Materials

Rediet Ghebrehiwet and Vitor Vavolizza



01 The Textility of Making

Tim Ingold Cambridge Journal of Economics



"Form is the end, death. Form-giving is life."

- Painter Paul Klee



The Textility of Making

- The Hylomorphic Model
 - Sees form as imposed on passive matter
- Genesis and growth > the form itself
- Must follow materials in practice
 - Conflicts with contemporary architecture
- Technology vs textility
- Advocates for a return to a more textural understanding of making, where tactile and sensuous knowledge guides practitioners through their materials





"Practitioners, I contend, are wanderers, wayfarers, whose skill lies in their ability to find the grain of the world's becoming and to follow its course while bending it to their evolving purpose."

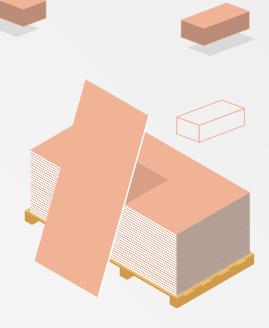
- Author Tim Ingold

"As practitioners, the builder, the gardener, the cook, the alchemist and the painter are not so much imposing form on matter as bringing together diverse materials and combining or redirecting their flow in the anticipation of what might emerge."

- Author Tim Ingold

The Textility of Making Con't

- Explores the concept of "things" as opposed to "objects"
 - Kite-making
- Rejects the idea of agency residing solely in humans or objects
- Things are not predetermined entities, rather ongoing
- processes, constantly intertwined with their surroundings
- Improvisation and itineration
- Dynamic nature of drawing
 - Process-oriented and continuous correction







02 Materiality Matters

VARNI

Mikael Wiberg, Hiroshi Ishii, Paul Dourish, Anna Vallgårda, Tobie Kerridge, Petra Sundström, Daniela Rosner, and Mark Rolston



Shifting Perspective in HCI

- Shift from user-computer interaction to **integrated experiences**.
- **ACM CHI 2012: "It's the experience"** A new focus on materiality in computing.
- "Material Interactions—From Atoms and Bits to Entangled Practices" discussing the fusion of digital and physical materials by the group of researchers.





Expanding HCI Vocabulary



- Acknowledgement of varied concepts: tangible UIs, physicalvirtual systems, and entangled practices.
- **A huge challenge** is developing a shared vocabulary for material interactions and materiality.
- Importance of a **multifaceted understanding** to explore materiality in HCI.



Radical Shift in Perspective

- Transition from tools to materials
- Hiroshi Ishii's vision of **"radical atoms"** and the future of dynamic materials
- **Droplet:** A tangible interface bridging digital and physical connection through light-based communication.





Aesthetic Opportunities in Tech Design

- Material perspective enriches HCI aesthetics and interaction forms.

- Anna Vallgårda's viewpoint: **Erasing boundaries** between **computational technology** and **traditional materials**.

Furniture design, fashion, industrial design, as interaction design, a matter of form-giving.

Are materials irrelevant?

- **Daniela Rosner and Paul Dourish**'s theoretical insights on materiality in HCI.
- Materiality's role in understanding design's social contexts and limitations.
- "Materials are irrelevant. Materiality matters." A focus on material properties and sociocultural considerations.

The Future of HCI Through Materiality

- Numerous implications of a material lens for HCI research and practice.
- Enhanced user experiences through a new understanding of materiality
- Expanding design possibilities by integrating **digital** with traditional materials.





Activity Making Without Imposed Form



Instructions

- 1. Get a piece of paper and pencils, pens, markers, or any drawing utensils.
- 2. Pair up with one person.
- 3. Both partners take turns adding to a collective drawing.
 - a. For thirty seconds per turn, add something to the drawing.

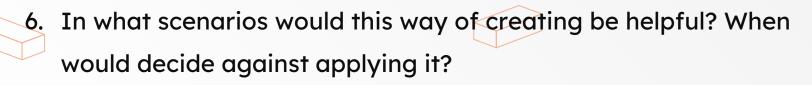
REMINDERS:

- Let the materials and process inform your decision.
- Don't impose a predetermined plan, respond to what you see on the paper as it evolves.



Reflection

- 1. How did the drawing evolve over time?
- 2. How each participant's contributions influence the outcome?
- 3. How did you feel about relinquishing control over the final result?
- 4. What is required from makers to adhere to this way of creating?
- 5. Do you see value of this way of creating? What are the benefits and/or limitations? What insights or challenges does it present?



Parallels to Readings

- 1. We challenged the traditional view of creation as the imposition of form onto matter by an agent with a predetermined design.
- 2. Our drawings emerged from interactions within our groups and the materials.
- 3. We focused on becoming rather than being, prioritizing genesis and growth versus the final product.
- 4. We accepted that each mark made is a continuation of the process.
- 5. We reinforced the idea that making is a dynamic and collaborative process.





Thanks!



