

AVT, MA and projects Seminar Series, Hacettepe University  
09.04.2021

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# User-centric research in media accessibility

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# Research focus

PRODUCT

PROCESS

PARTICIPANTS

CONTEXT-  
ORIENTED

# Media accessibility: some questions

- How are access services produced?
- What are the main features of access services?
- How are access services received?
- What works best for certain users?
- Who are the users?
- Etc.

Ultimate aim: societal impact.

# Media accessibility: the users

“Nothing about us without us”

Users at the center of the design and research process:  
“user-centered design methodologies”

Moving away from disabilities to capabilities (Orero et al.)

# 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

# Some examples

Projects in which TransMedia Catalonia (TMC) has participated in which the users are central:

<https://grupsderecerca.uab.cat/transmedia/>

In this presentation: focus on the research process, the methods, and not so much on the results.

# Ethical procedures in research

Ethical approval

Information sheet and consent form

Accessible formats

Dealing with the so-called “vulnerable” populations

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# Project 1: IMAC

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[imac-project.eu](http://imac-project.eu)



# ImAc

How can access services be integrated in immersive environments?

Focus groups inform user needs and requirements

User requirements are implemented and technological testing

Iterative user testing

# Subtitling in 360° videos: services



**Figure 1** Fixed-position subtitles attached to one position in the sphere in Episode 4 of *Holy Land*, created by Ryot.



**Figure 2** Always-visible subtitles attached to the FoV in Episode 5 of *Holy Land*, created by Ryot.



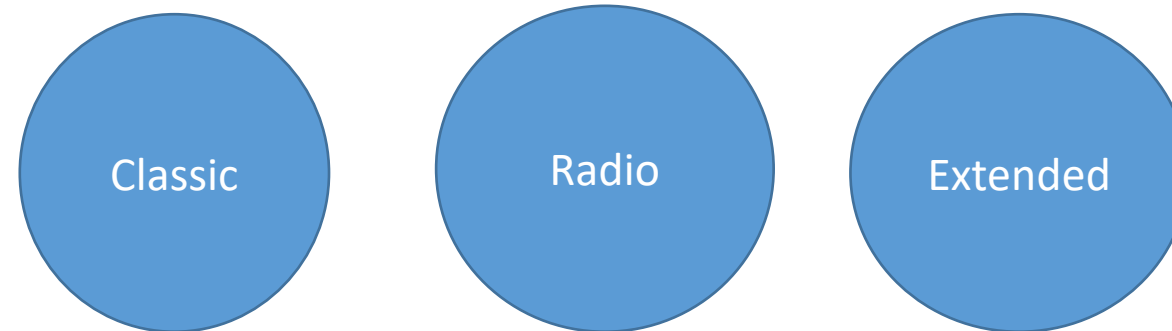
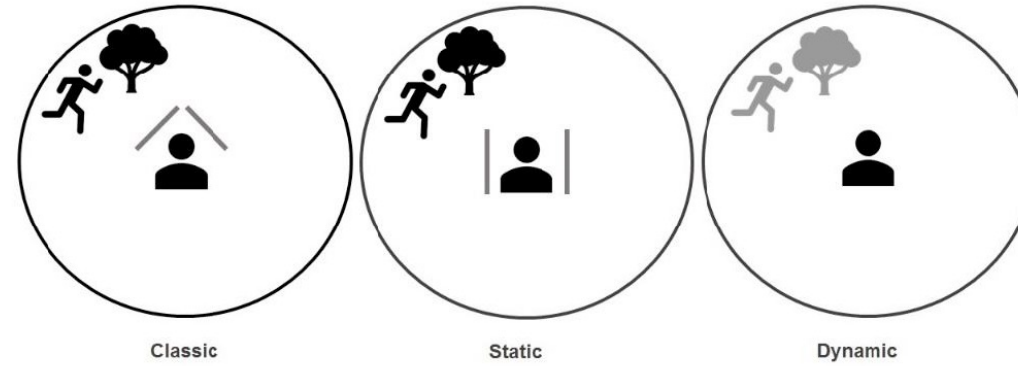
**Figure 3** Subtitle with arrows in *I, Philip* created by ARTE.



**Figure 4** Subtitles with radar in *I, Philip*, created by ARTE.

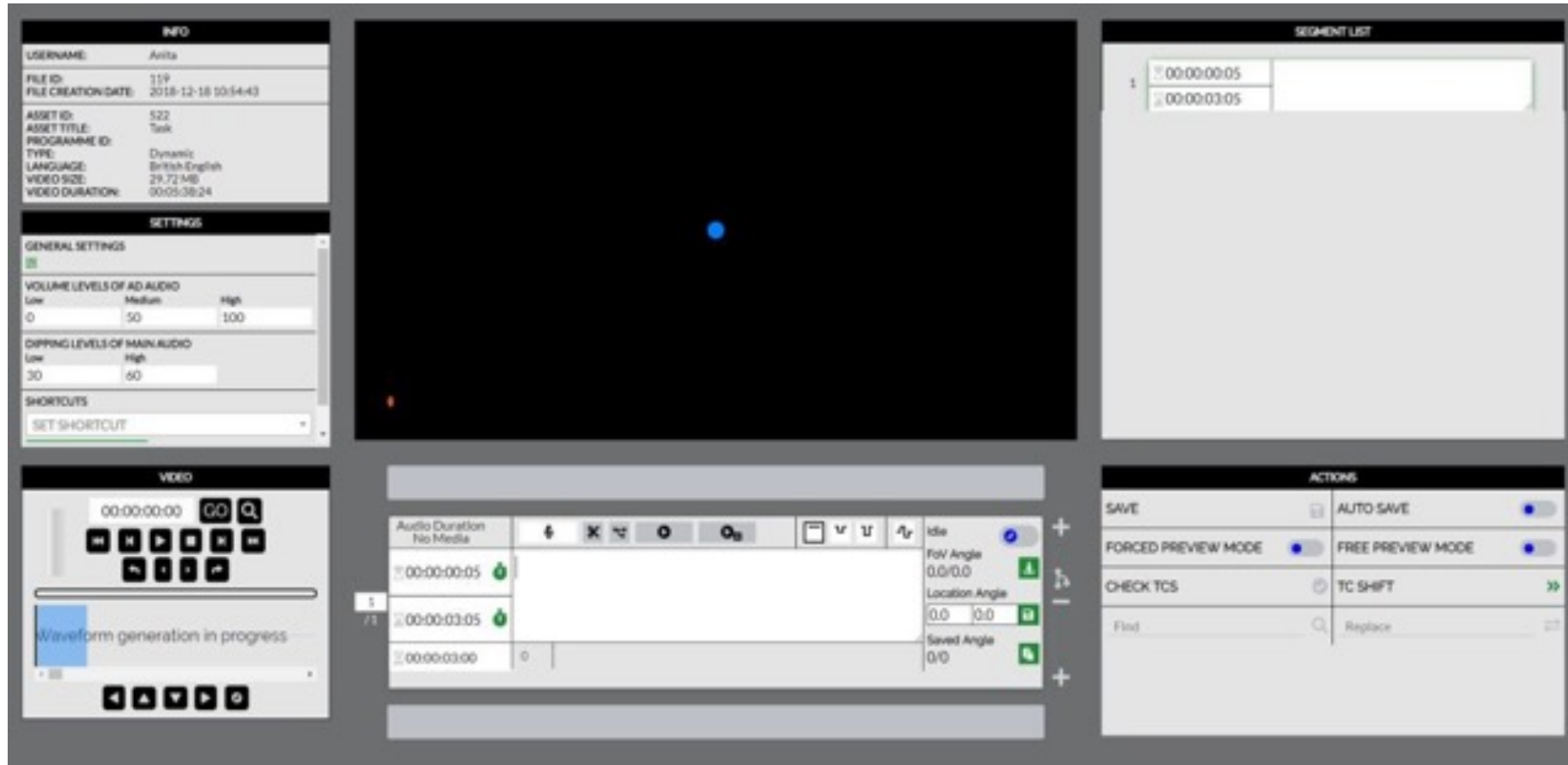
Sources: Agulló & Matamala (2018), D.5.4 IMAC deliverable

# AD in 360° videos: services



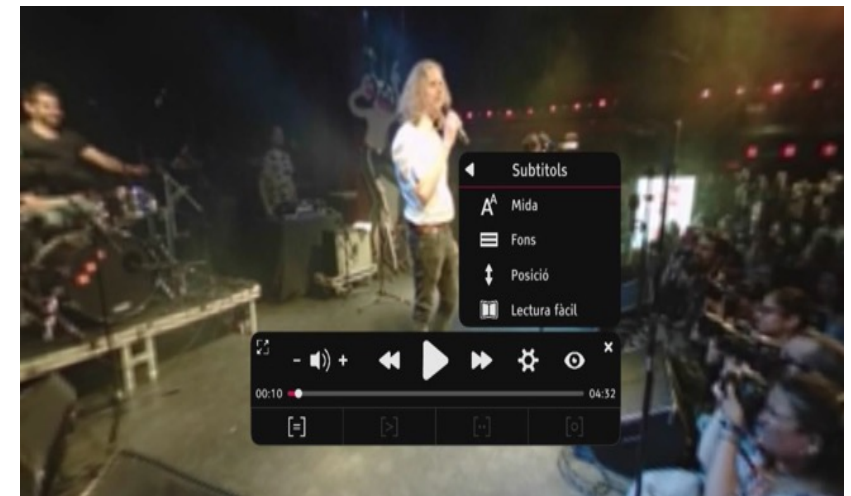
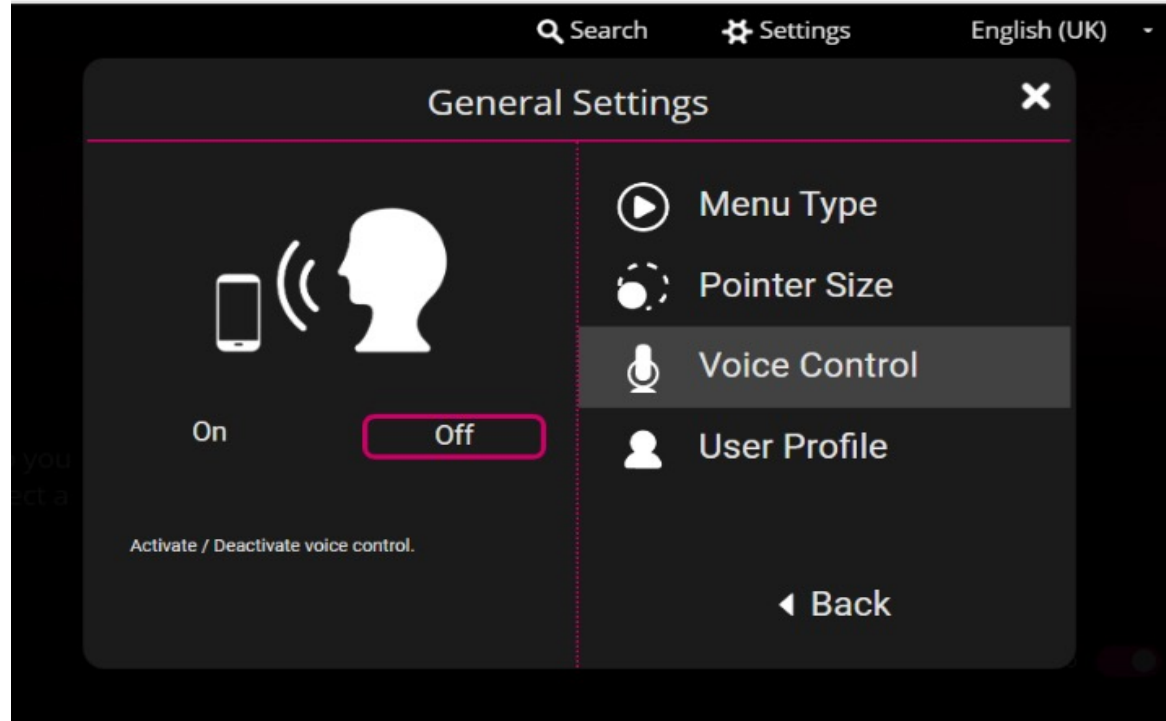
Sources: Phd by Anita Fidyka, Fidyka & Matamala (2018), D.5.4 IMAC deliverable

# 360° access services editors



Source: Fidyka & Matamala (2019)

# Player for 360° accessible content



# Methods

Focus groups

Usability testing (SUS)

Questionnaires

# **An idea to take home**

**Multidisciplinarity and team work are fundamental**

**Innovative research in media accessibility**

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# Project 2: NEA

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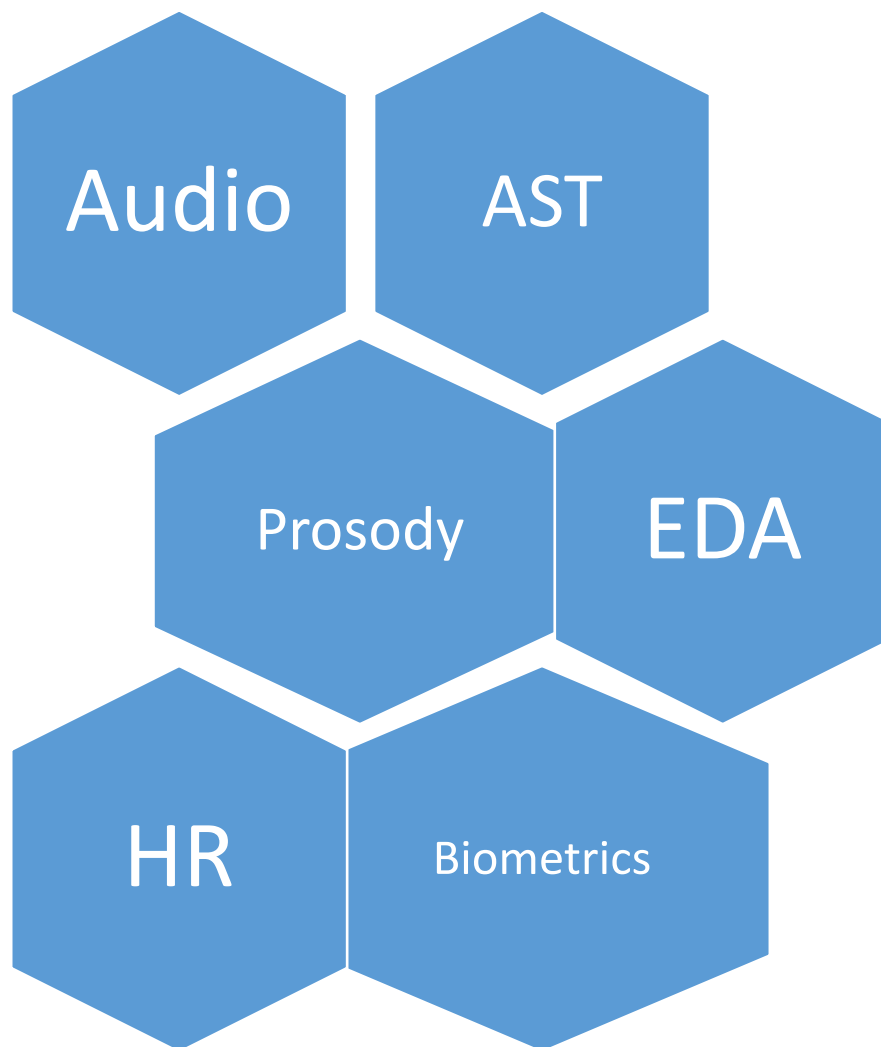
[pagines.uab.cat/nea](http://pagines.uab.cat/nea)

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## Sources:

Matamala et al (2020): "Electrodermal activity as a measure of emotions in media accessibility reserach"

Iturregui-Gallardo PhD on AST and emotional activation: voice-over versus dubbing effect. (*Perspectives*, 2020)

# Tools



Tactile version of the Self-Assessment Manikin (T-SAM) for the emotional assessment of visually impaired people (Iturregui-Gallardo, Méndez-Ulrich 2019)

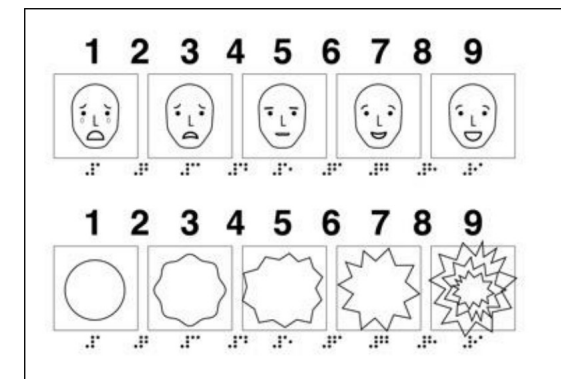
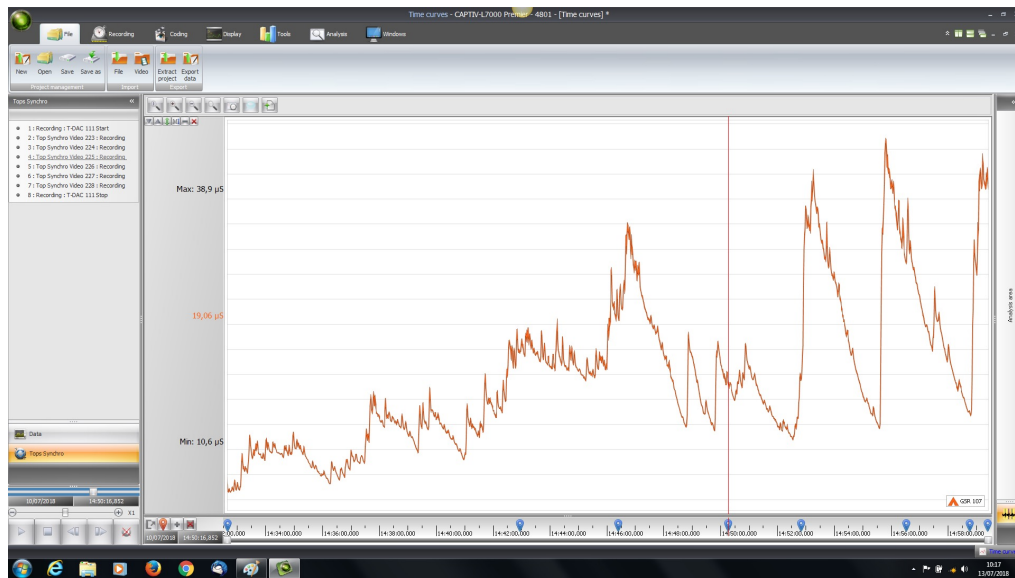


Figure 2. T-SAM (Tactile-SAM)



# **An idea to take home**

**Find the best tools for your empirical research**

**Example: eye-tracking**

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# Project 3: RAD

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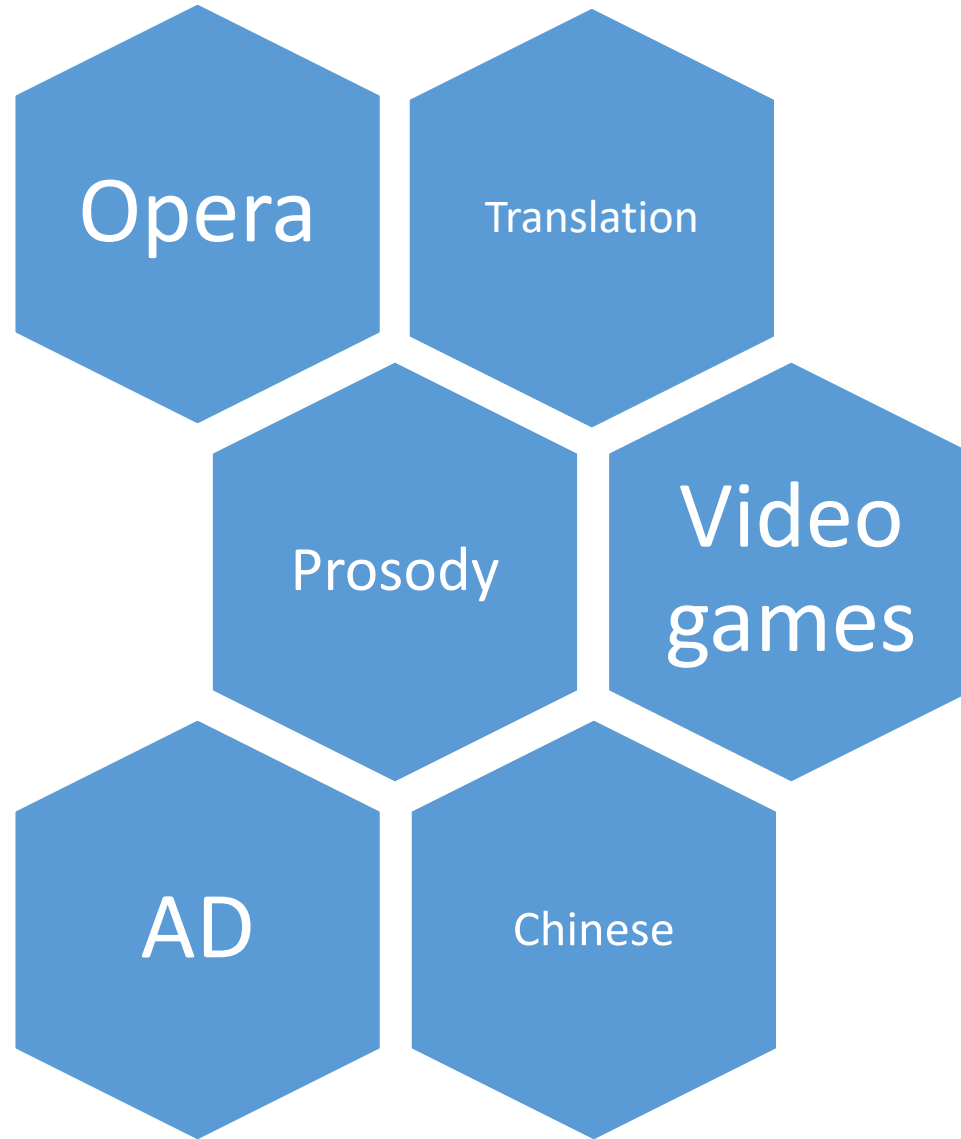
[Pagines.uab.cat/rad](http://Pagines.uab.cat/rad)

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# RAD



# **RAD: prosody**

Voices in AD:

“a neutral delivery has come to be recognized as the norm”  
(Fryer 2016: 88)

“voicing must be neutral with appropriate intonation”  
(Spanish standard)

**WHAT DOES IT MEAN?**

# Prosody

Descriptive study (using VIW corpus) in CAT, ES, EN:

- duration/speed
- intensity/volume
- pitch

Perception study:

- what is a neutral voice?
- select neutral/preferred voice (different pairs)

# Methods

- Online questionnaire (challenges)
- Qualitative and quantitative information



# **An idea to take home**

**Do your literature review and ask questions**

**Work with experts from other areas in empirical research**

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# Project 4: EASIT

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[pagines.uab.cat/easit](http://pagines.uab.cat/easit)

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<http://pazines.uab.cat/easit/>



**@EASITproject**

## **Online Multiplier Event June 2021. Free!**



Erasmus + Strategic Partnerships in Higher Education.

2018-1-ES01-KA203-05275

September August 2021





Innovative idea as a starting point:  
merge easy-to-read or Plain Language  
with access services (Orero, Bernabé-Caro)

Can we create easy-to-understand

- subtitles?
- audio descriptions?
- audiovisual content (eg. audiovisual news)?



1. State of the art: training and practice.
2. How to transfer easy-to-understand language into the audiovisual world?
3. New professional profiles? What skills?
4. How to train them?
5. What educational content is needed?
6. How to certify training?

## Methods:

- Questionnaire
- Focus groups
- Interviews
  
- Evaluation workshops (questionnaires)



# An idea to take home

**Importance of training professionals:**

**Course in Accessibility Management:**

<https://grupsderecerca.uab.cat/transmedia/course-accessibility-management>

**Course in Accessible Digital Communication:**

<https://grupsderecerca.uab.cat/transmedia/course-accessible-communication>

**International collaboration: relevant research in Turkey**

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# Other methods

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# Other methods

- We have mentioned:
  - Interviews , focus groups, questionnaires, EDA/HR, usability tests.
- Other methods:
  - Eye-tracking
  - EEG
  - Keylogging
  - Screen recording
  - TAP

# Some final advice

- Plan your evaluation
- Pilot it
- Evaluate it
- Analyse it
- Communicate it
  - Science
  - society
- Back to the “users” and to society, so that it can have an impact beyond the academic field.

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# Sharing knowledge

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# Networks



**LEAD-ME**

# Media Accessibility Platform

<http://mapaccess.org>

## Welcome to MAP (beta version)

Welcome to MAP, the Media Accessibility Platform, a unified atlas charting the worldwide landscape of research, policies, training and practices in this field. MAP aims to make media accessible to all, regardless of sensorial and linguistic barriers.

[Read more](#)

### PROJECTS

#### Understanding Media Accessibility Quality

Project duration **2017-2019**

Leading Institution **Autonomous University of Barcelona**

Funding bodies **European Commission**

Modalities **Media Accessibility**

### LATEST NEWS

02/10/2018 **Languages and the Media programme online**

23/04/2018 **MAP as media partner of 12th Languages and The Media conference**

23/04/2018 **12th Languages and The Media Conference - Berlin 2018**

08/03/2018 **UMAQ conference: programme online**

04/11/2017 **A new Collection of Movies with video-description**

19/10/2017 **EU one step closer to Accessibility Act**

October 2018

Su	Mo	Tu	We	Th	Fr	Sa
30	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31	1	2	3

### PUBLICATIONS

#### Audiodescrição Didática

Type **PhD thesis** Year **2016**

Author(s) **Elton Luiz Vergara Nunes**

Modalities **Audio Description**

### TRAINING COURSES

#### Cursos de Audiodescrição

Course Type **Professional training course**

Institution **Azimuth e-Learning** Year **2017-2018**

Modalities **Audio Description**

### EVENTS

#### XXXVIII Semana do Tradutor

Type **Conference** City **São José do Rio Preto, SP**

Date **24/09/2018, 25/09/2018, 26/09/2018, 27/09/2018, 28/09/2018**

Modalities **Audio Description, Sign Language Interpreting, Subtitling for the Deaf and Hard of Hearing**

### Accessometer

The Accessometer provides a world map of the legislation, standards and guidelines on media accessibility organised by countries.

[Read more](#)


### LEGISLATION, STANDARDS AND GUIDELINES

Об утверждении Государственной программы о социальной защите и содействии занятости населения на 2016–2020 годы

Type **Legislation** Year **2016**

Authoring **Government of Belarus**

Country **Belarus**

ГОСТ Р 57891-2017. НАЦИОНАЛЬНЫЙ СТАНДАРТ РОССИЙСКОЙ ФЕДЕРАЦИИ. ТИФЛОКОММЕНТИРОВАНИЕ И ТИФЛОКОММЕНТАРИЙ. Tiflokommentirovanie and tiflokommentariy. Terms and Definitions

Type **Standards** Year **2017**

Authoring **Pavel Obiukh, Sergey Van'shin, Federal State Unitary Enterprise "Russian Scientific-**

# Disclaimer

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