# Who Can See What: Privacy and Audience Management for People with Vision Impairments on Social Media

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## Abstract

People with vision impairments are increasingly using different social media platforms for sharing personal experiences and remaining connected with friends and family. However, we know little about their perceptions of privacy and audience as well as their social and relational behaviors associated with managing privacy and self-presentation on social media. In this position paper, I review previously published work that highlights how privacy and audience management features lack accessibility for visually impaired users. Additionally, I articulate a discussion agenda that calls for attention to designing accessible and usable privacy management features on social media.

## Author Keywords

Blind; vision impairment; accessibility; privacy; social media; audience management

## CSS Concepts

• **Human-centered computing~Human computer interaction (HCI)**;

## Introduction

With the ubiquitous presence of social media in modern life, people with vision impairments are increasingly using social media platforms such as Facebook, Twitter, and Snapchat to share personal experiences and stay connected with family, friends, and others with shared interests [2, 4, 15, 17, 21]. Considering this growing popularity of social media, an emerging literature in CSCW and social computing has been investigating behaviors and practices of people with vision impairments on social media, the accessibility challenges they face and their strategies to overcome those challenges [2, 11, 12, 16, 21]. As an example, researchers found that increasing use of image content is making social media less accessible for users with vision impairments [8, 11, 12, 16]. Following this, researchers have been designing tools to improve accessibility of image content [9, 10, 18]. While this literature highlights important challenges with accessing content in social media and suggest technological solutions to address those, many questions remain around how people with vision impairments share content on social media and their social and relational behaviors associated with managing privacy and self-presentation on social media [1, 14, 21].

## Tensions around Privacy and Self-presentation on Social Media

Within social computing and CSCW, an extensive body of research has focused on understanding users' privacy perceptions, concerns and behaviors on social media. Prior work has revealed that while sharing content on social media, users customize and balance audiences of their posts to reap relational benefits while ensuring that content is not shared with unintended audiences [19, 20]. Such privacy management strategies are contingent upon users' self-presentation preferences that have broader social, relational, and professional implications [7, 19, 20]. In particular, potentially stigmatized users maintain different public and private spaces - often across various combinations of social media platforms and audiences, to safely explore and manage their self-presentation online [7].

## Accessibility of Social Media Privacy for People with Vision Impairments

Despite the importance of understanding privacy and audience management practices on social media, limited prior work has examined how people with vision impairments perceive and manage privacy on social media. The work that does exist suggests that managing social media privacy is challenging for visually impaired users due to accessibility issues [1, 21]. As an example, Ahmed et al. found that visually impaired participants in their study mistakenly shared posts publicly instead of with specific friends as originally intended [1]. Furthermore, many visually impaired users remain worried about potential privacy risks associated with sharing 'inappropriate' content for public consumption [1, 21]. Particularly in the photo-sharing context, Zhao et al. found that users with vision impairments are concerned about unintended self-presentation that could potentially damage their public image and professional career [21]. Such privacy risks are further exacerbated by the complex and constantly evolving privacy settings on social media [13], which are especially difficult to understand and navigate non-visually [1]. Furthermore, users with vision impairments may not be aware of whether a particular privacy feature is inaccessible or not present at all, an issue Bigham et al. termed as "not knowing what you

don't know" [3]. Due to these accessibility challenges, visually impaired users often opt for selective content sharing or not sharing at all [1, 21]. Thus, accessibility issues with privacy management techniques add barriers for visually impaired users towards receiving relational benefits and support through social media that would have been available to them otherwise.

## Proposed Discussion

In light of the previous work, my proposal for workshop discussion would encourage attendees to explore ways in which social media can better support visually impaired users' needs to manage privacy and self-presentation online. To that end, I am interested in asking the following questions:

- How do visually impaired users perceive and manage 'who can see what' on social media?
- How do visually impaired users develop awareness of various privacy management features on social media platforms? Are these features accessible through screen readers and other adaptive technologies?
- Does the accessibility of existing privacy management features (or lack thereof) influence visually impaired users' self-presentation on social media?
- Do visually impaired users have personalized strategies for managing privacy and audience on social media? Can we leverage their personalized strategies to design accessible privacy management features?
- How can we leverage existing research on privacy and dynamic web accessibility to improve accessibility of privacy management features on social media?

## Author's Background

I am a third year PhD student in the Technology and Social Behavior program at Northwestern University. My research interests lie in the intersection of accessibility, assistive technology and computer-supported collaborative work. In my PhD work, I am studying and designing new technologies to support collaboration and content creation practices among ability-diverse groups such as those involving people with and without vision impairments.

In one of my ongoing projects, I am exploring collaborative writing practices of people with vision impairments and their sighted collaborators [5, 6]. We reported our findings from semi-structured interviews with 20 professionals and academics with vision impairments detailing the challenges they face while navigating collaborative writing tools like Google Docs and Microsoft Word and negotiating for accessibility needs with their sighted collaborators [5]. Following this study, currently I am exploring new ways to represent collaborative features (e.g., comments, track changes etc.) for enhancing accessibility and usability of collaborative writing tools.

In another project, I am investigating creative crafting practices of people with vision impairments collaborating with their sighted instructors. To this end, my colleagues and I are conducting an ethnographic field study in a crafting studio supported by an organization for adults with vision impairments. In the next phase of this study, we are planning to conduct participatory design sessions with the crafters and their sighted instructors geared towards understanding whether and how tangible and multimodal interfaces can augment their shared work experience.

Beyond these two ongoing studies, I am also interested in exploring how people with vision impairments share their work online with sighted audience and their perspectives about trust, privacy and presentation on social media.

## Acknowledgement

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