

Design Research & Synthesis: Class 2

Methodologies for Research

Thursday, September 2, 2010

First things first...

Did you pick your partners?

Let's talk about your homework.

Intermission

Before we get going, let's run through the assignments for the class.

Class Assignments

Due 9/7

Assignment 1: Focus

-Focus statement (paragraph) and primary questions

Class Assignments

Due 9/10

Assignment 2: Research Tools

- 2 Discussion Guides (one for contextual, one for participatory)
- 2 Participant Criteria (“ “)
- Planned Research Date
- Description of Data Capture plan

Class Assignments

Due 9/16

Assignment 3: Contextual Inquiry footage

- Raw video from your contextual inquiry
- Raw notes from your contextual inquiry

Class Assignments

Due 9/21

Assignment 4: Participatory Interview footage

- Raw video from at least one of your three participatory interviews
- Raw notes and materials from at least one of your three participatory interview

Class Assignments

Due 9/30

Assignment 5: Research Data

-All Research Data

Class Assignments

Due 10/5

Assignment 6: Draft Synthesis

- Flow Diagram (contextual research)
- Cultural Diagram (contextual research)
- Coded Data (contextual & participatory)
- Insight Themes (contextual & participatory)
- Draft Concept Model (contextual & participatory)

(Review Contextual Design: Chapter 6)

Class Assignments

Due 10/14

Assignment 7: Final Presentation Draft

- All models complete
- Translation in progress

Class Assignments

Due 10/21

Assignment 8: Final Presentation

- Final Research Report

- 20-minute presentation per group

There are two general classifications of design research: Generative and Evaluative.

Though these two types of research share values, their goals are very different. This means they rarely share research methods.

They are generally distinguished by the types of questions they answer.

Evaluative Research:
best for when you already have ideas, and for
incremental improvements.

“Do people like the way my design looks?”

“How can I improve the usability of my product?”

“I have a developed idea for a design solution. Is it the right one?”

“We have a product out, but want to make a new version that is better.”

Generative Research:
best for when you need ideas, or need to understand
a domain.

“I understand that there are opportunities to improve public transit. What are those opportunities and how can they be addressed?”

“How can we create a product that serves our same target customer without just making a new version of our old product?”

“How do people perceive recycling, and how does it fit into their lifestyle?”

“It is difficult to get women to visit clinics in rural Africa. What are the barriers and how can they be overcome?”

Generative methods we're going to cover today:

- Focus Group
- Interview
- Immersion
- Participatory
- Contextual Inquiry

these approaches aren't mutually exclusive – parts and pieces can be used in combination to best suit the research questions.

Let's talk a little bit about Focus Groups.

Focus groups are good for attaining consensus or dissent from the group.

Often, conversation among the group can be more dynamic than a one-on-one interview (esp. if the participants are likeminded). They can create together and find resonance.

Group techniques can be used along with participatory approaches by mixing individual activities (e.g. worksheets) with group discussion.

The downside of focus groups are potentially disastrous (and biased) group dynamics and the lack of context when held in an artificial setting.

Now, let's talk a little about Interviews.

Interviews work for discussing topics that do not require observation, such as finite events that happened in the past or events that we cannot observe (like showering).

For example, you can easily discuss a person's experience buying a home by meeting at their place and having a conversation.

Immersion involves the researcher actually becoming the user - adopting their lifestyle and activities for a period of time in order to understand their logic and emotions.

It is great for finding deep personal meaning in a topic, and can be combined with certain contextual inquiry techniques (such as interpretation) to gain richer understanding around a topic and build greater rapport with participants.

It can also take a really long time, and be difficult to document.

What is Participatory Research?

A method that considers the user as a part of the creative process, providing them tools and stimulus to descriptively discuss their experiences and express solutions.

The goal is to tease out emotionally-driven insights and seek resonance based on what is in participants' hearts, not just in their heads.

+ Participatory Research:

- learn about peoples' aspirations
- understand their perception of the future in terms of technology, products, etc.
- get creative ideas directly from participants
- establish detailed criteria for design based on participant input

- Participatory Research:

- participants don't always have the ability to think past what they already know
- you have to interpret the output, which makes it more time consuming (and more expensive)
- what people want doesn't always make for a holistic solution (but it will almost always inspire one)

Journaling:

A great way to get participants primed for a more in-depth conversation about their experiences.

It can also make for some solid data points.

The trick to participatory research is grounding participants in something they know.

- Start with a conversation about their current experience
- Build up to their ideal experience
- Identify the attributes that bridge the gap between current and ideal

Collaging & Co-creation

Stimulus is used as a supplemental vocabulary to help non-designers articulate how it feels to use a product, and how they want it to feel.

Learn about how people use the stimulus to express themselves.

Not about the object - about what the object means.



Design tools for non-designers. Big ideas - techniques come from projective psychology (emotional / aspirational) Stimulus Hunter case study....

help people articulate how it feels to use a product, or how they want to feel (emotional/ aspirational)

Articulate attributes of a product (how it behaves, how it looks, feels, acts)

How to configure a velcro model (landscape / portrait / buttons on the side or top)

Round shapes make happy.. Connect the emotional with the functional. A meaningful brand experience. Define your brand attributes of find out you need to retarget your direction.

The explanation of a piece of stimulus is more important – and richer – than the stimulus itself.

You cannot assign meaning to stimulus beforehand
- and you cannot explain to the user what it is.
Stimulus is meant to be, and evoke, whatever the participant wants.

Research Methods - Participatory



we don't care that all the participants picked an ipod – we care that 2 of them really like the navigation being menu-based, and the other 2 like that the screen stands out compared to the hardware. But at some point its needs to be added that not assigning meaning before hand to stimulus. Using unbranded, unidentifiable, don't answer when they ask “what is this?”, etc. there is no wrong answer. The stimulus is supposed to evoke meaning.



-Modern

- metallic materials
- mechanical “smoothness”

-Easy to use

- responsive
- can see it working

-Familiar

- even though it's abstract, I understand how it works.

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What is a Contextual Inquiry?

+ Contextual Inquiry:

- observe behaviors & relationships that participants don't talk about
- see the activity being done in context
- observe artifacts and workarounds currently used
- understand environmental elements (sound, light, traffic) that affect the experience

-Contextual Inquiry:

- ultimately, you only see what's happening presently
- logistically, coordinating this kind of research is difficult
- the researcher has to be very conscious and flexible, as to not interrupt the participant's job

Four principles of Contextual Inquiry:

1. Context
2. Partnership
3. Interpretation
4. Focus

1. Context

Understanding work in its natural environment:

- Go to the users
- Observe real things where they are normally done
- Discover details and intricacies of the setting, such as social interactions and physical artifacts

Be confident that you are observing and recording concrete, real data



2. Partnership

Establish a Master/Apprentice relationship

- Encourages users to share their expertise
- Forces you to suspend your assumptions and beliefs
- Invites the user into the inquiry process as a co-designer

Do not, ever, teach the user the “right” way to do things.

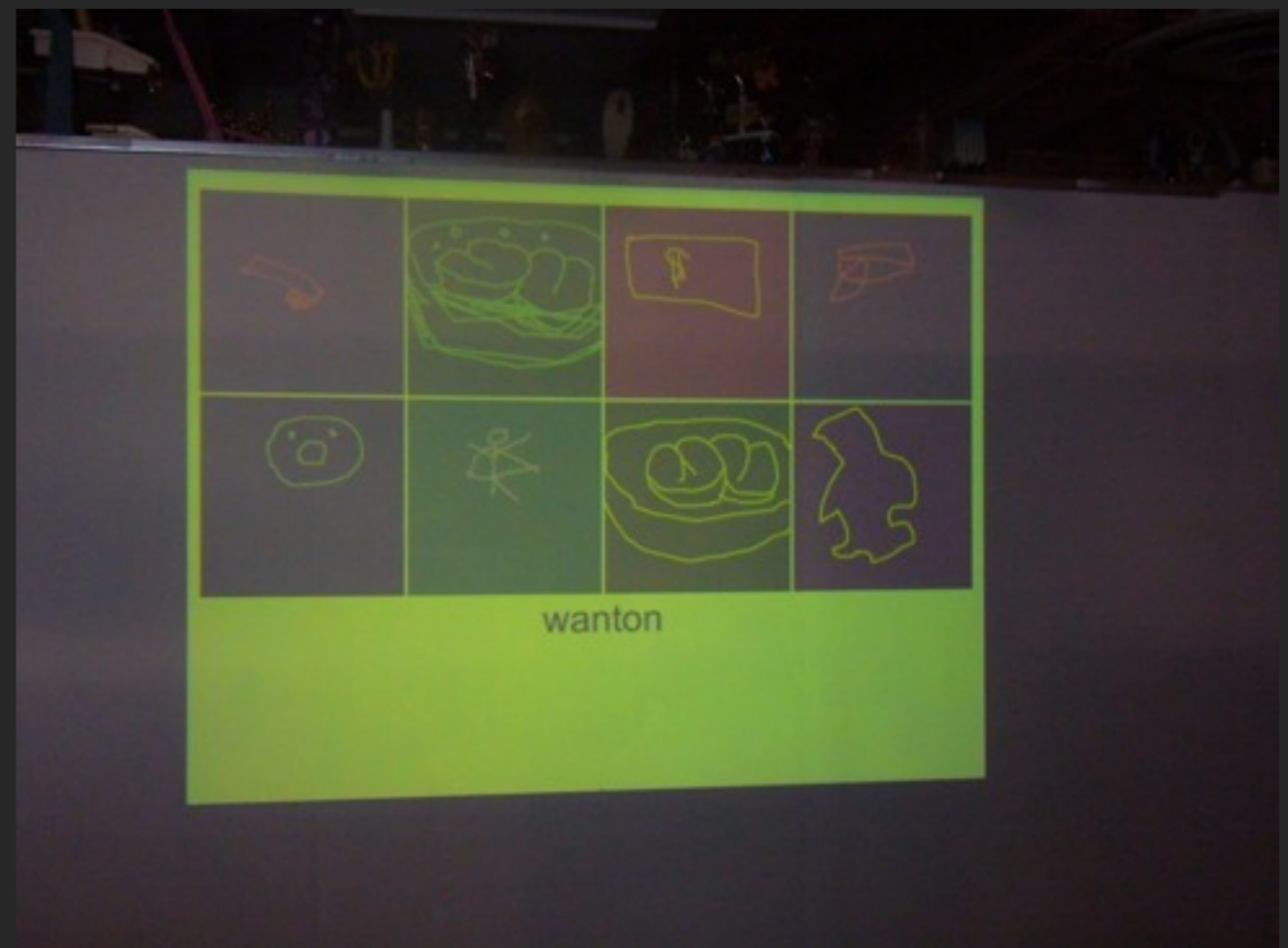


3. Interpretation

As designers, we will always be trying to establish meaning in what we discover

Discuss your interpretations with the user, and watch for hidden signals that your interpretation may be wrong

Remember - you aren't solving anything yet!

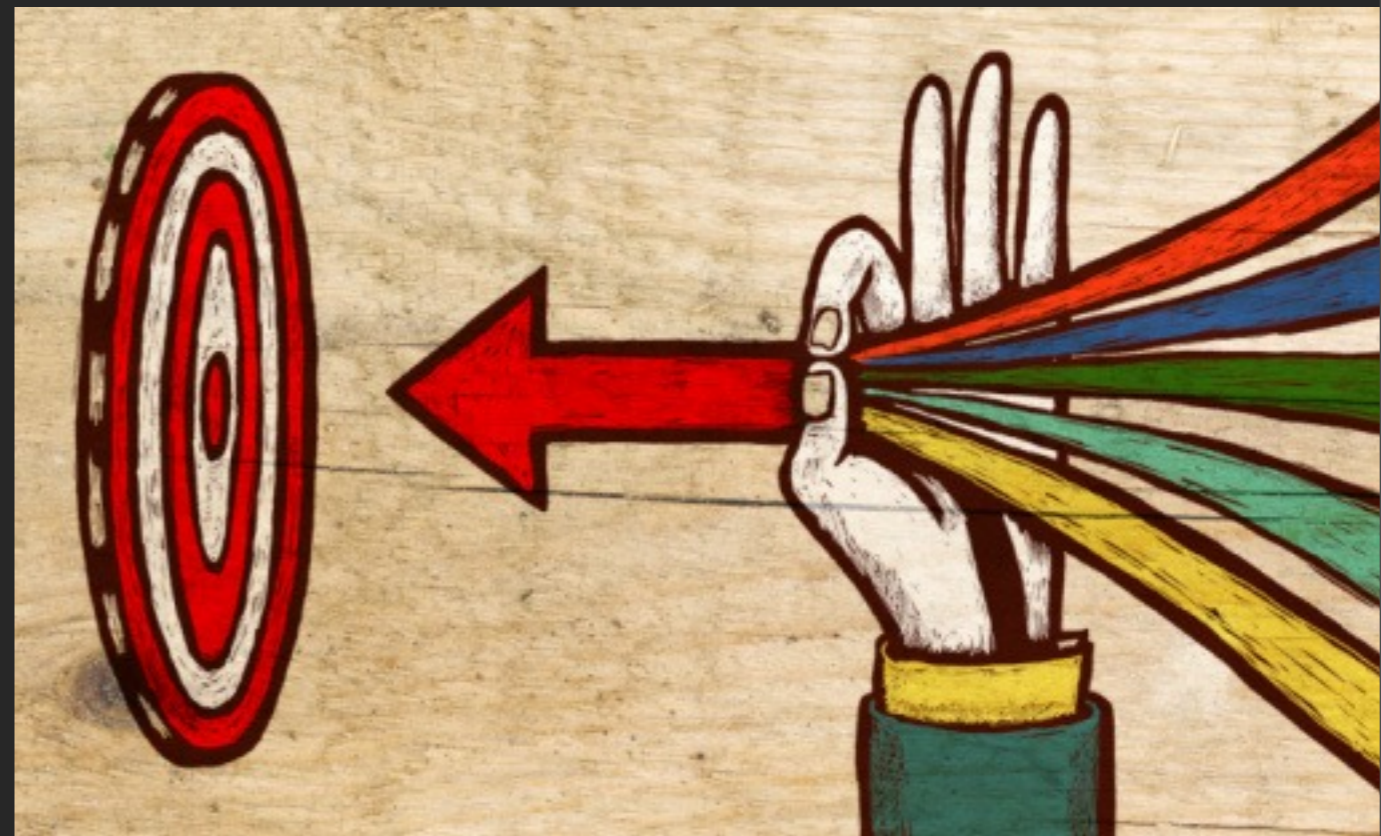


4. Focus

A perspective, based on a set of pre-conceived assumptions and beliefs. Sets the scope for your research.

The focus serves many roles:

- Directs the selection of participants
- Helps manage limited interview time
- Directs questioning towards a goal
- Creates understanding
- Keeps the conversation from becoming too broad



A research focus strikes a special balance - it should not be too broad, nor too narrow.

It is based on:

1. the amount of time you have
2. the amount of money (budget) you have
3. how much you already know
4. what you think you need to know to make intelligent decisions later

Focus Setting

Our topic for this quarter:

Recycling

why did we pick recycling? because it has a good balance of social impact and existing infrastructure... enough to provide a solid learning experience for this class without having too many conceptual/practical hurdles.

This class will focus on:

- Focus Group
- Interview
- Immersion
- Participatory
- Contextual Inquiry

why?

the domains we will be working with over the next year are complex. we want to understand them from fresh a fresh perspective, acknowledging the work and knowledge of experts while establishing a holistic understanding of the circumstances' unique stakeholders. This combination of techniques will allow us to understand a situation based on observation and reflection, and also by stepping outside of ourselves into the current experiences and aspirations of the people we are studying.

focus groups and interviews are both positive in that they can save money over conducting contextual inquiries or participatory research. Groups require less fielding time for a quantity of data points, and interviews can often be conducted without the complicated coordination of a contextual inquiry.

Each team will conduct:

1 Contextual Inquiry by 9/16

3 Participatory Interviews (at least 1 completed by 9/21)

contextual first, then participatory... but get them all set up. hand outs with requirements for each – CI: 90–120 minutes of contextual inquiry. videotaped. will need to be transcribed, so good audio quality a must. Participatory: 3–4, 1–1.5 hour interviews. we will help you build a toolkit, but think about the types of things you want the participants to define.

Focus Setting Activity

To help set our focus, we're going to use Affinity Diagramming.



Affinity Diagramming



inherent likeness or agreement; close resemblance or connection

Affinity Diagramming



the act of making a drawing or plan that outlines and explains the parts, operation, etc., of something

Focus Setting Activity

Now, we Affinitize!

Focus Setting Activity

1. In your teams, brainstorm everything you can think of around the topic of Recycling. Write each thing on a post-it, and call it out as you put it on the wall.

Activities

Environments

Interactions

Objects

Users

Y - Why is it being done? (Motivations)

get all ideas out on post-its – one thought per post-it. for example: “dumpster” is one post-it, just as “taking the recycler out” is also one. Then, group these based on likeness. AEIOU was developed by E-lab as a data capture tool – so also helpful codes when capturing data.

2. Next, group together all the things that are similar, or have something in common.

Try to also put groups that are similar near each other.

3. Name each of the groups you've made.

4. Pick a group or part of a group to be your focus for this class.