

ACCESSIBLE GAMING: EXPLORING GAME ACCESSIBILITY THROUGH AUDIO DESCRIPTION AND MULTIMODAL MEDIATION

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OVERVIEW

Current Game AD:

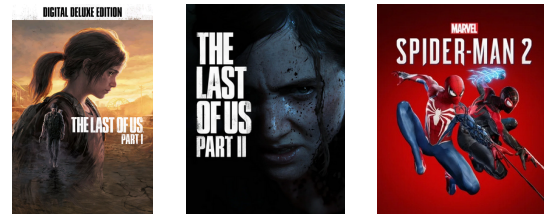
- Only around 13 games with AD
 - 8 that are fully playable
- Often limited to cut scenes
- Little support for quick time events
- AD can direct the player
 - Removes the element of fun

Technology:

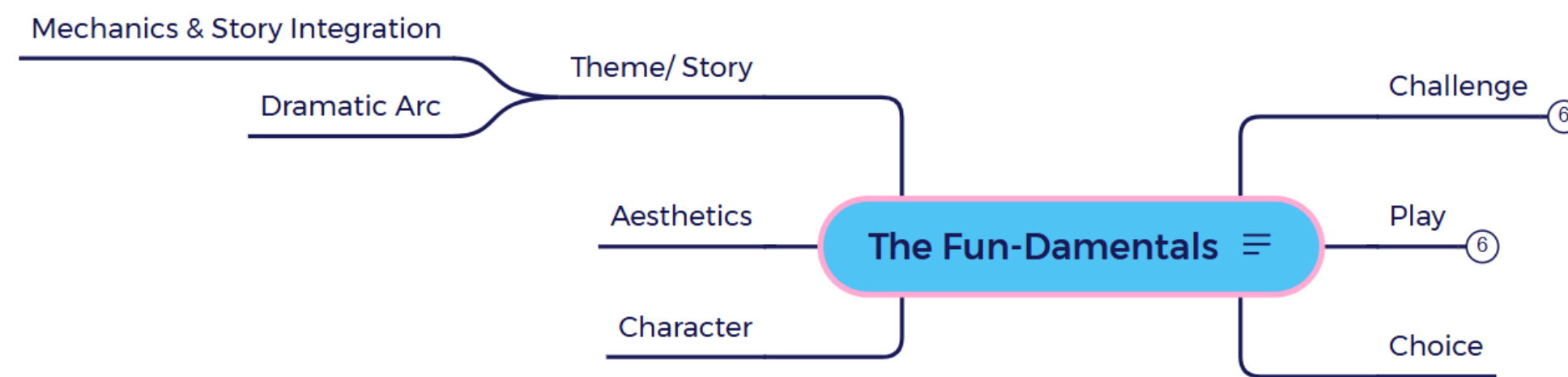
- **Surveyor** - Echolocation inspired navigation tool (Nair et al., 2024)
- **GamerAstra** - Human-AI collaboration framework, which facilitates access to 2D non-twitch games (Qiu et al., 2025)

Key Gaps:

- Implementing personalisation
- Quality guidelines for AD in Games
- Function over enjoyment



USER EXPERIENCE



Players want the same thing as everyone else
- fun, immersion, challenge
(RNIB, 2024)

The requirements needed to make a game fun, based on interdisciplinary research conducted in psychology, game design, and accessibility

RESEARCH QUESTIONS

1. What are the current theories and practices, user experiences, and limitations of applying AD to video games
2. How can AD be adapted to promote enjoyment and improve user experience?
3. How can game AD be evaluated to ensure it aligns with user needs, preferences and differing levels of accessibility?
4. How can technology assist in creating game AD? For example, how can AI tools help generate AD in real-time and/or personalise game AD?

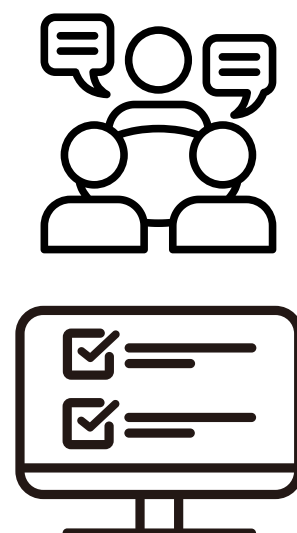
AIM & METHODOLOGY

Overall aim:

- Improve accessibility considerations from game developers
- Push forward best practices

Methodology:

- Focus groups with end users and game developers
- Test functionality over enjoyment
- Create our own AD to be tested with end users
 - Possible measurement tests
 - PAD scales
 - Facial Tracking
 - User Experience Scales
 - IMI (Intrinsic Motivation Inventory)
 - PXI (Player Experience Inventory)
 - UX of the Recommender System
 - CAPS Test



GUIDELINES COMPARISON & ANALYSIS

Currently comparing game accessibility guidelines in order to understand the current practices within the games industry, and comparing them to different AD guidelines. This aims to identify the best practices when making a game accessible for the blind and visually impaired.

Guideline	Levels of Guidance	Audio Description	Screen Narration	Sound/ Audio	Settings	Other
Game Accessibility Guidelines	✓	~	✓	✓	✓	✓
SIG Guidelines	✓	✗	✓	✓	✓	✓
Blind and Low-Vision Accessibility (Accessibility Reference Guide)	✗	~	~	~	✓	✓
XBox Guidelines	~	✓	✓	~	✓	~

Key Findings

- Game accessibility guidelines have little to no information on AD
- Different guidelines have different priority levels
- Screen narration should come as standard in games
- Sounds should be individually adjustable
- Music is important to the narrative and should be treated as dialogue

"Explaining is not describing, but describing an image without giving its meaning is of no interest" (Conseil Supérieur de l'Audiovisuel, 2021)

- Descriptions must be as objective as possible
 - However, there are times when subjectivity is preferred
- Narrators should fit the genre
- Language must be clear
- When to name the character is dependent on the country's preference, and if it is part of a series

Guideline	Organisation	Country	Year
Audio Description Guidelines	Government of Canada	Canada	2025
Ofcom's guidelines on Providing Television and On-Demand Access Services	Ofcom	UK	2024
Audio Description Style Guide	Netflix	US	2023
Guide de l'audiodescription - Principes essentiels, outil d'évaluation et bonnes pratiques professionnelles	Conseil Supérieur de l'Audiovisuel	France	2021
Audio Description Guidelines	ADLAB	EU	2014
Audio Description Guidelines and Best Practices	ADP / ACB	US	2010
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