

JUDGING & ANALYSIS

Beyond the rules

Jon Fishback FP, ARPS

Edition one
© 2012 Jon P. Fishback, FP, ARPS
jpf1@aol.com

Reproduction
whether in whole or in part
without consent
of
copyright owner is strictly prohibited.

Contents

The Pain and Pleasure of Critical Analysis_____	4
Forethoughts_____	6
Image Analysis What’s it all About_____	8
Analysis in the Personal Voice_____	10
Image Analysis “Objective or Subjective?”_____	14
The Human Eye_____	20
Eye Tracking_____	23
Impact on Image Analysis_____	25
On Viewing a Photograph_____	26
Distractions_____	29
Split Interest Area_____	31
Center of Interest_____	32
Rule of Thirds_____	33
Right to Left/Left to Right_____	34
Prejudice/Bias in Analysis _____	35
Abstract Unrecognizable Work_____	36
Who’s Art is It?_____	38
Technology_____	39
Opinions in Photography Analysis_____	41
A Final Note_____	43
Useful Terms_____	44
References_____	46

The Pain and Pleasure of Critical Analysis

One of the most difficult moments in the life of any photographer is hearing an analysis of his/her work. The few minutes leading up to the analysis may seem like an eternity. The event itself may feel like watching your first-born perform in her first Christmas pageant. This feeling is difficult to shake and may be around for years for those who continue to exhibit. I call this Analysis-Paralysis, (AP) for those of you who love acronyms.

One of the most critical elements in reducing this anxiety is the proper analysis by whoever is doing it. Properly done, the analyst can reduce the stress of the moment, and go a long way toward making future events much easier for the maker.

New members of camera clubs, PSA, or any group whose aim is viewing graphic art, may be especially vulnerable to AP. If part of the group's goal is to keep new members and make them old members, AP may need to be addressed at every level.

Analysis is much more complicated than just saying something nice about a photograph and then explaining how it could have been made better. This has been the popular belief in clubs for years. Persons who are successful in exhibiting are many times ill prepared to conduct analysis. Knowing how an image can be made better through experience is only part of the skill needed in proper analysis. Saying something nice about the image may do more harm than good.

Kind words regarding a photograph may seem condescending if they have no substance. Simply saying that the subject is pretty is saying something about the photograph over which the photographer may have little control, and is probably obvious to everyone. Comments pro or con must have substance. Most makers will recognize superficial comments and Analysis-Paralysis may set-in. . "I really like this photograph" may make YOU feel good; however it does not help the maker unless you can articulate why you like it.

Many times the person doing the analysis leaves out the most obvious. After all is said and done regarding rules and regulations about composition, lighting, and impact, how does the photograph make you feel? Sometimes the photograph will evoke a certain feeling. This gives the analyst another positive tool to set up the help the maker needs.

Examine the overall image before picking it apart. Many times the feeling evoked by the image at first glance will go a long way toward making the analysts' job easier. The worst thing that might be done is to begin picking apart the image using hackneyed rules, before deciding how the image makes you feel. It is just possible that the analysis need go no farther than this, and you have stepped beyond the rules.

Often, when confronted with a photograph that has a myriad of obvious flaws, the knowledgeable photographer as analyst may be so anxious to help he or she may not even be able to see the positive aspects

of the image. A type of tunnel vision sets in and the positive comments are rushed and many times shallow. It takes patience and understanding to ignore what needs to be done and comment intelligently on what was done properly.

Many times it is not what is said that is painful, but the way it is said. Positive comments regarding a photograph have no business in the same paragraph or breath with assistance in what can be done better. An example might be: “The foreground is well handled, however is slightly out of focus.” The maker may only hear the out of focus part, and worse than that hasn’t a clue as to how the foreground was well handled. A better approach is to discuss the foreground in a substantive manner. “To me, the foreground is well handled. Notice how the dark band of the foreground steps my eye into the lighter middle ground and then to the darker background. This layering of hues, in my opinion, adds dimension and impact to the image.”

Notice also the use of the personal terms TO ME, IN MY OPINION. These terms anchor the analysis to the analyst’s personal opinion, which, after all, is what it is.

Never use the connecting words, ‘however’ or ‘but’ or any word that ostensible “drops the other shoe.” This technique doesn’t work; the receiver may only retain the negative comment.

After finishing with what was done properly, a short pause may allow the maker to relax and even reflect on the fact that this process is not so bad after all. When writing the analysis always separate the good from the help area by placing them in separate paragraphs. The tendency may be; to re-address previous positive comments, to emphasize the help part. Do not do this. The positive reinforcement has been done and can only be degraded by further comment. Make the help comments as succinct as possible and above all make them pertinent

In the previous example one might say, “The foreground appears to be slightly out of focus to me. I think a sharper foreground may have given this photograph a bit more impact.” Then stop, and go on to any other help that can be rendered. Never belabor an obvious flaw, saying it two different ways is redundant at best and only adds to the makers AP.

One of the most difficult things in analysis is the need, many times, to completely alter the way one speaks or writes. The use of decisive terms such as ‘always’, ‘never’, ‘must’, ‘should’, are usually not the best words to use to analyze photography. Substituting indecisive words such as “may”, “might” or ‘consider’, may go a long way toward making AP easier to handle, and leave the analyst room to be wrong.

Analysis is not designed to find something wrong. It is designed to see something right, and then see things that may be improved upon. Analysis is not designed to correct what is wrong, but to suggest what may be done to improve in the future. The maker should be left with the impression that the improvement is their choice.

Forethoughts

Show your work to 100 different people and you will get
100 different opinions,
all of them valid.

Brooks Jenson.

No one can tell you **what** to think. Thinking is as natural as breathing. In the PSA/Camera Club (PSA/CC) environment there is much subtle teaching happening on **what** to think. There is a reason for this, whether or not it is a good reason I will leave to you.

In any organization there are rules. Rules designed for safety or ones to make the organization run more smoothly and efficiently. More importantly the rules may be designed to make the individual more successful. The PSA/CC environment is no different. The competitive environment has fostered rules over the years to help members be more successful within this framework. Rest assured it is a closed environment just like any organization, and outside that environment, the organizations rules may not exist in the same form or in any form.

What these rules have done is attempt to teach judges **what** to think, and it has succeeded to a degree. In teaching composition and balance we say use the rule of thirds. If something does not feel right we are taught that the natural world reads from left to right. The rules would have us believe that the natural world presents itself with one center of interest. The list goes on.

Rules learned for the sake of making ones own photographs, may very well make you more successful in the PSA/CC environment. When it comes to analysis there may be some additional worries when the rules are applied arbitrarily.

In this book I will be careful and try not to tell you **what** to think or say. I will spend most of the time on **how** to say what you think. This too can be a slippery slope, as makers perceive analysis in different ways. I will try to give you general ways to formulate words so that when the rules came up in your conversation it might appear as your own thoughts.

In this way, the analysis becomes something between you and the maker and not something that is a universal truth, as there are no universal truths. You will be taking ownership of your opinions.

Image analysis is subjective let me be very clear on this point. There are those who will say that the process can be objective, and certain truths fit all situations. This is just not possible, as people see things so differently.

I say again; preface you comments, positive and negative with personal terms that make them your opinion only. Terms such as: In my opinion, To me, To my eye, I think, I believe, etc, make the comments your opinion and you will be taking ownership of any hackneyed rules that you may have been taught. Examples of this process begin on page 10.

To complain of a photograph for being literal and merciless, is like complaining of a good memory that will not suffer you to forget your sins.

George Santayana

Photography is nature seen from the eyes outward, painting from the eyes inward.

Charles Sheeler.

If I could tell the story in words, I wouldn't need to lug around a camera.

Lewis Hine

One should really use a camera though tomorrow you'd be stricken blind.

Dorothea Lange

Photographic vision can be a curse. You can't turn it off.

Jon Fishback

A photograph is usually looked at - seldom looked into.

Ansel Adams

Image Analysis, what is it all about?

Image analysis is very subjective. Film critics analyze and criticize film based on years of watching the movies. Their analysis is nothing more than their opinion of the film with an emphasis on making an interesting discussion around the analysis. Part of their interest is self-serving in that they need their audience to continue to read and listen to their articles and/or television show. Their opinion may or may not be for the purpose of helping the filmmaker do it differently the next time. The fact is the film industry may ignore the analysis of their work.

The American film industry is largely in it for the money, so their reason to do it correctly has to do with pleasing the masses. The masses enjoy certain things and if the film industry provides this it may be successful. This does not mean the success is something everyone enjoys; it just means they make money. Making money is their reason to exist, their purpose.

Still photography is much like this. There must be a reason for the image to exist. If the photographer creates only for self-gratification, then he or she should do the analysis. For a second party to dare to comment on this type image would be a mistake. It is when the image is created for competition that image analysis becomes a very valuable tool for the maker. Images sent for competition have, by default, been sent in for the express purpose of competing. If the photographer wishes to be successful in dealing with competition judges there are certain norms that may apply.

Rules and regulations, or norms, have been passed down through the centuries in art, and through decades of judging in Photographic Society of America and Camera Club (PSA/CC) competition. If you show three landscape photographs to random members of PSA/CC, more times than not they will pick the one, as the best, that follow the most norms.. They may not know why and when asked why may not be able to articulate it. They have been bombarded by images that meet certain criteria and have been told this is good and will compete well.

These norms may have little relevance in the larger photographic environment. Much of the massive photographic community may not subscribe to norms of any kind. Relevance of images in this environment may have a much broader acceptance, and analysis takes on a much

different role, one that may be more esoteric or cerebral

It is the phenomenon of rules or norms that causes the analysis to be a valuable tool in the PSA/CC environment. The photographer must be aware of the norms that cause judges to react favorably to their images, if she or he is to be successful in exhibiting. Sure, one can just muddle along and see what gets accepted, then make more just like that. This is a very slow process and one that can be very costly. Knowing the norms leaves the photographer open to all types of experimentation. Norms can be applied or not in a myriad of ways. However, blatantly working outside these norms in competition may become very frustrating as the judging process is looking for work that is favorable within the enclosed environment.

The photographer that knows what is considered normal for a specific purpose and then works outside that, will know why the images was or was not successful, and will intelligently accept that outcome. The sensitive analyst may recognize fine images by persons working outside the norms and reward them for doing so. This may, in time, cause a reduction of the use of the hackneyed rules and norms, and broaden the spectrum of acceptable images.

Photographers must be emotionally prepared for critical analysis of their images. Analysis can be one of the most painful aspects of a photographer's life. Most images are not finished to the point of showing them unless the maker has an emotional attachment to them. Seldom have I heard someone say about their image, "I just hate this image, can you tell me why?" In almost every case the photographer is looking for reinforcement of his/her reason for making the image. Some times the maker is looking for additional reasons for the image to exist. Seldom is anyone prepared for reasons the image could have been made better, and worst of all, reasons it should not have been made at all. This is part of the reason the image must have a purpose. The purpose opens up the discussion to specifics regarding how the image does or does not fit that purpose. It allows photographers to distance themselves from the emotional attachment to the image and focus on the way to make it successful based on this purpose. The analyst's role at this point is a simple matter of a discussion regarding what norms have been applied or not, and make a recommendation based on this.

Analysis in the Personal Voice

The following examples are comments made by students in the online course *Image Analysis*.

The image is shown only as a reference, not as something to compare opinions. Opinions of the analyst, in most every case are valid. Unless the comment would do irreparable harm to the maker they are all valid. The personal voice is emphasized so that the comments will appear as the opinion of the writer and not a universal truth.

You need to learn to **TAKE OWNERSHIP** of your opinions.

The statement of the student is given first and then a corrected version in bold italics. Compare the two statements and I believe the personal voice will be obvious.



~~~~~

### Student's Comment

This is a very strong, striking image. The composition is excellent with so many leading lines giving my eye no choice but to look at the focal point of the window, which is nicely placed on a “rule of thirds crash point.” How wonderful to have such a beautiful sky framed within the focal point. The lighting is great, highlighting the beams and the window design. The corners are darkened to keep my eye within the frame. The tonal quality and colors work well together to add to the impact. Sharp focus and good depth of field lend to an overall captivating image.

Comment Corrected to the Personal Voice.

***I think*** This is a very strong, striking image. ***To me*** The composition is excellent with so many leading lines giving my eye no choice but to look at the focal point of the window, which is nicely placed on a “rule of thirds crash point.” How wonderful to have such a beautiful sky framed within the focal point. The lighting, ***to me***, is great, highlighting the beams and the window design. The corners ***appear to me***, darkened to keep my eye within the frame. ***I believe*** The tonal quality and colors work well together to add to the impact. Sharp focus and good depth of field lend, ***what is to me***, an overall captivating image.

~~~~~

Student's Comment

In my opinion, this is a balanced photo that has a good impact with all basic photography elements are there within the frame. The vertical wooden bars work well leading the eye toward the light and the hole in the ceiling which can be a symbol for freedom. Rule of third was applied positively and enhanced the composition by avoiding placing the hole into the center of the frame. Color gradient is good and the lighting is just ok as the more we get closer to the ceiling the more light we can see compared with the bottom of the frame. The choice of a small aperture setting was a clever option making sure that the whole image is in focus.

Comment Corrected to the Personal Voice.

In my opinion, this is a balanced photo that has a good impact with all basic photography elements are there within the frame. The vertical wooden bars work well leading ***my*** eye toward the light and the hole in the ceiling which can be a symbol for freedom. ***I think the*** Rule of third was applied positively and enhanced the composition by avoiding placing the hole into the center of the frame. ***To me the*** Color gradient is good and the lighting is just ok as the more ***I*** get closer to the ceiling the more light ***I*** can see compared with the bottom of the frame. The choice of a small aperture setting was a clever option, ***to me***, making sure that the whole image is in focus.



~~~~~

#### Student's Comment

This is a very sharp well focused image. The detail on the spoon, even though it is black-on-black, is seen well. The visual impact of the stark black and white is striking. The composition is strong and the angle of the spoon draws my eye to a “crash point”. Good placement of the objects within the frame, there is room for the eye to move around the entire image. The lighting is nicely done allowing for a good tonal quality of both the black and white elements of the image.

#### Comment Corrected to the Personal Voice

This is a very sharp, **and to me, a** well focused image. The detail on the spoon, even though it is black-on-black, **I believe**, is seen well. The visual impact of the stark black and white, **I think**, is striking. The composition is strong and the angle of the spoon draws my eye to a “crash point”. **To my eye**, Good placement of the objects within the frame, there is room for **my** eye to move around the entire image. The lighting, **I believe**, is nicely done allowing for a good tonal quality of both the black and white elements of the image.

~~~~~

Student's Comment

A simple but yet interesting still life photo with bold contrasted blacks and whites. Despite the challenging white balance setting when it comes to a solid black background, The exposure is just right. Rule of third was applied to the advantage of the image.

Comment Corrected to the Personal Voice

I like A simple but yet interesting still life photo with bold contrasted blacks and whites. Despite the challenging white balance setting when it comes to a solid black background, ***I think***, the exposure is just right. ***To me the*** Rule of third was applied to the advantage of the image.

~~~~~

### Student's Comment

The image exposure is good with stark contrast stemming from the simple subject matter. Technical aspects of focus, DOF, gradual shadows, etc., seem well done with no distractions. The composition is balanced in the frame with both linear and curved shapes. Diagonal lines and thirds are used to good effect.

### Comment Corrected to the Personal Voice

***I think*** The image exposure is good with stark contrast stemming from the simple subject matter. Technical aspects of focus, DOF, gradual shadows, etc., seem well done, ***to me***, with no distractions. ***I like that*** The composition is balanced in the frame with both linear and curved shapes. ***To my eye***, Diagonal lines and thirds are used to good effect.

~~~~~

The corrected version of the comments takes into account the subjectivity of the analysis process. The comments are the express opinion of the analyst and using the personal terms makes that obvious. It also allows the analyst to take ownership of any hackneyed rules that are used.

Image Analysis

Objective or Subjective?

The following two definitions are from the New World Dictionary.

Objective:

Being, or regarded as something outside the mind of the subject or person thinking.

Being independent of the mind; real; actual.

Subjective:

Of or resulting from the feelings or temperament of the subject, or person thinking; not objective; personal.

It may be loosely interpreted that the judging process is the act of placing a numeric score on an image to determine its worth within a process, and the analysis may be explaining or defending that score.

Using the two dictionary definitions above, the nature of the process might appear to be SUBJECTIVE. Although the image itself may be OBJECTIVE or tangible, the thoughts of one analyzing it may be very subjective. The tools one uses in their mind to analyze a photograph may also be SUBJECTIVE. A rule such as the Rule of Thirds, may very well be OBJECTIVE, as it is real, can be drawn on paper and made to reside outside the mind.

When an OBJECTIVE rule is applied from the mind of the analyst and then communicated it may very well become quite SUBJECTIVE. Here its application becomes a feeling and part of the temperament of the analyst. It becomes personal and therefore SUBJECTIVE.

In an attempt to shed some light on just how subjective the process may be, we may use images and examples of real life analysis by students in an online Image Analysis Course.

The students in this course run the gamut from the very experienced judge to the aspiring one. In most cases they are good photographers who have been in the camera club environment for some time, and in many cases are the members who are looked up to when it comes to analysis.

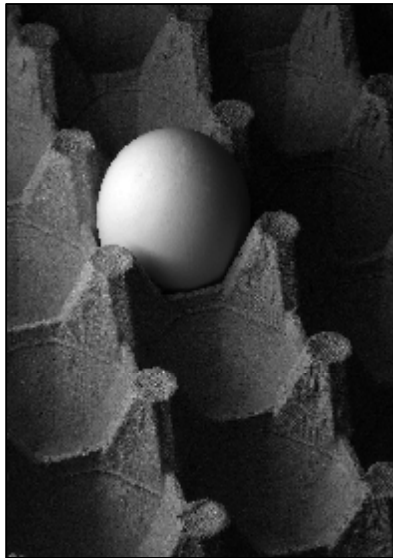
I must say, in most cases the comments are extremely good. The student sees well,

communicates feelings, their comments are well thought out and follow the prescribed rules that have been handed down for decades in the Camera Club (CC) environment. The disparity of their comments in no way reflects on their perceived relevance in this environment.

The following is in no way a condemnation of the student's opinions, but given here to show the subjectivity of the process. Each analyst sees this through their own image filter. This filter may be made up of learned experience and bias.

Let's start with one of the more controversial images in the course.

For the sake of brevity student's comments have been paraphrased and short bulleted statements will be used. Each pair of comments represents hundreds of analysis of this same image.



*The image is over exposed. *The image is under exposed.

*The depth of field is off. *The depth of field is right on.

*The center of interest is placed well. *The center of interest is off, use the rule of thirds.

*The black and white is a good choice. *I think it should be in color.

The highlights are blown out. *The highlight has good detail.

*The shadows are too dark, need detail. *The shadows are good and balance the image well.

*The leading line should not come from the corner. *The composition is excellent.

*The image should be flipped. *The diagonal lines are just right from right to left.

Here is another:



*The background is too black. *I love the black background.

*There is too much negative space. *The composition is impeccable.

*Not enough detail in the shadows. *The shadow detail is good.

*The highlights are blown out. *The edge highlight is perfect, with detail.

*I like the vertical stem, it balances nicely. *The vertical stem should be cropped out.

*The composition is good. *The subject is ill placed, crop the bottom.

*I like the back lit leaf. *Too much light on the leaf, detracts from the interest area.



Another of the more controversial images shown above is an image by Imogen Cunningham. The title is “The Unmade Bed.”

Some forty years ago if you were able to scrape together the \$1200 you may have been able to buy this print. Today the vintage print of this image will sell retail upwards of \$10,000.00. The point made here is that the image is well respected as one of the finer photographs of history.

As you might expect there have been many fine comments about the image, and some well thought out criticism. What you might not expect is the hostility generated by it. There have been students that felt the maker should not have made the image. There were those that said it made no sense to them therefore they were unable to view it in a positive manner. Who wants to look at an unmade bed? Many could not recognize the items on the bed therefore faulted it for this.

This subjectivity may largely be bias which resides in everyone but might be more damaging in analysis.

Suffice it to say there are wide variances in the comments from every image in the course. The images have been arbitrarily changed from time to time to see if the content of the course might be the reason everything seems so subjective. Prize winning images and ones from beginning photographers have been used. It does not seem to matter; the comments pro and con are so disparate overall that the only conclusion one might come to is that the process itself is subjective beyond what you could have imagined.

Now, all this said, this may not be a bad thing. On the contrary, it may keep things in equilibrium. If the process was objective and the images could be judged and analyzed by a computer, things might get boring very fast. Winners would be the ones who mechanically followed the hackneyed rules programmed into the computer.

The trick for camera club members who may be asked to judge and analyze, is to recognize this subjective process and try not to arbitrarily apply objective rules like a computer might. Above all else, take ownership of any hackneyed rule you may wish to apply to your analysis.

It may be important to utilize objectivity in your own work. You can even make a transparent mask to hold up in front of the camera with the rule of thirds scribed on it. This may be the height of objectivity as it is tangible, and you can see it, it is real. Here you will be applying an objective tool to your photography.

The thing you may want to avoid in analysis is arbitrarily applying that objectivity to the work of others.



I am hopeful that you will recognize the pitfalls in an analysis such as the one below, regarding this image.

This has beautiful color, nice work on the flesh tones, and great focus on the eyes.

The image is out of balance. The rule of thirds is violated. The eyes are right in the middle. The top is heavy thus the composition is bad. The scarf at the top sticks up in an unnatural way and creates a dark hole, eye trap, distraction. The image can be partially saved by cropping at the top to eliminate the distractions which move the eyes up.

Of course this is a painfully subjective and poorly worded analysis and

may, in fact, be total crap. Even if it is all true to the person doing the analysis, I am sure you can see that the analysis was insensitive, boorish, egotistical, down right nasty, and maybe the most damaging thing is that it is not in a personal voice and may sound to the maker as if the entire world sees it this way. This could not be farther from the truth as I think most anyone can see it is a beautiful portrait.

If you learn anything from this book, I am hopeful you will learn this:

No one can tell you **what** to think, so when you analyze a photograph ask yourself three questions.

(1) Am I looking at the image as a whole or am I breaking it down to component parts for the purpose of finding something wrong?

(2) Is what I am saying about the image actually what I think, or am I saying something that someone taught me to think?

(3) Is the comment I am making sensitive and personal?

The Human Eye:

As it pertains to image analysis

At the center of the macula, approximately on the visual axis, there is a pit (termed the "foveal pit") with a diameter of about 1.0 mm, that is associated with a high concentration of cone photoreceptors. The centre of the fovea or the foveola - is about 0.2mm in diameter - and only cone photoreceptors are present and there are virtually no rods. Compared to the rest of the retina, the cones in the foveal pit have a smaller diameter and can therefore be more densely packed (in a hexagonal pattern). The high spatial density of cones accounts for the high visual acuity capability at the fovea. This is enhanced by the local absence of retinal blood vessels from the fovea - which if present would interfere with the passage of light striking the foveal cone mosaic.

Since cones contain the pigmented opsins that allow humans to discriminate color, the fovea is largely responsible for the color vision in humans which is superior to most other mammals'. Rods are essentially the light receptors, and the fovea contains none, thus does not function well in low light. This is why things lose color at night. Astronomers know this: in order to observe a dim star, they use averted vision, looking out of "the side of their eyes".(1)

Outside the fovea there are fewer cone receptors and they are not concentrated which causes the lack of detail in anything but the small 1% of the macula called the foveola.

The fovea although less than 1% of the retina takes up over 50% of the visual cortex in the brain. The fovea sees only the central two degrees of the visual field, which is roughly equivalent to twice the width of your thumbnail at arm's length.

This narrow field of view that the human eye sees as sharp is called the Point of Regard, or POR.

Taking into consideration that this field of view is just over one degree, one might correlate that to see something outside that Point of Regard (POR), the eye must be moved.

A simple test of this fact is shown in Figure 1 on the following page.



Figure 1

If you place your gaze or Point of Regard (POR) on the white circle and concentrate on the face by not moving your eyes, everything else in the image will appear hazy or out of focus. You may be able to recognize items but will not be able to see them clearly. It is not until you move your eye and its POR that something else will appear sharp. Even the crucifix on the subjects left, as close as it is to the subject, will not come into focus unless you move your eye. Only the small 1 degree foveola of the eye can render a sharp image.

This focus issue may play a very important role in image analysis.

Since it seems to be impossible to focus on no more than about 1 degree of the image at any one fixations, it might correlate that one must move the eyes to completely enjoy the image. If this eye movement is natural it might hold that the movement itself might not be a negative issue in analysis.

Eye Movement:

Your eyes never stop moving. When you look at something, your eyes constantly move from feature to feature, taking in parts and pieces to create a whole image in your mind. Even when you try to focus on something, your eyes move off your subject quickly. Saccadic eye movement constantly forces your eyes back onto the subject. It happens so quickly that you are not even aware of it, and it takes sophisticated equipment to measure it.

Saccades are small, abrupt movements. Saccadic eye movement is when both eyes simultaneously jerk back and forth and up and down, fixating on and then leaving one point and then another. The velocity of saccadic eye movements can be as much as 1,000 degrees per second. In addition to the saccadic motion, the eyes vibrate at a rate of about 30 to 70 hertz. These vibrations cause the eye to refresh the image to the brain similar to when you refresh a web browser. The vibrations are called microsaccades.

The direction of the saccade eye movements depends on which eye muscles the brain is activating. The muscles are controlled by a group of neurons--specialized nerve cells--in two gaze centers in the reticular formation of the brain. The reticular formation is a group of nerve pathways that control waking, sleeping and other levels on consciousness. The gaze centers control horizontal movement and vertical movement. Each gaze center activates independently.

The brain triggers saccades in total darkness during the dream or rapid eye movement phase of sleep. During waking hours, saccades are stimulated when a movement, light or change in color attracts the observer's attention. For this study these saccades may be triggered by a desire to analyze a photograph. The observer directs the fovea--small depressions in the retina where the cones are concentrated--toward the stimuli.

It is the limited extent of the foveola that demands the eyes of humans be highly mobile and be able to sweep the eyes through a large angle.

The brain could not retain an image if your eyes fixated on it without moving. The function of the eye-brain connection is complicated and requires the constant movements to continually make impressions on the brain. Mapping of saccadic eye movements when the observer gazes at a portrait show that most movement traces patterns from each eye to the mouth and back again, periodically moving to hair, ears and other features. This suggests that your brain identifies individuals most significantly by their eyes and mouth.(2)

It may seem that eye movement might be, involuntary. Eye movement triggered by a desire to analyze an image might be something over which the analyst has no control. The unconscious frustration of the narrow range of cognitive recognition causes the eye to move involuntarily. Knowing this fact may make the movement of the eye natural and not something that should be considered a fault in an image.

Eye Tracking:

Modern study of eye movement was pioneered by Alfred Yarbus in the 1960's. By using a rather crude contact lens fitted with a suction cup and mirrors, he was able to track the eye movement of volunteers when viewing the painting in Figure 2.

Figure 3 shows a compilation of the eye movement of volunteers when told to extract data from the image using specific challenges. In free association the subject was not told anything prior to the exercise. The subject was told answers to the questions would be expected after the exercise. The lines are the saccades or eye movements and may be superimposed over the image to see what was viewed by the volunteer. The dark areas are where the eye paused or fixated.



Figure 2 (3)

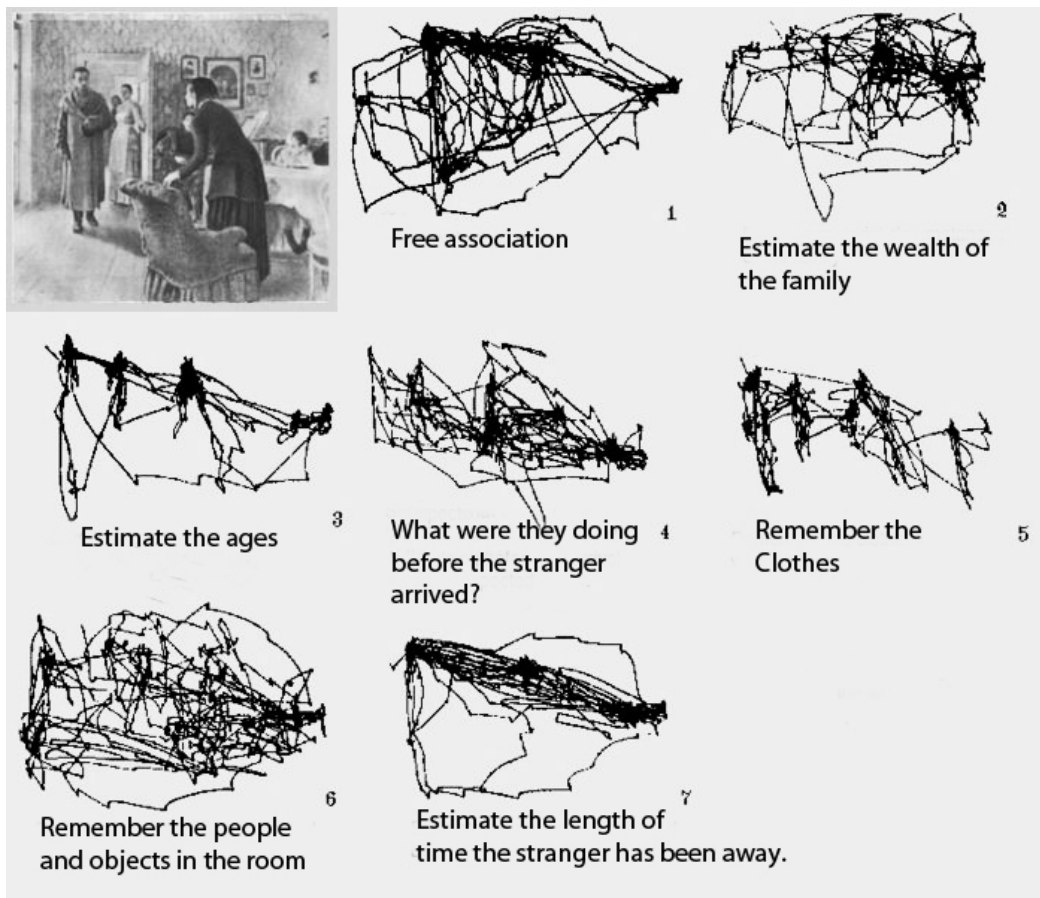


Figure 3

It was this study that may be the most important to understanding how a judge might look at a photographic image and subsequently make a decision as to the relative worth of the image in the competitive environment.

Volunteers given the challenges shown in 1-7 of Figure 3, looked at the image in a manner that would extract data to answer the question. In free association, #1, the gaze appears to have taken in most of the image. Compare this to #3 where the volunteer was looking for the ages of the people in the image. Given the task as in #3, the volunteer spent the most time looking at the faces to determine their age. In #5 most of the time was spent looking at the clothes of the subjects because that was the task given.

Judges in the PSA/CC environment are given a task when asked to judge a photographic

competition. The task is to analyze the images and determine a score that will indicate the relative worth of the images in the competition. This task may very well dictate how the judge approaches the individual images. Since the task at hand requires mental analysis the judge may begin by looking for something wrong based on prior learning. The task, by its nature, is one that must be completed in a very small amount of time. (Sometimes as little as 6 – 8 seconds) The prior learning about judging may involve a subset of ideas based on the function of the eye, such as split interest or eye movement and distractions. If the judge has no background in how the eye functions, there may be a disconnect between the prior learning and reality.

Impact on image analysis:

In the online course titled “*Image Analysis*,” students are given the task of placing a numeric score on a photographic image and then writing an analysis of their reasons for the score. Some typical statements are as follows:

“My eye wanders all over the image and can find no place to rest.”

“There are so many things in the image I find my eye moving from object to object,”

“I am distracted by my eyes moving around the photograph.”

“My eye jumps back and forth between the people, I find this distracting.”

“The light area on the left is distracting, my eyes keep going back there.”

“My eye keeps going back to the dark area in the foreground.”

“I find the rocks on the right distracting.”

Images are constantly being analyzed by judges in PSA and Camera Clubs with little or no knowledge of the physiology of the human eye as it may pertain to viewing a photograph. This fundamental misunderstanding may have evolved over decades and judges today may be embracing issues that have little basis in fact.

The fact is that appreciation of an image cannot take place without eye movement. Interest areas are determined by the scanning of the image. Returning to areas of the image over and over may be nothing more than a conditioned reflex and have nothing whatsoever to do with a fault in the image.

On viewing a photograph.

Growing up in the Photographic Society of America and Camera Club (PSA/CC) environment one may be taught certain rules that make the exercise of competition or salon entry more successful. This is fine as long as that is the goal of presenting the image. Analyzing images produced for that purpose are then discussed with these rules in mind.

The study conducted on eye motion and control shown earlier may shed some light on some of the rules and why certain of these may not hold up under scrutiny, namely eye movement, split interest areas and distracting objects. Some of this study may be worth repeating.

Viewing a photograph is goal oriented. [Mackworth and Morandi, 1967, Underwood and Radach, 1998, Henderson and Hollingworth, 1998]. Given a task to view a photograph the viewer will spend time looking at relevant portions of the image based on the task. As an example if a person was given a photograph, and nothing was said, they might randomly scan the image based solely on their personal preferences or better yet their prejudices. The same person given a verbal task in viewing the image may see something entirely different although looking at the same image. An example of a task that may be pertinent is the task of the analyst. If the analyst is given an image with the task of evaluation, he or she may start out looking for something perceived as right or wrong with the image.

Some perceived right or wrong may come from a subset of rules, some of which have been passed down through generations of art appreciation. Some are nothing more than arbitrary rules that exist within the framework of a closed environment, three of which will be discussed here.

These rules that may not have basis in history or science are the rule of distracting elements, eye movement and split interest areas.

These perceived problems have been studied and these studies may shed some light on why the rule may be something to question. Kowler, 1990, says that information in guiding the eye movement around an image must come from the scene. The process of selecting a new location to view must be guided in part by low frequency information gathered from the periphery during earlier fixations. These earlier fixations caused by the eye scanning the image.

Low frequency information may be considered areas of high contrast or junctions, or more commonly, light areas. These are sometimes thought to be significant information outside

the fixation point. The fixation point or the Point Of Regard (POR) as was stated is the narrow angle of the human eye that will render a cognitive image. Outside the fixation point low level stimulation may or may not play an important part in eye movement. This is a highly debatable topic in the scientific community, although widely held as a truth in the PSA/CC environment.

So if one were given a task to evaluate a photograph the eye might travel around the image in a discursive manner attempting to fulfill the task given, in this example, to find something good or bad within the image. Nowhere in the research was there any discussion of the fact that this eye movement was anything more than the mind fulfilling the task. In fact I find no mention of any psychological factor that might allude to this movement being a distraction or something bad.

So it might appear that distraction through eye movement, perceived, might very well be quite subjective and in fact be a very personal thing, difficult to quantify.

Moving on to split interest areas, one might need to describe interest area. Using the research of Yarbus 1967, the interest area might very well be where the eye stops its fixation on one small area of the image. Since this movement is task oriented, and our discussion revolves around the very broad task of image analysis, it could be correlated that there is no primary interest area to begin with. After scanning the image the analyst may make an arbitrary decision as to the interest area.

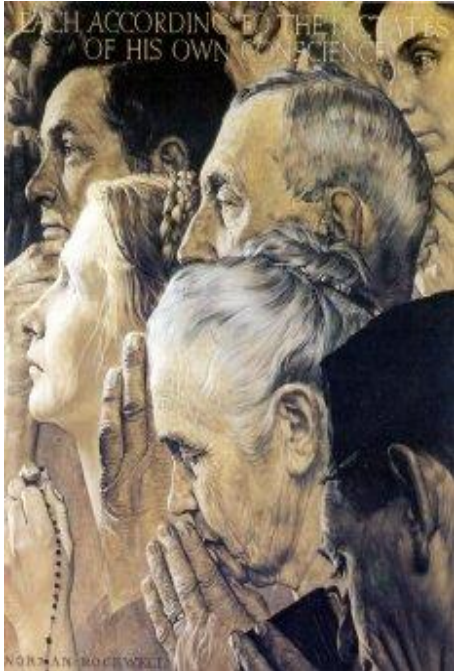
Some of these arbitrary decisions may be easy. An example might be; subjects isolated in some way so as to remove reasons for additional fixation of the eye or saccades.

Saccades, as mentioned earlier, are the rapid movements of the eye from fixation point to fixation point. They are usually involuntary but can be voluntary. They are what cause the analyst's eye to move from interest area to interest area. Since the decision is made by the analyst as to the primary interest area, the perception and popular belief is that the image can hold no more than one.

This belief is usually articulated by the analyst by saying that his or her eye moves back and forth, thus making the image confusing. The fact may be that the eye and its saccades, in many cases, is involuntary so movement of the eye is perfectly normal. Stopping to fixate on two or more areas of an image may only be confusing if the analyst perceives it to be so. Reducing the photograph to one interest area may be a disservice, as life itself seldom has one interest area.

There may be no rule in art history that precludes an image from having multiple interest areas or in fact having multiple subjects outside a perceived interest area. There also may be no rule that says the eye must not travel in a discursive manner about the image.

If one were to study the work of 16th and 17th century masters you will find that the two rules mentioned here are broken over and over along with a host of others which will be left for another discussion.



This image may be a perfect one to illustrate what has been said.

There does not appear to be one interest area, the old woman with clasped hands looking down may capture the interest of many. The young woman with her raised eyes and highlighted face will appeal to another. The dark hair of the person in the foreground may draw the eye of yet another viewer, and yet the dark haired man in the background seems to be the sharpest with the most contrast and will probably draw the eye of someone else.

The eye movement around the image, from interest area to interest area is as natural as breathing. The power of the image may, in fact, be its lack of a central interest area. The movement of the eye around and around is simply enjoying each interest area. This may, in fact, be exciting to some.

Outside the present discussion there are other portions of this image that may need analysis. Notice how the elderly woman's head cuts the elderly man's face just below the nose. There may be those that will see that as distracting. The partial face of the man in the foreground will be seen by others as a fault, although if this were a photograph that is how the scene might have appeared. The fact is Norman Rockwell could have painted it any way he wished. He did not see it as not having a central interest area, or with distracting elements. He simply saw it as interesting, and one might hesitate to say he did it wrong.

Notice also the artist did not paint selective focus, the image is sharp front to back.

Distractions

We have all encountered distractions, a whining child when concentrating on reading a novel, the ringing of the cell phone while driving, may all be examples of physical distractions. Visual distractions may be somewhat different.

A visual distraction may not have an auditory component. That is, if you were watching a pigeon walking around eating bread crumbs you just threw, and a jogger ran between you and the pigeon, you might be distracted. This real world example, of course, is in the third dimension, and has the added component of movement.

A static image such as a photograph may also have a distraction. One theory is that this distraction may not be as common as judges would have us believe.

Consider if you will the following possible definition of a visual distraction when it is associated with a photograph.

A visual distraction may very well be something that is not recognizable. This type of distraction is one that causes your eye to stop its natural movement around the image and wonder what it is. It will sometimes stop your eye movement for an inordinate amount of time.

Now, if this object has no relevance to the overall image and it has caused you to spend way too much time trying to figure out what it is, it might be a distraction because it is keeping you from enjoying the image.

A visual distraction might be something recognizable. A pastoral scene with a mountain in the background and three sheep grazing in a nice triangular composition in the middle ground, with a large, empty, white, plastic, grocery bag in the foreground. The bag might be a distraction.

Now consider what might not be a distraction.

Natural, recognizable, relevant objects within the image may not be distractions. One example may be a rock. It is natural, you recognize it and it is relevant if it is in the sheep scene described above replacing the plastic bag. The fact that the rock breaks up the odd number of sheep from three objects to four, and the fact that the rock may be light in color and insignificantly small, may not make it a distraction. It may simply be another natural object in the scene. The movement of your eye to the rock and then around the scene and back to the rock, may not make it a distraction, simply something to see.

Judges may misinterpret natural eye movement as a distraction. Many times it is said

that eye movement to relevant recognizable subjects splits the interest area. A consideration might be that it does not split anything, only allows a more complete appreciation of the presentation or what was there.

So the next time you see something in a photograph that appears to be a distraction, ask yourself if what you are seeing really is spoiling your experience with the image, or is it simply something you happen to see. Ask yourself if it is something that truly distracts your mind or is it something you have been taught should distract your mind.



An example of what might be a distracting element. Even though we may know what it is, (dowel) it is not relevant and the viewer may spend too much time trying to decide what it is and why it is there.



An example of something that may not be distracting:

The price tag may be relevant, recognizable, and natural. It tells the cost of the golf clubs. The eye is drawn back to the white price tag, over and over, however may not spoil the overall experience with the clubs. There may not be two interest areas although the eye moves back and forth between the clubs and the tag. In fact one might venture to guess that the viewer will spend a lot of time trying to see how much the clubs cost, however the tag may not be of primary interest.

Split Interest Areas

Split interest areas might be a subset of Distractions. If the distraction holds your interest, by definition it could be a split interest. A distraction as defined previously may be something that is recognizable yet so far from relevant it may be considered a distraction and a split interest. The problem arises when the analyst interprets something natural and relevant as a



Pieter de Hooch: "La despensa" (Woman with a Child in a Pantry)

split interest area, or in fact considers split interest as a problem. It may not be, the following may be an example:

Here we have a classic painting by the 17th century painter Pieter de Hooch. It serves as a good example of what may be seen, by some, to be distractions and split interest areas.

The small light colored triangle above the door might be perceived as a distraction. The small bright white window middle left also might be seen

the same way. The entire doorway leading to the next room with its interesting objects may be seen as a completely different interest area.

The fact is that none of these perceptions may be bad, only taught to be so.

Consider for a moment, the scene before you may be exactly the way it was. This room and the other objects are inextricably linked. They go together because that is the way the house was built. The windows and objects are a part of these people's life.

The fact that your eye travels around the image fixating on elements of the scene, then

goes around again, may be nothing more than your eye and mind doing what is natural. The fact you stop to look at the two people, then move over and examine the room beyond, may not be a problem, it may just be your mind needing to take in the entire story.

Life and the natural environment may not be made up of single interest areas. In the first place, one cannot fixate on the mother and child at the same time. Try it; fixate on the mother's face. The child will be out of your point of regard unless you move your eyes. Then to enjoy their relationship one must continually move ones eyes back and forth between the woman and the child. I believe this eye movement between the woman and the child constitutes a split interest area, but not something bad. With this in mind, split interest then might be a natural phenomenon and something to be embraced. Movement of the eye from the mother and child then over to the door and what is beyond might be as natural as standing where you are and looking at the scene. How can this possibly be a problem?

Center of Interest



What exactly is a center of interest? Previously we have discussed split interest areas. In that discussion It was pointed out that there may be many interest areas within the boundaries of the image. If one were to assume that all images must have only one single interest area, what would the image look like? Let me see if I can find an example.

Short of a lump of coal on a snow bank, it is difficult to find an image with only one center of interest. Here is a photograph of a single subject, so the interest might be considered the leaf. There is, however, many interest areas within the frame. You may argue that the lines of the leaf all point to the interest area. If the interest area, is the stem

where the lines come together, how does one explain the interest one feels to get to that point? Or when there, how can the interest area stretch so far?

Going back, for a moment, to the previous beautiful image of the mother and daughter, one would be hard pressed to determine the center of interest. Strangely enough the center of interest will probably be determined by each viewer. One person will be taken by the relationship of the mother and child, while another may be very interested in the floor and how it was made, while a third may be very interested in the chair in the other room, or the portrait on the wall. The fact is the center of interest may be determined by the task of the viewer.

Use the center of interest rule in your own work, be very careful in applying it to the work of others.

Rule of Thirds



Although this rule can be a very powerful tool in building a composition, it is by no means something that should totally influence the analyst in judging the impact of the image.

Here we have a classic image by Norman Rockwell. Notice that the rule of thirds does not seem to be a consideration in his composition. If it had been, wouldn't we see some crucial part of the image in one of the intersecting points?

In fact, if we digress for a moment you may notice what could be perceived as distractions and split interest areas. The items on the floor, however important they are in telling the story, may be misinterpreted as distracting

from a perceived interest area. The girl's face and posture in the mirror may appear to hold one's interest, however the large mass of her back occupies a majority of the frame. One might easily be distracted into thinking this is a split interest area to be shunned.

The doll with the cut-off head may also hold one's interest as it is relevant and very

natural to this story. The movement of the eyes around this image might easily be interpreted as confusing or chaotic.

It is at this point the analyst may want to relax, take a deep breath and ask a few personal questions: Am I being confused by this image or am I excited? Are the elements within the frame relevant, recognizable? Does what I am seeing make sense to me in the overall? Are the rules I perceive as being broken, ones I think detract from the image, or are they rules I have been taught to apply arbitrarily?

Right to Left/Left to Right

The popular phrase is; “We read from left to right.” Ok, one may ask, “So what?” A better question might be, “Does the world align itself from left to right?” I think the answer to this may be no. One of the problems in this rule is to identify just what should be moving from left to right. There are those that will say the eye movement needs to adhere to this rule. There are others that will say the subject should be facing that direction. It is all very confusing, here



is an example:

In the image on the left, by Jamie Wyeth, it may be difficult to determine how the composition flows.

The bathtub appears to be facing right to left, while the shadow may be facing from lower left to right. More importantly the hilltop with the dark mass of trees

on the left may move the eye from left to right. As you can see, the subject in the foreground, the bathtub, facing from right to left violates the rule. If the image were reversed to accommodate the rule for the bathtub, the remainder of the image may then be in violation.

This rule must be very carefully and very rarely discussed. Unfortunately it is widely discussed and used in analysis with little regard to common sense.

Prejudice/Bias in Analysis

Prejudice:

a (1) : preconceived judgment or opinion *(2)* : an adverse opinion or leaning formed without just grounds or before sufficient knowledge *b* : an instance of such judgment or opinion *c* : an irrational attitude of hostility directed against an individual, a group, a race, or their supposed characteristics

Bias:

b : an inclination of temperament or outlook; *especially* : a personal and sometimes unreasoned judgment : prejudice

Most people are accustomed to these two words as they may apply to race, religion or as it says above, a group or their supposed characteristics.

The application of a bias in image analysis may not sound as common as the above, but may be an underlying cancer in the judging process that must be diagnosed and cured. The diagnoses may be easy, you may have been involved in the judging process long enough to recognize the disease.

There is the judge who awards a low or a high score of a cat photograph and then proceeds to explain themselves by saying that they either don't like, or really like cats. They may even apologize for the bias. There have even been cases of judges who, before the judging starts, confess that they do not like cat pictures, or sports, etc.

More subtly than this is the judge that does not even realize that he or she always judges down when the image of a cat comes up. You may recognize this judge as the old timers will tell you not to show your cat pictures when this person is judging.

It is proper to say that you do not care for a particular photograph of a cat, and then present reasons why the image does not work. It is not ever proper to say that you don't like cats.

It is perfectly natural to have a bias or two, everyone does. The trick in analysis is to recognize that you have it and attempt to separate yourself from the subject when making the analysis. All images can be evaluated based on their merits as graphic arts. Setting aside the fact that you may not like photographs of cats, how well was this particular one presented based on the elements of a fine photograph and especially how well does it measure up to other photographs of cats. If you discuss these criteria the fact that you may not like cat photographs need not be an issue.

There are those few that have learned to control the verbalization of a bias, but who may still have a problem. These individuals analyze the image based on the elements and may find it has pleasing composition, color, harmony, good lines, focus, depth of field, etc. Then find that they have given it a score of 6 because it has no impact. The thing is, impact is an emotional thing and the lack of it may very well be the manifestation of a subtle bias. The fact is this person may never find that a photograph of a cat has any impact on them. If this is you, you may want to give less emphasis on impact when your photographic bias comes up.

Abstract/Unrecognizable Work

It has been said, by both critics and advocates of the photograph, that the photographic image describes everything and explains nothing. This is a neat little compact phrase designed, I think, by the critic, to put photography in its place, and by the advocate, to find a niche for photography in the broad spectrum of communications. I imagine this might be said of all the graphic arts, those that don't actually speak either by voice or the written word.

I will submit that this is the true strength of the graphic arts, especially the photograph. Explanation may, in fact, be overrated when speaking of the creative as well as the viewing process.

All our lives we have been bombarded with explanations of things both tangible and intangible. Twelve or sixteen years of school have taught us to get our explanation of things from the written or the spoken word. Much of what is taught has, as a consequence, a right or wrong answer based on what someone has told us, or what we have gleaned from books, pamphlets or the Internet. This works well in learning the who, what, why, where and how. A photograph of someone driving a car may not get you started on the right track if you are actually trying to learn to drive. If, on the other hand, you have no interest in learning how to drive, or already know how, the power of this same photograph's inability to explain comes in to play.

Photographers learn, early on, the viewer will interpret their work. Giving up the right of interpretation is also central to the creative as well as the viewing process. Photographers are released from the burden of explanation by virtue of the fact they may not be there during the viewing. The viewer is allowed the freedom of understanding based on a personal connection to the photograph.

Those who find interpretation difficult will attribute a weakness to the statement "*Photographs describe everything and explain nothing.*" The need for explanation in life may be a cultural phenomenon bred from years of being spoon fed explanations of everything. Those who find visual interpretation easy and emotionally fulfilling will subscribe to the fact that the power of the photograph is in a personal connection, its lack of explanation, and find joy in the fact that "*Photographs describe everything and explain nothing.*"

One of the most difficult things for the student to analyze is the abstract image. There are those that see abstraction as something to ponder over and to analyze based on the image as

a photograph. There are others whose anger at not knowing what it is prevents them from making rational comments. The greatest disparity in analysis comes from the abstract image. So it might appear that if one were to compete with the abstract form, one might expect mixed scores in judging.

It is possible you will be confronted with images you do not understand. There is no way you can understand what every maker has in mind. You can, however, discuss the work from the standpoint of a photograph. It is unlikely that the image will have no characteristics of a photograph. Therefore using the tools at your disposal it is possible to discuss aspects of something you do not understand.

One of the worst things that can happen is for an analyst to judge down because of her/his lack of understanding. It is better to disqualify oneself than analyze on a prejudice or the inability to understand the underlying story of the image. It is not possible and not necessary.

We may use this image as an example. There may be no actual meaning. The maker is not available to ask, and there are few if any clues for the analyst.

It may not even be a photograph, but if you are judging a PSA/CC competition there is



a very good chance that it is.

The analysis may, therefore, be based strictly on a graphic design and whether or not it appears successful to the analyst.

Movement can be discussed, lighting, graphic impact, lines of force, composition, feelings, shape and pattern.

With all the elements of a photograph to discuss, if the analyst still is unable to get beyond the prejudice of not knowing what it is, as I said before, it may be better to disqualify oneself.

In analyzing the abstract image,

inevitably the old rule regarding whether or not the maker was successful, rears its ugly head.

Somewhere, someplace, sometime, it was said that one of the criteria for judging an image is; ***has the maker succeeded in the task at hand.*** Now, I am not sure, but I might speculate that what is meant by this is whether or not this particular butterfly on the flower measures up to all the other butterflies on flowers that may have been deemed good. Success in this context may seem self evident. You have either successfully created the good butterfly based on all other butterflies on flowers, or you have not.

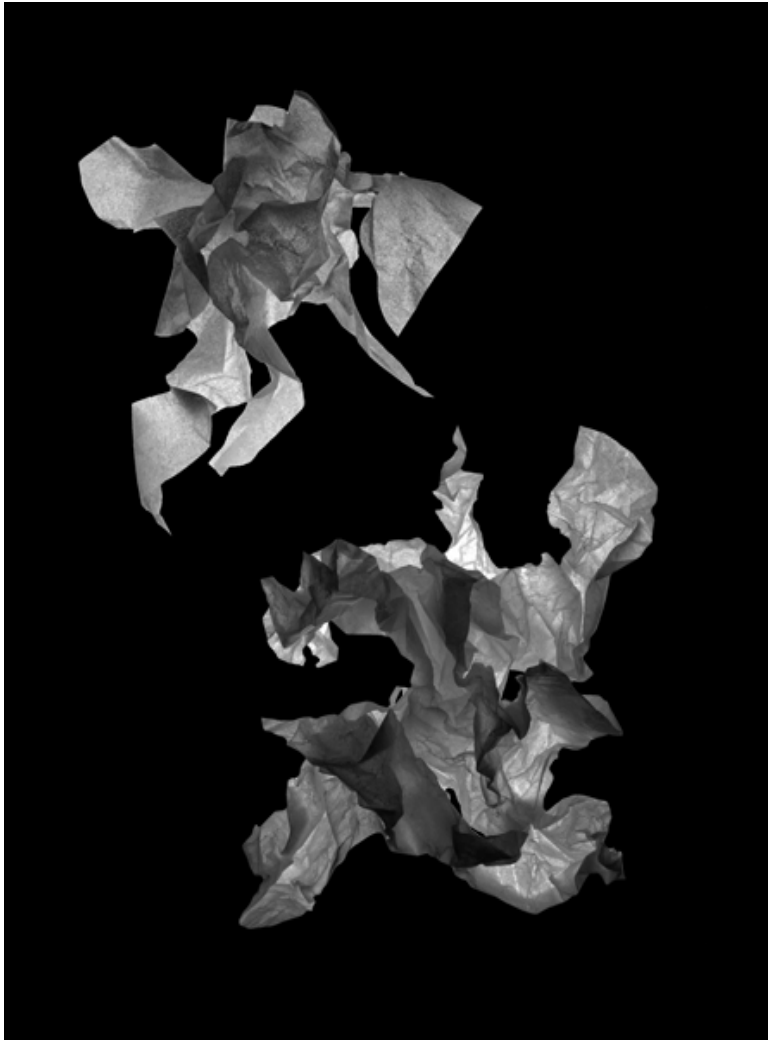
The problem with this criterion is that analysts carry it forward into the analysis of other types of work, specifically the abstract form. Many images just don't fit into a category that will allow the analyst to recognize the subject of an image. Now, if you cannot identify the subject, it might be difficult to decide whether or not the maker was successful in creating it.

This hackneyed rule, ***has the maker succeeded in the task at hand,*** causes additional problems with some analysts. Since there is no way to apply the rule, as the image is not recognizable, a sort of blindness may set in. Confronted with a non-recognizable image, the analyst may reject it out of hand. I have heard it said more times than I care to, "I can't analyze this because I do not know what it is."

Knowing what it is cannot be one of the criteria for analyzing photography. The maker has released all rights regarding what it is over to the viewer. The viewer/analyst then must accept the burden of creating a personal meaning. Then it should be a simple matter of using the elements of a good photograph to analyze the work. Most everything photographic will have, or not, composition, lighting, impact, emotion, balance, etc. Understanding what it is, or being able to create a meaning may just be a bonus, not imperative.

Some photographers are drawn to the abstract form. I am not sure if many of them can articulate the reason for this fascination. The fact remains that these same individuals will compete in Photographic Society of America and Camera Club (PSA/CC) competitions. Judges may be called upon to comment on these same images, and do a disservice to these people by not understanding how to make relevant comments.

Who's art is it?



This is one of the photographs, at one time, used in an online analysis course.

A student's partial analysis went like this?

This picture is difficult to judge because you really are judging the figures of art which is someone else's art work. I would say that a picture like this type should not be in a contest, but the art work itself can be entered. I guess what I'm trying to say is, if the artwork is the work of the photographer then it could be acceptable.

I returned this partial critique of her analysis:

Be very careful in making assumptions. It is best to discuss

what you know. What you know may be only what is in front of you. If the work is there it needs intelligent analysis. The only reality you have is that the work has been presented for analysis. You may need to analyze it as a photograph.

The student returned this explanation of her analysis:

I once entered a picture in a contest. It's a picture of crazy horse and I tried to capture the sculpture in the background within the frame of the statue. The judge told me that because it was someone else's art he didn't think it was good to enter it in a contest as someone else's work.

The student had been influenced by the words of a judge. This is largely how judges/

analysts are trained in the PSA/CC environment

I returned the following advice to the student.

And did that make any sense to you? Your comment to the judge might well have gone something like this: "Since this is a photograph, I don't expect you to judge it on the merits of the sculpture, I am sure the maker has already received the analysis needed on that. What I would expect is that the photograph be judged on its own merits, as a photograph. In a photograph of the great sphinx, one does not judge the work of the artisans that created it, rather it is hoped that the analysis of the photograph of that sculpture would be judged on its own merits."

It is disturbing to me to think that there are judges out there that actually think along those lines. I can only hope that the study of this book will help you rise above all this.

Technology

In the middle 1970's there was published, a fine book, "One Hundred Years of Photographic History." It was essays honoring Beaumont Newhall. The last essay in the book was by Minor White. Mr. White's wonderful essay finished up discussing the photographer's relationship to the *enlightened critic*.

This essay started me thinking as to how that relationship may have changed over the years. The enlightened critic, (I prefer the term analyst) has always been one who is able to get past personal prejudice in favor of a rational approach to analysis. The enlightened analyst has studied the history of photography and ***has seen and examined a large number of images in every category***. This experience should allow the analyst the tools necessary to discuss photographs by comparing what is being seen, with other work that has been and is being done in that same category.

Photography analysts might be considered in at least two different camps. There are those fine art analysts that work generally with images seen in galleries, museums, or fine art publications. Their job has not changed much over the years. They are generally focused on the cerebral aspects of the image. That is, they are concerned very little as to how the image was made, or why, but rather focus on the image itself, the social and or societal ramification, and the artist. The second analyst is concerned with how the image was made and possibly how it could have been made better. This critic/analyst may be working with images in such places as the Photographic Society of America (PSA), camera clubs, or the many professional

photography associations worldwide. Let's call this second critic **judge**, simply because that is the name frequently applied to these analysts.

The headlong race toward technology may enter into the judge & photographer mix of things. The bold italic words above are worth repeating here, with regard to what an analyst should be. (*.....has seen and examined a large number of images in every category*) I will use one example; the wonderful high tech. tool called High Dynamic Range (HDR). For those of you not familiar with this term, it is a term used in graphics art computer software that allows combining multiple images of over and under exposure into one, thus extending the range of exposure. One might think of it as a high tech. Zone System. It may be possible that the judge of today has not been exposed to enough work that has been subjected to this technique, to recognize it and fairly discuss its merits. This headlong race toward tools to make photography easier and better has made the job of the judge much harder. It may take some time for the judge of today, to come abreast of a single new technology and as soon as it happens there is a new one.

The analyst not being aware of the high tech tools may be one problem. Being aware of them may be as much or more of a problem. It is very easy today to look at all images with a jaded eye. Let's call this eye the high tech filter. As analysts we tend to see modern work through this filter. Something well done may be suspect as the technique used to create it may very well be a high tech computer manipulation, or not.

One may pose the question, so what? So what indeed, the image is what it is and how it was created should have no bearing on the issue. This statement of fact holds true outside the realm of PSA and camera clubs only. There are places in competition with these groups, for heavily manipulated work such as the Projected Imaging Divisions (PID) of PSA and there are other divisions where it is not allowed. The high tech. filter of the judge's mind may see manipulation when it is not there and not see it when it is well done.

Today we are seeing analysis done where the maker is faulted for not using a particular high tech tool just because it is available. As an example we hear comments regularly regarding the fact there is no detail in the shadow area, no matter that the naked eye would have seen no detail there. Because we have the tool to put detail where it may not exist, many feel it should be done despite the fact that there may be no need.

Opinion in Photography Analysis

The difference between fact and opinion is that a fact is something that is empirically true and can be supported by evidence while an opinion is a belief that may or may not be backed up with some type of evidence. An opinion is normally a subjective statement that can be the result of an emotion or an individual interpretation of a fact. For example, a photograph is good or bad

The differences between facts and opinions usually rest on whether they are objective or subjective respectively, a fact cannot, by definition be subjective. Opinions can only be subjective and factual only in our minds. A subjective statement may communicate why someone likes a photograph. If you tell someone that you really like a particular image that is a subjective statement about your emotional state despite the fact you may think it to be true. The fact is you may be able to back up your statement with perceived facts. This does not make the statement a fact, only an opinion. If I tell you that you should not like it, this statement would qualify as my opinion regardless of the fact I think it is true and may be able to give you reasons..

Discerning fact from opinion is often difficult and for centuries philosophers have been trying to discover what can actually qualify as a fact rather than an opinion. This branch of philosophy is called epistemology, the study of the limits of what human beings can know for fact. Additionally, all of the modern sciences rest on the foundation of discerning fact from opinion and methodically aim to find true knowledge or fact.

It is difficult to claim that something is a fact when it is not clearly obvious, such as biological differences in gender, because facts are often proven to be wrong. For example, centuries ago the world was thought to be flat and this was held as fact by the majority of people. As we now know, the world is in fact round so the former statement is demoted to an outdated opinion. From this example we can see that those who thought that the earth was not flat were initially communicating an opinion that was eventually found to be true, which shows that an opinion can become a fact. (4)

I think we are born with few opinions. The brain, at that time, may be a blank canvas, an unexposed roll of film, an empty compact flash card. To fill up the media of our mind we must be subjected to some form of stimulation, auditory, visual, tactile, or olfactory,

sometimes combinations of all four.

Early in our lives we soak up things around us and when we become old enough to understand, we are fed information about things. We may hear from our parents; “that smells bad,” or “isn’t that pretty.” This auditory information is stored along with the smell and the sight so later in life we may smell or see this or a similar thing and verbalize its existence in the same manner.

If we are lucky, an appreciation of photography becomes a part of our lives. In the beginning there may be little understanding of the esthetics. We may have been subjected to beautiful images in magazines and books. We have been told what is pretty and may try to emulate through our photography, that which we have been told is good, or what we have seen that appeals to us.

At this point it may be difficult to articulate why a particular image appeals to us, we just know that it does. It may be the color, or the fact it reminds us of a past experience. It may simply be something someone influential in our lives has told us appeals to them.

Eventually photography may become so important to us we seek out the fellowship of others who have similar interests. We join a camera club, or a society such as PSA. At this point, through competition, we may start to hear opinions of those we perceive as knowledgeable regarding our work and the work of others. We may find that what was visually pleasing to us is not held in that same regard by others. Through years of competition we may begin to learn what wins, and begin to change our opinion about what is pretty. The early teaching of our parents and experience may give way to a more adult learning based on the opinion of others.

At some point we may decide that we wish to become a judge and analyst passing judgment on the work of others based on what we have learned.

What we have learned are the opinions of others. The empirical fact at this time may be that certain types of work are more readily accepted in competition within a particular environment. This may very well be a subjective fact, as opinions change and sure enough the world may be round.

A Final Note

By now I hope you have discovered how to phrase your comments to reflect just how subjective the process really is. That is about all that can be hoped for in a booklet such as this. Beyond that I hope you re-read this booklet carefully. Most of the images that you have seen in this book, and in any judging, will have either been applauded or maligned. There is usually no consensus. The only thing that might be construed as consensus is a quality here and there that is obvious. However, there may never be universal analysis of any image.

The fact is, the author has had the opportunity, in teaching an online course based on this document, to alter the images analyzed to try to repair faults seen by students. It made no difference at all, students just found new faults, and worst of all faults on the very thing that was altered or supposedly repaired.

Several of the images that have been analyzed, have been done by masters of the medium. They were picked because they are considered, by the fine art community to be some of their finest work. They came no closer to consensus than any other.

Many of the things admired by some students in the online analysis course are the very thing despised by others. I would say that the issue is about split 50 – 50. Knowing this, I think you may see how very subjective analysis can be.

Many students, who have been in the Camera Club environment for years, have picked up the hackneyed rules that may make images more successful in competition. This is not a bad thing, if one wishes to compete one must follow the rules. It does, however, perpetuates image making by formula. **S + C = A** Subject plus Compliance equals Acceptance

Subject being those subjects most popular in competition, birds, flowers, landscapes, frogs, etc. **C**ompliance being those elements of the photograph understood by judges to be proper and passed down from generation to generation in judging. Then **A**cceptance being the goal of competition, the realization that the image has solved the equation.

I can only hope that you will re-read this booklet, and even share it with some of your fellow camera club members. This material is not designed to cast aspersions on any method of analyzing images, but rather to get people thinking that there may be other ways to analyze photographs, one that might alter the formula just a bit.

Useful terms

Thanks goes out to the Museum of Photographic Art, <http://www.mopa.org/>, for this list below.

Study this list of terms, and the next time you are thinking there is nothing to say about a photograph, remember what you studied here.

General Vocabulary:

abstract: an image that emphasizes formal elements (line, shape, etc) rather than specific, recognizable objects.

content: the subject, topic or information captured in a photograph.

direct approach: confronting a scene in a straight-forward manner, without using unusual angles or distortion.

documentary photography: photographs whose main purpose is to record a place, person(s) or event.

expressive: concerned with communicating emotion.

geometric shape: simple rectilinear or curvilinear shapes found in geometry, such as circles, squares, triangles, etc.

intention: reason(s) why the artist made a work of art.

landscape: an image that portrays the natural environment.

objective: a point of view free from personal bias, which attempts to consider all available information with equal regard and fairness.

organic shape: shapes based on natural objects such as trees, mountains, leaves, etc.

representational: an image which shows recognizable objects.

subject: the main object or person(s) in a photograph.

theme: a unifying or dominant idea in one work of art or in a collection of works.

Visual Elements:

focus: what areas appear clearest or sharpest in the photograph? What do not?

light: what areas of the photograph are most highlighted? Are there any shadows? Does the photograph allow you to guess the time of day? Is the light natural or artificial? Harsh or soft? Reflected or direct?

line: are there objects in the photograph that act as lines? Are they straight, curvy, thin, thick? Do the lines create direction in the photograph? Do they outline? Do the lines show movement or energy?

repetition: are there any objects, shapes or lines which repeat and create a pattern?

References

- (1) "Webvision: Simple Anatomy of the Retina" (definition of terms), University of Utah, Webvision: The Organization of the Retina and Visual System, September 2005, Webvision.med.utah.edu webpage: Med-UtahEdu-retina.

"Relation Between Superficial Capillaries and Foveal Structures in the Human Retina" (with nomenclature of fovea terms), Masayuki Iwasaki and Hajime Inomara, *Investigative Ophthalmology & Visual Science* (journal), volume 27, pages 1698-1705, 1986, IOVS.org, webpage: IOVS-fovea-capillaries.

The Stimulus and Anatomy of the Visual System" (with fovea description), Hanover College, Psychology Department, HanoverCollege-Fovea-PDF-as-HTML.

Fairchild, Mark. (1998), *Color Appearance Models*. Reading, Mass.: Addison, Wesley, & Longman, p.7.

- (2) Griffin, Dan, http://www.ehow.com/about_6648464_saccadic-eye_.html

- (3) **Yarbus**, Alfred L, **Eye Movements and Vision**, © 1967 by Plenum Publishers, Inc.

- (4) WiseGeek <http://www.wisegeek.com/what-is-the-difference-between-fact-and-opinion.htm>