

# Data as a Material?

Materiality

Hfg Karlsruhe, 27 May 2021



```
solemaker.js
```

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 **WEAR**  
**sustain**

 **Solemaker**

# Digital Material



# Physical Material

# Challenge 1

How can data be a material you design  
with?

# The Arts and Crafts Age

Before the industrial revolution



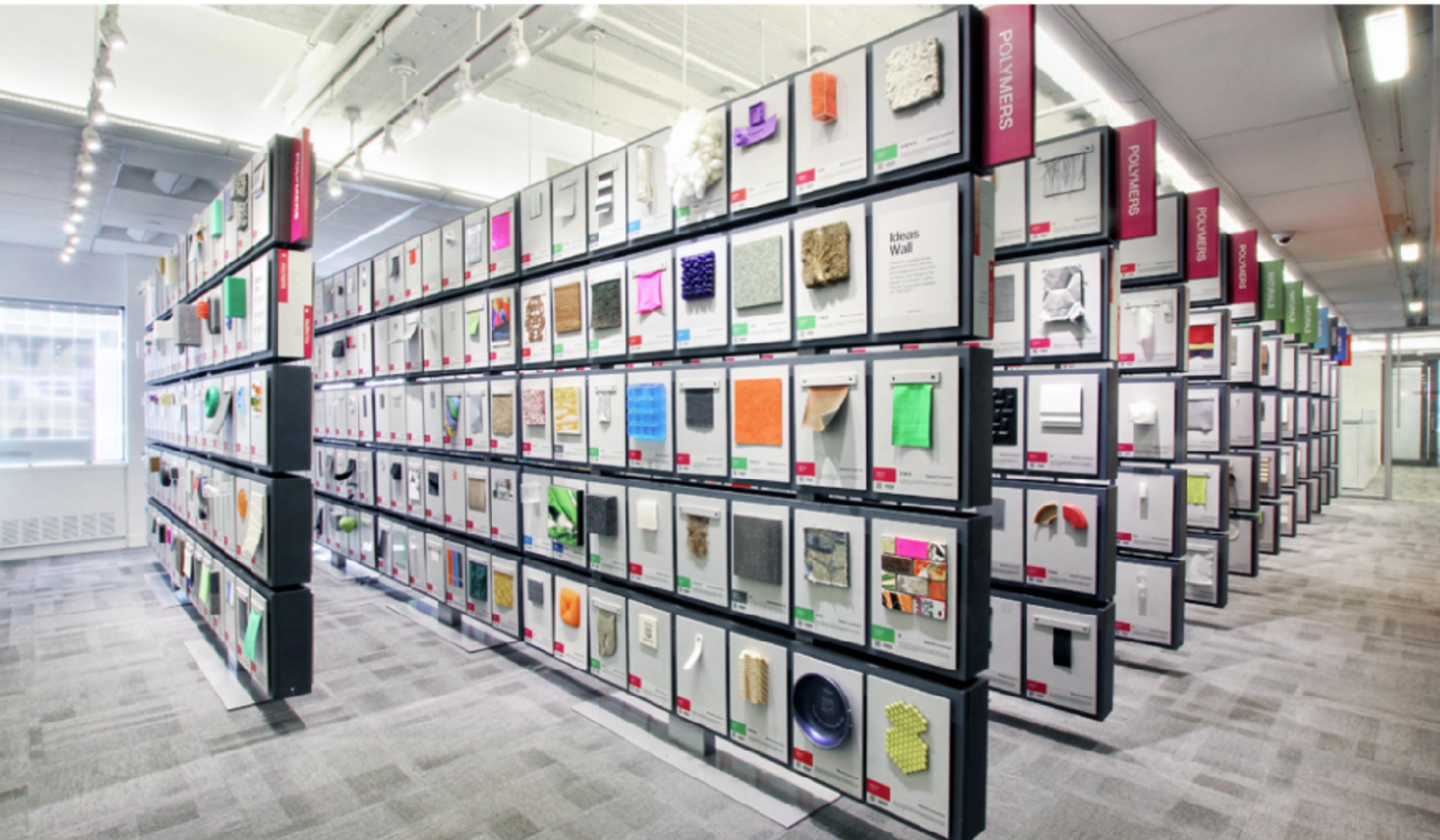
# Design for All

After the industrial revolution



# Programmable Materials

After the fourth industrial revolution



# Material turn

e.g. Project Jaquard



<https://www.youtube.com/watch?v=qObSFfdfe7I>

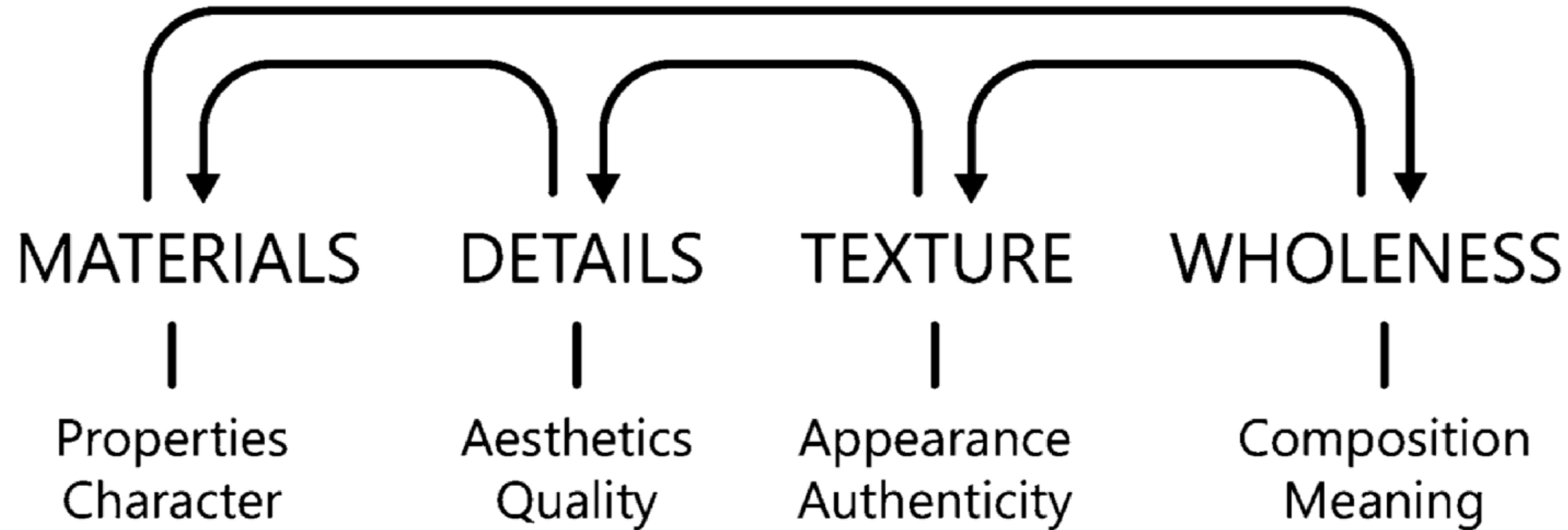


**What MATERIAL is this?**

What does it feel like?

# Material or Materiality?

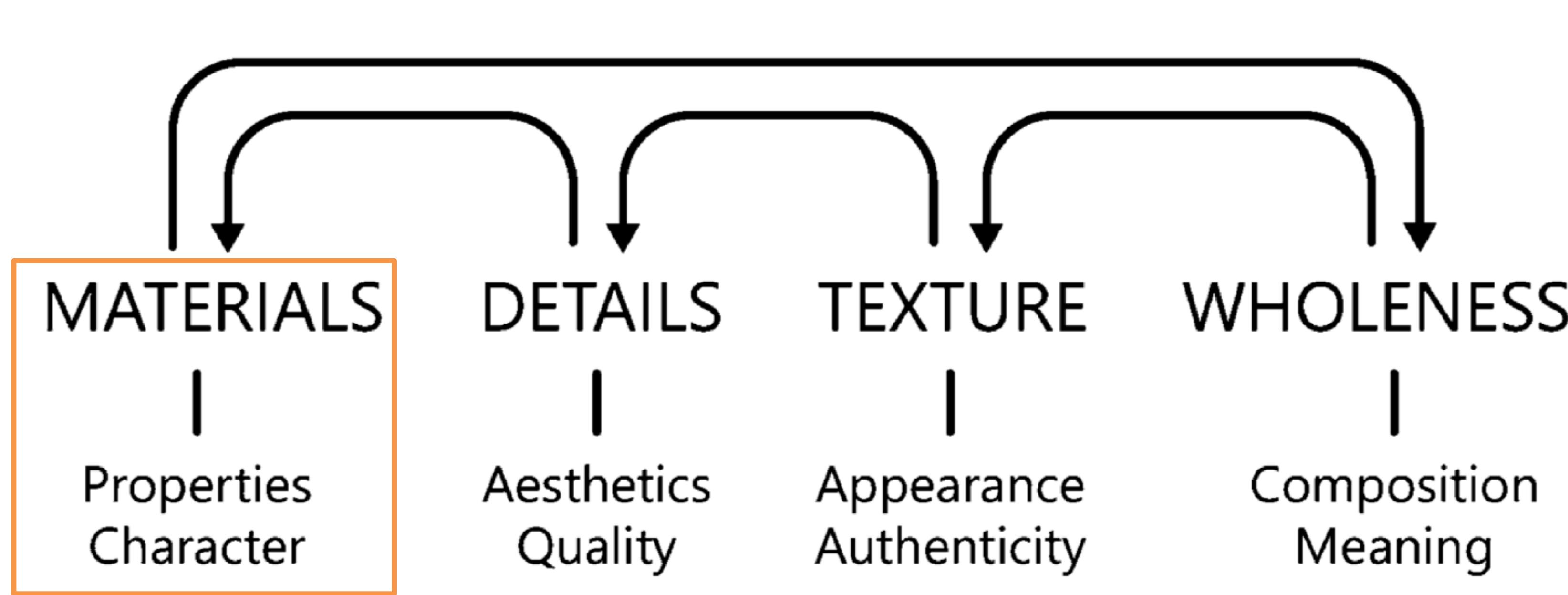
# Materiality



# Materiality

Material centered process

- Shifting back and forth from details to wholeness



# MATERIALS

Properties & character

- understand the potential and limitations of a certain material, removed from its relation to context.
  - material properties
  - understanding a materials limitations and potentials
- material character
  - understanding what a materials expresses

**What are the material properties of Data?**

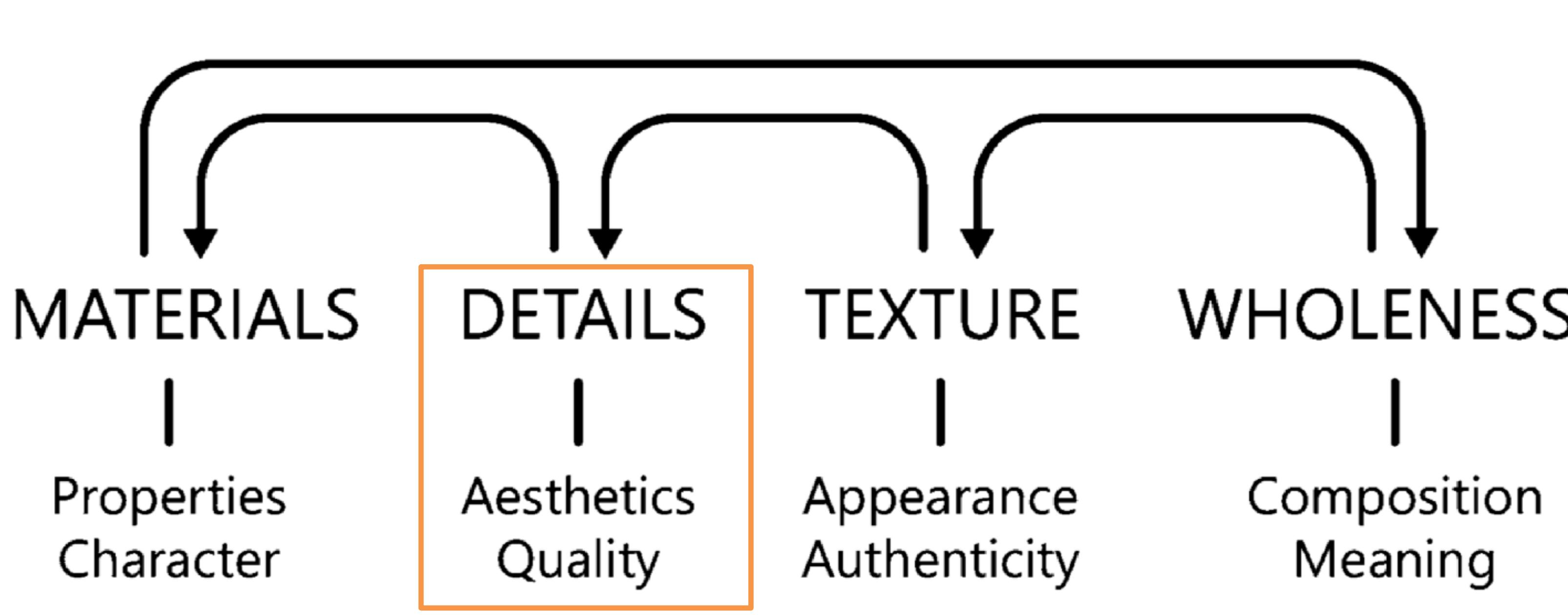
**What does data express?**



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# DETAILS

## Aesthetics & quality

- “Attention to details” implies a methodological focus on implementation. It focuses on how, on a very detailed level of analysis, materials have been selected and used in form-giving and design.
- both about aesthetic aspects as well as heavily concerned with quality aspects as being inseparable and intertwined with any design.
- Focus on
  - Aesthetics
  - Quality

**What are the aesthetics of Data?**

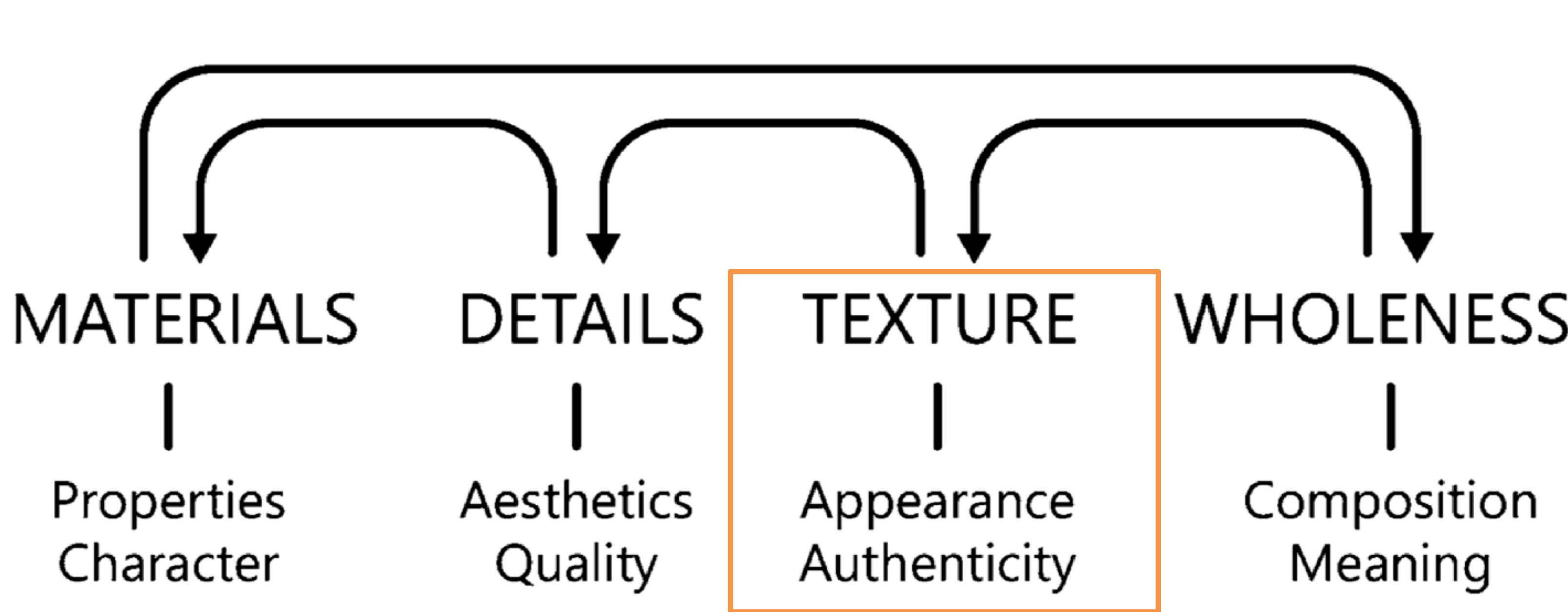
**What are the qualities of data?**



# HCI & MATERIALS

Material centered process

- Shifting back and forth from details to wholeness



# TEXTURE

appearance & authenticity

- Texture communicates material properties through material surface and thus through appearance.
- texture operates relationally between material properties and its appearance,
- two relevant notions are:
  - Appearance
  - authenticity

**What does Data look like?**

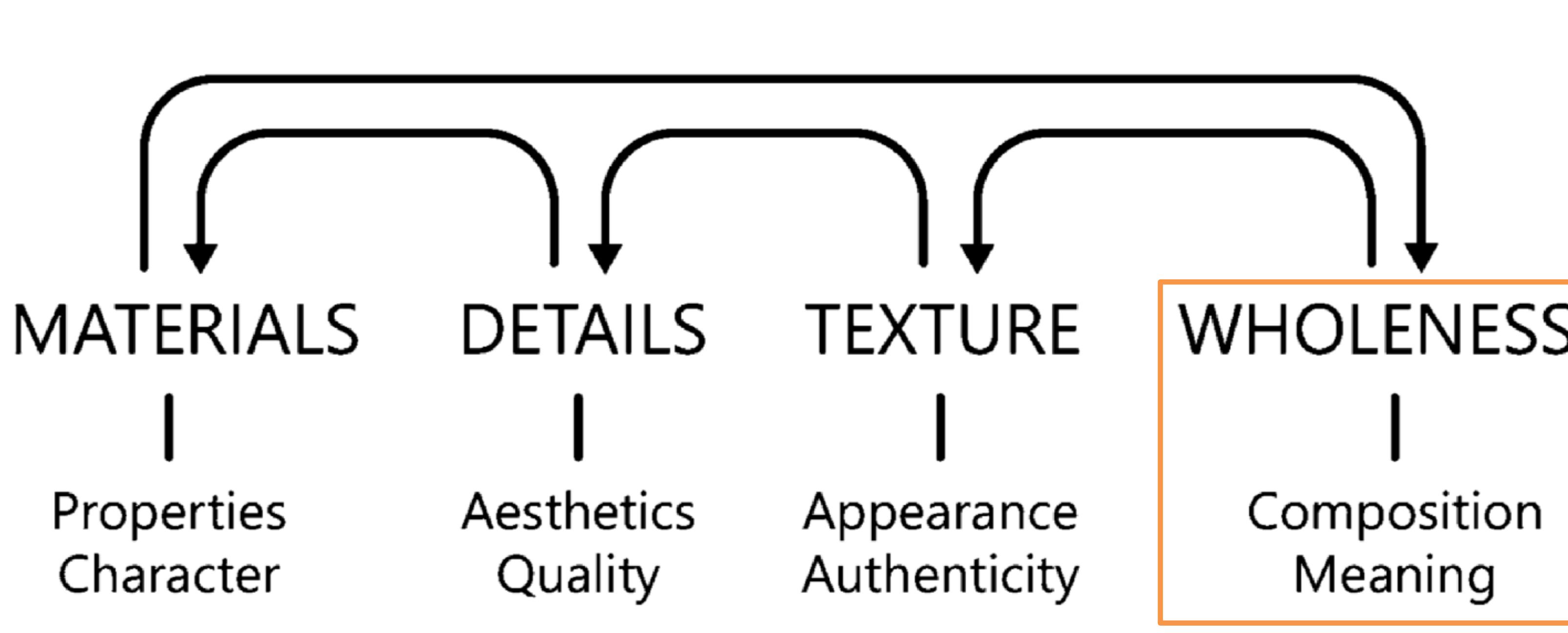
**What makes data authentic?**



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# WHOLENESS

Composition & meaning

- materials come together in a composition – seen from the perspective of an observer.
- Holistic perspective of sense-making
- two specific dimensions are central:
  - Composition
  - Meaning



History tablecloth

<https://dl.acm.org/citation.cfm?id=1142437>

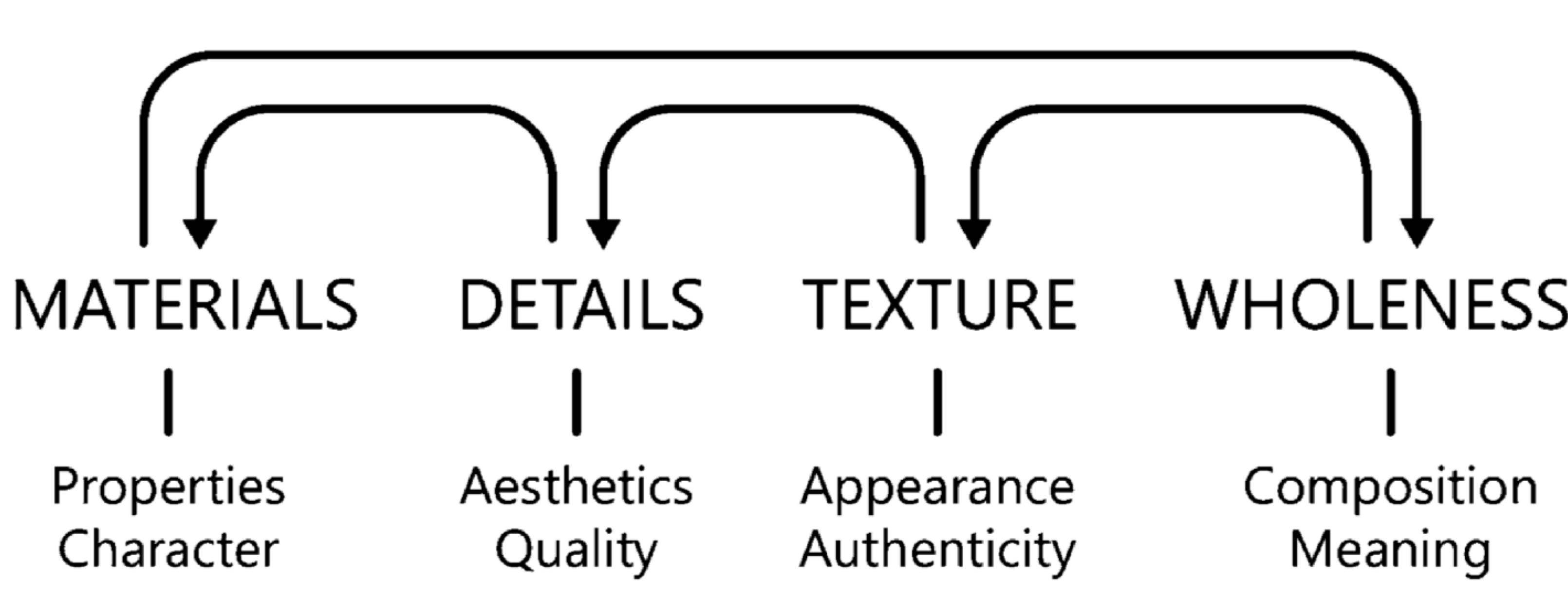
**What is Data composed with?**

**What does Data mean?**

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# Challenge 2

What does it mean to wear  
data on the body?

What does it mean to Interact  
with data near the body?

# Plan for the rest of the day

Think about materiality?  
How could you use the data and sensor?

What can it be used for?  
Where can it be used?

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Embodied Ideation

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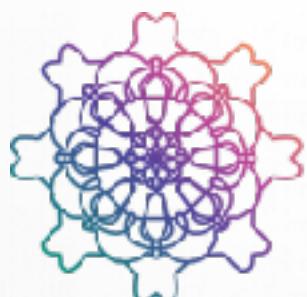
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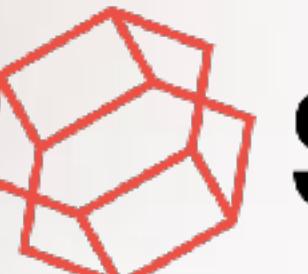
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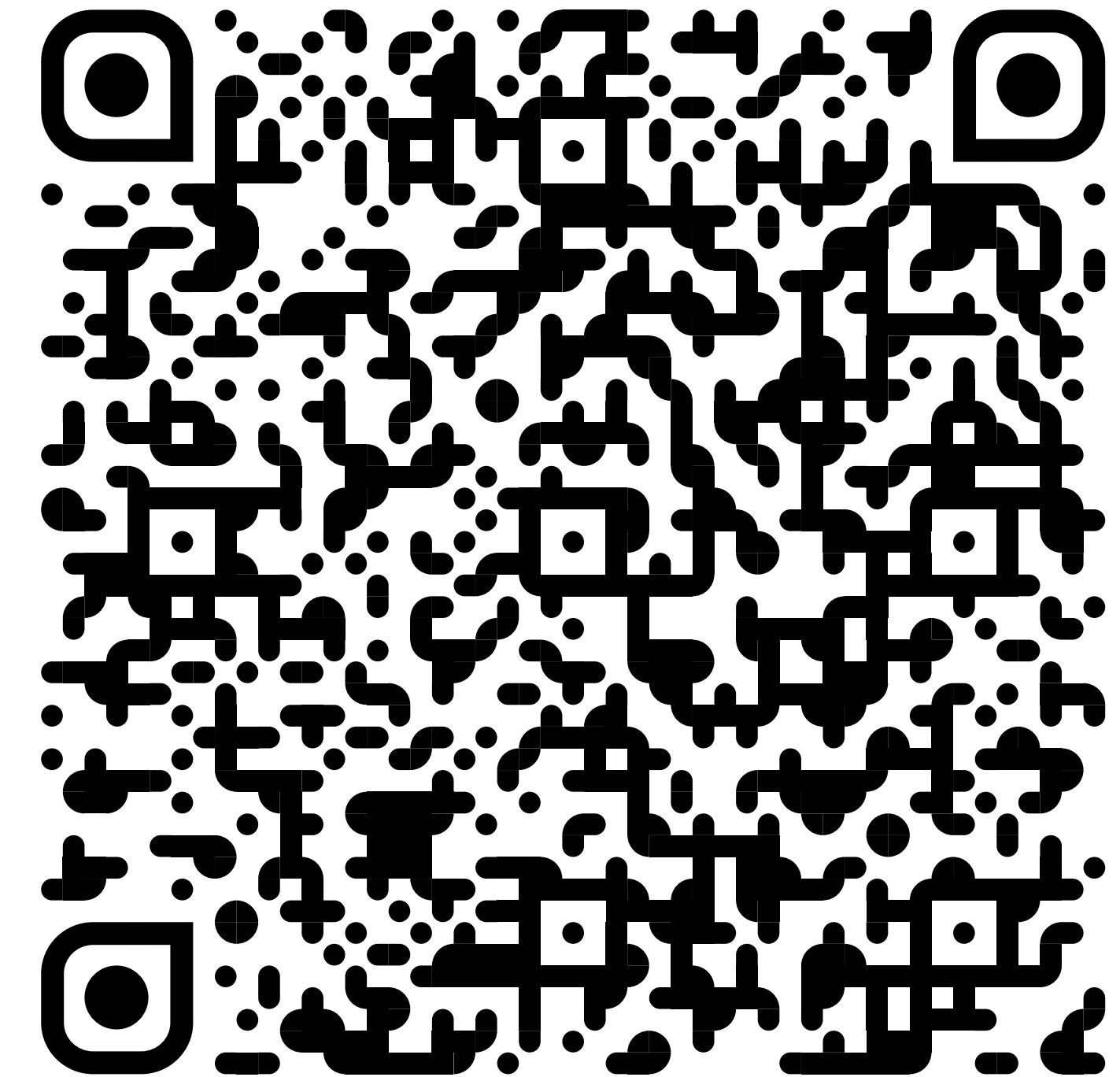


 **WEAR**  
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Fashion Research &  
Technology Group



Amsterdam University  
of Applied Sciences

# The Lifecycle of a Garment

