

# Does It Look Beautiful? Communicating Aesthetic Information about Artwork to the Visually Impaired

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## ABSTRACT

‘A picture says a thousand words’ is a fitting phrase to express the difficulty in communicating visual information to a sighted individual. But what happens when the person the artwork is being described to doesn’t have any vision? What features of the artwork enhance their comprehension of the aesthetics, and what details are excluded from the description? This paper will explore the ways in which artwork is described to visually impaired individuals, and the details the visually impaired express interest in knowing about the artwork. Specifically, we focus on the value of drawing from shared experiences and prompts. These findings are based on observational data that was gathered from a study involving a visually impaired participant and a sighted companion exploring a gallery of artwork together and conversing about the artwork.

## Categories and Subject Descriptors

K.4.2 [Social Issues]: Assistive technologies for persons with disabilities

## Keywords

Visual impairments; accessible information; communication; visual art

## 1. INTRODUCTION

Being able to describe visual art effectively to visually impaired individuals is important for many reasons. For instance it can play a vital role in social interaction by being a topic of conversation and enabling them to experience a part of life they may miss if they were once sighted. Application of effective strategies for communicating aesthetic information can also beneficially apply to other mediums of information, thus making a variety of things more accessible to the visually impaired.

As a portion of a study based on blind navigation, visually impaired individuals and sighted companions explored an art gallery on the University of Maryland, Baltimore County campus. The observations from this led to findings concerning what the visually impaired participant wanted to know about the aesthetics of the artwork, the circumstances that prompted their



**Figure 1:** After his sighted companion stops to look at a series of pictures, P1 asks her “Are they are beautiful?” She responds “no, not really”, and the participant and companion move on to the other artwork. This is one example suggesting that the interest of a visually impaired individual in a particular art piece is prompted by the opinions and interest of others.

interest in a particular art piece, and the manner in which the complex visual information was described to the visually impaired participant.

## 2. RELATED WORK

Prior work concerning communicating visual information involves developing systems to convey visual information more effectively by utilizing other mediums such as audio and tactile cues, such as Hribar [2], and Wall [4]. By incorporating audio and tactile cues into communicating visual information, results showed that visual information could be more effectively shared. The topic was also explored by researches interested in conveying data information to visually impaired users, Such as Goncu [1], who focused on 2 dimensional graphics, and McGookin[3], who focused on communicating data from tables and graphs. These authors prompt the necessity and importance of the ability to convey graphic and aesthetic information to the visually impaired, and emphasize the necessity of having alternative methods to communicate such information. Through knowledge and exploration of effective communication methods, visually impaired individuals can be empowered by more accessible information.

## 3. PARTNER STUDY

This research was conducted as a portion of a partner study concerning how the visually impaired navigate with a sighted companion. The study involved navigating to various places on a university campus. The study had six pairs of participants, with a total of six locations to navigate to. The present research focuses on analysis of conversation within an art gallery displaying student work.

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Through this study many results supporting better understanding of visually impaired tendencies and common misconceptions were found. Williams [5] discusses the many misconceptions sighted people often have about blind navigation. This prompted analysis of other communication tendencies that could be observed in the study.

## 4. FINDINGS

### 4.1 Drawing on Shared Experience

A frequently utilized method for describing something visual is to reference another item that has similar visual attributes. This was commonly observed during the partner study, and varied based on the familiarity between the companions. If the companions were less familiar with each other they had a tendency to reference shared knowledge items, which were items that they had not necessarily interacted with in each other's company, but both knew about. For example, a Rubik's cube, that was referenced to describe a piece of artwork by fifth participant's sighted companion.

With the companions that were more familiar with each other, the tendency to describe artwork through shared memories was observed, for example saying a piece is similar to a piece of art the sighted companion had made when they were a child. The sighted companion of participant 3 described a piece of artwork made with Styrofoam and hanging from the ceiling as "I remember when I made this in third grade...It's the little balls you stick the little picks in to get them to stick together. Remember I made that in third grade?" By referencing a shared memory the visually impaired participant was able to better understand the aesthetics of the artwork.

The descriptions of the artwork tended to incorporate more objective language, and involve information about the medium utilized to create the artwork, as well as the color, size, or shape. The visually impaired participant would occasionally ask more subjective questions concerning the aesthetics of an art piece. When this did occur, trends were noticed concerning actions by the sighted participant suggest that the actions prompted the visually impaired participant's interest.

### 4.2 Interest Prompts

The next finding comes from the circumstances that prompt the visually impaired participant to express interest in the aesthetics of a particular piece of artwork when they are surrounded by numerous pieces of art. The observations of the companions showed trends in expressing interest in an art piece when the sighted companion also showed interest in an art piece, and likewise for situations when the sighted companions expressed disinterest in an art piece. An example of this would be when the participant one started expressing interest and asking for additional visual information in response to the companion commenting that she thought the art piece was nice. The blind participant even touched the art piece to gain even more understanding of it, and wanted to know if she was touching the one her companion thought was nice.

The opposite occurred when the sighted companion of participant one said that the artwork was not really beautiful, as described in Figure 1. The companions continued navigating down the hall after, and the blind participant did not ask any more questions about the art piece. This is another example suggests that the interest of a visually impaired individual in a particular art piece is prompted by the opinions and interest of their sighted companions.

## 5. CONCLUSION AND FUTURE WORK

References to shared knowledge were often made for the purposes of describing aesthetic features to individuals with visual impairments in the observational partner study. Since a visually impaired individual requires more detailed information about visual artwork, referencing shared knowledge and assigning multiple qualities or features to the art piece is an effective way to communicate multiple qualities at once.

Increased interest in aesthetic information from the blind participants occurred when they believed that the art piece was pleasing to their sighted companion. This indicates that while the visually impaired frequently desire objective descriptions in order to understand the features of the artwork, they are interested in art pieces that their sighted companion expresses a subjective opinion about.

These findings about describing aesthetic features of artwork can be useful in providing more comprehensive descriptions to the visually impaired, and thus make information about the aesthetics of artwork more accessible to them. Future work could include exploring recommendation systems for describing aesthetic information

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