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# **Methods Notebook**

Sijie Yang

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# INTERVIEW

## DEFINITION

Interview is a fundamental research method for direct contact with participants, to collect firsthand personal accounts of experience, opinions, attitudes, and perceptions.

## QUOTE

“In all forms of interviews, the researcher needs to be personally sensitive and adaptable, yet organized and responsible in adhering to the protocol of the session.”

— Universal Methods of Design

## NATURE

Attitudinal | Qualitative | Traditional | Exploratory | Generative  
Evaluative | Self reporting | Straightforward  
Structured | Unstructured  
One component of a research strategy

## CONTEXT

- The social context in which the interview takes place, such as: this is an interview with a politician who has recently been accused of wrongdoing and he is being interviewed in an atmosphere where a lot of people are calling for his resignation, impeachment, or indictment.
- The physical context in which the interview takes place, such as with an actor in his trailer between takes while he is in full makeup for his character
- Context given as a parameter of the interview, such as you are interviewing a social activist and you ask him or her to elaborate on something in light of some circumstances that you describe.

## PROCEDURE

### • Preparing Steps

Interviewer decides on an initial collection of possibly interesting questions and discusses them with subject to make sure that the subject has no objections to any of the questions, and to make sure that the questions will cover the topics. Interviewer revises questions, puts them in writing, acquires a tape recorder, and schedules the date and time for the interview.

### • Using Steps

The interview is conducted and tape recorded. In structured interview the interviewer just reads off the questions that he previously had produced, but the subject answers without anything written in advance, and presumably has not seen the list of questions in writing in advance. Unstructured interview allows for flexible detours in a conversational format. Interviewer should guide the session and collect the necessary information within an allotted time.

### • Attention

- Interviews may also be conducted individually, with couples, or with strategic groups.
- Be aware of the undue influence that one person can have over another.
- Find ways to moderate the risk of dominated interviews or conversations.

## USE CASE

- Project Description

### The Meanings of Comfort

We conducted a user study to understand the notion of comfort, in particular, we practiced asking open-ended questions and using personal narratives as a foundation for design insights. A variation of the interview approach, personal narratives focus on uncovering individual life events that are significant to the subjects and allow researchers to understand people's motivations, emotions, imaginations, and other forms of subjective dimensions of social action and life experience through storytelling. I identified more people and conducted interviews with each of them respectively, in order to gather relatively adequate information for data analysis and get more insights.

- Strengths

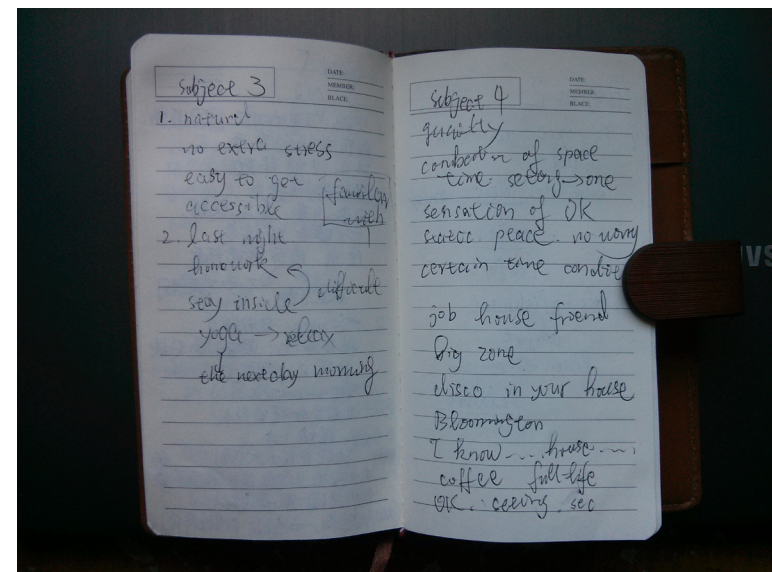
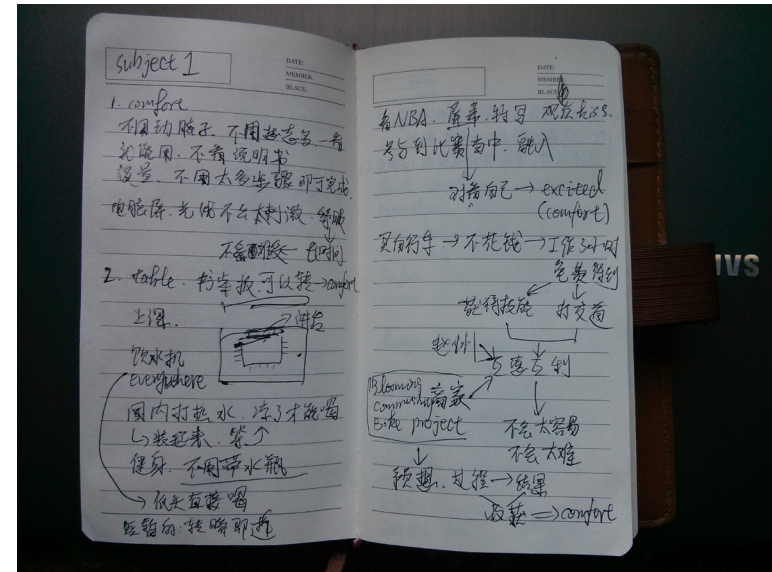
- If the respondent lacks reading skills to answer a questionnaire.
- Are useful for untangling complex topics.
- The Interviewer can probe deeper into a response given by an interviewee.
- Interviews produce a higher response rate.

- Limitations

- The interviewer can affect the data if he/she is not consistent.
- It is very time consuming.
- It is not used for a large number of people.
- The Interviewer may be biased and ask closed questions.

## VISUALS

- Photos/Diagrams/Screenshots/Sketches



# ETHNOGRAPHY

## DEFINITION

Design Ethnography approximates the immersion methods of traditional ethnography, to deeply experience and understand the user's world for design empathy and insight.

## QUOTE

"The study of people in their natural settings; a descriptive account of social life and culture in a defined social system, based on qualitative methods (e.g. detailed observations, unstructured interviews, analysis of documents)."

— Universal Methods of Design

## NATURE

Behavioral | Attitudinal | Qualitative | Adapted  
Exploratory | Observational

A broad approach encompassing several research methods, focused on a comprehensive and empathic understanding of the users, their lives, their languages, and the context of their artifacts and behaviors.

## CONTEXT

- Participant Observation. Researchers spend time with people as they go about their daily lives, learning how they live by actually doing what they do.
- Natural Setting. Ethnography is conducted in the space where participants actually live, work and play, not in a separate research facility.
- In Their Own Words. Researchers research findings are delivered in the words of the participants, using their language and intonation.
- Holism. People's actions and thoughts are influenced, directly or indirectly, by absolutely everything in their lives. Ethnographers stay open to all potential connections.

## PROCEDURE

- Preparing Steps
  - Understand organization policies and work culture.
  - Familiarize yourself with the system and its history.
  - Set initial goals and prepare questions.
  - Gain access and permission to observe/interview.
- Using Steps
  - Establish rapport with managers and users.
  - Observe/interview users in their workplace and collect subjective/objective quantitative/qualitative data.
  - Follow any leads that emerge from the visits.
  - Record your visits.
  - Compile the collected data in numerical, textual, and multimedia databases.
  - Quantify data and compile statistics.
  - Reduce and interpret the data.
  - Refine the goals and the process used.
- Attention
  - Use ethnographic methods early in the design process.
  - Have a well-defined scope.
  - Choose a proper level of ethnographic study.
  - Make use of previous ethnographic studies

## USE CASE

- Project Description

### Clutter and/or Hoarding in the Home

We identified and recruited one household for the study. Established trust early so that we can spend as much time as we can with the study subjects, participated in their "natural habitat" and witnessed specific activities and interactions. The observation was scheduled for a sunny Thursday noon. We observed his cooking process during the first half of the session, and he introduced his living space to us during the rest half. The whole interview and observation was conducted without his roommates' presence. Their living room is highly decorated and furnished.

- Strengths

One of the more widely cited benefits of conducting ethnographic research is that due to the first-hand observation that is involved, usually conducted over an extended period of time, the research can provide extensive and in-depth findings about human behavior. In addition, because ethnographic research relies on observation rather than examinations or predetermined tests, the research can evolve and explore new lines of inquiry.

- Limitations

Due to the fact that ethnographic research relies on observation, it often takes a longer period of time to produce thorough and reliable results. Also, because the research is reliant upon the observations of just one or a few people, the conclusions about what the human subjects were doing, saying or feeling could be altered by the observers' cultural bias or ignorance.

## VISUALS

- Photos/Diagrams/Screenshots/Sketches

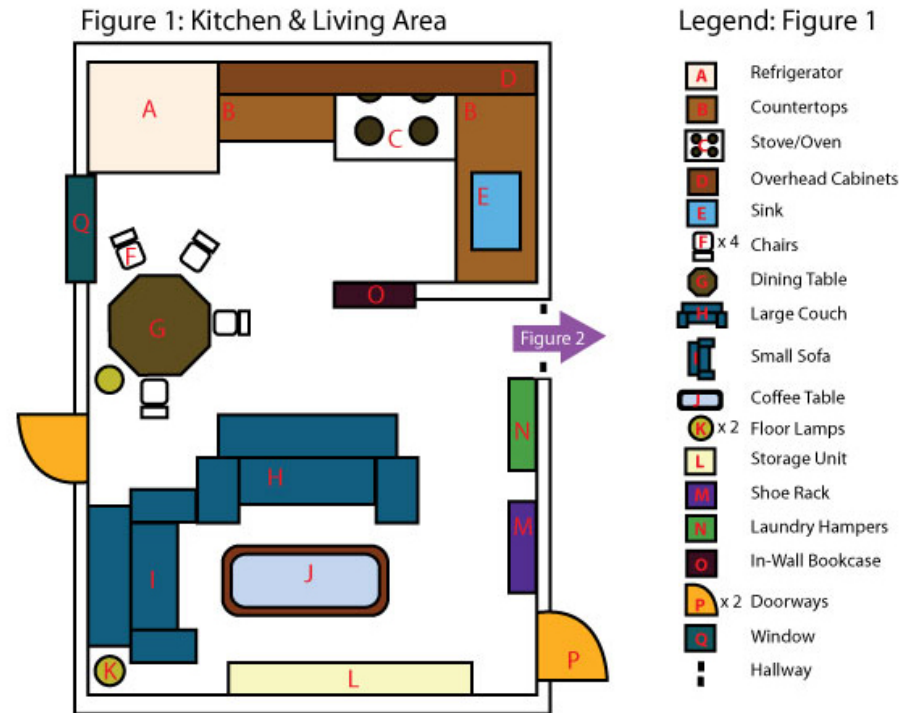
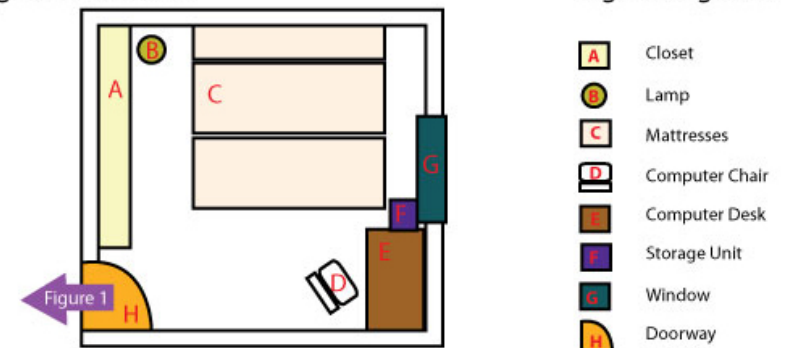


Figure 2: Bedroom





# CONTEXTUAL INQUIRY

## DEFINITION

Contextual Inquiry is an immersive, contextual method of observing and interviewing that reveals underlying (and invisible) work structure. It is a method adapted from the immersive work of ethnographers. The point of Contextual Inquiry is to unearth details and intricacies of work or play discovering parameters, criteria, features, or process flows for design or redesign that you couldn't dream up in a studio without the right level of prompting.

## QUOTE

“Contextual inquiry is just one part of the contextual design process, which also includes work modeling, consolidation (which uses affinity diagramming), work redesign, user environment design, and prototyping and testing with customers.”  
— A Customer-Centered Approach to Systems Design

## NATURE

Behavioral | Qualitative | Innovative  
Exploratory | Observational | Self reporting  
A framework that places the researcher on-site as a participant in the inquiry, and begins the process of exposing underlying work structure.

## CONTEXT

- Interviews are conducted in the user's actual workplace.
- The researcher watches users do their own work tasks and discusses any artifacts they generate or use with them.
- The researcher gathers detailed re-tellings of specific past events when they are relevant to the project focus.
- The researcher has to observe details about the day-to-day activities of people.

## PROCEDURE

- Preparing Steps
  - Idea generation and identification of groups and relationships.
  - Plan in as much time as possible, it will take longer than you expect.
  - make sure you really know who you need to research and cover the variables.
  - research plan - should only be semi structured as you never know what you might find.
- Using Steps
  - Traditional interview, which is the phase where the interviewer gets an overview of the users work and start to establish trust with the user.
  - The 'switch', from a traditional interview to a master-apprentice relation.
  - Observation. The users are the master and they 'run the show'.
  - Summarisation. In this phase the interviewer should summarise what they have learnt during interviews.
- Attention
  - Understand the "ongoing experience" of the subjects rather than just the "summary experience".
  - Double-check your interpretations while on-site with the participants.

## USE CASE

- Project Description

### Resourcefulness of Everyday Design

We investigated the ways in which non-designers engage in design in their everyday lives, often simply by using and adapting objects, surfaces, and routines to suit their needs. We also interviewed subjects in the context in which appropriation, transformation, and/or adaptation of everyday objects is performed.

- Strengths

- The open-ended nature of the interaction makes it possible to reveal tacit knowledge, knowledge about their own work process that users themselves are not consciously aware of.

- The information produced by contextual inquiry is highly reliable. It focuses on the work users need to accomplish, done their way—so it is always relevant to the user.

- The information produced by contextual inquiry is highly detailed.

- Contextual inquiry is a very flexible technique. It can be conducted among many places.

- Limitations

- Contextual inquiry does not result in statistically significant data. If 50% of users studied raised a specific issue, it cannot be concluded that 50% of the market experiences that issue. Follow-up surveys can provide quantitative sizing information where needed.

- Contextual inquiry is resource-intensive. It requires travel to the customer site, a few hours with each user, and then a few more hours to interpret the results of the interview.

## VISUALS

- Photos/Diagrams/Screenshots/Sketches



## DEFINITION

A diary study is an in-depth reflection on learning processes or teaching experiences regularly kept by an individual and then analyzed to look for recurring patterns or significant events. It involves asking a number of people to record their experiences related to a particular subject over a period of time. It is a useful tool to help learn about user behaviour as it provides a record of thoughts and actions in context.

## QUOTE

“Diaries or journals are guiding artifacts that allow people to conveniently and expressively convey personal details about their daily life and events to design teams.”

— Universal Methods of Design

## NATURE

Behavioral | Attitudinal | Qualitative  
Exploratory | Self reporting

Diary studies involve systematic personal accounts of the feelings, thoughts, beliefs, attitudes and reactions over a period of time. It is a kind of self-observation, introspection and retrospection.

## CONTEXT

- Diary studies are useful tools in exploratory research, preparing the designer for further research by contributing to an understanding of participant user groups.
- While diary studies are typically conducted with a relatively small sample, common themes and patterns can emerge.
- Diary studies can also be used in generative research.
- Diaries may be used for usability studies or evaluation, as a means of collecting feedback from users testing products in context over time.

## PROCEDURE

- Preparing Steps
  - An analysis guide, a set of criteria against which each diary will be analysed. Include sections for everything you wish to observe.
  - An interview guide outlining questions about the activities you're studying that you can ask to all participants.
  - A management schedule planning agreed dates/times for check-points, noting progress and managing who has been contacted and when.
- Using Steps
  - Recruit more participants than you need.
  - Make sure participants know what's expected of them in terms of the kind of information to record and when to record it.
  - Participants should be required to be available at a set number of check-points during the study.
  - Record key observations from the analysis of diary content. Summarize the key steps. Try and identify any patterns.
  - Conduct face-to-face follow up interviews
- Attention
  - It is important though to avoid leading the participants by being too specific. Make sure they only record their natural behaviour and don't deliberately do things which they may feel would be interesting to you..



## USE CASE

- Project Description

### The Stories of Mundane Technologies

We explored the space of mundane technologies, those simple and unremarkable technologies (e.g., email, spreadsheets, texting, scanning, coffee machines, Panini press, toaster ovens, etc.) that have long been appropriated by users and are thus embedded in our family lives, work environments, as well as communities at large. In the context of interaction design, this method enables designers to understand how artifacts and environments figure into people's lives, highlighting aspects of their lifestyle, habits, priorities and values. We practiced seeing the world from the target user's point of view, with the goal of understanding how mundane technologies support her/his daily routines.

- Strengths

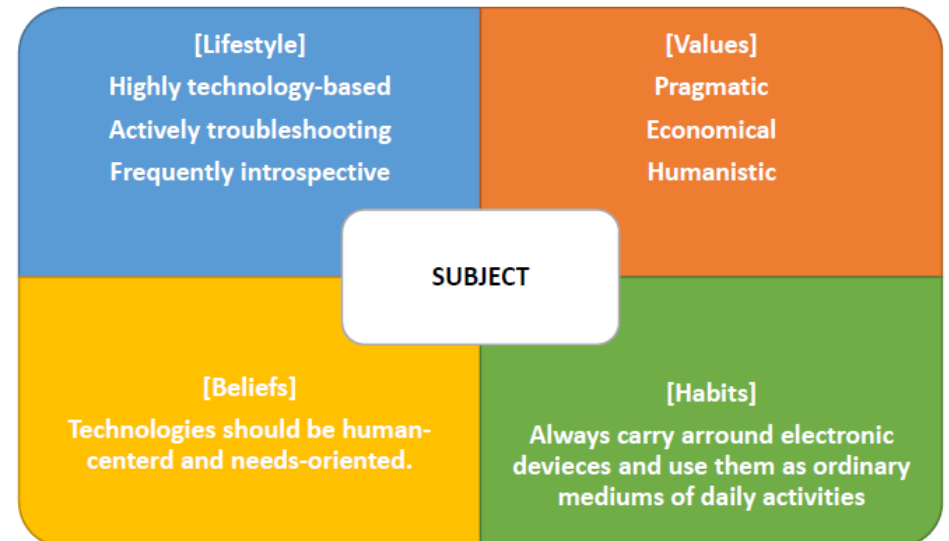
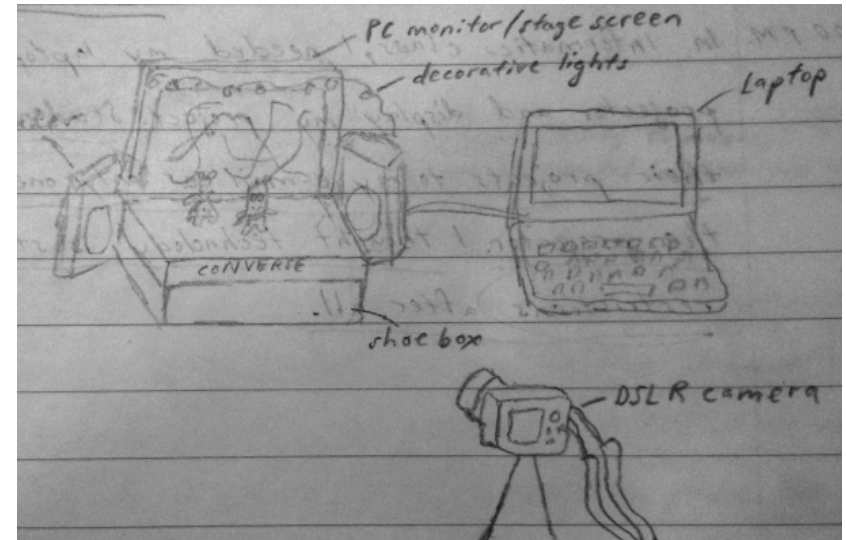
- Efficient use of your time
- Facilitate broad geographic distribution
- Support in-situ reporting over time
- Can be a rich window into context of use

- Limitations

- Can be tiresome for participants
- Participants will require reminders
- Can get very expensive for long durations
- Amount of data can be overwhelming

## VISUALS

- Photos/Diagrams/Screenshots/Sketches



# ELITO METHOD

## DEFINITION

This method consists a team of people from Sales, Marketing, Product, Design doing research together and doing a collaborative analysis session together filling out columns on a spreadsheet consists of the following: Observation, Judgement, Value, Concept/Sketch, and Key Metaphor. Elito builds a shared vocabulary and collective memory, and gives team members a sense of ownership in the process.

## QUOTE

"The Elito Method is used to develop solid design arguments grounded in research observations and anchored to business directives."  
— Universal Methods of Design

## NATURE

Behavioral | Attitudinal | Qualitative  
Innovative | Generative | Design process  
It helps to shape research findings into a series of fact-based narratives that connect the people for whom we are designing to promising design concepts.

## CONTEXT

- Get Sales, Marketing, Product Managers, Designers, Researchers involved in the research and synthesis creates buy-in.
- People can be creative without being held back from research even if it's backed up.
- Bringing people back to the Elito, showing blank cells on the screen gets people back to the task at hand. People want to fill in the blanks.
- Gets people focus on the task at hand instead of getting distracted by arguments.

## PROCEDURE

- Preparing & Using Steps
  - Observation asks "What did you see, read, or hear?" The content must be fact-based. Sketches or photos can help make the observation concrete.
  - Judgment asks "What is your opinion about that observation?" It provides a clear point of view about why the observation matters.
  - Value asks "What values are ultimately at work?" Values are positive in tone and help to "express a quality of goodness." They communicate what is truly at stake and represent people's deep motivations (e.g. Health, Delight, Privacy)
  - Concept/Sketch asks "What can the design team do to solve this problem?" It should articulate or visualize a form factor or design direction that solves a problem or creates values.
  - Key Metaphor asks "What is the hook for this story?" It is a memorable tagline that the team can share to refer to this specific logic line.
- Attention
  - Spreadsheet columns do not need to be completed in any methodical way; rather, it is more important to use the Elito spreadsheet to capture the team's random, non-linear thinking.

# ELITO METHOD

## USE CASE

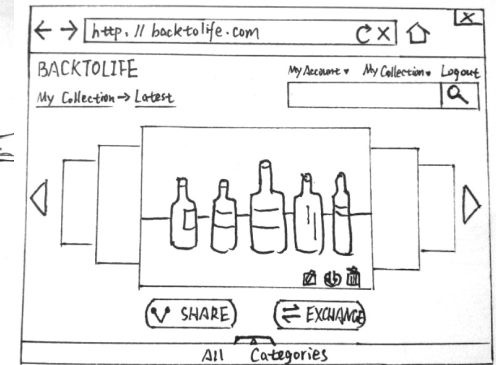
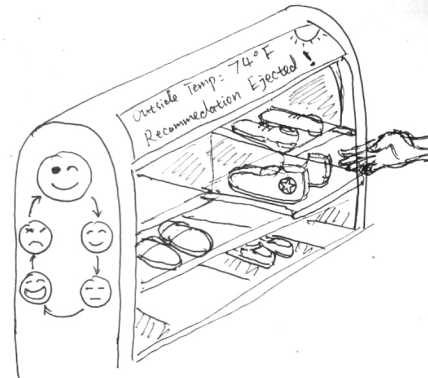
- Project Description

### Data Analysis using the Elito Method

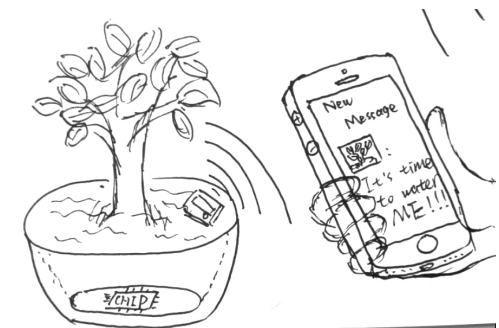
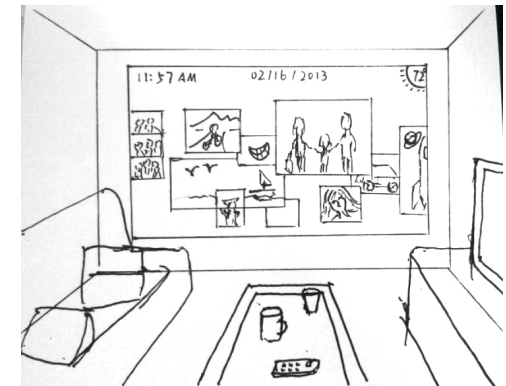
We worked with the same partner you worked with in ethnography study and practiced using the Elito method to analyze and synthesize the ethnographic data you collected for the cluttering and hoarding problem space.

## VISUALS

- Photos/Diagrams/Screenshots/Sketches



Observation	Judgement	Value	Concept/Sketch	Key Metaphor
The flag of Malaysia on the wall	To remind him of his hometown and his nationality	To enhance the sense of belonging and patriotism	Maybe anything belongs to the subject could be digitally endowed with cultural features of his home country	Make it homelike
A shoe rack which is full of various kinds of shoes	To change which shoes to wear depending on personal preference or outdoor conditions	To fulfill the psychological needs in terms of various dimensions of personality and different conditions of daily life	A shoe cabinet that suggests and organizing shoes by weather or mood.	If the Shoe fits!
Large laundry Hampers	Needed more room for storing his own and his roommates' clothes	To categorize and manage different people's clothes	laundry shoots that take clothes straight to laundry room	A Straight Shot to Success
Wine bottles on window sill	Recycling area	Decoration to catch the light from window	Probably he wants more different bottles for decoration. Resources like special collection communities can be recommended to him.	Stuff Swap
Empty butter Containers	Uses for storage	To keeps them for potential reuse	He keeps the containers but has no idea how to use them effectively. Websites or apps that provide ideas about how to make the most use of such things may be useful for him.	Reduce, REUSE, Recycle
Many groceries on the top of refrigerator	There is no enough place to put those groceries in the kitchen	To maximize the usage of limited space	Storage carrier on the top of the refrigerator could be helpful, which can also remind the subject what is useful and what can be thrown away	Use the space wisely



# AFFINITY DIAGRAMMING

## DEFINITION

An Affinity Diagram is a tool that gathers large amounts of language data (ideas, opinions, issues) and organizes them into groupings based on their natural relationships. The Affinity process is often used to group ideas generated by Brainstorming.

## QUOTE

“Affinity diagramming is a process used to externalize and meaningfully cluster observations and insights from research, keeping design teams grounded in data as they design.”  
—— Universal Methods of Design

## NATURE

Behavioral | Attitudinal | Qualitative  
Adapted | Generative | Design process  
The affinity diagram is a business tool used to organize ideas and data.

## CONTEXT

- When you are confronted with many facts or ideas in apparent chaos
- When issues seem too large and complex to grasp
- When group consensus is necessary
- After a brainstorming exercise
- When analyzing verbal data, such as survey results

## PROCEDURE

- Preparing & Using Steps
  - Conduct a brainstorming meeting. Use the Brainstorming tool to generate a list of ideas.
  - Record ideas and issues on post-it-notes or cards
  - Gather post it notes/cards into a single place (e.g. a desk or wall) in a random manner
  - Sort the ideas into groups based on the teams thoughts. Continue until all cards/notes have been sorted and the team is satisfied with their groupings.
  - Name each group with a description of what the group refers to and place the name at the top of each group.
  - Capture and discuss the themes or groups and how they may relate.
- Attention
  - Ideally, all of the ideas can be sorted into related groups. If there are some “loners” that don't fit any of the groups, don't force them into groupings where they don't really belong. Let them stand alone under their own headers.

# AFFINITY DIAGRAMMING

## USE CASE

- Project Description

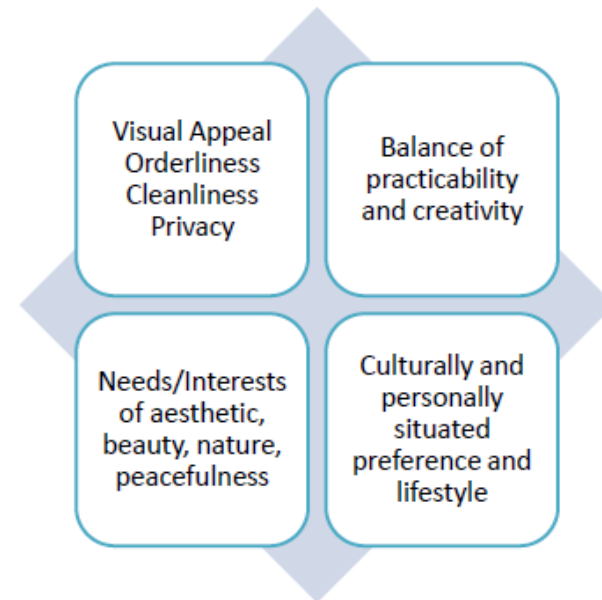
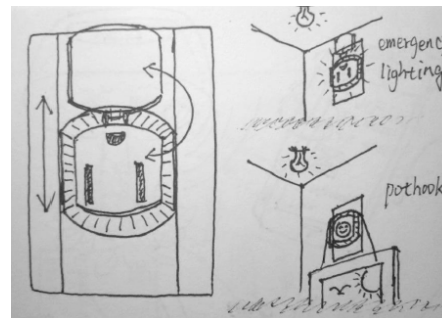
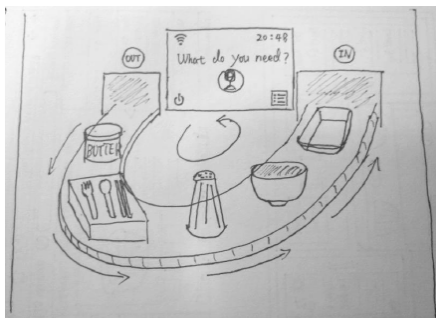
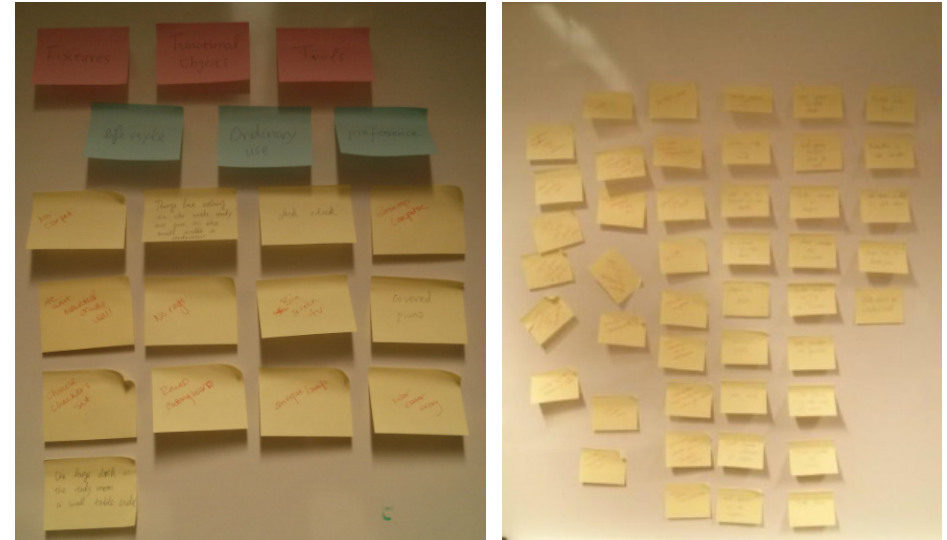
### Affinity Diagram

We worked with the same partner you worked with in contextual inquiry and practiced using the Affinity Diagramming method to analyze and synthesize the contextual inquiry data you collected for the “everyday design” problem space.

- Strengths
  - Can gather large amounts of information from a group in a short amount of time
  - Gives each individual in a group the opportunity to give input
  - Organizes information into categories that can be used with other tools
- Essentials
  - The issue or problem must be identified and agreed upon prior to using the tool
  - Ideas should be recorded in a way that allows each idea to be easily moved around (sticky notes, index cards, etc.)
  - A method of brainstorming must be decided on prior to using the tool

## VISUALS

- Photos/Diagrams/Screenshots/Sketches





# ARTIFACT ANALYSIS

## DEFINITION

The study of how people use and conceptualize objects, including how people use computers in their work or play. Artifacts may be examined from any number of perspectives, including where the objects are, how many there are, their functional role, their conversational role, their physical characteristics, or their flexibility of use through different situations.

## QUOTE

“A systematic examination of the material, aesthetic, and interactive qualities of objects contributes to an understanding of their physical, social, and cultural contexts.”  
— Universal Methods of Design

## NATURE

Behavioral | Attitudinal | Qualitative  
Adapted | Exploratory | Observational  
The emphasis of artifact analysis is on the object itself. Artifact analysis asks what do objects have to say about people and their culture, time, and place

## CONTEXT

- Artifact analysis may be used to supplement observational data and to gain a more thorough understanding of people's tasks, and may lead to the design of improved artifacts
- An artifact analysis can be conducted in participant homes or workplaces, but can also be a useful tool for examining and comparing precedent and competitive products, or for studying specific aspects such as materials and manufacturing processes, colors, brands or on-line presence.

## PROCEDURE

- Preparing & Using Steps
  - Material analysis addresses the quantitative inventory of artifacts in the environment. (material composition, durability, wear patterns and disposability, etc.)
  - Aesthetic analysis includes a subjective visual assessment, but also aspects such as historical references, whether the artifact can be identified with particular era, time or place.
  - Interactive aspects of the analysis address the explicit characteristics of operational use and behaviors that the artifact affords. (functional or instrumental, immersive or multitasked, positive or negative, etc.)
  - A final element of analysis should address the location of objects (public or private, where they are stored, displayed, or carried).
- Attention
  - This method can be used as an informative tool to help understand both physical and digital objects.
  - Visual documentation of artifacts through photographs, video, or sketches is essential

# ARTIFACT ANALYSIS

## USE CASE

- Project Description

### Strangely Familiar

We practiced seeing objects in the environment and appreciating their identity, originality, and remarkableness beyond their seemingly ordinairness. We also practiced using some of the analytical strategies to understand artifacts. The artifact I chose was my backpack.

- Strengths

- Artifacts become data through the questions posed about them and the meanings assigned to them by the researcher. There is no one right way to analyze artifacts. A wide range of disciplines informs the analysis of artifacts, including anthropology, archaeology, art history, history, human geography, ethnography, and sociology

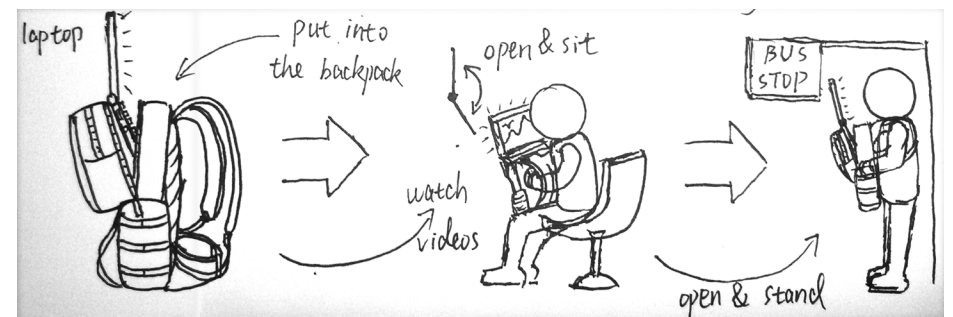
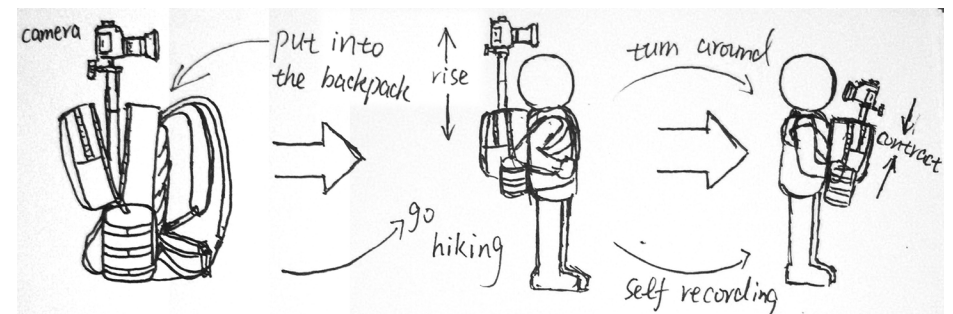
- An artifact has a story to tell about the person who made it, how it was used, who used it, and the beliefs and values associated with it

- Limitations

- Artifact analyses are at the heart of material culture research, however it would seem that for every artifact, a specific model is often needed to adequately probe the various layers of information that an object can provide.

## VISUALS

- Photos/Diagrams/Screenshots/Sketches



# CULTURAL PROBES

## DEFINITION

The method cultural probe is a design-led approach to understanding users that stressed empathy and engagement. Probes are collection of evocative tasks aiming to elicit inspirational responses from people – not comprehensive information about them. It serves as a means of gathering inspirational data about people's lives, values and thoughts.

## QUOTE

"The probes are small packages that can include any sort of artifact (like a map, postcard, camera or diary) along with evocative tasks, which are given to participants to allow them to record specific events, feelings or interactions. The aim is to elicit inspirational responses from people, in order to understand their culture, thoughts and values better, and thus stimulate designer's imaginations."

— Wikipedia

## NATURE

Behavioral | Attitudinal | Qualitative  
Innovative | Exploratory | Self reporting  
The aim is to get fragmented clues about the peoples lives and thoughts.

## CONTEXT

- Cultural probes are appropriate when you need to gather information from users with minimal influence on their actions, or when the process or event you're exploring takes place intermittently or over a long period.
- Cultural probes can be used for idea generation, inspiration, values and dreams in a design process. The technique is about opening up the design space, instead of narrowing it.

## PROCEDURE

- Preparing & Using Steps
  - Selected participants are briefed, given a kit of materials, and briefed about the requirement to record or note specific events, feelings or interactions over a specified period
  - Typically, a follow-up interview is conducted at some point after the briefing session. This helps ensure that participants are actively engaged, and are collecting the required information. At the end of the specified period, the materials are collected and analysed.
  - A de-briefing session is also typically conducted, in order to supplement, validate and otherwise explore the information gathered by the participants. Information gathered is then analysed, and documented in some fashion.
- Attention
  - Open-ended questions are a great way of encouraging users to write extra information down.
  - Giving users the choice of how they record their thoughts and feelings—text, photos, and drawings
  - The diary in whatever form can be as small or large as desired



## USE CASE

- Project Description

### Broken Probes

Designed a cultural probe packet to send to our target user group (people who went through divorce) to learn about human experience of loss and grief. Our specific design assignment was to understand how people cope with grief and how they remember and relate to people (or pets), relationships, and objects they have lost.

- Strengths

– By analyzing the results of your cultural probe, you can build up a pattern of how users behave: what they love and hate, what motivates them to do what they do and why. Results can also help identify unrecognized needs and invent new products—and create happy users who feel as if we can read their minds.

- Limitations

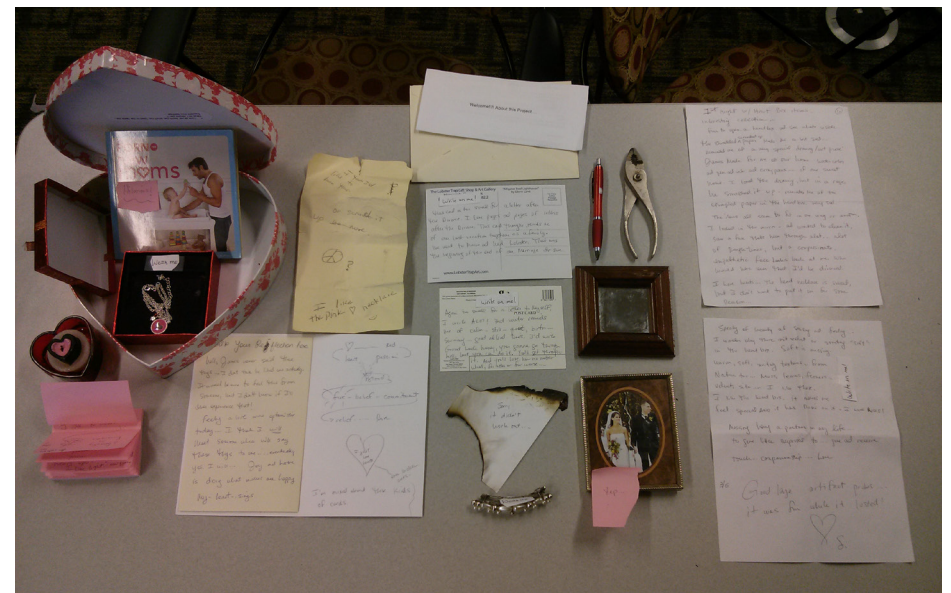
– It is hard to get scientifically valid information from data that is so subjective. The data generated it not suitable for deep analysis and requirements list.

– Participants are supposed to reflect upon and be inspired by the probes, but it can be hard to motivate participants doing it, as well as to get them to send the probes back. There is a risk of few returns.

– The wide variety of applications of and scientific approach to the probes has been criticised by Gaver and his colleagues as a misunderstood desire to rationalize and analyze the probes.

## VISUALS

- Photos/Diagrams/Screenshots/Sketches



# GENEALOGY AND LANDSCAPE ANALYSIS

Design Method-9

## DEFINITION

Genealogy analysis is the study of families and the tracing of their lineages and history. Researchers use oral traditions, historical records, genetic analysis, and other records to obtain information about a family and to demonstrate kinship and pedigrees of its members. The results are often displayed in charts or written as narratives.

Landscape analysis is the process of describing and interpreting the landscape ecology a person's possessions. Artifact attributions and a landscape network of connecting possessions are identified, described and classified.

## QUOTE

"Genealogy is a method that does precisely that, namely, it investigates how certain taken-for-granted, such as scientific, truths are historical constructs that have their roots in specific social and political agendas."

— Doing Research in Cultural Studies by Paula Saukko

## NATURE

Behavioral | Attitudinal | Qualitative  
Innovative | Exploratory | Observational | Self reporting

## CONTEXT

- The main aim of genealogy analysis is to 'problematize' the way in which we tend to think of social phenomena or problems, instead of providing solutions to them.

- The patterns which are detected in landscape analysis can be used to assess the relations among personal possessions, and to reveal the owner's personality.

## PROCEDURE

### • Preparing & Using Steps

[For genealogy analysis]

- Collect family documents and stories of each artifact

- Begin analysis with the present and work backward in time

- Use historical records to demonstrate kinship between artifacts

[For landscape analysis]

- Identify and classify the possession types, and artifact attributions within a landscape of personal possessions.

- Analyze the landscape ecology of each objects/artifact/possession.

- Identify a connected network of diverse relationships distributed across the landscape of possessions.

### • Attention

- Source citation is also important when conducting genealogical research.

- Research plan should be dictated by what the landscape analysis process uncovers, not by what is written down in assumption.



## USE CASE

- Project Description

### Genealogy and Landscape of Personal Possessions

Our team approached one study participant and asked the individual to empty her shoulder bag. We recorded the content of the bag using field notes and documentary photography. Then we used the material ecology approach to construct a landscape analysis of all the content in the bag, and selected two very different items from the bag and perform two genealogical analysis of those objects separately.

- Strengths

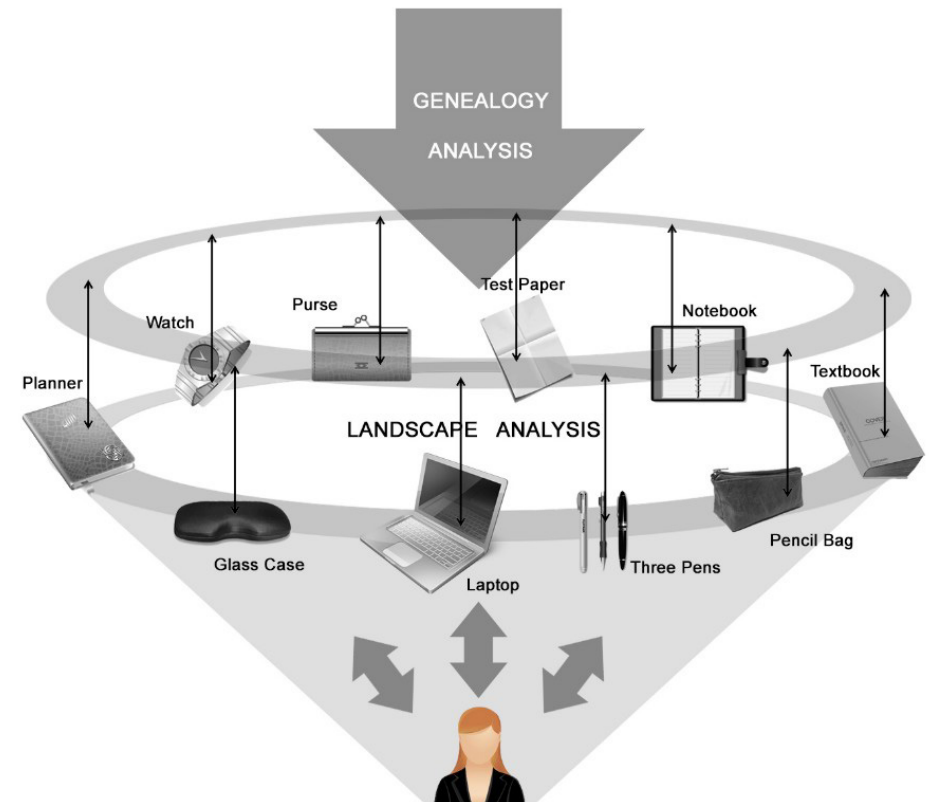
- The combination of genealogy and landscape analysis provides a multidimensional perspective through which we can understand how certain artifacts have developed over time, how they ended up in our subject's possession, and how they relate to each other. By going through the whole analytical process, we discovered hidden connections between objects or between the objects and our subject. Thus the research data enables us to identify more design opportunities and generate more design concepts.

- Limitations

- Even with the advantages of the combination of genealogy and landscape analysis, we can speculate various potential possibilities about the relationships between subject and her possessions. However, the results of our speculation does not necessarily mean that those relationships must have emerged in this particular subject's case. So we cannot assume each analytic outcome is actually true for our subject. Verification or follow-up interview is needed.

## VISUALS

- Photos/Diagrams/Screenshots/Sketches



## DEFINITION

Visual ethnography is a subfield of ethnography that is concerned, in part, with the study and production of ethnographic photography, film and new media. Photo studies, particularly, are an ideal way to have participants highlight details or their of their personal lives directly. Still photographs are used both as a means of presenting social research and as a research method.

Photo studies invite the participant to photo-document aspects of his or her life and interactions, provideing the designer with visual, self-reported insights into user behaviors and priorities.

## QUOTE

“Viewed as records, photographs are thought to reproduce the reality in front of the camera’s lens, yielding an unmediated and unbiased visual report.”

— Using Photography in Qualitative Research by Dona Schwartz

## NATURE

Behavioral | Qualitative | Innovative  
Exploratory | Self reporting

## CONTEXT

– Photo studies are common in exploratory research as a method for understanding the world of users, particularly when engaging in territory unfamiliar to the designer.

– Photo studies are most often used as a complementary component of other methods.

## PROCEDURE

- Preparing & Using Steps
  - To initiate a photo study, participants are informed that they will be photographed, or provided with a camera, or instructed how their own cameras are to be used for the purposes of the research. With the permission of participants, they are given general instructions on what to document through images such as to take pictures of each technology interaction during the day, or their work settings. Participants may also be instructed to take images of their surroundings when they are feeling a particular way of human interactions. Designers may solely rely on the photographs and notes provided by the participants to synthesize findings. However, it is more recommended to have the participants explain his or her photos in follow-up interviews.

- Attention
  - In order to use photographs either as data or as data generators we need to have some notion of how viewers threat and understand photographic images, whether those viewers are informants or researchers.
  - In order to benefit social research, the use of photographic methods must be grounded in the interactive context in which photographs acquire meaning.

## USE CASE

- Project Description

### Visual Ethnography

We practiced observing and recording the mundane and idiosyncratic features of everyday life through photographic technique and learn how to interpret the visual data for design interventions. The objective was to use photography as a lens to understand a target population, focusing on the context in which images are produced. 5 different citizens of Bloomington and their working lives to reflect the light and shade of their day were documented.

- Strengths

- Photographic meaning is conceptualized as being contained within the image itself. The photograph becomes a receptacle from which individual viewers withdraw meaning. Instead of being a "message" in the usual sense, photograph is the raw material for an infinite number of messages which each viewer can construct for him/herself.

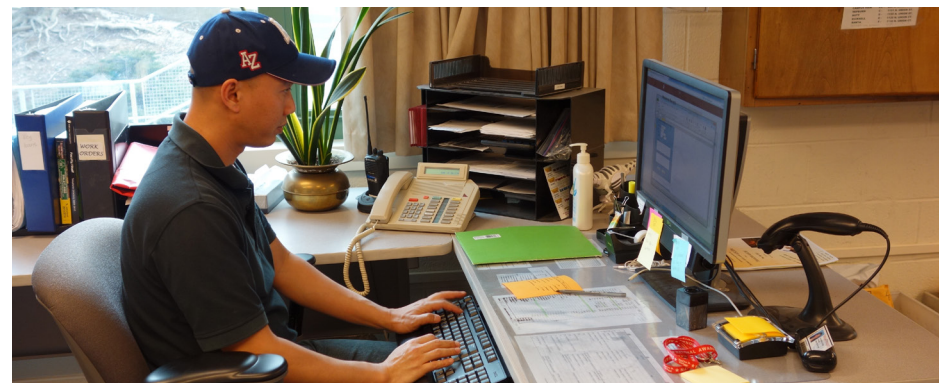
- Limitations

- The perspective of this method fails to consider the role of the spectator in the process of constructing photographic meaning. The viewing process is a dynamic interaction between the photographer, the spectator, and the image; meaning is actively constructed, not passively received.

- The tendency to treat photographs as objective evidence ignores the convention-bound processes of both image making and interpretation.

## VISUALS

- Photos/Diagrams/Screenshots/Sketches





The use of design methods is supposed to help designers or researcher to know the people, their behaviors, and the contexts that are being studied. The very basic point of conducting research or fieldwork is to construct a foundation for understanding, generating insights and producing design implications. No matter what kind of approach we take or what a specific method we use, it is this point that plays as a baseline or a fundamental principle we should yield to. In this method notebook, more and more methods will be added into it and become parts of a toolkit that enables me to refer to each one of them as long as I need to carry out a user study. So far there are ten methods which have been tailored and compiled based on my own experience of using them. It is important to reflect on them and rethink about the nature of being equipped with this toolkit.

The first method I used is interview, a universal tactic that can be used pervasively. An interview seems to be about asking other people questions and writing down their answers. Substantially, it is a way of having conversation. In my opinion, any dialog with the intention of acquiring opinions from another person is an epitome of interview. In other words, interview is a conversational approach of getting to other people's thoughts. Even though there are different types of interview, such as semi-structured or fully structured interview, the terms and formality are for us, the designers and

researchers, not the interviewees or participants. People can tell the truth while they think, talk and behave naturally, being relaxed. Compared with my experience of conducting interviews with strangers, the ones that I conducted with my friends were much more informative and inspiring. Simply because they were willing to share more stories about themselves, more details that they knew and most importantly, the processing activities they had in mind. A good interview is more like a deeper conversation. When participants start actively responding to our questions, the process of obtaining relevant information will be accelerated. Interview can be used to initiate various kinds of user study by getting people on board, namely making subjects become researcher's temporary friends during the rest of the study. Start from then not only the researcher care about the study, but also participants are more likely to contribute.

In ethnography study, researchers or designers put themselves into the subjects' living and working environments. The study happens at the place where the subjects actually stay or work as opposed to some independent locations chosen by researchers. The study sites could be totally unfamiliar or even strange to us, whereas it is our job to adapt ourselves to the new surroundings quickly with active interactions with the participants. Unfamiliarity can distract us from the main focus which is to understand the contextual relationships

between the subjects and the objects they are dealing with. Therefore as researchers, we should spend some time on warming up before we formally begin to conduct ethnographic observation and inquiry. This period of time is not only for adaptive preparation from the researcher's standpoint, but also for any subject who need time to get used to the presence of any observer next to them. Getting along with each other is the prerequisite for both researchers and participants in ethnography study.

Similar to ethnography, contextual inquiry also requires us to immerse ourselves into the environments where people who are being studied. It is the purpose or main focus that has been shifted from a general observation based understanding to a learning process in which researchers are apprentices, meanwhile subjects are instructors. The goal of experiencing such mentoring relationship is to capture a clear and objective sense of how people do whatever they are used to do and complete their tasks. By listening to what people talk about their procedures and expertise of taking actions in their daily activities, we have a chance to know what goes well and what does not. Contextual inquiry encourages people to reflect on each step of accomplishing a goal, including decision making and skills applying. Some ignored problems of proceeding or opportunities for improvement can be exposed through people's self-reflection.

The methods of photo studies or visual ethnography, as well as diary studies can be applied during the process of ethnography and contextual inquiry. On one hand photography plays a role of mediating inquiry and reflection from an image based perspective. On the other hand, diary keeps track of the significant moments which are highlighted as historical records. The static view presented by pictures and diaries allows researchers to see something significant but seemingly unnoticeable while we are using our eyes to identify in real-time scenarios. The use of visual ethnography and diary studies complements the whole point of view of having prior studies in dynamic manners. That is to say, we can construct a more comprehensive picture of our subjects, their activities, and their living or working environment by using the combination of those methods.

Not like other methods mentioned so far, cultural probe asks for no concrete intentions or explicit purposes of using it, but it does require us to have open minds in order to embrace any possibilities resulted from the study. Cultural probe itself is a sort of combination of methods because it provides a toolkit which probably contains elements borrowed from other methods such as diary notebook and pictures. The distinctive feature of cultural probe is its flexibility which enables researchers to put anything creative and related to a topic that researchers are interested in. It also gives enough space to participants so

that they can respond to each item within the toolkit based on their experience, interpretation, and imagination. There is no direct interference from researchers during the implementation of this method. Subjects can take their time and play with the probe kit and reflect upon it just like a meditation therapy which stimulates the production of unexpected outcomes.

When it comes to data analysis, usually we can think of elito method, affinity diagramming, artifact analysis and genealogy / landscape analysis. Elito method is very helpful when we need to generate design concepts quickly and randomly based on either representative observations or secondary observations. Ideas will come into being through a logic line which has both judgment input and value input. However, it is inevitable to have several groups of similar ideas after elito method session. Although not every single idea is promising and worth pursuing, even not able to be treated as a concept, grouping them together may lead us to inspiring directions or insightful paradigms. Affinity diagramming is the one that helps us group ideas based on underlying connections between them and reveal patterns. We can have different grouping results by taking different approaches. Diverse structures and hierarchies can be built according to various standards of categorization. When an artifact draws attention, it is time to use artifact analysis. This is a valuable method especially in terms of critiquing a

product no matter if it is going to be replaced by a better one or not. Material, aesthetic and interactive dimensions will be analyzed and its social, cultural and historical impacts can be identified. With respect to a collection of artifacts, for instance, all the belongings of a person, landscape analysis serves well in establishing the relationships between each object as well as between all the artifacts and their owner. At the same time, genealogy analysis opens up a historical channel through which we can see the origin and development of every object. The mixed use of the two methods brings us to the next level of understanding why an individual owns what he or she has, how interactions take place, and what relationships have been established or maybe emerge as time goes on.