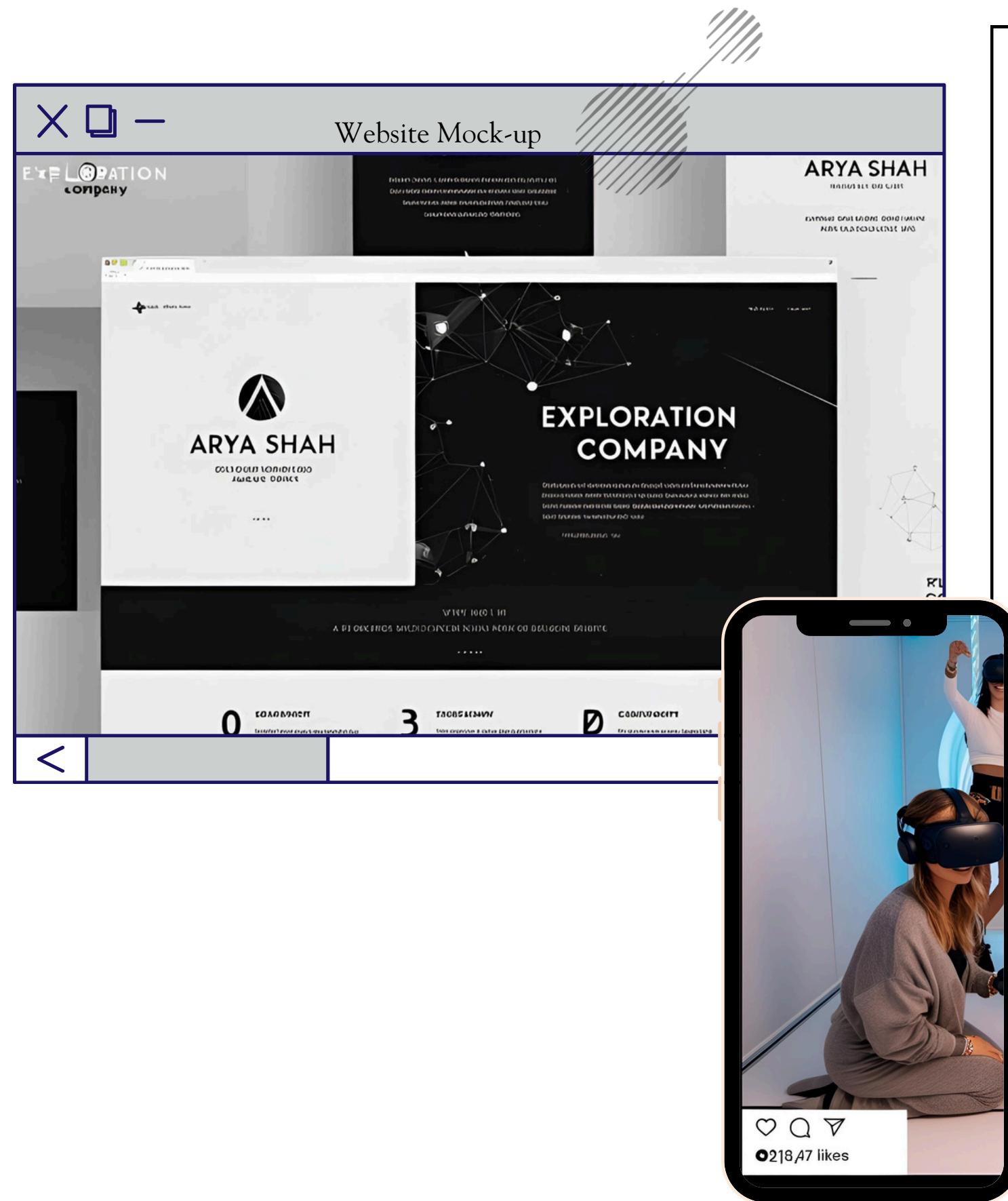


Thermolam fusible fleece to
reinforce the bottom panel



Marketing

Mission 13.8 is a series of immersive experiences, that invites visitors to explore the world of the 13.8 collaboration and emphasizes the impact of sustainable and climate adaptable garments and honors the resurgence of space exploration



Key aspects

- Location : Munich, Germany (where the Exploration company is based in)
- Immersive zones:
 - zero-gravity room- A zero Gravity experience that utilizes VR for guests to visualize garments while in zero gravity.
 - climate chamber- Garments from the collection will be given to guests so they may experience how garments are adaptable to various changes in temperature.
 - space history tunnel- a brief history of the intersection of fashion and space exploration, a mission statement to emphasize the importance of sustainability.
- who is invited? : sustainability leaders, influencers and musicians: FKA Twigs, Grimes, Hunter Schafer, Fashion students (FIT, Parsons, SCAD), Margiela loyal customers or collectors
- space industry voices,
- Aligns with the collections's ethos of deconstruction, utility, and conceptual design



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Space suit Fashioning Apollo - Nicholas De Monchaux

Expedition Fashion from the Extreme- Thames&Hudson

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fabric sources



https://ripstopbytheroll.com/products/0-51-oz-dyneema-composite-fabric-ctle-08?currency=USD&variant=7129640385&utm_source=google&utm_medium=cpc&utm_campaign=Google%20Shopping&stkn=9f9bb315e4fe&utm_source=google&campaign_id=21575087174&ad_id=&utm_medium=cpc&utm_campaign=actual_campaign_name_hardcoded&utm_content=&utm_term=&gclid=CjOKCQjw782_BhDjARIABTv_JCQilGsv3h751PqODP03iA5HLMM-joXB3kBgn3X-QSAEsold3Fugy0aAu2WEALw_wcB&gad_source=l&gbraid=0AAAAAqwAfZ6oh_fzJzvnnKUBLLOSKff9F

https://swatchon.com/wholesale-fabric/TENCEL™+Modal-PU+%28Polyurethane%29-Knit-Rib-TENCEL™+Fiber-18933?section_item_pos=44&from=/wholesale-fabric

https://swatchon.com/wholesale-fabric/Silk-Spandex-Plain-Crepe-OEK0-TEX®-High+Twist+Yarn-48898?section_item_pos=3&from=/wholesale-fabric

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[https://www.etsy.com/listing/862948856/black-gray-gore-tex?ls=s&ga_order=most_relevant&ga_search_type=all&ga_view_type=gallery&ga_search_query=gore+tex+fabric&ref=sr_gallery-1-2&content_source=a9f3300f16dbf1dd12237102c953dd48ec06fd1f%253A862948856](https://www.etsy.com/listing/862948856/black-gray-gore-tex?ls=s&ga_order=most_relevant&ga_search_type=all&ga_view_type=gallery&ga_search_query=gore+tex+fabric&ref=sr_gallery-1-2&content_source=a9f3300f16dbf1dd12237102c953dd48ec06fd1f%253A862948856&organic_search_click=1&logging_key=a9f3300f16dbf1dd12237102c953dd48ec06fd1f%3A862948856)

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Thank You

