



Designing Culturally Neutral Storyboard: A Case Study of Designing an Online Survey with Storyboards

**Cross-Cultural User Experience Design Seminar II:
How to do it in practice?**

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A Case Study of Designing an Online Survey with
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1

Introduction



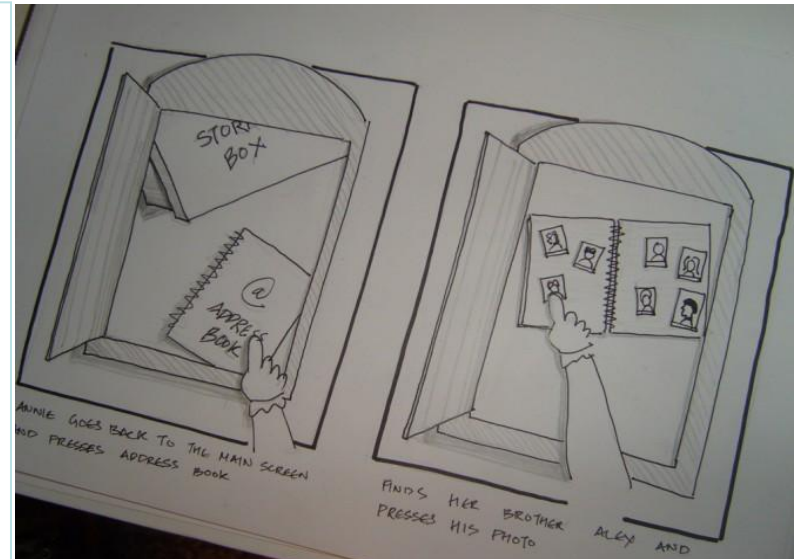
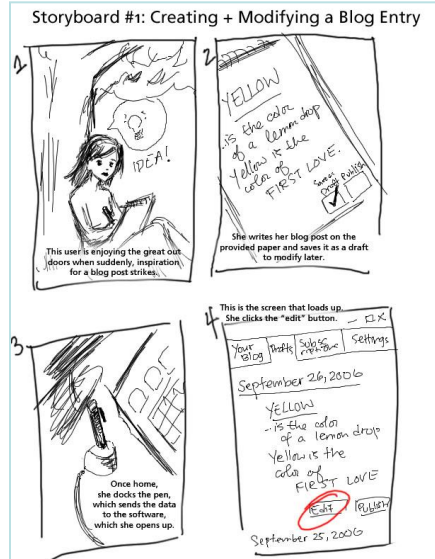
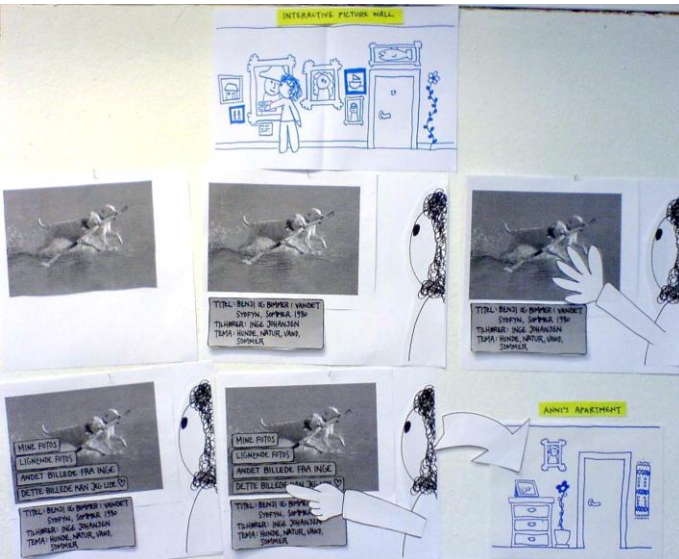
Introduction

- The aim was to develop visual presentation material about the use of mobile Social Networking Services' (SNS) for international remote online survey.
 - The case study presented here is about how the visual material was designed and evaluated.
- The approach was not to localize the material, but internationalize so that all users in 5 countries would have the same stimulus material.
- Research questions:
 - How to create culturally neutral and easy to understand visual presentation material for a storyboard questionnaire?
 - How users from different cultures interpret visual material?



2

Storyboard



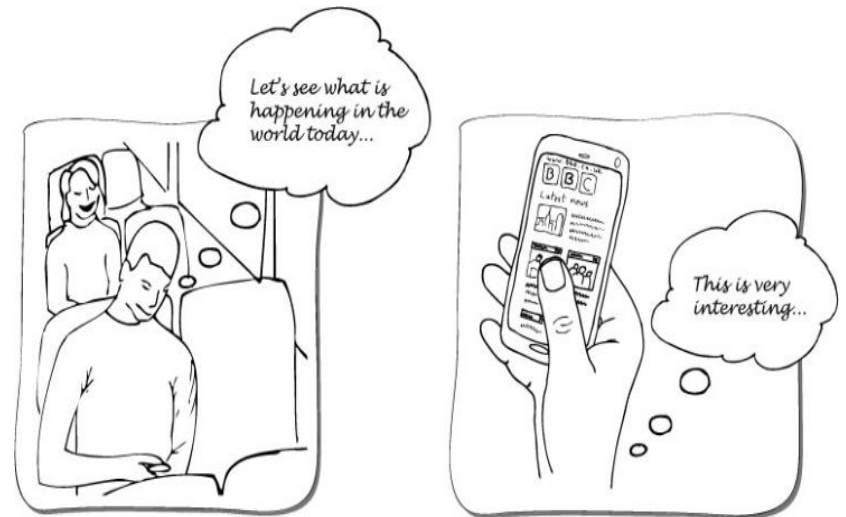
Storyboard

- Series of pictures like comic strips (a series of graphical depictions and units of textual narratives).
- In HCI mostly used:
 - To present the interaction between user and system
 - To demonstrate use contexts and user interfaces.
- Visual presentation of ideas helps users to identify themselves with the use situation, especially when there are no prototypes available.
- Useful method in cross-cultural user studies:
 - Remote online implementation enables quick and cost-efficient concept evaluation early in different use contexts in different parts of the world.
 - Reduce the amount of text that users need to read.



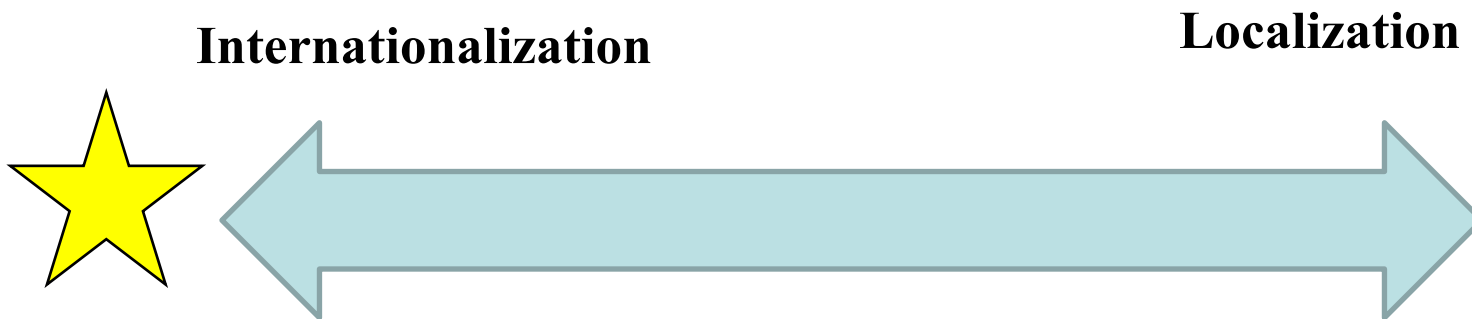
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Internationalization of Visual Material



Internationalization of Visual Material (1/2)

- Images (graphics, symbols, icons, fonts and colours) form the visual language of a culture.
- People interpret visual material in different cultures differently.
- Internationalization of visual material is removing the culture-specific attributes -> Culturally neutral, "Universal Design".
 - Seldom sufficient for products marketed to many different cultures.



Internationalization of Visual Material (2/2)

- Some images may be offensive, others sacred or simply inappropriate for the context, while other images may not mean what you think they mean in a target country.
- E.g. physical context (how to visualize the environment), hands (left or right hand), racial characteristics, gender roles, modesty (how to dress up the people), the use and interpretation of colours differs around the world etc.



What to do? (1/2)

1. Research target cultures.
2. Test visual material with target cultures.
3. Involve persons from target cultures in design.
4. Use images representing globally common experiences.
 - Pick globally recognizable images e.g. rainbow, envelope, books, cameras, clocks, eye glasses, microphones, planes, trains, scissors, rainbow etc.



What to do? (2/2)

5. Generalise images.

- Keep the design simple
- Draw people with whom the user can identify. Detailed images of people carry cultural and racial identifiers. In drawing an image of a person:
 - Dress people modestly.
 - Minimise signs of economic and social class.
 - Take care with body language.

6. Eliminate culture-specific symbols.

- Avoid mythological and religious symbols e.g. cross, crescent
- Avoid national emblems
- Be careful when using colours: Colours have symbolic meanings and the meaning of colour varies from culture to culture.



4

Case Study



Goals of the Pilot Case Study

- **The goal of the pilot case study** was to develop visual presentation material for international product concept evaluation (mobile SNS use).
 - To create culturally neutral storyboards as a stimulus material by involving persons from the target cultures to the design process.



Research process of the pilot study

- Research questions and goals
- Target countries: Brazil, India, Russia, Spain, USA
- Method: Online survey with use scenarios that were presented in a storyboard form
- Design and iteration of the storyboards and survey questions
- Recruiting participants
- Survey and interview sessions
- Analyzing data
- Results (cultural differences and survey improvements)
- Iteration of the storyboards and survey questions for the upcoming online study



Designing storyboards

- 10 written use cases to start with
 - E.g. *Having fun with friends: You are spending some time with your friends and having fun. You decide to share your location/ picture/ text of your whereabouts*
- First drafts were drawn by the SUXES research group and given to the graphic designer
- The graphic designer's versions of the storyboards were further iterated 5-7 times
- 5 storyboards selected to the online survey
- Testing the survey with 1 British and 5 Finnish users
 - Storyboard changes: Neutralizing happy face, camera: "Click!", add people and background

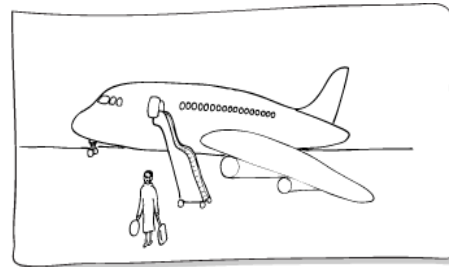


From the first draft to the final storyboard

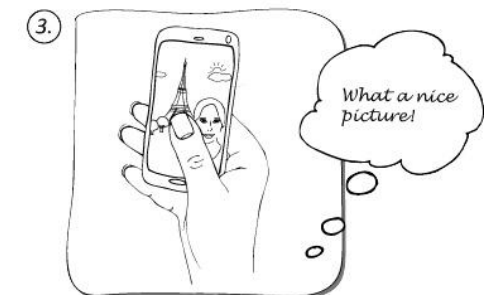
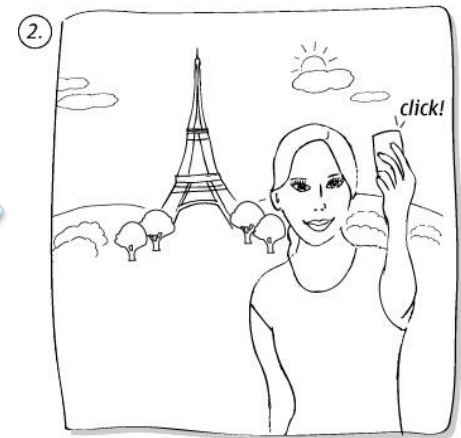
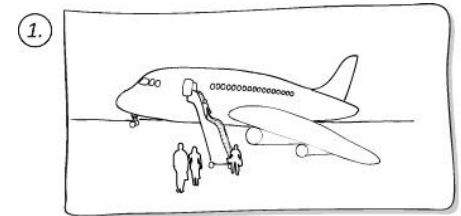
"Vacation in Paris"



The first draft



The first GD's version



The final version



Survey and interview sessions

- 12 under graduate students representing 5 nationalities participated (1 American, 1 Brazilian, 5 Indians, 1 Russian and 4 Spanish)
- **Background questions**
 - such as age, nationality, native language and English skills
- **Storyboards (5) and questions of SNS usage**
 - The storyboards acted as a stimulus to users before answering SNS questions
- **Questions of storyboards**
 - *Now, describe in your own words, what is happening in this scenario?*
 - *Imagine yourself in this situation. What would you do next?*
 - *Was there anything unfamiliar or odd for you in this situation or in these pictures?*
 - *Was there anything irritating in this situation or in these pictures?*
 - *How did these pictures suit your own culture?*



Results (1/3)

- **Storyboards helped respondents to understand difficult concept ideas and imagine themselves into the use situations, which made answering to the SNS questions easier and fun.**
 - AM1: “Pictures were good and captured the essence. Made it **easier and more fun to answer**. It was nice.”
 - IN1: “Picture is like presenting the situation already, so you know the information there. **You can put yourself into that situation and imagine how you react**. Quite ok. It was good.”
 - SP1: “With the pictures it is faster: **you can take a look and imagine what happened very fast**. **If you answer the survey in a foreign language**, like in my case, **it is clearer with the picture** than with just a text.”



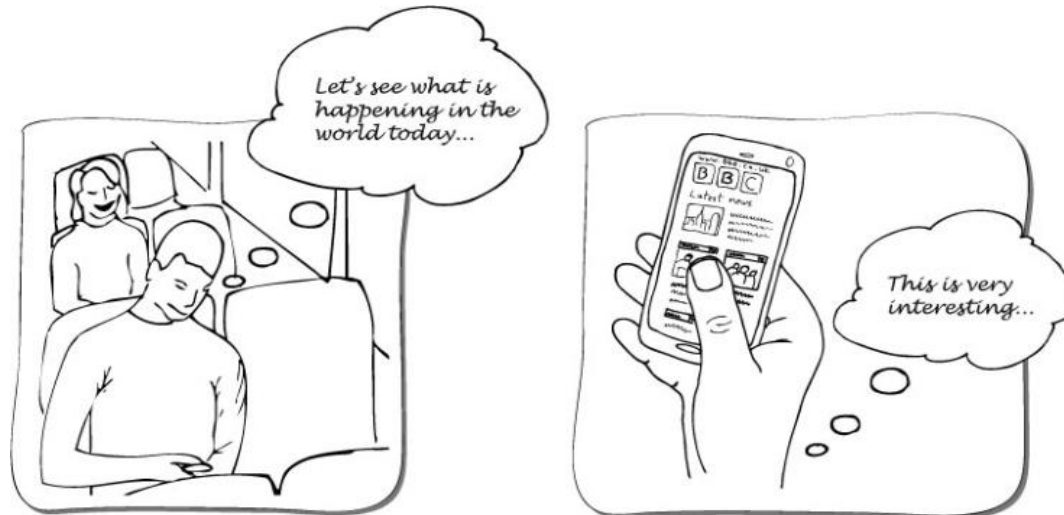
Results (2/3)

- **Storyboards themselves were well understood by users with different cultural backgrounds.**
- Only minor differences in interpretation of the pictures:
 - Indians interpreted a bunch of friends on a beach to be a family gathering
- More differences in how common the presented situations were for the users
 - Most users rather took photos with digital cameras than with mobile phones (“Vacation in Paris” storyboard)
 - Sharing pictures: “It is not my style to share pictures immediately. I will go home and choose to share it or not.”



Results (3/3)


- More cultural differences...
 - AM1: “In the western side of US public transport doesn’t really exist.”
 - BR1: “These situations would happen in Brazil, maybe not read news (with a mobile device) , because communications is not so good...”
 - IN7: “Internet access by travelling is not yet very common in India.”



Conclusions

- Storyboards seem to be a useful method for remote cross-cultural user studies, also for remote concept evaluation studies
 - Users with different cultural backgrounds understood and liked the pictures which also helped them to imagine the use cases.
 - Storyboards helped users to understand the product concept and filling in the questionnaire was easier and more fun.
- It is important to involve users from the target cultures to the storyboard design to find out culture-specific elements
 - Ask user to describe what is happening in the storyboard
 - Ask how likely the scenario could happen in one's own country and how familiar are the pictures for one's own culture
- This pilot study produced useful data on how to further improve the survey and alter the storyboards for the upcoming online survey





Questions? Thank you!

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User Experience Evaluation For Supporting International Competitiveness



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