

# becoming materials

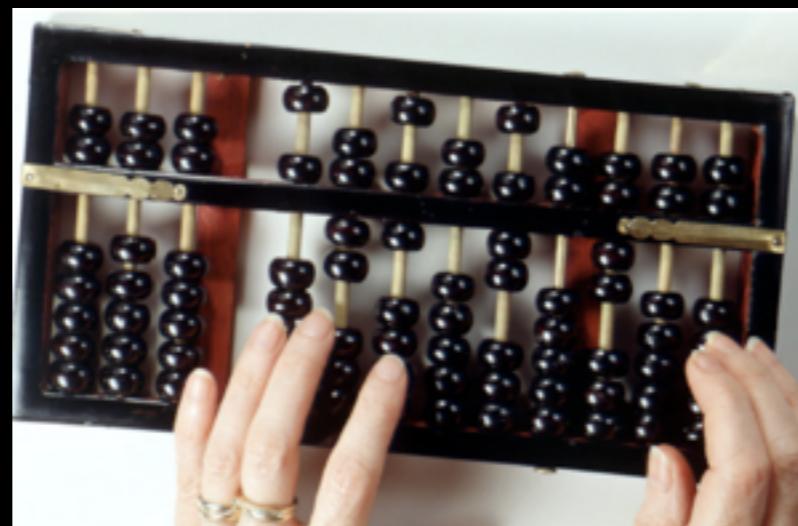
## computation, composites, & craft

liza stark

computer as material

# computer as material

or, the the materiality of computation



# computer as material

Would we design for computers for **presence** in  
our lives rather than **use**?

My thesis idea is to examine the materiality of computation as a response to current interface design strategies, focusing on craft as a well-positioned framework for a dual purpose:

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My thesis idea is to examine the materiality of computation as a response to current interface design strategies, focusing on craft as a well-positioned framework for a dual purpose:

- (1) to extend current conceptual and evaluative frameworks of this approach and
- (2) to engage users in the creation of computational artifacts with the hope of encouraging tinkering in the Maker spirit.

weiser's black box

the “material turn” in interaction

why focus on materials?

why focus on materials?  
context

why focus on materials?

context

expressiveness

# why focus on materials?

context

expressiveness

use v. presence

# computational composites

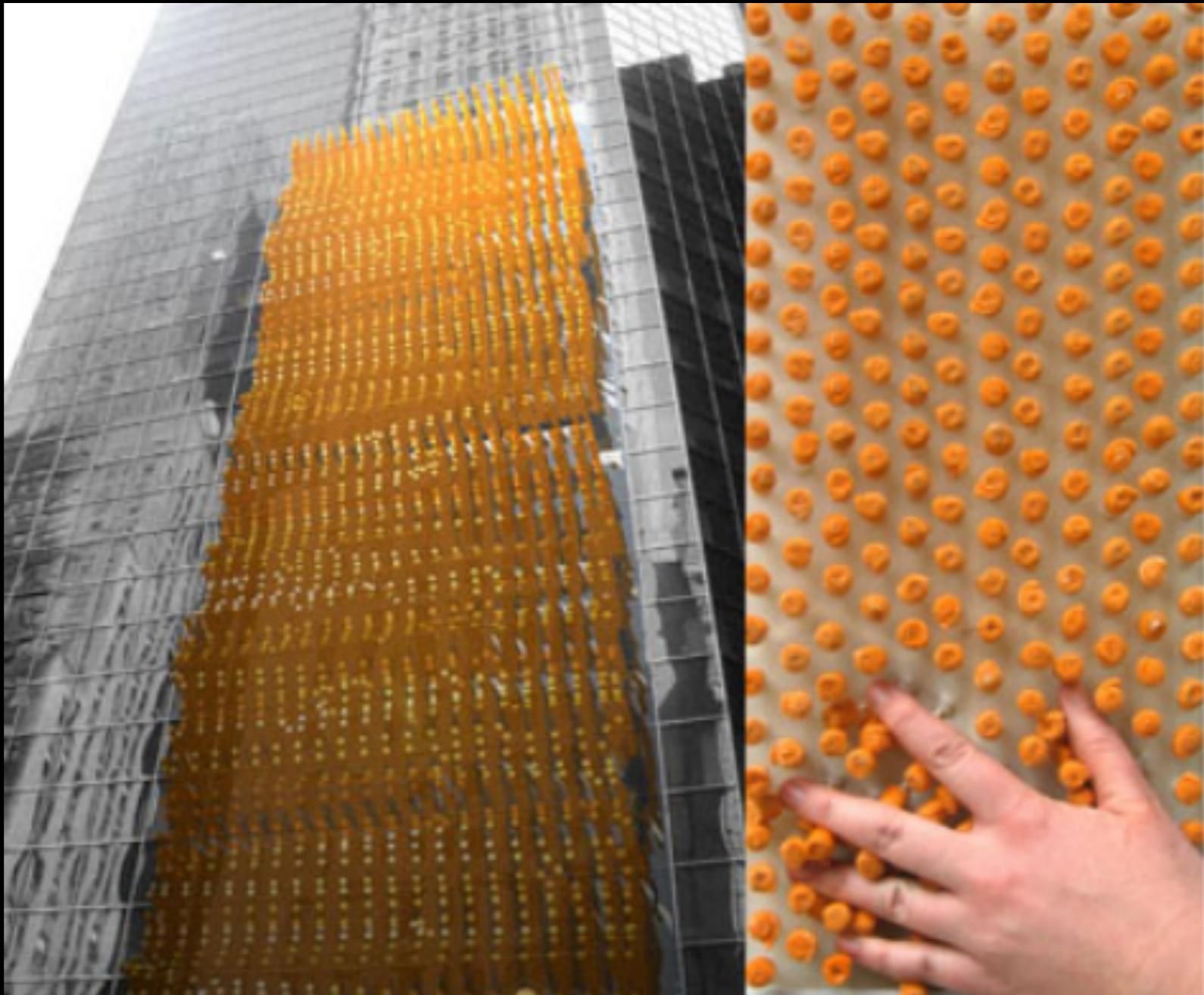
any type of calculation

are engineered or naturally occurring materials made from two or more constituent materials with significantly different physical or chemical properties which remain separate and distinct at the macroscopic or microscopic scale within the finished structure



# PLANKS

Anna Vallgårda et al

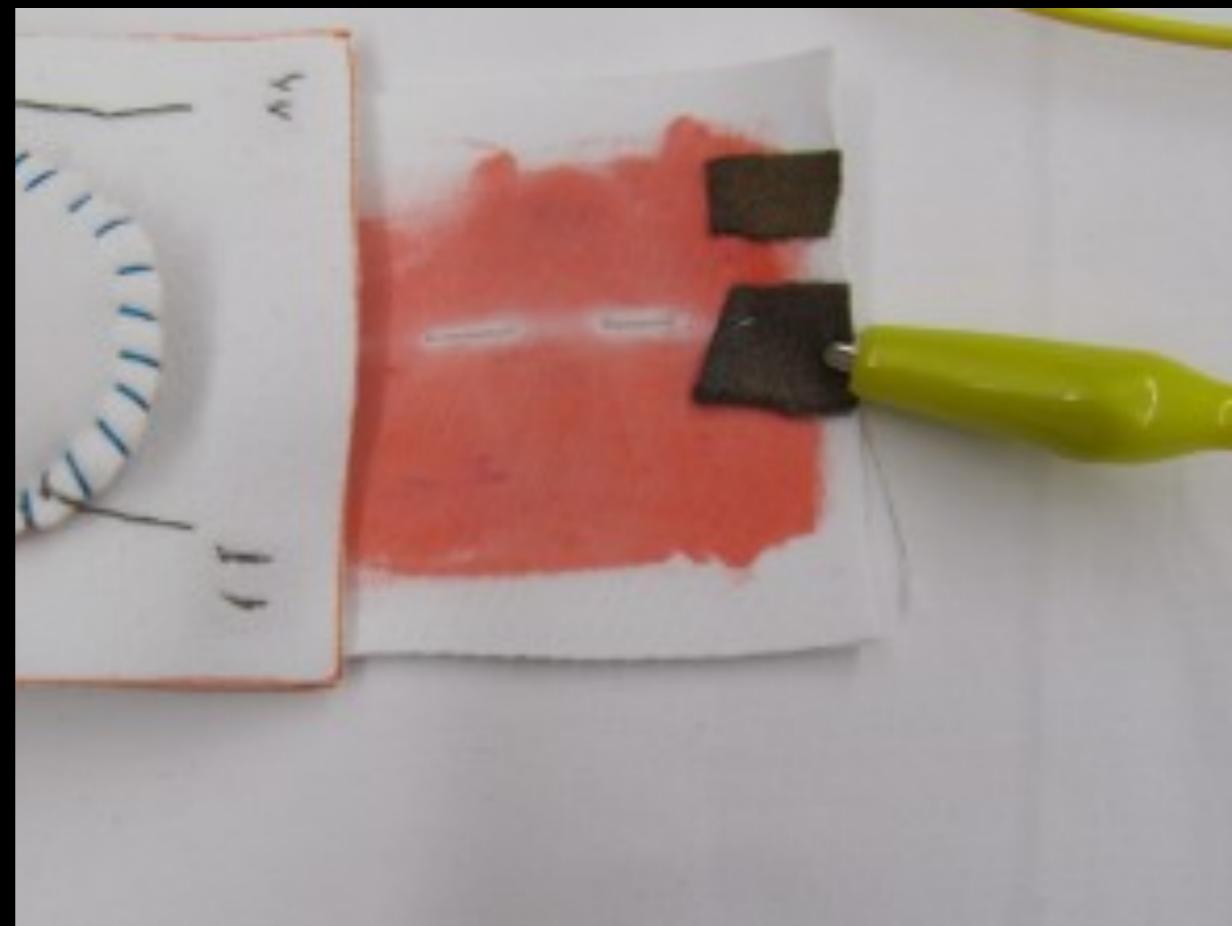


# Super Cilia Skin

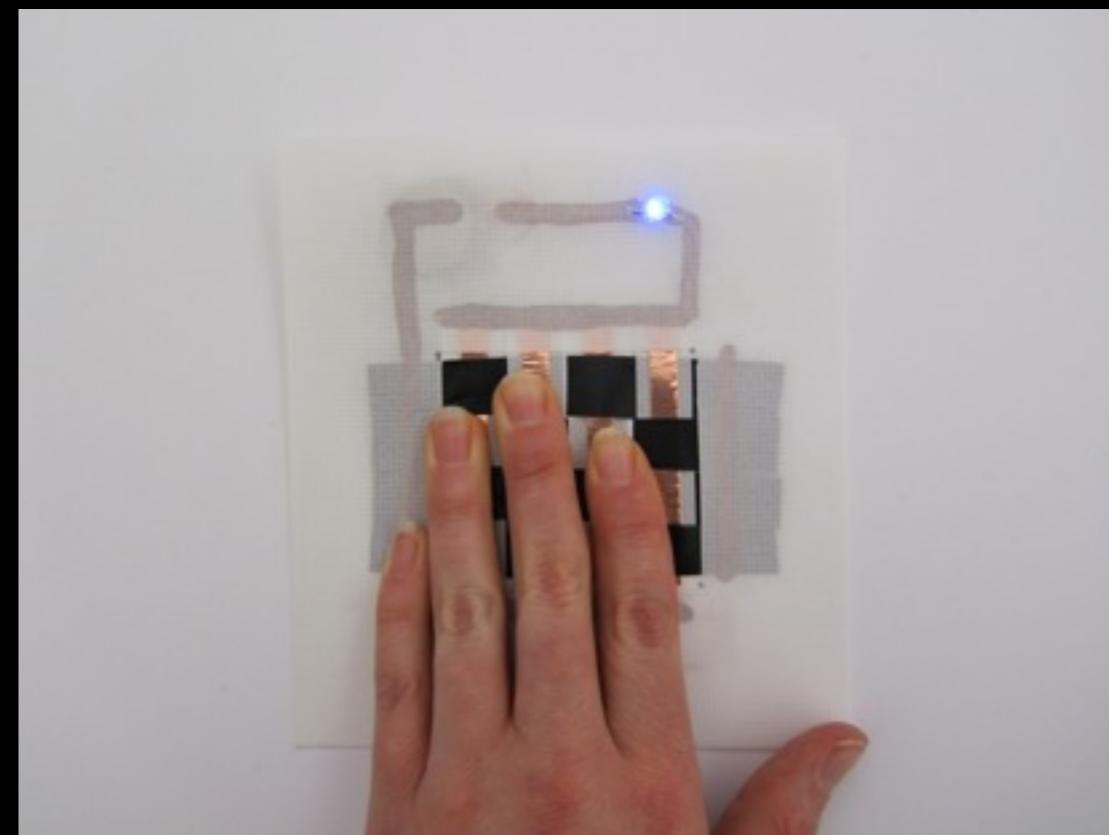
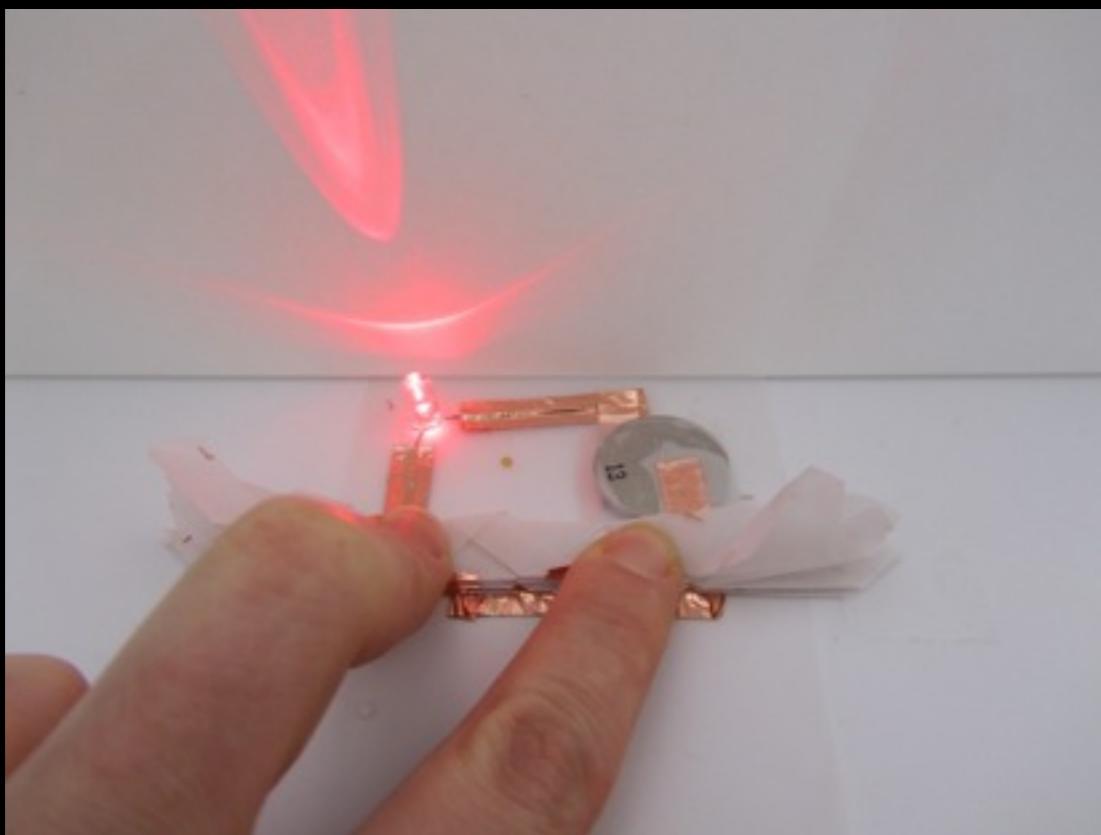
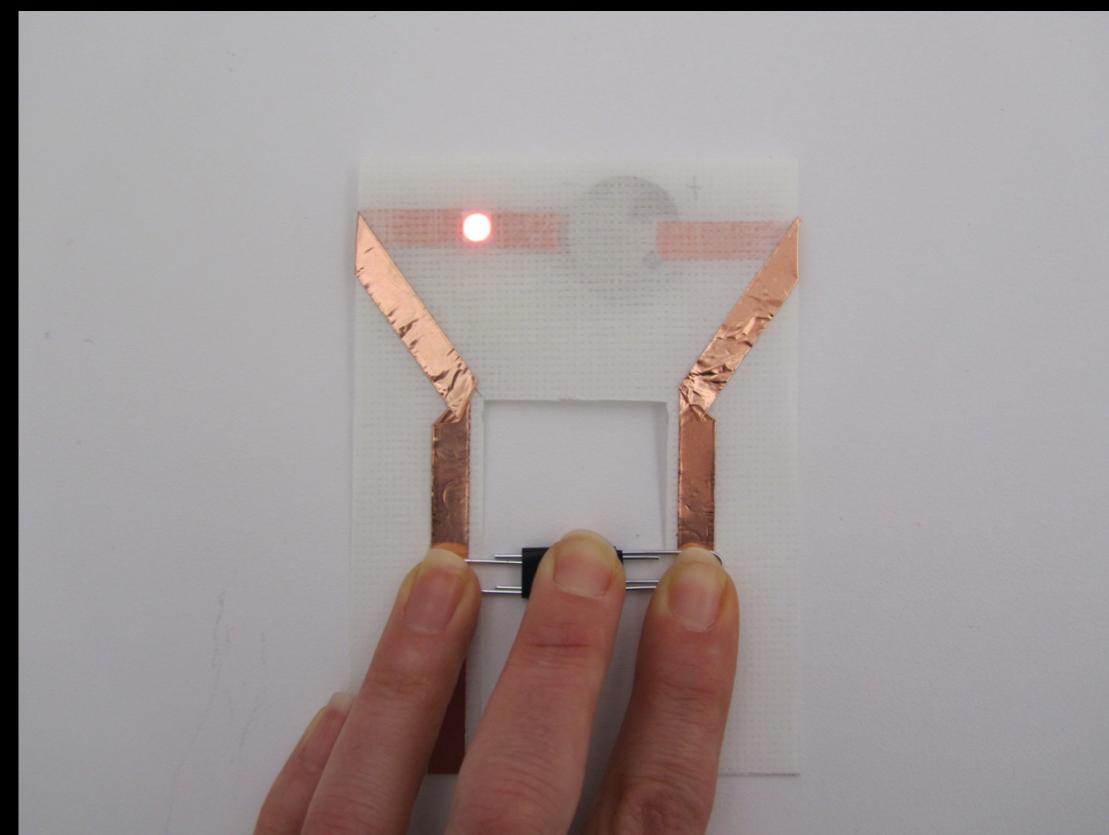
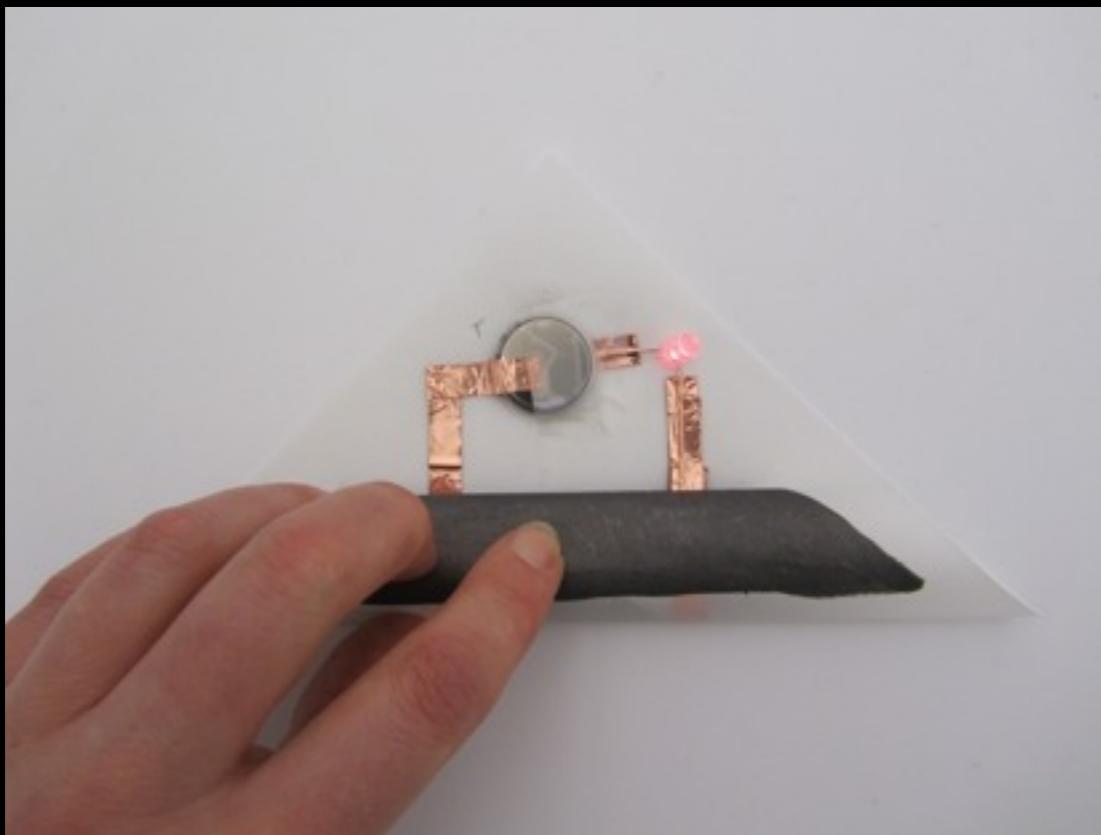
Hayes Raffle, Mitchell Joachim, James Tichenor

the role of craft





Thermochromic Ink



# Paper Prototypes

stop talking, start playing

methodology

Here is my current plan of attack:

- 1) Literature/precedent review
- 2) Materials research
- 3) Design application
- 4) Contextual evaluation

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A	B	C	D	E	F	G	H	I	J	K
2	CONCEPTUAL	CULTURAL	SOCIAL	TECHNICAL	THEORETICAL/EVALUATIVE					
3	computation as material and form (why, how); craft especially well-positioned practice to examine as a framework based on the recent conversations going on among divergent groups; what is the potential of craft; what is the future of craft	"material turn" in interaction; ubicomp; black box; tinkering; craft/materials; turn to materials away from the screen as we become more and more comfortable with our tech	who are my users/audience; what do I want them to leave with;	what materials do I want to focus on; divide between substrates and smart materials; will be informed by ethnographic research; catalogue	expressiveness; context; presence (v. use); identity; aesthetical; what are the current frameworks for evaluation; taxonomies	WHY	HOW	QUALITATIVE	QUANTITATIVE	POSSIBLE ISSUES
4	Expert Interviews									
5										
6	Ethnography					My research will center on the meaning that people derive from different objects; distinguishing the differences between how people act with their devices, objects, and environments (e.g., heavy/light tech) will guide the form of my project and ensure that I do not reference previous research.				
7										
8	Materials Research					Better understanding of properties and how will relate to others; becoming sensitive to the materials, aware of their strengths and weaknesses;				
9										
10	Design Application					I am going to pick 3 substrates and 3 "becoming" materials (3 x 3) and research/document/prototype the hell out of them; this is what I want to accomplish before the end of the semester				
11										
12	Conceptual Sketches									
13										
14	Theory Compilation									
15										
16	Contextual Evaluations									

Sheet1

Count: 2+

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Strategies:

Expert Interviews

Ethnography

Materials Research

Design Application

Conceptual Sketches

Theory Compilation

Contextual Evaluations

Heuristics

# $3 \times 3$ prototypes

substrates

materials

