

0281-562 Color Perception and Measurement

Lab—Color in Art and Its Reproduction
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1.0 Introduction

We studied the mechanism of the human visual system, and the complexity of the color perception process. We learned that color serves as an essential element in art and design. We know that high quality color reproduction begins with good original where effective use of color is a critical factor.

In this lab assignment, we will explore and learn to appreciate master-level artists as to how they use color to express ideas and emotions. In addition, the lab offers us an opportunity to address criteria relating to artwork reproduction.

2.0 Objectives

- 2.1 To explore how colors are used by art masters in their artistic endeavors which enlighten our visual experiences.
- 2.2 To reproduce selected artwork, and discuss criteria as well as limitations in artwork reproduction with today's digital media.

3.0 Procedures

3.1 Art appreciation

- 3.1.1 Access to artwork—We will use the AMICO Library, an on-line image database which is accessible via the Electronic Resources of the Wallace Memorial Library (<http://wally.rit.edu>), as the main resource for artwork. To gain access to the AMICO Library, you must have a DCE account with RIT (see Appendix A for more information). Other resources, such as Photo CDs and royalty-free digital stock houses, are also acceptable.
- 3.1.2 Select art work—Use the AMICO Library to search for artwork which best illustrate three different art styles over time, e.g., Byzantine (330-1450), Renaissance (1400-1600), Baroque (1600-1700), realism, impressionism, post-impressionism, Expressionism, Art Nouveau, Fauvism, Cubism, Dadaism, Surrealism, Abstract, Pop art, etc.

3.1.3 Describe the artists and their artwork—Elaborate the three art styles that you picked with the use of specific artists and his artwork. Describe how colors were used by these artists to convey their feelings and emotions. Use references and books in the library to support your writing. Include a 4” wide artwork (in color) where the discussion is in your report.

3.2 Artwork reproduction

3.2.1 Cross-media reproduction—“What you see is what you get” or WYSIWYG is a reality with PostScript font display and print, but is it true for color? Describe the degree of visual agreement between the artwork as displayed and the artwork as printed with devices available to you. Assess the capabilities as well as the limitations of the two media, i.e., screen and print.

3.2.2 Color reproduction criteria—Read Chapter 7 of the textbook, “The Objectives of Color Reproduction,” and consider the question, “What should the objective of artwork reproduction be?” The notion of ‘exact reproduction’ sounds good for artwork reproduction. What difficulties are there for achieving exact reproduction using AMICO images? What solutions do you consider viable?

3.3 Summary and references

3.3.1 What did you like the most about the lab? What did you like the least about the lab?

3.3.2 If you’re to explore further into the topic of ‘Color in Art and Its Reproduction,’ what do you propose to do?

3.3.3 List the references and web sites used in completing the assignment.

4.0 Deliverable

4.1 Follow the lab documentation style specified in the *Important Notes*. Make sure that each of the questions raised in this assignment are addressed in a coherent manner.

4.2 Submit a hard copy of your report, and email a PDF version of the same to the instructor. Your lab report will be graded and returned to you two weeks from the due date.

4.3 Today’s date: December 13, 1999; Due date: January 5, 2000. Late penalty applies.

Appendix A. Access and Use AMICO

AMICO is an electronic resource containing image database of 32 museum art collections. This note offers information regarding AMICO access and image downloading.

1.0 DCE Account

You need a DCE account to access AMICO. If you're a RIT campus student, your VAX account is the DCE account. If you're a DL student, you need to obtain a DCE account in order to have access to the AMICO.

DL students can request DCE accounts in the Student Services Firstclass folder under Wallace Library conference. Please ask Marybeth Martin of the Distance Learning Office for further assistance.

2.0 Access AMICO

If you're entering from an RIT Internet address when you attempt to access the AMICO Library, you will not be prompted for a password and should have no trouble entering the AMICO Library.

When entering to AMICO through Wallace Library web page from a non-RIT Internet address (i.e. using an outside-of-RIT Internet Provider), the user is presented with a web page that allows them to connect with a RIT DCE username and password.(same as used to get into RITVAX). For more information about AMICO, there is a web page and a PDF version on the Wallace Library page under the Image Collections button (AMICO link).

3.0 Image Downloading

All images in AMICO are RGB data in jpeg format. There are three image sizes available for each image: the small-size thumbnail, the medium-size, and the large-size. By clicking on the current image, the next size image is displayed. For this lab, download the large-size images, and resize them to appropriate sizes, without resampling, to obtain the appropriate resolution of the image for color hardcopy reproduction purposes.