Congreso Internacional sobre Traducción e Interpretación de Discursos Especializados, Málaga 3-12-2021.

New approaches to AD research: words, voices, and collaborative processes

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Audio description

Images into words

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



Some relevant topics

Audio Description Reception

Technology Collaboration Training



Description Content and linguistic selection

https://pagines.uab.cat/viw/





The Corpus

The VIW corpus is made up of audio descriptions in different languages of the same short film, and it incorporate a **search engine** (forthcoming). It currently includes 10 professional audio descriptions in English, 10 professional audio descriptions in Spanish and 10 professional audio descriptions in Catalan. All 30 audio descriptions were commissioned to professionals, who were remunerated. It also includes 10 audio descriptions in Spanish and 7 audio descriptions in Catalan made by students (text only, not recorded audio/video files). We hope to expand it in the near future with more audio descriptions. You are invited to read the section "Contribute".

Audio and video files with audio description by professional describers

English Catalan Spanish

Text files of audio descriptions by students

Catalan Spanish

ACCESS TO THE CORPUS SEARCH ENGINE

All materials are also available at UAB's open access repository: https://ddd.uab.cat/record/147267.







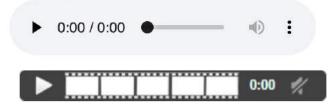


ENGLISH AUDIO DESCRIPTIONS

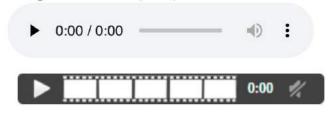


All materials are also available at UAB open access repository: https://ddd.uab.cat/record/147267.

Able (NZ):



Bridge Multimedia (USA):



BTI Studios (UK):









List of available corpora

You can also use the **BROWSE facility** to look for a specific file.

- WHW-EN-Pr: The WHW-EN-Pr corpus contains professional audio descriptions in English for the short movie "What Happens While". access
- WHW-ES-Pr: The WHW-ES-Pr corpus contains professional audio descriptions in Spanish for the short movie "What Happens While".
 access
- WHW-CA-Pr: The WHW-CA-Pr corpus contains professional audio descriptions in Catalan for the short movie "What Happens While".
 access
- WHW-ES-St: The WHW-ES-St corpus contains audio descriptions in Spanish for the short movie "What Happens While" made by students. access
- WHW-CA-St: The WHW-CA-St corpus contains audio descriptions in Catalan for the short movie "What Happens While" made by students. access





Actions for corpus 'WHW-EN-Pr'

- Filmic annotations: you can get the <u>.eaf file</u> with all filmic annotations or the <u>html version</u>
- Simple string search: this allows simple string searches on the entire WHW-EN-Pr corpus access
- AD unit, sentence and word countings: this provides some figures about AD units, sentences and words in the WHW-EN-Pr corpus
 access
- AD distribution in the timeline: you can get a compact view or an expanded view of the ADs distribution in the timeline
- Verb distribution in the timeline: you can choose a verbal semantic class and see its distribution in the timeline. access
- AD similarity: see text similarity among files in the corpus access
- Word frequency by part of speech: you can see word frequency by part of speech tag access
- Word frequency by provider: this gives the number of verbs, nouns, adjectives and adverbs per provider. access
- Verbs & semantic classes: you can inspect verbal semantic classes access
- Nouns & semantic classes: you can inspect nominal semantic classes access
- Adjectives & semantic classes: you can inspect adjectival semantic classes access
- Adverbs & semantic classes: you can inspect adverbial semantic classes access







References

Matamala, Anna (2019) "<u>The VIW corpus: multimodal corpus</u> <u>linguistics for audio description analysis</u>". *RESLA. Revista Española de Lingüística Aplicada*, 32:2, 515-542.

Matamala, Anna (2018) "One short film, different audio descriptions. Analysing the language of audio descriptions created by students and professionals". *Onomazéin*, 41, 185-207.





Audio: voicing

pagines.uab.cat/nea Pagines.uab.cat/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

Machuca, Matamala, Ríos in MonTi (2020)





Prosody

Perception study:

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

- 60 participants in Spanish (31 with sight loss/29 without)
- 71 in English (40/31)
- 61 in Catalan (35/46)





Quantitative results

Non-neutrality, easier to identify than neutrality

Differences across languages





Qualitative results

- Emotions, expressivity
- Pitch
- Volume
- Speed
- Changes in the previous parameters
- Accent
- Articulation, pronunciation
- Unobtrusive
- Gender





Reception

pagines.uab.cat/nea





PhD theses

Cristóbal Cabeza-Cáceres: Reading speed, explicitation and intonation

Nazaret Fresno: information load and distribution.

 Anita Fydika: 360° videos (AD strategies: standard, radio, extended)



NEA

Matamala et al (2020): "Electrodermal activity as a measure of emotions in media accessibility research": https://jostrans.org/issue33/art_matamala.php



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





Technologies: for creation





ALST

"Linguistic and sensorial accessibility: techologies for voice-over and audio description", 2013-2015 (Spanish funding).

PhD thesis by Anna Fernández-Torné on AD and technologies.

Matamala, Anna (2016) "The ALST project: technologies for audio description". In Matamala, Anna; Orero, Pilar (eds) *Researching Audio Description. New Approaches*. London: Palgrave Macmillan, 269-284.



Rationale

Speech recognition

Machine translation

Text-to-speech

Voice-over? AD?



Speech recognition

Soundtrack extraction, speech activity detection, speaker diarisation and speech-to-text transcription.

Film "Closer" (English and Catalan)

DER & WER measures: low performance.

Source: Delgado, Matamala and Serrano (2015)



Machine translation

Main experiment: 12 AVT MA students

Human creation/Human translation/post-editing (EN>CAT)

Temporal, technical and cognitive effort (InputLog) Perceived effort (questionnaire)

Source: Fernández-Torné & Matamala (2015)



MT in AD: results

- Temporal effort
- Technical effort
- Cognitive effort (pause-to-word ratio)

Subjective measures



MT: speech synthesis

Pretest: select the "best" human/natural male/female voice

Main experiment with 67 persons with sight loss.

Main results:

- Natural voices, higher values.
- Overall impression/acceptance: mean higher than 3.2
- 94% TTS acceptable solution, not preferred one.

Source: Fernández-Torné & Matamala (2015) In line with previous research by Szarkowska *et al.* in Poland



Technologies for collaboration

https://mediaverse-project.eu/















Professionals and non-professionals working together

Social transformation impact

But how to evaluate it?



Process

- Non-professionals:
- Profile*
- Participation*
- Engagement
- Balanced contributions
- Mutual understanding
- Relationships
- Satisfaction
- Project evolution

Artistic product

- Artistic product*
- Quality
- Media impact
- Audience
- attendance*
- profile *
- response:
- feeling represented
- personal change
- satisfaction
- Non-professionals response:
- feeling represented
- satisfaction

Process and product

- Community impact
- Non-professionals:
- personal change (empowerment, relationships)
- learning
- Professionals:
 - personal change (relationships, attitudes)
 - learning
- Institution:
- institutional change (attitudes, programme, practice)

 Could this be transferred to the co-creation of accessibility services?

Matamala & Orero (forthcoming)



MEDIAVERSE approach to co-creation

Co-creation of 360° videos for social inclusion



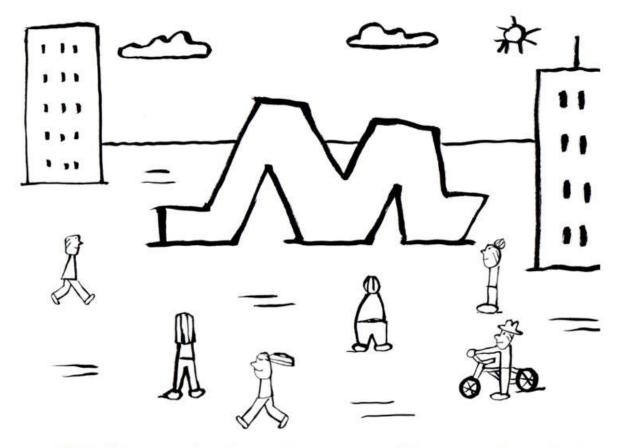








MEDIAVERSE platform



MediaVerse makes it easy to create and share media content in an ethical and democratic way.



MEDIAVERSE platform

What about access services?

- Could we create audio descriptions on content uploaded in the MV platform and
 - Assign copyright?
 - Monetize it?



Researching on:

Copyright assignment & monetisation in collaborative environments

Co-creation processes with impacts beyond economic aspects

Role of technologies and of humans



Training

https://www.adlabpro.eu/pagines.uab.cat/easit





http://www.adlabproject.eu/





Some of the main outputs:

Audio description guidelines: "Pictures painted in words".

Training materials (free)



Hybrid services:



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

Erasmus + Strategic Partnerships in Higher Education.

2018-1-ES01-KA203-05275

September August 2021







Main results regarding AD:

- E/SJT
- Focus groups results: is it feasible?
- Skills card
- Curriculum design
- Training materials









Conclusions





What else?

Technology and workflows

Less researched languages

Audio elements

Platforms

Multimodality

Knowledge transfer



Media Accessibility Platform

http://mapaccess.org



ACCESSOMETER +

RESEARCH -

TRAINING -

MODALITIES -STAKEHOLDERS - EVENTS - NEWS

~

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: progamme 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	Мо	Tu	We	Th	Fr	Sa
30	1	2	<u>3</u>	4	<u>5</u>	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

Modalities Audio Description

Course Type Professional training course

Institution Azimuth e-Learning

Year 2017-2018

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.







Disclaimer



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