ELEMENTS THAT INFLUENCE VISUAL APPEAL IN PHOTOGRAPHS

Jeffrey L. Hall

A Thesis

Submitted to the Graduate College of Bowling Green State University in partial fulfillment of the requirements for the degree of

MASTER OF EDUCATION

May 2007

Committee:

Donna K. Trautman, Advisor

Charles Spontelli

Linda Swaisgood
ABSTRACT

Dr. Donna K. Trautman, Advisor

In photography, image appeal may be characterized by the interest that a picture generates when viewed by an observer, other than the photographer. The American Heritage Dictionary (2005) defines the adjective “appealing” as being attractive or beautiful. For this study, an image with appeal is considered the kind of image all photographers strive for but is difficult to achieve. The purpose of the study is to identify the primary visual elements that evoke emotion and influence the overall appeal of a photograph.

Participants in the study viewed four different photographs in each of three categories: people, still life, and landscape. Each participant was first asked whether each of the twelve images was “visually appealing.” Next, each participant rated the significance of ten visual elements to the overall appeal of each photograph. Participants used a Likert scale to rate the significance of the elements.

The data gathered was analyzed using a series of MANOVA tests at a significance level of .05. Mean scores were calculated to illustrate the importance of each of the 10 visual elements in each of the three categories: people, still life, and landscape. The elements were analyzed utilizing the MANOVA (Tukey at the .05 level of significance) test, and comparing their value versus the categories of people, still life, and landscape.

Analyses of the data indicated that there are some commonalities in visual elements that influence the appeal of photographs. However, most visual elements are dependent on the photographic category. The importance rankings of the visual elements produces only two pair
of visual elements considered equal in importance: subject in the still life and landscape categories, and depth of field in the people and landscape category.

The results of this study indicated that photography educators must recognize that students need to understand these ten visual elements and how they impact a photograph. However, it is more important to understand how they affect certain categories of photographs. When students are aware of this difference they can develop the skills necessary to consistently create images of strong visual appeal.
Dedicated to my wife and best friend, Lisa, and our children, Richard and Katelynne, who granted me the patience, love, and support to complete this thesis. We have all learned that with hard work and dedication anything can be accomplished.
ACKNOWLEDGMENTS

I want to thank Donna Trautman for all of her time and patience. Without her this thesis may still be “a piece of work in progress.” She gave me the determination and motivation to get this done. I would also like to thank Mr. Chuck Spontelli, for his thought provoking questions, and Ms. Linda Swaisgood, for her wonderful writing skills, for taking time to serve as committee members. I owe all of them my sincere gratitude. A special thanks to Kim Strickland who kept me informed of schedules, and more importantly, impending deadlines.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Chapter I. INTRODUCTION</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Context of the Problem</td>
<td>1</td>
</tr>
<tr>
<td>Problem of the Study</td>
<td>2</td>
</tr>
<tr>
<td>Significance of the Study</td>
<td>2</td>
</tr>
<tr>
<td>Objectives of the Study</td>
<td>3</td>
</tr>
<tr>
<td>Assumptions</td>
<td>3</td>
</tr>
<tr>
<td>Limitations</td>
<td>4</td>
</tr>
<tr>
<td>Delimitations</td>
<td>4</td>
</tr>
<tr>
<td>Definition of Terms</td>
<td>4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chapter II. REVIEW OF LITERATURE</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Photographic Art and Aesthetic Beauty</td>
<td>6</td>
</tr>
<tr>
<td>Visual Elements</td>
<td>7</td>
</tr>
<tr>
<td>Related Studies</td>
<td>9</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chapter III. METHODOLOGY</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Restatement of the Problem of the Study</td>
<td>11</td>
</tr>
<tr>
<td>Research Design</td>
<td>11</td>
</tr>
<tr>
<td>Selection of Visual Elements</td>
<td>12</td>
</tr>
<tr>
<td>Selection of Participants</td>
<td>12</td>
</tr>
<tr>
<td>Identification of Photographs</td>
<td>12</td>
</tr>
<tr>
<td>Data Collection Instrument</td>
<td>13</td>
</tr>
<tr>
<td>Procedure of Data Analysis</td>
<td>13</td>
</tr>
<tr>
<td>Section</td>
<td>Page</td>
</tr>
<tr>
<td>------------------------------------------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>Timeline</td>
<td>14</td>
</tr>
<tr>
<td>Budget</td>
<td>14</td>
</tr>
<tr>
<td>CHAPTER IV. FINDINGS</td>
<td>15</td>
</tr>
<tr>
<td>Identification of Visual Elements</td>
<td>15</td>
</tr>
<tr>
<td>Instrument</td>
<td>15</td>
</tr>
<tr>
<td>Analysis</td>
<td>16</td>
</tr>
<tr>
<td>CHAPTER V. SUMMARY AND CONCLUSION</td>
<td>20</td>
</tr>
<tr>
<td>Summary of the Study</td>
<td>20</td>
</tr>
<tr>
<td>Conclusion</td>
<td>21</td>
</tr>
<tr>
<td>Recommendation for Further Research</td>
<td>23</td>
</tr>
<tr>
<td>REFERENCES</td>
<td>24</td>
</tr>
<tr>
<td>APPENDIX A. SCRIPT FOR ADMINISTERING QUESTIONNAIRE</td>
<td>26</td>
</tr>
<tr>
<td>APPENDIX B. ELEMENTS</td>
<td>28</td>
</tr>
<tr>
<td>APPENDIX C. LETTER FOR PARTICIPATION</td>
<td>29</td>
</tr>
<tr>
<td>APPENDIX D. PHOTOGRAPHS</td>
<td>31</td>
</tr>
<tr>
<td>APPENDIX E. DATA COLLECTION SPREAD SHEET</td>
<td>37</td>
</tr>
<tr>
<td>APPENDIX F. DATA RESULTS</td>
<td>38</td>
</tr>
</tbody>
</table>
CHAPTER I

INTRODUCTION

Context of the Problem

Today’s cameras can take excellent technical quality images; images that are sharp, have good tonal range and colors. However, technical quality in itself is not sufficient to create a lasting, visually appealing image. In photography, image appeal may be characterized by the interest that a picture generates when viewed by an observer, other than the photographer. The American Heritage Dictionary (2005) defines the adjective “appealing” as being attractive or beautiful. For this study, an image with appeal is considered the kind of image all photographers strive for but is difficult to achieve.

The evaluation of image quality is a topic that has been discussed and researched for decades. Photography educators find that it is very easy to speak to students about the technical merits or qualities of a photograph. Some image quality measures that have been identified are sharpness, tonal range, contrast, and noise. These are typically used in practice to evaluate the quality of imaging systems, and are all objective observations of the quality of the photographic image (Katajamaki & Saarelma, 1998).

However, creating a visually appealing image encompasses much more than equipment, technical data, and objective criteria. True beauty is not typically defined objectively, but, rather, is generally felt by the viewer. Some element or elements in the image give the observer an emotional stimulation that is perceived by the viewer as “beauty.” What are the elements that can emotionally stimulate this response from the viewer? Are certain elements more important or more common in appealing or beautiful images?
Problem of the Study

The problem of the study was to identify the primary visual elements that evoke emotion and influence the overall appeal of a photograph.

Significance of the Study

The identification of influences that affect image appeal is important to aspiring photographers who are developing their personal craft. Although technical quality is important, it is not enough to create a lasting, visually appealing image. We are inundated by photographs every day—pictures of family and friends, far away lands, and our own home towns. We all have photo albums or drawers full of pictures. They bring us the pleasure of art and information about things that we may never actually see. However, of the countless photographs our eyes are subject to, only a small number grab our attention and last in our memories. Just what is it that separates these images from the rest? (Burian & Caputo, 2003) Photographers must know and understand the influences that contribute to strong image appeal so they create those images that viewers remember well past the time of actual viewing. Photographers must, in fact, be artists who can incorporate subtle elements of artistry to stimulate those who view their images.

Wikipedia (2006) defines aesthetics as the branch of philosophy that is concerned with beauty and art. The major component in aesthetics concerns the nature of beauty. There are two basic approaches to this problem of capturing beauty—the objective, which asserts that beauty is inherent in the object itself, and the subjective, which tends to identify the beautiful with that which pleases the observer (Wikipedia, 2006). What is much more difficult to define and evaluate is what makes one image more visually appealing than another. Photographers who wish to create images with mass appeal must know and understand these influences. It is when the image is created commercially and designed for the masses that critical analysis becomes one
of the most valuable tools of the photographer. If the photographer wishes to be successful in dealing with the public, there are certain rules that apply (Fishback, 2005). “What is indisputable is that the better the photograph the more people will look at it over a longer period of time, which means the subject matter will have more resonance whatever the original reason for admiring the image. It is the photographer’s aim to create beautiful pictures, of any and all subject matter” (Hurn, 2001).

The results of this study strive to give educators the ability to better communicate the visual elements that bring impact to beginning photographers’ images. Higher emphases can be placed on the visual elements that rank highest in creating visual appeal in different types of photographs.

Objectives of the Study

The objectives of this study were to:

1.) Identify the visual elements of a photograph.

2.) Develop an instrument to distinguish and rank the visual elements that influence the visual appeal of a photograph.

3.) Analyze the data to identify and rank the visual elements in each of three categories of photography and identify any element commonalities between categories.

Assumptions

1.) Participants will not respond to the questionnaire based on a comparison of one image to another, but as an individual image.

2.) Participants will respond only to the overall appeal without regard to any prior knowledge of the photographic craft.
3.) Participants will be honest in their responses.

Limitations

1.) Participants were not screened for vision problems.
2.) The results were based on a sample from voluntary participants.
3.) No black and white photographs were used in this study.

Delimitations

1.) Photographs in the journalistic category were not considered.

Definition of Terms

For the purpose of this study, the following terms were operationally defined.

- Color Balance – overall color of the light that dominates the photograph
- Composition – arrangement of visual elements within the image
- Contrast and Brightness – the difference between the brightest and darkest and the overall brightness of the photograph
- Depth of Field – area of the image from foreground to background that is acceptably sharp; can be narrow or very wide
- Direction of Light – the direction that the light comes from to strike the subject; four common directions are top lighting, side lighting, front lighting and back lighting
- Impact – the emotional reaction that the viewer has to an image, grabbing power that makes the viewer want to look at the image
- Interesting/Strong Subject – the main center of interest that the photographer is attempting to visually express
• Sense of Moment – the moment when everything comes together in the creation of a photograph, the subject, the situation, expression, the light.…

• Sharpness – describes an image or part of an image that shows crisp detail and texture

• Quality of Light – the amount of diffusion the light has; soft light has no shadows and is low in contrast, hard light is contrasty with deep sharp edged shadows

• Visual Appeal - attractive
CHAPTER II
REVIEW OF LITERATURE

This chapter reviews the literature related to two main areas of interest in this study. The first section helped define an appealing image. Since much has been studied and written in regard to art appreciation, and since photography is an art form, this chapter will include a brief review of the aesthetic beauty in art. The second section reviewed what educators and professional photographers believe are the influences that affect image appeal. Beginning photographers are influenced by the instruction of photography educators and are required to adhere to certain standards and techniques to produce a visually appealing image. It is necessary to understand these influences in order to appreciate the conclusions of this study.

Photographic Art and Aesthetic Beauty

As earlier stated, in photography, image appeal may be defined by the interest that a picture generates when viewed by a observer, other than the photographer. A common definition listed in the American Heritage Dictionary (2005) defines the adjective “appealing” as being attractive or beautiful. Thus, an image with visual appeal would be considered an attractive image-the kind of image all photographers strive for, but is very difficult to achieve. These definitions are important to begin the discussion of art and beauty.

Photographic art is the activity of capturing an image that is appreciated for its beauty with the photographic media. Beauty is not something that “exists” objectively, but, rather, something that is felt, or an emotion. Some element in the photograph gives the viewer an emotional stimulation that is defined by the viewer as beauty. What then, are the elements that stimulate the viewer emotionally? In other words, what are the elements of beauty? Beauty is the combination of the elements reflecting the purpose for which the object was created. That is
to say, when the elements of the image center on the purpose of its creation, the result is an emotional stimulation that is felt as beauty. When beauty is recognized as such by the viewer, it becomes actual beauty (*Essentials of Unification Thought, 2005*).

It is a common expectation that when someone defines a thing as beautiful, the viewer means to offer a judgment that is, at a minimum, intended to recommend to another viewer that he will find the object in question beautiful too. Those who claim that a thing is beautiful are usually willing to back up their claim, defending it by citing evidence. This suggests that these critics do not believe that claiming something to be beautiful is nothing more than expressing a personal opinion (Fenner, 2003). As Bill Jay (2001) observed in his book-length interview with Magnum photographer David Hurn, titled *On Being a Photographer*, “…for many people, the word beauty is associated with the predictable…cliché images of sunsets, small furry animals…postcard views and so on. For me, most great photographs displaying beauty reveal a sensation of strangeness, not predictability…. They are the opposites of clichés; they have a quality beyond the visually obvious. But even if it is difficult to define, beauty still lurks behind the scene…” (Hurn, 2001, pg. 45).

**Visual Elements**

According to Hurn (2001), some pictures are obviously more interesting, more beautiful, more inspiring than others, even of the same subject matter. The question of what transforms these photos into pictures of lasting merit is not easy to answer. Although there are many visual elements that work together to help create images of beauty, the question becomes which of these elements are the most consistently important. Photographers and photographic educators all have opinions on this topic.

Bob Krist believes that there are four defining characteristics: interesting composition, great
light, a sense of moment, and good color. However, he is aware of the difficulty in integrating these four elements into every photograph. When Bob Krist speaks of a photograph’s “sense of moment” he refers to photographs that are “moments, snatched from the chaotic stream, where everything came together in a harmonious fashion and made you really feel what it was like to be there” (Krist, 2000, pg. 8).

In her biography in the *National Geographic Photography Field Guide* (2003), Annie Griffiths Belt stated, “The direction, quality, and color of light, and how it’s touching the subject, are far more important than the quality of light in most photography. With landscapes or very simple graphic things, I think the single biggest element missing in many pictures is a sense of light.” James Stanfield believes that light is the photographer’s most powerful tool. Beautiful things happen in early morning: warm light or climatic conditions such as fog, snow, rain, or frost (Burian & Caputo, 2003). Light is so important to photographers that many believe the objects within a photograph are really nothing more than surfaces by means of which light can be seen and captured. To these photographers, the subject would then be the light itself (Grill & Scanlon, 1990).

William Allard is a 35-year veteran *National Geographic* photographer. Allard’s finest images exhibit a very striking design with strong composition: color contrasts, a sensitivity for dramatic light, deep shadows with symbolic importance, and an intensity of emotion (Burian & Caputo, 2003). Bob Shepherd believes that good photographs emphasize the subject by focusing attention to it. Too many times the photograph includes distracting or irrelevant elements, thus de-emphasizing the subject (Burian & Caputo, 2003). An important reason that photographs fail is that they do not communicate ideas because the photographer has not identified why he wanted to take a particular photograph. He cannot decide how his photograph should be
composed unless he knows what he is trying to convey. “Muddled thoughts result in muddled compositions; clear thoughts are the cornerstone of good composition and effective photography” (Grill & Scanlon, 1990).

Another opinion regarding the art of photography maintains that the subject is the central point of interest and is usually placed in the foreground of the shot (towards the viewer). Now we compose the message by including a second element, a context, which is often the background. The context gives the subject relevance, presence, location, or other interest. It is the combination of the two elements--subject and context, foreground and background--that tells the message (Photography: What Makes a Great Shot, 2006).

Related Studies

In one of the earliest attempts to examine the nature of beauty, and how artists can create an idealized, beautiful human form, Francis Bacon observed two alternative methods of creating exemplary models of human perfection: the adapting of ideal proportions laid down by historical precedent, or the invention of composite images created through the synthesis of multiple observations (Northern Gallery for Contemporary Art, 2006).

A study conducted by the universities of Regensburg and Rostock (Beautycheck, 2006) in Germany attempted to determine why some faces are more beautiful than others. In this study the researchers asked subjects to rate the attractiveness of faces using a Likert scale. Using compute software, faces rated very attractive were morphed with other faces with high ratings. Faces with low attractive ratings were also morphed with faces of similar ratings. In all cases the faces with high ratings were ranked even higher as the characteristics of the attractive faces went through the computer morphing process, and faces with low ratings continued lower. The study showed that the greater the number of attractive characteristics, the greater the overall
attractiveness of the face.

Another large body of research has focused on facial patterns that are universally seen as beautiful. Psychologist Michael Cunningham has conducted some of the most respected work. Reviewing numerous studies, he found that the "ingredients" of a beautiful female face often included:

- Wide cheekbones
- Narrow cheeks
- Broad smile
- Wide nostrils
- Wide eyes
- High-placed eyes
- Eyes set far apart
- Large pupils
- Large eyes relative to the size of the face
- High eyebrows
- Small nose
- Small chins

When models or actors are described as beautiful (or handsome), objective characteristics are pointed out that most people would agree fit a common definition of beauty (We Attract, 2006).
CHAPTER III

METHODOLOGY

Methods and procedures of the study are described in this chapter relating to the research design, characteristics of the research sample, data collection instrument, and procedures for data analysis.

Restatement of the Problem of the Study

The problem of this study was to identify the most important visual elements that influence the overall appeal of a photograph.

Research Design

This was a descriptive study that utilized an individually administered questionnaire for data collection (See Appendix A). The objective of the questionnaire was to document the participants’ assessment of whether an image was appealing and what elements affected their decision.

Important to this study was the absence of interviewer bias. The interviewer was a professional photographer who was careful not to influence the interviewees in their responses. To eliminate interviewer bias a set of questions was established and subsequently reviewed by two photography educators for content and clarity. Upon completion of the interviews, each participant was given the opportunity to review all responses for accuracy and to verify that all comments were their own. This review attempted to eliminate any interviewer’s bias of the participants’ comments. The analysis of this data resulted in a ranking of the most common visual elements in each category and identified common elements between categories. The questionnaire required that participants’ comments only reflect subjective appeal of the image and not involve comments of an objective nature. Participants for this study volunteered.
Selection of Visual Elements

The researcher incorporated some of the visual elements used in a study conducted by Andreas E. Savakis, Stephen P. Etz, and Alexander C. Loui (2000). This study, entitled “Evaluation of Image Appeal in Consumer Photography,” was conducted at the Imaging Science Technology Laboratory of the Eastman Kodak Company. The researcher reviewed educational photography books on the topic of the photographic craft of producing visually appealing photographs and identified ten visual elements (See Appendix B).

Selection of Participants

Participants in this study included men and women who volunteered to participate. A request for participation was sent by e-mail to the Bowling Green State University community asking for volunteers to respond to a survey (See Appendix C). From the responses, forty participants volunteered to participate in this study. No photography educators or professional photographers were included in the selection.

Identification of Photographs

The photographs for this study were selected from those created by students in an intermediate university photography class. Some photographs were from the portfolio of a professional photographer. The instructor of the photography course selected seven images in each of three categories: landscape, people, and still life. Each image was selected based on its strong technical quality that did not detract from the visual appeal of the photograph. A panel of three visual communication educators individually reviewed the photos and, by consensus, selected the final four images to represent each category (See Appendix D). Each panel member was asked separately to identify four photographs from each category that were visually appealing, had strong technical qualities, and was not biased toward any particular element.
Data Collection Instrument

Data was collected through personal interviews with each participant. These interviews were conducted face-to-face by the researcher. The interviewer recorded the responses into a data collection spreadsheet for four images in each of the three categories totaling 12 photographs (See Appendix E). Each participant was asked to respond to the same set of visual elements (See Appendix B). The participants were given a printed list of definitions that included each of the 10 elements. Participants were asked to identify whether each image was appealing and to comment on the visual elements that affected their response.

Responses were on a Likert-type scale, rating the importance of each visual element to the overall appeal of the image (1=unimportant, 2=of little importance, 3=moderately important, 4=important, 5=very important). The participant was able to ask for clarification on the meaning of each visual element and a definition was read (See Appendix B). Each participant was given a list of printed definitions to reference as the interview proceeded. The participant’s response was recorded for all four photographs in each category: landscapes, people, and still life.

Procedures of Data Analysis

The data gathered through the interview process was analyzed with the help of the Statistical Consulting Center using descriptive and inferential statistics, such as ANOVA at the .05 significance level. The results will determine the ranking of the elements that influence the visual appeal of each individual photograph. In addition it will be determined if the elements are consistent for all of the photographs in each category. Analysis also compared the importance ranking of visual elements between categories to determine if there are any commonalities of importance.
Timeline

April 17, 2006 – proposal approved

November 11, 2006 – begin surveys

January 8, 2007 – synthesize data

January 22, 2006 – write final thesis chapters

March 12, 2007 – defend thesis

March 26, 2006 – completed thesis to Director of Graduate Studies

Budget

The following is a list of items that had associated costs.

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<thead>
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<th>Research Items</th>
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<td>Printing of photographic images (inkjet)</td>
<td>$24.00</td>
</tr>
<tr>
<td>Mounting of photographic images (board)</td>
<td>$30.00</td>
</tr>
<tr>
<td>Travel (Bowling Green State University Firelands Campus)</td>
<td>$25.00</td>
</tr>
<tr>
<td>Gift Certificate (Sam B’s Restaurant)</td>
<td>$50.00</td>
</tr>
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CHAPTER IV

FINDINGS

The results of the research study are discussed within this chapter, including information pertaining to the research question, and data analysis.

Identification of Visual Elements

The researcher incorporated some of the visual elements previously identified and used in a study conducted by Andreas E. Savakis, Stephen P. Etz, and Alexander C. Loui (2000). This study, entitled “Evaluation of Image Appeal in Consumer Photography,” was conducted at the Imaging Science Technology Laboratory of the Eastman Kodak Company. The researcher also reviewed photography textbooks on the craft of producing visually appealing photographs and identified ten visual elements that were consistently reported as vital to a photograph’s visual appeal (See Appendix B).

Instrument

The researcher originally selected 21 images. From these 21 images a panel of professional photographers and educators selected the final four images for each of the three categories in the study. Data were collected through personal interviews. Interviews were conducted in conference rooms and a classroom, and lasted approximately 15 minutes each. All other visual images were removed from the environment. Participants in the study viewed four different photographs in each of three categories: people, still life, and landscape. Each participant was first asked whether each of the twelve images was “visually appealing.” Next, each participant rated the significance of the ten visual elements to the overall appeal of each photograph. Participants used a Likert scale to rate the significance of the elements. The interviewer recorded individual responses to all 10 elements for each of the 12 photographs for a total of 120
responses per participant into an Excel spread sheet.

Analysis

The data gathered through the interview process was analyzed by the Statistical Consulting Center at Bowling Green State University (See Appendix F). A total of 40 males and females participated in the study, however gender did not have a significant effect on the responses. The data gathered was analyzed using a series of MANOVA tests at a significance level of .05. To satisfy the third research objective, the mean scores were calculated to illustrate the importance of each of the 10 visual elements in each of the three categories: people, still life, and landscape. Table 1 illustrates the mean total for each of the elements by category on a 1-5 Likert scale with 5 being most important for visual appeal. This created a ranking of most important to least important visual elements as perceived by the participants.

<table>
<thead>
<tr>
<th>People</th>
<th>Mean x/5.0</th>
<th>Still Life</th>
<th>Mean x/5.0</th>
<th>Landscape</th>
<th>Mean x/5.0</th>
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<tr>
<td>1. Subject</td>
<td>4.28</td>
<td>Sharpness</td>
<td>4.08</td>
<td>Quality of light</td>
<td>4.16</td>
</tr>
<tr>
<td>2. Quality Of light</td>
<td>4.09</td>
<td>Composition</td>
<td>3.96</td>
<td>Color</td>
<td>4.14</td>
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<tr>
<td>3. Impact</td>
<td>3.98</td>
<td>Color</td>
<td>3.88</td>
<td>Composition</td>
<td>3.87</td>
</tr>
<tr>
<td>4. Sharpness</td>
<td>3.93</td>
<td>Quality of light</td>
<td>3.67</td>
<td>Contrast/brightness</td>
<td>3.84</td>
</tr>
<tr>
<td>5. Sense of Moment</td>
<td>3.92</td>
<td>Depth of field</td>
<td>3.55</td>
<td>Sharpness</td>
<td>3.76</td>
</tr>
<tr>
<td>6. Composition</td>
<td>3.90</td>
<td>Contrast/brightness</td>
<td>3.53</td>
<td>Direction of light</td>
<td>3.59</td>
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<td>7. Direction of light</td>
<td>3.86</td>
<td>Subject</td>
<td>3.5</td>
<td>Subject</td>
<td>3.49</td>
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<tr>
<td>9. Color</td>
<td>3.72</td>
<td>Impact</td>
<td>2.95</td>
<td>Sense of Moment</td>
<td>3.15</td>
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<td>10. Depth of field</td>
<td>3.33</td>
<td>Sense of Moment</td>
<td>2.59</td>
<td>Depth of field</td>
<td>2.98</td>
</tr>
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</table>
The elements were analyzed utilizing the MANOVA (Tukey at the .05 level of significance) test, and comparing their value versus the categories of people, still life, and landscape (See Appendix F). The data showed 17 different combinations of photo elements and categories that were significant. These significant differences are identified in the following statements. The critical value for significance was .27.

1. **Quality of light** was identified by the sample as being a significantly more important element in the **landscape** (.48) category than in **still life**.

2. **Quality of light** was identified by the sample as being a significantly more important element in the **still life** (.42) category than in **people**.

3. **Direction of light** was identified by the sample as being a significantly more important element in the **people** (.44) category than in **still life**.

4. **Direction of light** was identified by the sample as being a significantly more important element in the **people** (.27) category than in **landscape**.

5. **Color** was identified by the sample as being a significantly more important element in the **landscape** (.41) category than in **people**.

6. **Sharpness** was identified by the sample as being a significantly more important element in the **still life** (.32) category than in **landscape**.

7. **Contrast and brightness** was identified by the sample as being a significantly more important element in the **landscape** (.31) category than in **still life**.

8. **Subject** was identified by the sample as being a significantly more important element in the **people** (.78) category than in **landscape**.

9. **Subject** was identified by the sample as being a significantly more important element in the **people** (.78) category than in **still life**.
10. **Sense of moment** was identified by the sample as being a significantly more important element in the **people** (1.33) category than in **still life**.

11. **Sense of moment** was identified by the sample as being a significantly more important element in the **people** (.77) category than in **landscape**.

12. **Sense of moment** was identified by the sample as being a significantly more important element in the **landscape** (.56) category than in **still life**.

13. **Impact** was identified by the sample as being a significantly more important element in the **people** (1.04) category than in **still life**.

14. **Impact** was identified by the sample as being a significantly more important element in the **people** (.62) category than in **landscape**.

15. **Impact** was identified by the sample as being a significantly more important element in the **landscape** (.42) category than in **still life**.

16. **Depth of field** was identified by the sample as being a significantly more important element in the **still life** (.57) category than in **landscape**.

17. **Depth of field** was identified by the sample as being a significantly more important element in the **people** (.35) category than in **landscape**.

Table 2 lists the significant comparisons of visual elements by photo category. The table illustrates the elements that have greater significance than other elements. For example, the visual element, quality of light, has greater significance in landscape than in still life, and is more significant in still life than in people.
Table 2. Significance Comparison of the Importance of Visual Elements by Photo Category.

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CHAPTER V

SUMMARY AND CONCLUSION

The identification of influences that affect image appeal is important to aspiring photographers who are developing their personal craft. Although technical quality is important, it is not enough to create a lasting visually appealing image. This problem of this study was to determine the visual elements that affect visual appeal in photographic images. The summary of the study was prepared based on the objectives of the study.

Summary of the Study

Objective 1: The first objective was to identify the visual elements of a photograph. The researcher incorporated some of the visual elements used in a study conducted by Andreas E. Savakis, Stephen P. Etz, and Alexander C. Loui (2000). This study, entitled “Evaluation of Image Appeal in Consumer Photography,” was conducted at the Imaging Science Technology Laboratory of the Eastman Kodak Company. The researcher also reviewed educational photography books on the topic of the photographic craft of producing visually appealing photographs. From these resources ten visual elements that were consistently recognized as vital to a photograph’s visual appeal were identified (See Appendix A).

Objective 2: This objective was to develop an instrument to distinguish and rank the visual elements that influence the visual appeal of a photograph. The instrument consisted of two parts. Part one was the photographic images. The researcher selected 30 images and had a panel of professional photographers and educators select the final four images for each category.

The second part of the instrument was the questionnaire and the Excel data file. Data collection was done by personal interview. The interviews were conducted in conference rooms and a classroom by the researcher. All other visual images were removed from the environment.
The participants viewed four different photographs in each of three categories: landscape, still life, and people. Participants were asked whether they found the image visually appealing and then to rate the importance of the ten visual elements to the overall appeal of each photograph. The responses were given using a Likert scale rating, with 1 being the least important and 5 being the most important. The interviewer recorded the responses into an Excel spreadsheet. This instrument was successful in gathering the data in an objective manner. Each interview took approximately 15 minutes to conduct.

Objective 3: The final objective was to analyze the data to identify and rank the visual elements in each of three categories and identify any element commonalities between categories. The data gathered through the interview process was analyzed by the Statistical Consulting Center at Bowling Green State University. A total of 40 people participated in the study. The data gathered was analyzed using a series of MANOVA tests at a significance level of .05. To satisfy the third research objective, the mean scores were calculated. These scores illustrated the importance of each of the 10 visual elements in each category. The three categories consisted of people, still life, and landscape. Table 1 illustrates the mean total for each of the elements by category on a 1-5 Likert scale with 5 being most important for visual appeal. This created a ranking of most important to least important visual elements. The elements were then analyzed, utilizing the MANOVA (Tukey at the .05 level of significance) test, and comparing their value versus the categories of people, still life, and landscape. The data showed that there were 17 different combinations of photo elements and categories that were significant.

Conclusion

Analyses of the data indicated that there are some commonalities in visual elements that influence the appeal of photographs. However, most visual elements are dependent on the
photographic category. The importance rankings of the visual elements produces only two pair of visual elements considered equal in importance: subject in the still life and landscape categories, and depth of field in the people and landscape category.

Quality of light was the only element considered important in all three categories, ranking as the most important element in landscape, the second most important element in people, and the fourth most important element in still life. This result was not unexpected since the word “photography,” as literally translated from the Greek, means “light drawing.” Photography is about light; light reflecting from a scene creates an image (Burian & Caputo, 2003).

Appealing landscape images have always been the result of great light. Quality of light ranked first, color balance of the light ranked second, and strong compositional element ranked third. As an example, great landscape photographers, such as Ansel Adams spent a tremendous amount of time looking for the right location and waiting for best light to create his stunning landscape photographs. These ranking by the participants of the important elements seem logical, but were not substantiated until documented through this study.

The ranking of the element subject, as the seventh most important visual element in the still life category, was a surprise to this researcher and photographer. Typically, a photographer would begin to create a still life photograph, by finding a strong and interesting subject. Strong composition, ranked second, and the quality and color of the light, ranked third and fourth. These seem to be the appropriate ranking by the photographer’s perspective as well. The participant viewed sharpness as being the most important element, but is not, perhaps, the photographer’s first concern. This confirms the researcher’s assumption that viewers of the image and this photographer’s view of the elements may be different.

The people category was the only category in which all elements were considered moderately
important and higher. While all elements were important, the subject or person in the photograph was found to be most important. This ranking was expected by the researcher.

The results of this study indicated why many photographers excel at certain types of photography. Photographers who can create incredible landscape photographs may not be able to create photographs of people with equal appeal. These photographers may have an outstanding understanding of light but may not be able to recognize the strong subject necessary for appealing people photos. A strong understanding of these visual elements and how they affect the appeal in various categories of photography is essential to becoming an accomplished and versatile photographer.

Photography educators must recognize that students need to understand these ten visual elements and how they impact a photograph. However, it is more important to understand how they affect certain categories of photographs. When students are aware of this difference they can develop the skills necessary to consistently create images of strong visual appeal.

**Recommendations for Further Research**

1. Compare the effectiveness of an instructional model in which the 10 visual elements are discussed and a model in which the 10 visual elements are discussed with regard to the three categories of photographic images.

2. Interview various professional photographers who specialize in the three categories of photography to see how they would rate the importance of the ten visual elements and compare the results to this study.

3. Compare the effectiveness of a grading rubric based on the results of this study to that of other photography instructors.
REFERENCES


APPENDIX A

SCRIPT FOR ADMINISTERING QUESTIONARE

Thank you very much for agreeing to participate in this study. I am going to show you four photographs in each of three photographic categories: landscape/cityscape, people, and still life. For each image I will be asking you a series of questions in regards to the appeal of each photograph. The first question will be whether you find the image appealing. If you do not find it appealing we will move on to the next photograph. If you find the photograph appealing I will ask a series of question about visual elements and the extent they contribute to the photograph’s appeal. There are ten visual elements (read list of elements and their definitions) that I will ask you to respond to. Responses will be on a Likert-type scale, rating the importance of each element to the overall appeal of the image (1=unimportant, 2=of little importance, 3=moderately important, 4=important, 5=very important). In front of you is a list and definition of the visual elements and a copy of the Likert-type rating scale. I would like you to give an immediate response or your first thought to the question. Do you have any questions?

(Answer any questions and/or begin the questionnaire)

Proceed through the list of questions for each photograph.

Questions for Participants

The following questions will be asked to each participant. The questions will be repeated for each of the four images in each of three categories; landscape/cityscape, still life and people.

Do you find this photograph appealing? Yes or No

1. Is composition an important visual element that enhances the appeal of this photograph?
2. Is the quality of light an important visual element that enhances the appeal of this photograph?

3. Is the direction of light an important visual element that enhances the appeal of this photograph?

4. Is the color balance an important visual element that enhances the appeal of this photograph?

5. Is the area of sharpness an important visual element that enhances the appeal of this photograph?

6. Is the contrast and brightness an important visual element that enhances the appeal of this photograph?

7. Is the interest and strength of the subject an important visual element that enhances the appeal of this photograph?

8. Is the sense of moment an important visual element that enhances the visual appeal of this photograph?

9. Is the overall impact an important visual element that enhances the visual appeal of this photograph?
APPENDIX B

ELEMENTS

For the purpose of this study, the visual elements will be defined as follows.

• Color Balance – overall color of the light that dominates the photograph

• Composition – arrangement of visual elements within the image

• Contrast and Brightness – the difference between the brightest and darkest and the overall brightness of the photograph

• Depth of Field – area of the image from foreground to background that is acceptably sharp; can be narrow or very wide

• Direction of Light – the direction that the light comes from to strike the subject; four common directions are top lighting, side lighting, front lighting and back lighting

• Impact – the emotional reaction that the viewer has to an image, grabbing power that makes the viewer want to look at the image

• Interesting/Strong Subject – the main center of interest that the photographer is attempting to visually express

• Sense of Moment – the moment when everything comes together in the creation of a photograph, the subject, the situation, expression, the light….

• Sharpness – describes an image or part of an image that shows crisp detail and texture

• Quality of Light – the amount of diffusion the light has; soft light has no shadows and is low in contrast, hard light is contrasty with deep sharp edged shadows
APPENDIX C

LETTER FOR PARTICIPATION

October 16, 2006

To Whom It May Concern:

As a part of my Master’s research, I am asking individuals from the university community to participate in a survey. The survey is related to research that I am conducting on the visual appeal of photographic images. The survey should take a person no longer than twenty minutes to complete.

The purpose of this study is to determine the most important visual elements that contribute to the overall appeal, or beauty of a photographic image. The survey will be conducted individually with each participant and will consist of viewing four images in each of three categories: people, landscape/cityscape and still life. The participant will then be asked to comment on the overall appeal of the image and to rate the importance of ten visual elements towards that appeal.

If you choose to participate in this survey, your identity will be kept confidential and anonymous. All participants will have an opportunity to win a fifty dollar gift certificate at Sam B’s restaurant in Bowling Green.

Again, this survey is to determine the importance of visual elements in the overall appeal of a photographic image. The data obtained from this research can be used to develop a teaching matrix for learning the visual elements that are most important to photographic appeal.

Please contact me at jlhall@bgsu.edu to arrange a time and place for participation in this study.

If any questions or problems about this study become evident, please contact the chair of the study, Donna Trautman, PhD at 419 372-7613 or by e-mail, at dktraut@bgsu.edu. If questions or concerns about participant’s rights become evident, please contact the Bowling Green State University Human Subjects Review Board at 419 372-7716 or by e-mail at hsrb@bgsu.edu.

Thank you very much for your participation!

Sincerely,

Jeffrey L. Hall
Graduate Student
College of Technology
Bowling Green State University
419 372-7613
May 26, 2006

TO: Jeffrey L. Hall
   College of Technology

FROM: Richard Rowlands &
   HSRB Administrator

RE: HSRB Project No.: H06T314GX2

TITLE: Elements that Influence Visual Appeal in Photographs

You have met the conditions for approval for your project involving human subjects. As of May 24, 2006, your project has been granted final approval by the Human Subjects Review Board (HSRB). This approval expires on May 18, 2007. You may proceed with subject recruitment and data collection.

The final approved version of the consent document(s) is attached. Consistent with federal OHRP guidance to IRBs, the consent document(s) bearing the HSRB approval/expiration date stamp is the only valid version and you must use copies of the date-stamped document(s) in obtaining consent from research subjects.

You are responsible to conduct the study as approved by the HSRB and to use only approved forms. If you seek to make any changes in your project activities or procedures (including increases in the number of participants), please send a request for modifications immediately to the HSRB via this office. Please notify me, in writing (fax: 372-6916 or email: hrb@bgsu.edu) upon completion of your project.

Good luck with your work. Let me know if this office or the HSRB can be of assistance as your project proceeds.

Comments/Modifications:
Stumped original consent documents coming via campus mail.

c. Dr. Donna Trautman
APPENDIX D

PHOTOGRAPHS

Landscape
Still Life
APPENDIX E

DATA COLLECTION SPREAD SHEET

This spread sheet will be used to record participants’ responses. The spread sheet will be able to total each individual’s results, the results from each category, and will produce visual representations of the data in the form of graphs or charts.

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### APPENDIX F

#### DATA RESULTS

The GLM Procedure

Repeated Measures Analysis of Variance

Univariate Tests of Hypotheses for Within Subject Effects

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Greenhouse-Geisser Epsilon: 0.9182
Huynh-Feldt Epsilon: 0.9614

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Huynh-Feldt Epsilon: 0.5845

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