

9th International Symposium for Young Researchers – 29<sup>th</sup> June, 2018

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# Audio description in 360° videos: results from a focus group in Barcelona

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- Definition and research on audio description
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- User-centered methodology adopted in this research
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# Aim of the PhD research

- Learn about the possible ways of integrating AD and additional access services which often coexist with AD, such as AST, in 360° contents.

- Universal Declaration of Human Rights  
Article 27 “Everyone has the right freely to participate in the cultural life of the community, to enjoy the arts and to share in scientific advancement and its benefits.”
- UN Convention on the Rights of Persons with Disabilities (CRPD)
- All types of new technology should be made accessible
- Access is provided by means of access services

# Audio description - definitions

- AD is an audiovisual transfer mode
- Reserched within Audiovisual Translation Studies (AVTS) and Media Accessibility (MA)
- AD in audiovisual contents

# AST - definitions

- Closely related with AD
- A voiced and recorded version of subtitles
- They can be an independent access service, but often coexist with AD

# Research on AD

- Eye-tracking studies and reception studies
- Most research on AD is related to television and cinema
- Existing standards and guidelines on AD focus on AD in 2D audiovisual products
- Empirical studies in relation to AD in more immersive products are almost non-existent

# Immersion

- A concept central to experiencing immersive contents
- End users should understand, enjoy and feel immersed in the story presented in these new media
- Presence is a concept used to measure immersion in audiovisual content

# Overview of immersive contents

- Immersive virtual environments are those in which “sensory input to the user from the external world is, ideally, wholly provided by the computer generated displays” (Slater and Usoh 1993:221)
- Virtual environments: VR, AR and MR
- VR is a medium through which we experience a wholly computer-generated reality



# 360° videos

- a form of VR
- Spherical or omnidirectional videos
- Video content, fictional and non-fiction, can be watched on a smartphone or by means of HMD
- A user can look around to discover the visual sphere, but cannot walk inside the sphere. The content is triggered by head movements
- The potential of the medium

# User centered methodology

- the project adopted a user-centered design methodology to gather user needs and expectations
- Accessibility needs to be considered as part of the production process
- A focus group was conducted, with two profiles of end users

# Results from advanced home users

- AD linked to the main action
- Interest in secondary ADs of the visual scene
- Implementation of immersive sound

# Results from professional audio describers

- Visual scene is larger, there is much more information to convey
- Content selection - more difficult

Editor for AD:

- the visual scene should be divided into sections
- AD should be provided into each section
- More AD units
- Approach: costly and demanding greater workload

# Conclusions and further research

- End users voiced their interest in 360° technology, and consuming AD 360° content in the future.
- It remains to be seen how these ideas could be put into practice
- A solid basis for further PhD research
- Guidelines for audio describers of 360° contents?

# Abstract

Rapid developments in the field of virtual reality (VR) can be seen all around the world. Although the medium is new and its possibilities still need to be defined, immersive technologies are being applied in different industries. They are already used to entertain, inform and educate in video conferencing, language learning, e-commerce, architecture, in the medical field, filmmaking and video games. It is most probable that immersive technologies will permeate into other industries in the next years. The new technologies should provide accessible contents and accessible platforms to cater for the needs of multiple audiences. The aim of this presentation is to discuss the results of a focus group conducted in Barcelona both with professional audio describers and audio description end users. The study was conducted as part of my PhD in order to understand the user needs and expectations on how to implement audio description and audio subtitles in 360° media. This presentation will begin with an overview of immersive technologies. Then, previous work in the field of audio description and immersive environments will be discussed. Finally, the results of the focus group conducted in Barcelona in the early stages of the project will be reported.

# References

- Slater, M., & Usoh, M. 1993. Representations systems, perceptual position, and presence in immersive virtual environments. *Presence* Vol. 2 No. 3. 221–233.

# Disclaimer



TransMedia Catalonia is a research group funded by Secretaria d'Universitats i Recerca del Departament d'Empresa i Coneixement de la Generalitat de Catalunya, reference code 2017SGR113.

The project ImAc has received funding from the European Union's Horizon 2020 Research and Innovation Programme, grant agreement No 761974.

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