Co-Designing Systems to Support Blind and Low Vision Audio Description Writers

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1 Introduction

Although blind and low vision (BLV) people are the primary beneficiaries of audio description (AD), current AD creation processes are often inaccessible. As AD informed by BLV perspectives better caters to audience needs, **BLV people should have access to AD creation opportunities**.

Primary Research Question: How can BLV writers gather the context necessary to independently write AD?

2 Related Work

Prior work applied AI to the area of AD to:
- Augment BLV viewers' video understanding via bot interactions [1]
- Automatically generate AD scripts from transcript data [2]

However, neither of these projects aimed to help BLV users create AD themselves.

3 Methodology

Application Design

- Navigation controls
- Written transcript
- Baseline descriptions
    - Objects, people, etc.
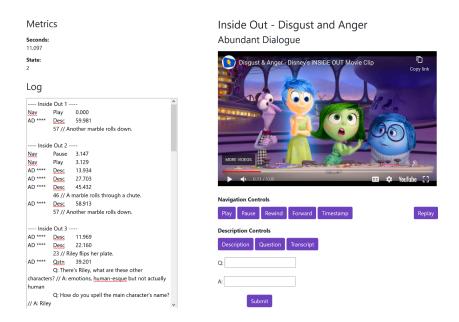- On-demand AD

Prototype Evaluation

- 6 BLV participants
- Three parts:
    - Discussed participants' AD preferences and writing experience
    - Used the prototype to write audio descriptions

- ○ Shared thoughts about prototype usability and stigmas facing blind and low vision AD writers

4 Findings

User Study Feedback

- Average satisfaction rating of 6.58 / 10
- 5 participants listened to all baseline AD
  - ○ The other participant was already familiar
- Visual question answering features helped participants (N = 4) gather detail

Context Required for AD Writing

- Character descriptions (a)
  - ○ Race, age, etc.
- Background settings
- Action descriptions
- Sound effects (b)
  - ○ Clarified audio cues

Examples

- (a) **Written AD:** *Riley, a Caucasian baby sits in a high chare for dinner with her parents…* [sic] (P1)
- (b) **Question:** *When he says "right after you eat this", is he throwing a cat?* (P5)

Get in touch!

If you're interested in digital information a11y or cultural perspectives on access, I'd love to chat!

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