User-centric methodologies in research

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Your research

Define your research in 10 seconds.

Write down keywords of your colleagues’ research.
Research methodologies

Translation Studies research can focus on:

• Product.
• Process.
• User.
• Context.

(Saldanha & O’Brien, 2013)
Aim

Part 1. Discuss methodological aspects when dealing with users.

Share your views and research! I am only the facilitator of this workshop.

Part 2. One practical exercise.
Research methodologies

User: participant-oriented research.

Human agents in the translation process. Who are they?
Human agents in the translation process

- Human agents in the context of:
  - Creation.
  - Reception.
- Translators, trainers, trainees, post-editors, interpreters, end users, readers, viewers, etc.
- What about East Asian Studies?
Terminology

• Participants.
• Informants.
• Subjects.
• Users
• ?????
User-centric methodologies

Translation (or accessibility or...) as part of a process, not as an added element.

Can we use “user-centered design” methodologies in translation studies / accessibility / East Asian Studies?
User-centric methodologies

Harte et al (2017):

• An explicit understanding of users, tasks, and environments.
• A permanent involvement of users throughout the design and development.
• A design driven and refined by user-centric evaluations.
• An iterative approach.
• A multidisciplinary team with different skills and perspectives.
• A clear but at the same time flexible approach to user testing.
An example: the ImAc project

http://www.imac-project.eu/

Integrating accessibility in immersive environments.

Access services creation & reception.
An example: the ImAc project

Defining the users: UNCRPD framework or mainstreming accessibility?

Reaching the users: user associations.

Involving them all along the process: “Nothing about us without us”.
An example: the ImAc project

Access services in immersive environments.

Before development: focus groups, basis of user requirements and platform specification.

During development: first pilot testing (formative evaluation). Focus groups development.

Towards the end: second pilot testing.
Research instruments: user-centric methodologies

- What research instruments can be used, and what do you know about them?

- Please make a list!
During the process: ET


https://www.smivision.com/

Demo:
https://www.youtube.com/watch?v=lo_a2cfBUGc
https://www.youtube.com/watch?v=x0_DyNOJ3lQ
https://www.youtube.com/watch?v=HvAOAOOnuyb4
During the process: ET

Visual attention & visual distribution

Mean fixation duration
First fixation duration
Number of fixations
Gaze shifts between subtitles and images
Etc.
During the process: EEG

Emotiv Epoc+: https://www.emotiv.com/epoc/

Demo in another field: https://www.youtube.com/watch?v=bposG6XHXvU

Electrical Activity of the Brain.
Psychological measures: for instance, immersion (Kruger et al. 2016).
During the process: GSR & HR

Galvanic Skin Response (electrodermal activity) and heart rate, often together with facial recording.

Emotional states: physiological responses (sudoration and heart rate).

Example: https://www.youtube.com/watch?v=m6E6tpOHYkE&t=2s
An example: NEA project

http://pagines.uab.cat/nea/

Voice-over versus dubbing effect in AST.

https://ddd.uab.cat/record/190634
During the process: keylogging

It records keyboard movements, including mouse and pauses.

Technical effort.
Temporal effort.
Cognitive effort (pause).
During the process: keylogging

InputLog: http://www.inputlog.net/
Translog: http://www.translog.dk/default.asp?id=20

Comparison:
http://www.writingpro.eu/logging_programs.php

An example: the ALST project.
During the process: screen recording

Camtasia: https://www.techsmith.com/camtasia.html

Blueberry Flashback Express: http://www.flashbackrecorder.com/express
During the process: remote monitoring

Ethical issues

Webwatcher
RealtimeSpy
Indirect observation: TAP

Think aloud protocols

• During the process,
• After the process.

Does it influence the process?
How to process information?
Indirect observation: interviews

- Structured.
- Semi-structured.
- Non-structured.
Indirect observation: questionnaires

Paper versus electronic.
Open and closed questions.

Survey Monkey.
Google Forms.
Indirect observation: focus groups

- Facilitator.
- Interest in group, not individual variation.
- Example from IMAC.
- How to process data?
Other UX methods


- What can we learn from these methods?
Defining the test and the user

• Selecting the methodological approach: commercial context versus academic context.

• Selecting and profiling users: questionnaires and standardised tests.

  • Dialang test (language proficiency)
  • Cognitive tests on intelligence, processing speed or verbal skills: http://www.akademiai.com/doi/abs/10.1556/084.2016.17.2.4
Experimental design: some initial questions

• Research question and hypotheses.
• Variables:
  • what do you expect to change? (dependent variable)
  • what will you manipulate in order to see the effect on the dependent variable? (independent variables)
• Who and how many?
• Stimuli/materials?
• Environment?
• Tools?
Experimental design

• Replicable (it can be repeated in future studies).

• Reliable (it is internally consistent, all elements that can distort the results have been controlled).

• Valid (it is measuring what you really want to measure).

...and following ethical principles.
Ethics

European Code of Conduct for Research Integrity:

• Honesty in communication;
• Reliability in performing research;
• Objectivity;
• Impartiality and independence;
• Openness and accessibility;
• Duty of care;
• Fairness in providing references and giving credit,
• Responsibility for the scientists and researchers of the future.
An example: UAB’s ethical committe


- Looking at the online form: [http://apps.uab.cat/ceeah/welcome.htm](http://apps.uab.cat/ceeah/welcome.htm)
Some issues

- Informed consent.
- “Vulnerable” populations: alternative communication means.
- Protecting personal data.
- Open access in research.
Part 2. Practical exercise

UAB wants to create a new accessible multilingual website to attract East Asian students.

You want to design a research that takes into account users.

How would you involve users and what type of methods and tools would you use? Try to design a few experiments.
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