Facilitating Cultural Sensitivity in User Research Methods

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University of Art and Design Helsinki
Cross-cultural UX Design Seminar | TUT | 18.09.09
Design Research in School of Design, TAIK

Strategic role of design in companies
Values of designed products
Culturally sensitive design
UX & Interaction design
Housing & design for all
Design methodology & design knowing

Activities
Design Connections Summer School and Winter School take place yearly to share students' ongoing research and to produce knowledge on different themes. In addition to this annual school, seminars workshops with various topics are held. In 2007 a literature seminar took place every month and "Design and Conceptualization", "User-Centered Design Methods", "Intersections of Design and Research and Housing" are organized.

About
Design Connections Doctoral School started in the beginning of 2007. The five-year program is a collaborative effort between the University of Art and Design Helsinki and the University of Lapland and is funded by the Ministry of Education and the Academy of Finland.

The key objectives of the doctoral school are to educate design researchers and experts on the strategic level of design and to increase the knowledge about the connections of design with the society. They focus on understanding the cultural connections of design, the links between welfare, equal participation and design, design, business and innovation, and how decision making.
Bio, briefly

Cross-cultural project: UX Modeling of Multi-Media Use in Korea, China, India and the Netherlands with Samsung Electronics Co. 2006

User Interface Analysis on Mobile Phones for Chinese Market with LG Electronics Co. 2005

Cross-Cultural User Study on Dish-washer Use in Korea & Italy With politecnico di milano 2008

Series of Studies on Relationship Between Cultural Characteristics & User Research Methods

User-Centered Design Seminar, June 2008
Intersections of Culture and Design, Oct 2008

Lectures: User-Inspired Design, Design Research for MA students at TAIK
Reviewer for cultural papers at DPPI, Interact, IASDR

Industrial Design closer strand to HCI
Usability / UX design
User Research planning
Cross-cultural design

Design Research in UX Design
UCD methods (co-design)
Cultural Interaction Design
Today’s Talk

Cross-cultural design
- Historical overview of CCD & criticism in UCD methods

Why?
- Theoretical reviews

How different?
- Cross-cultural experiments

How to consider...
- facilitating cultural sensitivity in the design process
What kind of works have been done?

Language & Symbols
(de Souza 2008; Marcus & Gould 2000)
- Translating language, Avoiding Taboo, Re-designing Icons...

Aesthetic Preference
(Abulkhair & North 2005)
- Adjusting Colors & Forms...

Cultural Needs on Functionality
(Konkka 2003)
- Mecca indicator phone, Pen-based UI...

Cognitive process
(dong & Lee 2008; Kim et al. 2007)
- Menu categorization, menu navigation structure...

Mecca-Indicator Phone, LG, 2004

Samsung W559, 2007
Criticism in Methods as New Markets Emerge

“Different Culture, Different Method?”

Developed in North America and Europe
Some Evidences

Questionnaire _ Likert Scale

For East Asians, construct validity of the scale is better with a choice of 7 responses or without a neutral response.
The think-aloud test is less affected by cultural differences than the plus-minus method.
Some Evidences

Video Observation

- Home Observation in Japan?
  (Cross-cultural project on eating behaviors 2004)

- Pictures in public spaces?
  (new designers’ workshop in Nagoya 2006)

Self-Documenting

- "Since Indian people are less committed to given tasks and time, face-to-face interview is more effective than user diary."
  (Cross-cultural project on multi-media use 2006)
Why?
Theoretical Review on Cultural Differences

Culture Anthropology
- Edward T. Hall
  - The Silent Language

International Business
- Geert Hofstede
  - Culture’s Consequences
- Intercultural Cooperation and Its Importance for Survival

Cognitive Psychology
- Richard E. Nisbett
  - The Geography of Thought
Theoretical Review on Cultural Differences

Culture Anthropology

- Individualism vs Collectivism
- Low-Context vs High-context
- Femininity vs Masculinity
- Low vs High Power Distance
- Weak vs Strong Uncertainty Avoidance
- Monochrome vs Polychrome Perception of Time
- Universalism vs Particularism
- Field Independent vs Field Dependent
- Analytic vs Synthetic
- Functional vs Thematic
Culture & Interpersonal Communication Styles

Face-Negotiation Theory

Positive

High Context Culture

Face-Assertion

Face-Giving

Low Context Culture

Face-Restoration

Face-Saving

Self-Face Concern

Other-Face Concern

Negative

# Culture & Interpersonal Communication Styles

## Face-Negotiation Theory

<table>
<thead>
<tr>
<th></th>
<th>Individualism / Low-Context</th>
<th>Collectivism / High-Context</th>
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<tbody>
<tr>
<td><strong>Western</strong></td>
<td></td>
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<tr>
<td>Identity</td>
<td>I</td>
<td>We</td>
</tr>
<tr>
<td>Concern</td>
<td>Self-face</td>
<td>Other-face</td>
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<tr>
<td>Mode</td>
<td>Direct</td>
<td>Indirect</td>
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<tr>
<td>Style</td>
<td>Controlling, Confrontational</td>
<td>Obliging, Avoiding, Affective-orientated</td>
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<td></td>
<td>Solution-oriented</td>
<td></td>
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<tr>
<td>Speech acts</td>
<td>Direct</td>
<td>Indirect</td>
</tr>
<tr>
<td></td>
<td>Individualistic, Direct</td>
<td>Contextualistic (role-oriented), Indirect Emotional Expressions</td>
</tr>
<tr>
<td>Nonverbal acts</td>
<td>Direct</td>
<td></td>
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</tbody>
</table>

**Eastern**
Relationship with User Research Methods

Participants try to keep their own freedom & space.

Positive
- Participants try to keep researcher’s or other participants’ thoughts and feeling.

Self-Face Concern
- Face-Assertion
- Face-Restoration

Negative
- Face-Giving
- Face-Saving

Other-Face Concern

Relationship with User Research Methods

What people (experiences)

Techniques

Know

SAY

interviews

Surface

deep

DO

observations

Observable

MAKE

generative sessions

tacit

(Knowledge

(Sanders & Dandavate 1999)
Relationship with User Research Methods

- Sharing Personal Stories & Feelings?
- Interaction with Researchers?
- Tendency of Problem Criticism?

“I don’t like this. This is a problem.”

“What if my answer is wrong... What if researchers don’t like my responses...”

“It’s because I am not good at using this Product.”

Product Evaluation, Usability Test
Focus Group Interview

Relationship with User Research Methods

Interaction with other members?

Discussion Attitudes?

Group Dynamics & Power Distance

“But I don’t think so…”

“Argumentation makes a situation better.”

“He is my senior. I wouldn’t disagree with him.

“Better to reach to a conclusion that everybody agrees...”
How Different in User Research Methods?
Cross-Cultural Experiments

Topic: Portable Media Convergence Device

Usability test

Focus Group interview

Comparative Analysis

6 univ. students in Netherlands (Individualistic/Low context)

6 univ. students in Korea (Collectivistic/High context)
Cross-Cultural Experiments

Usability test

U10, Iriver

PSP, SONY

Photos of participants using the devices.
Cross-Cultural Experiments

Usability test + Protocol analysis

Critics
Problems
Strengths
Self-criticism
Non-user role

(m=45.8 sd=8.8)
(m=29.3 sd=6.1)
(m=19.8 sd=5.4)
(m=1.2 sd=1.3)
(m=14.3 sd=6.9)

(m=77.7 sd=17.5)
(m=21.5 sd=5.0)
(m=9.0 sd=5.1)
(m=7.3 sd=6.7)
(m=5.3 sd=3.6)

m= mean
sd= standard deviation

* Netherlands
Korea
## Cross-Cultural Experiments

### Usability Test + Protocol Analysis

<table>
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<th></th>
<th>Netherlands</th>
<th>Korea</th>
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<td>Number</td>
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**m = mean, sd = standard deviation**

### Questions:

- Uh, I think I’m doing this awful....
- Should I press this button now?
- Is it on now?
- Am I in the right position now?

### Topics:

- Critics
- Problems
- Strengths
- Self-criticism
- Non-user role

**Notes:**

- When I was 6, I had a Gameboy.
- Uh, I think I’m doing this awful....
- Should I press this button now?
- Is it on now?
- Am I in the right position now?
Cross-Cultural Experiments

Focus group interview
Cross-Cultural Experiments

Timeline Representation

Focus group interview + Protocol analysis

[Graph showing timeline representation with various symbols and colors indicating different activities such as providing a topic, calling on a person, asking for volunteers, detail questioning, and participants' speaking.]
Cross-Cultural Experiments

Representation by each member

Focus group interview + Protocol analysis
How to Facilitate Cultural Sensitivity...
What did we learn?

- Focus group interview

- “Narratives” from Dutch Participants vs “Short answers” from Korean participants

- Poor member-to-member verbal interactions & Big Facilitator’s Role in Instigating in a Korean group

- More active participation after the break in a Korean group

Cultural Sensitivity to Tools & the Process
Designing Tools

1 Sensitizing & Relationship Building

Sensitizing them with the process & topic before the session, Help them to be prepared

“Quan Xi” 关系

Ice-breaking & Relationship Building

“Pre-talk”
Designing Tools

Facilitating a shared ground & indirectness

- Tangible & playful tool enabling to express emotions & presence in focus groups
- Shared ground by having the same representations
- Emotional attachment to the situation
- Indirect & humorous way for appealing opinions

“Mini-me dolls”
Designing Tools

3 Staging an imaginary situation to be free from *facework*

- Exaggerated scenario, Different roles as show hosts & customers weaken structural facework.
- Playful atmosphere
Applying Tools

Sharing stories of pre-task cards

Idea Generation & Evaluation

In the product development process, this focus group can be applied
1) Debriefing & Interpreting Field Data
2) Idea Generation for Future Concept Design
3) Evaluation of Existing Products / Prototypes
Some Tips for Focus Groups in East Asia

1. Designing tools enables researchers & designers to have sensitivity to users before an actual session.

2. Tangible artifacts & visual images can invite users to talk with & facilitate playful atmosphere.

3. Role-playing may facilitate group dynamics by weakening structural facework & supporting indirectness.

4. Ice breaking & sensitizing is especially important for East Asians.

5. Place tasks of evaluation and critique in the latter part of the session.
If we broaden a perspective... not only with users, but also with different stakeholders.
Cultural Sensitivity in Current UCD Methods


- A good collaborative framework for working with data from ethnography.
- Empowering users
- Closer interaction between designers & users
Cultural Sensitivity in Current UCD Methods

For example, Design Probes

Not a method kit from the shelf,
Designing methods already requires sensitivity to & understanding of people that we design for.
Such an iterative process,
But ideation already happens when we design methods.

Domestic Probes
for illiterate people in Brazil
(Judice & Judice 2007)
Cultural Sensitivity in Current UCD Methods

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Cultural Sensitivity in Current UCD Methods

For example, Make Tools

Velcro blocks of make tools

make tools for aging worker
(Active@work project, picture from Design Probes, Mattelmaki 2007)

make tools for kids (2008)
Kiitos. Q & A

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