

CS181DT Class 20: Craft



Class 20 agenda

- Zipcrit
- PM5 Crit
- Seminar: Accessibility
- Break
- Lecture: Craft
- Seminar: Materials
 - Code party tonight 7-9pm, Hive!! I will be there with snacks

PM5 artwalk

- Tape up your ideas in the appropriate categories
 - If you forgot to print them out, you can pick your favorite piece, pull it up on your laptop, and place your laptop near the category
- Give post-it feedback (at least 6 post-its)
 - “I like, I wish, I want...”
 - What draws you to this idea? What do you wish they did differently? How would you react if this was real?
 - Does it capture the spirit of design noir? Try to give constructive criticism too!
- End 11:20

Seminar: Accessibility

Craft + computation

Computers can't capture these qualities



The tactile feeling of clay, where hard chunks may lie, if you need to knead it more or if it's too pliable



To work around knots in wood carving, intrinsic to each unique piece of wood



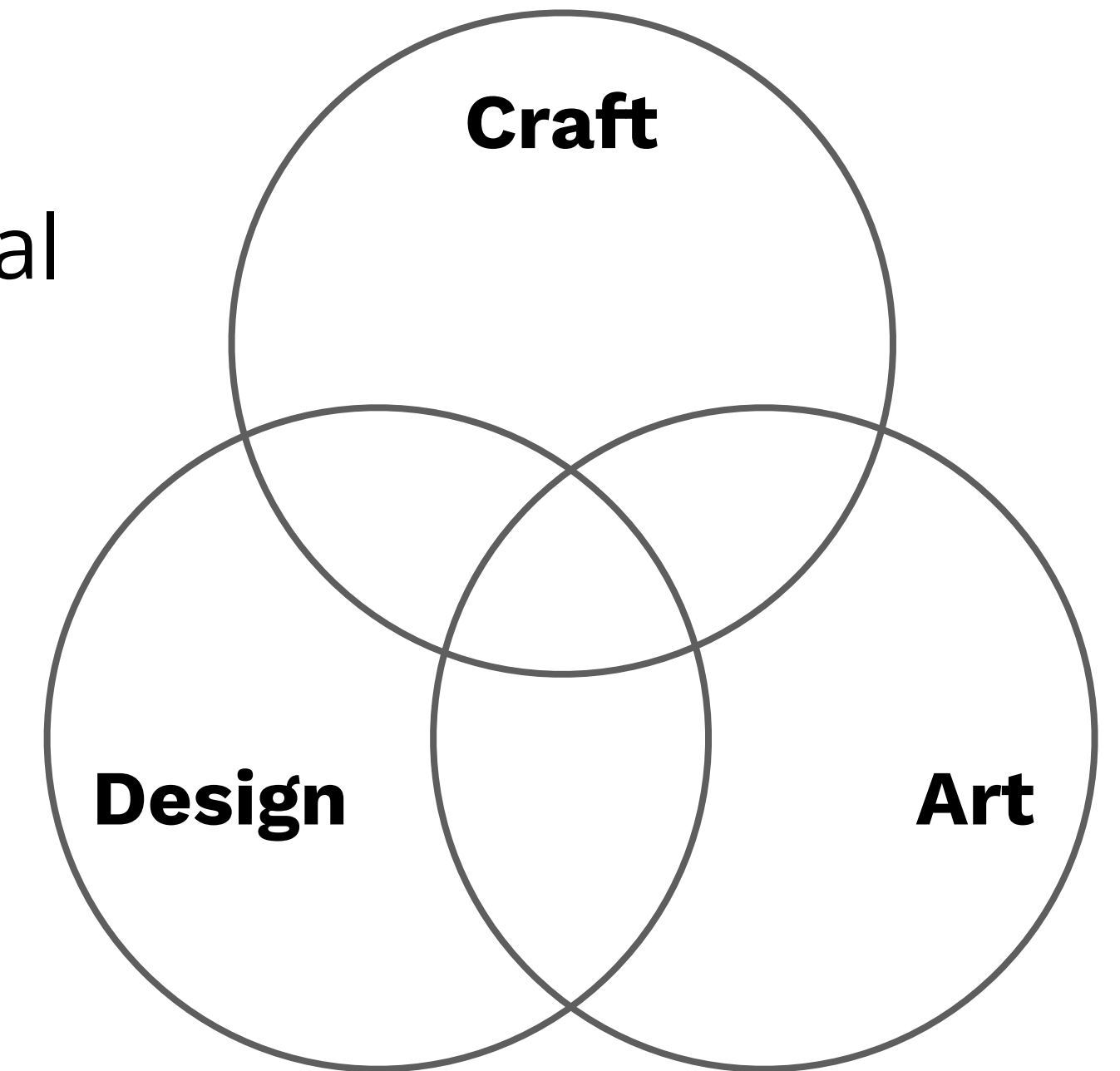
The sheen and slight thickness of paints

Craft

- **Craft** is “an enduring, basic human impulse, the desire to do a job well for its own sake.” - Richard Sennett, *The Craftsman* (2008)
- “Every good craftsman conducts a dialogue between concrete practices and thinking [which] evolves into sustaining habits, and these habits establish a rhythm between problem solving and problem finding.”
- Against values of speed and efficiency
- **The bricoleur** “always to make do with ‘whatever is at hand,’ that is to say with a set of tools . . . which is always finite and is also heterogeneous because what it contains bears no relation to the current project, or indeed to any particular project.” - Claude Lévi-Strauss, *The Savage Mind* (1962)

Craft vs design vs art?

- Obviously, not hard lines, but I would say...
 - Craft is *process* driven: making for the sake of making/technical execution
 - Design is *goal* driven: making to accomplish satisfying a specification
 - Art is *expressivity* driven: making to get out a message or feelings; art is social



Discuss: Do you agree with these distinctions? If not, what would you change or add?

Do you identify more with being a craftsman, a designer, or an artist?

Craft + computation

- How can we model craft materials computationally?
- Well, for the domain of sculpting, we can model geometry easily (all 3D models contain purely *geometric* information, not *material* information.)
- Material information is abstracted away by the computer, so how can we combine the best of both worlds? How can computation guide us for the right geometry, but we still interact with materials with our hands?



FreeD, Zoran et al.
(CHI 2013)

Craft + computational scaffolds



Sculpting by Numbers, Rivers et al.
(SIGGRAPH 2012)

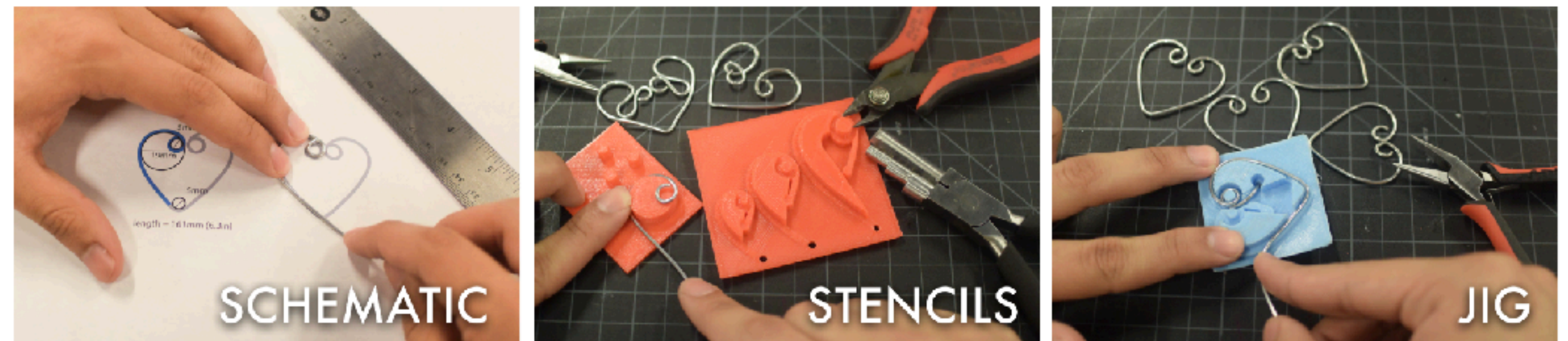


Figure 1. a) Schematic, an annotated construction proxy used to provide fabrication feedback, b) Stencil, a fabrication proxy that breaks down designs into elementary forms, c) Jig, a fabrication and construction proxy that provides a ritual high-fidelity fabrication process.

ProxyPrint, Torres et al.
(DIS 2016)

Takeaway: Craft + HCI research respects and upholds the process of manually making things with your hands, while incorporating computation in other “useful” ways.

PM6: Materials

- Part 1: go on a solo “artist date” and nurture your inner creative child, pay special attention to your senses and if you have any material conversations
- Part 2: be a bricoleur and collect random objects that can serve as materials (we’ll design with them in class next Monday)

Personal Making Assignment 6: Materials

This is a two part assignment investigating the materiality of objects. In the first part, you will take yourself on a physically grounded “artist date” and write a reflection paragraph on it. In the second part, you will collect 5 every day objects that could be valuable design materials, but might be often overlooked, which we will use to design together in class on Monday November 18. The learning goals of this assignment are to understand how materials have agency and impact design, and to give yourself space to decompress and nurture your creative inner child in a usually very hectic time of the semester.

Part I: An artist date & a material conversation

First, take yourself on an “artist’s date”. This idea is specified by Julia Cameron in her handbook on how to be more creative, *The Artist’s Way*:

An artist date is a block of time, perhaps two hours weekly, especially set aside and committed to nurturing your creative consciousness, your inner artist. In its most primary form, the artist date is an excursion, a play date that you preplan and defend against all interlopers. You do not take anyone on this artist date but you and your inner artist. No lovers, friends, spouses, children—no taggers-on of any stripe. If you think this sounds stupid or that you will never be able to afford the time, identify that reaction as resistance. You cannot afford NOT to find time for artist dates.

Your artist needs to be taken out, listened to. There are as many ways to evade this commitment as there are days of your life. “I’m too broke” is the favored one, although no one said the date need involve elaborate expenses. Your artist is a child. Time with a parent matters more than monies spent. A visit to a great junk store, a solo trip to the beach, an old movie seen alone together, a visit to an aquarium or an art gallery—these cost time, not money.

Think of the child of divorce who gets to see a beloved parent only on weekends. (During most of the week, your artist is in the custody of a stern, workaday adult.) What that child wants is attention, not expensive outings. What that child does not want is to share the precious parent with someone like the new significant other. Spending time in solitude with your artist child is essential to self-nurturing.

Class 20 recap

- TODO
- **Tonight!:** Code party, 7-9pm, Hive (drop by any time, might do a JS intro at 7:30)
- Next class: guest lecture on the history of computational creativity by Eric Rawn (PhD student at UC Berkeley)
- Fri: System diagram/plan & code library set up

Seminar: Materials