



PBase

Magazine

July
2007

in this issue:

Learning with Carol Pfeffer

Culture Cauldron

Photographer's Notebook

Photoshopography

One Day in Tuscany

and more...

PBase Member

Naoki Hayashi

Exclusive: The Official Whitehouse photographer

Eric Draper

Editorial Notes

COVER PHOTO BY NAOKI HAYASHI
DESIGN BY GARY BLANCHETTE



FROM: The Editor's Desk

Double Digits! We hit Issue #10 of the PBase Magazine with this one! Hooray!

That's the tenth time we scrambled around and put things together the very last minute. That's the tenth time that Wanda has scrambled to get the proof reading done on time. That's the tenth time.... you get the picture.

I had mentioned some time ago that the Internet is a great tool for diverse people to get together and produce something interesting. On the other hand, the convenience of emails and chat systems make us that much lazier in trying to actually make an extra effort to meet in person. Well, this time, Eric and I made that effort. We met up in Bethesda, Maryland for dinner at the Mongolian Grill and had a great time. We talked about all sorts of things including how to take PBase Magazine forward to the next step (you know, sponsorships and other things I have referred to in the past) and more. In fact, I think if we had this discussion in the Silicon Valley, we would have had a business plan on napkins and would be talking to Venture Capital firms for seed funding at this moment.

And did I mention the food was great too? Try the Mongolian Grill (not the Mongolian BBQ) when you are in Bethesda the next time over, and before that, let me know – I'll join you!

By now, you must have already seen the "Exclusive" sign on the cover page. Well, in this issue, Eric managed to grab an interview with Eric Draper, the Whitehouse photographer! I've asked Eric to write a small note about his Whitehouse experience in Parting Shots. Way to go, Eric! It was funny – every time I asked Eric about when he would submit the article, Eric would respond "I am trying real hard – Eric Draper is currently on a flight with the President of the United States". Well, I don't hear that too often!

In this issue, we have Kevin O'Hara talking about life in Greenland (very unique!) in our Culture Cauldron section while Guido takes us through the pure romance of a vacation in Tuscany, Italy. Our learning section again is very unique – how about "Photography without a Camera"? Confused? Let

Carol Pfeffer take you through the fascinating world of chromogenic development. And then in our "Entrepreneur" section, we have Glen Hollis, who talks about how he went about from being a radio host to starting a photo/art framing business. In the retouching section we have a double-whammy again, with Dave & Dave taking us through skin retouching and an interesting image vectorization effect.

Shay Stephens continues his "Photographer's notepad" column and gives great advice on photography techniques and Linux tools for photo editing (I never knew Shay had the geeky angle in him of writing code!).

And finally, we have our featured "PBase Photographer of the Month" – Naoki Hayashi. A dental technician by profession, who started photography as a tool to take pictures of his patient's teeth, Naoki now takes fascinating photographs of a variety of subjects with the finesse and artistry that seems to be so ingrained in the Japanese.

So again, enjoy our "double digits" issue!

~ Arjun Roychowdhury
www.pbase.com/arjunrc



Eric (L) and Arjun at the Mongolian Grill, Bethesda Maryland



PBASE PHOTOG: Naoki Hayashi

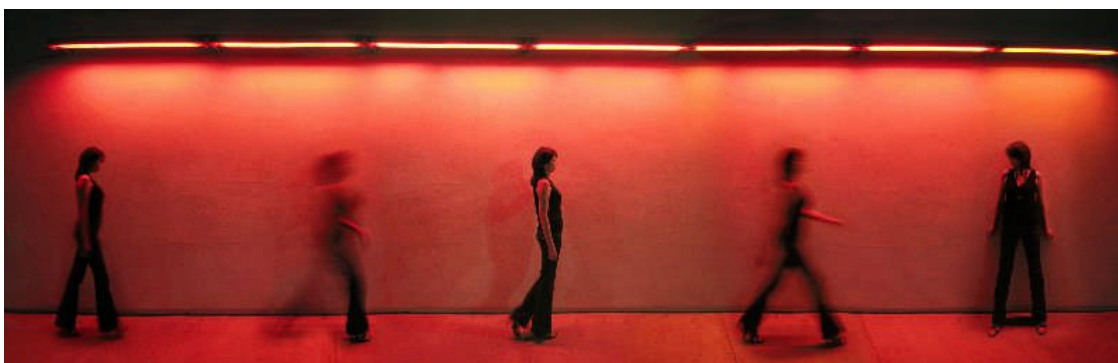
[Naoki](#) moved to California from Japan seven years ago. He has been a practicing dental technician for over sixteen years. His specialty is Esthetics of Dental technology and treatment. Strangely, his interest in photography originated from the fact that he had to take pictures of his patient's teeth for dental work, leading him to also taking portraits of those who agreed. He is a perfectionist who always likes to think "what do I need to do in order to take a beautiful picture?" His interest in photography kept increasing with each step he took forward, and today, he also takes pictures of scenery, experiments with lighting as well as enjoys symbolic and stylistic photography.

PBase Magazine: How did a Dental Technician of sixteen years get interested in photography?

As I wrote in my profile, I have been taking photos of patients and their teeth after dental treatment for a long time. I have also used them for lectures as well as a book that I published. The patients really liked the images and based on their

often appreciated by them. I published a photo album of dental art in 2005.

PBM: Your galleries have a wonderful combination of minimalism and artistry that is, well, for lack of a better word, very 'Japanese' in style. What is it that makes Japanese forms of art so fine?



Motion

encouragement, I started thinking about a wider range of photography and taught myself by reading books and taking advice from knowledgeable people. As strange as it may seem, this is how I started my journey in photography. Of course, I also wanted to apply these wider skills to take even better pictures of my patient's teeth and smile, but my interests did not just stop there.

PBM: Do you still practice Dentistry or do you work as a full time photographer?

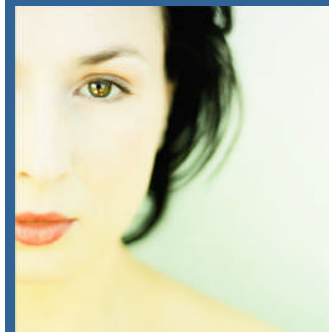
My main job is still that of a dental technician. Now that I understand concepts of photography better, I find myself better at my job, since accurate photography for before-and-after situations in my job result in better understanding and appreciation from the patients. In fact, some of the dental photographs are so beautiful; I call them "Dental Art". I sometimes also take portraits of my patients with their 'beautiful smiles, which is

Japan used to have a historical art called "SUIBOKUGA" where they used only black ink with a very delicate brush and would draw on white rice paper. This art is described by its simplicity of just using the color of black and white. I was never conscious about it but maybe "Japanese Blood" makes me create those photos more naturally. I do like taking photos that are very simple and at the same time, have a strong character. My photos do not have the mainstream 'fascinating imagery' that attracts every person's attention, but if you can respect and feel my sensitivity and image forms, that makes me very happy.

PBM: What was the first photographic assignment you ever received from anyone and how did you execute it from start to finish? Was the customer satisfied?

My first assignment as a photographer was for a company's poster shoot.

NAOKI'S CORNER



See through

"I have been taking photos of patients and their teeth after dental treatment for a long time. I have also used them for lectures as well as a book that I published. The patients really liked the images and based on their encouragement, I started thinking about a wider range of photography and taught myself by reading books and taking advice from knowledgeable people. As strange as it may seem, this is how I started my journey in photography"



PROFILE

NAME: NAOKI HAYASHI

WEBSITE: [HTTP://WWW.PBASE.COM/NAO0000](http://www.pbase.com/nao0000)

FROM: JAPAN

YEARS AS PHOTOGRAPHER: 7

PHOTOGRAPHY STYLE: MIXED

EQUIPMENT: NIKON D2X AND F5, FUJI FINE PIX S5 PRO, KODAK

DCS PRO SLR/N, RICOH GR DIGITAL

Although my client had a requirement for a particular style of photograph, my personal feeling was that the image selected was too boring, and more importantly, not a photograph that was of *my kind*. I was careful not to push my idea as a concept too much – instead I decided to shoot a concept which was a combination of his selection and mine. Fortunately for me, my client really liked it. However, when I look back, I think I could have done it better (don't we all!)

particular photographer I really like, and start looking at his photos often, I lose originality and my photos become more like his photos. So I try to keep it as a reference. Also, I often get inspired by my environment – nature, or even models working with me.

PBM: What is the one thing that you think needs improvement in your style?



Conflict

PBM: Has anyone inspired you in your photography? If so, who and why?



Rise

There are many people whose photography inspires me, not just one. I often find myself studying a photograph more than the photographer. I also believe that if I have a

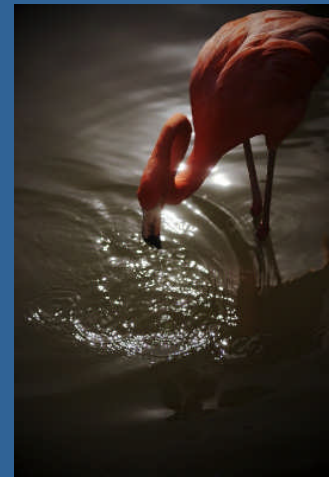
I definitely need much more experience and challenge in my current area of work. I believe having more experience adds more 'depth' and 'taste' to my existing style and may even make me change my style for the better. And this is true for things beyond photography as well. More 'time behind the wheel' makes you improve in anything that you do. So, in short, I don't think I have spent enough time doing what I do right now, and need to keep at it to keep getting better

PBM: As a corollary, what is your greatest strength as a photographer?

I don't want to brag about myself but I have a pride for my photos and my work. I have inner strength to keep motivating myself and complete my work until my goal has been achieved.

PBM: How strong is the photographer community in Japan? Is it considered a mainstream profession by many?

Well, I have been in the US for seven years now, and to be honest, I was never deep into photography in Japan, so I don't know. But what I do know is that Japan has a vibrant photo fashion industry as well as several artists who excel in this field. And of course the myriad excellent camera makers are also from Japan so I am sure the photographic world is as mainstream as it gets in Japan.



Cozy



Naoki at a shoot

PBM: What is your most favorite walk around lens and camera?

My favorite camera is the Nikon D2X, the AF-S DX Zoom-Nikkor ED 17-55mm f/2.8G (IF) and the Sigma 30mm f/1.4 EX DC HSM lenses.

PBM: Where do you see yourself going from here?

I don't know! But all I wish is that a bright future awaits me at the end of the journey!



Reverse

PBM: Do you prefer to shoot under natural light or controlled light?

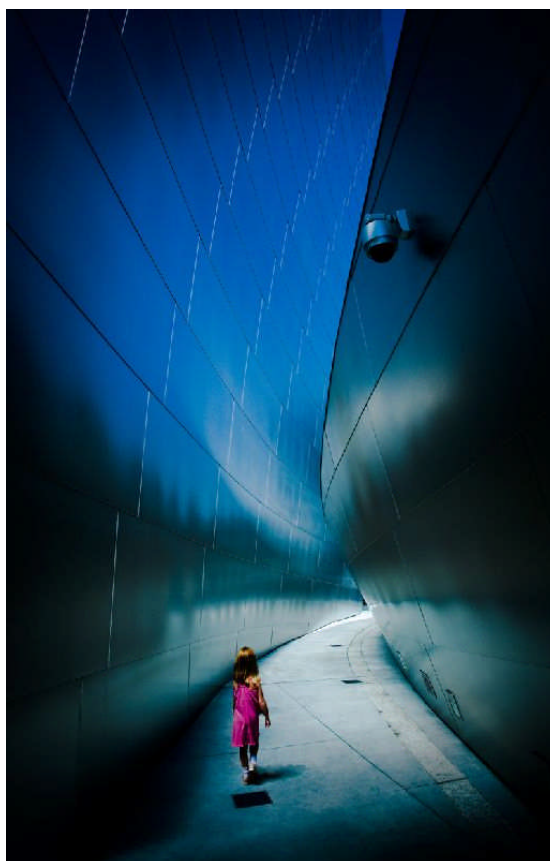
I prefer to shoot under controlled light but they both have their own nuances. Natural light has different effects based on the season, weather and time of shoot. So your output cannot always be fully controlled by you and it has to be timed right. On the other hand controlled lighting lets you replicate settings whenever you want, but also introduces more challenges since you now have more things to monitor and likely mess up!

PBM: Do you mostly shoot in a studio?

It depends. Sometimes nature is my studio or some other times the street light at night is. Of course I also shoot at photo studio at times.

PBM: Do you approach your photographs with pre-thought ideas or do you prefer to create as you go along?

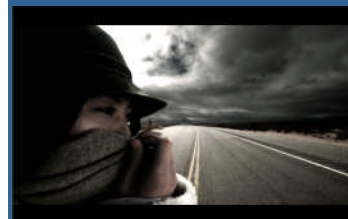
I do both. I always have an idea or pre-thought image before shooting but I come up with new image or ideas on the fly during the shoot. For example, I sometimes need to work with models I have never worked with before. Even though I try and find out details before, when the model arrives, his/her expressions may be totally different from what I had in mind, in which case I need to 'create on the fly'.



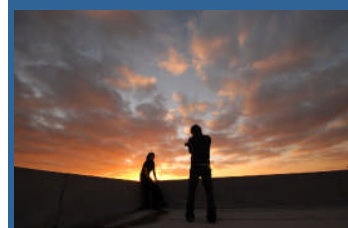
Dream



Dawn



Uncertain



Sunset shoot

Please email your comments and suggestions to magazine@pbase.com



PRO PHOTOG: Eric Draper

Eric Draper is the White House Photographer and Special Assistant to President George W. Bush. Draper worked for the Associated Press as a news photographer prior to joining the White House. His many assignments included the 1996 and 2000 presidential campaigns, the 2000 Summer Olympics in Sydney, Australia, the Kosovo conflict in 1999 and the 1998 World Cup in France.

Over the years, Draper has also worked as a staff photographer for The Seattle Times, the Pasadena Star-News and the Albuquerque Tribune.

He won the Associated Press Managing Editors' Award for three consecutive years, the 1999 National Headliner Award and was named 1992 Photographer of the Year by Scripps Howard Newspapers. He is a graduate of California State University, at Long Beach.

Responsible for capturing history, Draper lives and breathes with the President, gaining access from everything to the President's private meetings to state dinners with the Queen of England. Eric Kuhn from PBase Magazine was able to catch up with him in his West Wing office and talk to him about his job.

PBase Magazine: How did you become the White House photographer?

My story is kind of unique. I was a news photographer at the time, working for the Associated Press, never ever planning to be here, but it was one of those things where I saw a great opportunity. The Associated Press assigned me to cover the campaign in 2000.

That is what started me on this road here. I still blame everything on the recount. Because if the recount had not happened, I probably would not have been here, since I was moving on. I had my tickets to cover the inauguration for the Associated Press because I was planning ahead. But during the recount I took time off, pretty much the night after the election, and was thinking "I could probably do that job." So after a couple of weeks I said, "Okay, if I am going to try it, I might as well just go for it." I knew it would be a once in a lifetime opportunity. So I put my name in the hat and I actually got a chance to ask the president personally. They always say timing is everything, so I found out that I was invited to a Christmas party in Austin, Texas right when the president became president-elect and right before the inauguration. So I said, "Well, this is it. This is my chance." I walked up to him at the party, at the end, and actually used the president's approach where I looked him in the eye and asked him for the job. That was one of his sayings during the campaign. So I looked him in the eye and I said, "I want to be your personal photographer." And I looked him in the eye and didn't blink. He kind of

looked at me like he never thought about it before. He looked away and said, "Oh I really appreciate it and I will get back to you." I don't know if it helped, but a week later I got a call from Andy Card who was the chief of staff at the time and here I am. It was one of those opportunities that I couldn't give up.

PBM: What is your job description?

To basically document the presidency and also head the photo office.

PBM: So how many photographers work for you?

Four. That includes the Vice President's photographer who just covers Cheney and we also have a photographer assigned to Mrs. Bush and two photographers that roam and fill in the gaps.

PBM: How much responsibility do you feel to document history?

It's huge. It is a huge, awesome, all encompassing job. One of the reasons why I thought I could do this job was because of my training and background. I spent 14 years working for newspapers and the wire service. I knew I could contribute. I knew I could offer something to this job and I knew I could serve the president well. So here I am!

PBM: What is a typical day like? What is your work flow?

There really is no typical day in the White House. The schedule can start at 6:30 – 7:00 in the morning and end at midnight, depending on the events of the day. For example, take the Queen. We had morning events, the arrival at the South Lawn, meetings during the day, the white tie dinner and a lot more.

PROFILE

NAME: ERIC DRAPER

WEBSITE: WWW.WHITEHOUSE.GOV

PHOTOGRAPHY STYLE: PHOTOJOURNALISM

EQUIPMENT: CANON (BECAUSE WE ARE ALL ABOUT THE QUALITY OF THE PRESIDENTIAL IMAGES)

It's OFFICIAL!

"I walked up to him at the party, at the end, and actually used the president's approach where I looked him in the eye and asked him for the job. That was one of his sayings during the campaign. So I looked him in the eye and I said, 'I want to be your personal photographer.'"

And I looked him in the eye and didn't blink. He kind of looked at me like he never thought about it before. He looked away and said, 'Oh I really appreciate it and I will get back to you.' I don't know if it helped, but a week later I got a call from Andy Card who was the chief of staff at the time and here I am. It was one of those opportunities that I couldn't give up."

- Eric on how he got the job



President George W. Bush shows the badge of Port Authority officer killed at the World Trade Center on 9/11. The badge was presented to President Bush by the wife of the officer



President George W. Bush and his father former President George H W Bush in the Oval Office on Jan. 20, 2001. First time in the Oval Office as President

PBM: And you are with him the entire day?

I basically follow the president when he leaves the residence of the White House. I am with him all day, just following him around.

PBM: What do you do to prepare for a big event, like the Queen?

That particular coverage was a little more complicated, just because the level of what we had to cover, in terms of the key pictures to get. It definitely took a staff effort to get it done. One of the things that we produce, for a visit of that level, is a photo album which we turn around overnight for the Queen. The President and Mrs. Bush presented that photo album the next day.

PBM: So you were up all night?

Oh yeah. Managing the work flow, I have a team of photo editors that were pouring over all the images, hundreds of hundreds of pictures that day taken by five photographers, picking just the right ones to tell the story of the visit. It took a lot of coordination and managing the work flow. Having the prints turned around overnight and then producing a custom made, leather bound album in order to present it to the Queen. Something that we want to do is not make it look like it was a "quick, slap together, here you go!" It is definitely a very thick keepsake. Something hopefully the Queen will have in her living room from years to come!

PBM: How easy is it to photograph the president? What is your relationship with the president?

It is very professional. I like the guy a lot. He is very easy to work for. He is very direct, if he does not want you there, he will let you know right away. I am at the point now where I can literally read his face and know if he wants me there or

not. Part of my job is to not be a participant and to be that fly on the wall, that professional observer, in order to make these types of pictures. The situations can be pretty intense, depending on the discussions and events, so I try to use my skills to capture those moments without being distracting. There is definitely an art to it that is really a lot of non-verbal clues that you just have to take in the situation and determine what is more important, making a picture or just watching the events unfold until there is a good opportunity to make a picture, so I am not distracting or in the way.



President George W. Bush gives a driving tour of the ranch in Crawford, Texas, in Aug. 7, 2007.

PBM: As you walk up the lawn to the West Wing there is all the press and there are tons of photographers that would love to get "inside." You are always on the inside. What is your relationship with the other photographers?

I know them all too well because I used to be one of them. I know how they operate and I know what they are looking for to do their jobs. Now that I am not a journalist, I am the White House photographer, I can assist with helping them do their jobs better with staying out of the way, first of

"Part of my job is to not be a participant and to be that fly on the wall, that professional observer, in order to make these types of pictures. The situations can be pretty intense, depending on the discussions and events, so I try to use my skills to capture those moments without being distracting. There is definitely an art to it, that is really a lot of non-verbal clues that you just have to take in the situation and determine what is more important, making a picture or just watching the events unfold until there is a good opportunity to make a picture, so I am not distracting or in the way"

all! It is definitely a different role. One of the things that I remember as a news photographer is that I would get snippets of time with whatever I am covering. For these guys who work at the White House pool, there is a lot of down time, a lot of waiting for events to happen. As a White House photographer, I see it all. I see the personal moments, the public moments, the press moments, the family moments and I have the opportunity to tell a complete story. That is what I try to do every day.

PBM: How much of what gets put out by your office is vetted by other people or do you have full reign of all the photographs?

Everything that is released by the White House is approved by the press office. My office will do the mechanism...but in terms of what is approved, that is not my job. That is the job of the press office.



President George W. Bush and Eric Draper look at the "Photos of the Week" album Jan. 14, 2005. White House photo by Tina Hager

PBM: Do you ever use Photoshop?

Everyday. Now that we are all digital, and Photoshop is such a powerful tool, we use it minimally, literally to open the photo and crop it. We do very little of anything to the picture. We try to leave it as is.

PBM: Your photographs are not just photo journalism, but great photos artistically, as well. How do you balance the photojournalism with being artistic?

I try to combine those elements in terms of making a photo interesting, but also making a record of things. That is important too.

PBM: How do you balance those two elements?

I think that the fun part of my job is using that balance. I can take a situation and document it as a record. A lot of situations I am in are interesting by themselves just because who is in it. Starting with that as a benchmark is like, "Wow!" Having the president and the Queen in front of you is already an interesting picture. You don't have to do much more than that. But then using light and using composition and capturing moments that can help tell the story is where I try to use my skill level and background in creating those images so the events can be understood later. I try to make images that can put things into context.

PBM: Is that the role of a photojournalist? To be able to look back and know exactly what happened?



Profile of President George W. Bush outside the Oval Office Feb. 15, 2006

There are a couple ways of looking at it. There are some journalists that can take situations and make a record of it. Then there are some journalists that will put their own spin on how to see things. I try to do both. It is important in this role to document history, but show it as it is. I try to bring my own vision secondly to that aspect of it, because it is more important to get it right and get the history accurate, first.

PBM: Have you ever made a mistake on the job?

Everyday. But not too much. Obviously, I would not be here if I messed up too much. It is always trial and error. With photography, everyday I try to do better than I did the last day. Just like everything you do in life, you have good days and bad days and you try to have fewer bad days. I try to keep that level of presidential quality and the level of imagery high.

PBM: What have you learned over the past years that you wish you knew on day one?

I probably would not have planned it any other way, to be honest. Even though I was a press photographer before and covered the campaign, I never worked in Washington. To be honest, I think if I had ever worked in Washington, I probably never would have taken this job.

PBM: Why?

I think it was a new experience for me to do something totally new and different. It was a challenge. If I had already been a seasoned veteran in Washington I probably would have thought I knew everything. I wanted a fresh start with a new challenge and to do it my way. To have it play out and learn. I see it as an ongoing story. I started the story that has a beginning and an end. That is one of the reasons I am still here after nearly seven years. I started the story from day one the minute I captured an image of the President leaving Texas, before the inauguration, for the last time before becoming president. Looking back, he was walking up the stairs of the plane. He had a cowboy hat in one hand; he turned around and looked back at Texas before he boarded the government flight; it wasn't Air Force One yet because he wasn't president. The

"There are a couple ways of looking at it. There are some journalists that can take situations and make a record of it. Then there are some journalists that will put their own spin on how to see things. I try to do both. It is important in this role to document history, but show it as it is. I try to bring my own vision secondly to that aspect of it, because it is more important to get it right and get the history accurate, first."

- Eric on the role of a photojournalist

first moments as the president walked through the Oval Office door as president. I have those moments and I would like to be there to capture the end of the story, which is the president walking out of the oval office for the last time; the president arriving back in Texas as a citizen, a former president.

PBM: I have goose bumps! Do you ever pinch yourself and say to yourself, "Is this really happening?"

Everyday. Everyday I feel how fortunate I am to be in this situation. I see it as a privilege to be here, because it really is a unique situation for anyone, let alone a photographer to be able to see so much history. To literally have a front row seat to history.

PBM: Is there one photo shoot or day that really stands out?

I think 9-11 still stands out as one of the most unforgettable days, unforgettable moments that still to this day I go back to. Every time I look at those photos I look at them differently just because of the history of what has happened since then. That is one of those things that I did not expect to happen when I look at my photos again. It is fascinating. I go back and look at photos I made two years ago, three years ago and to relive those moments, but with context now, with history behind it, I look at them differently every time.

PBM: What job do you want next? Can you go anywhere from here?!

I don't know yet. I will keep my options open. This job will be hard to top, it really will because

there is nothing else like it. It is really hard to describe in words, so I try to do it in pictures. But this will be a hard one to top.



President George W. Bush surveys the damage at the Pentagon from the presidential helicopter, Marine One, as he travels to New York Sept. 14, 2001

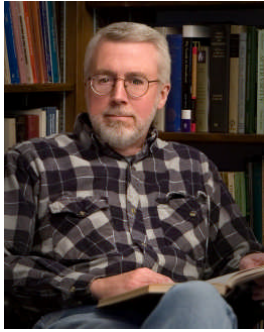


President George W. Bush departing Offutt Air Force Base in Bellevue, Neb., confers with Vice President Dick Cheney from Air Force One during his flight to Andrews Air Force Base Sept. 11, 2001

"I think 9-11 still stands out as one of the most unforgettable days, unforgettable moments that still to this day I go back to. Every time I look at those photos I look at them differently just because of the history of what has happened since then. That is one of those things that I did not expect to happen when I look at my photos again. It is fascinating. I go back and look at photos I made two years ago, three years ago and to relive those moments, but with context now, with history behind it, I look at them differently every time"

Please email your comments and suggestions to magazine@pbase.com

PHOTOSHOPOGRAPHY: A 'quick-fix' skin-fix



David Thomasson makes his living as a consulting writer in Washington, D.C., but finds greater satisfaction working with digital images. He began a couple of years ago, playing around with Photoshop Elements 3.0 and hanging out on retouching forums. You'll usually find him under the screen name "Peano." After recently upgrading to CS3, he began doing some freelance commercial work. He will soon launch his website at www.radiantpics.com

Editor's note: Based on a lot of feedback we received, for this issue we have decided to make an exception to our two column layout for the retouching section, since people complained that the effects cannot be discerned easily with thumbnail images. Let us [know](#) if this layout helps.

This is a simple technique to remove minor blemishes from skin and even out undesirable variations in skin tone while preserving skin texture. It's a widely used method that I picked up from my online ramblings. I've found that by changing the typical order of steps, I gain better control over the outcome as I proceed. Here's how I go about it.

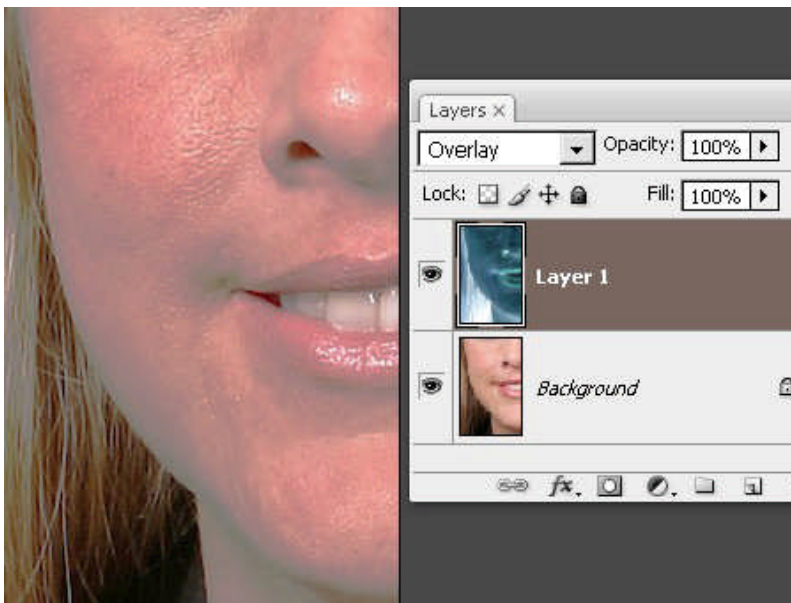
Begin with this image.



Note the blemishes and deep red patches, especially prominent on the cheek and upper lip. Touching these up will be the focus of this article.

Step 1

Duplicate the background layer. Change blend mode to Overlay, and invert the image (Ctrl+I).



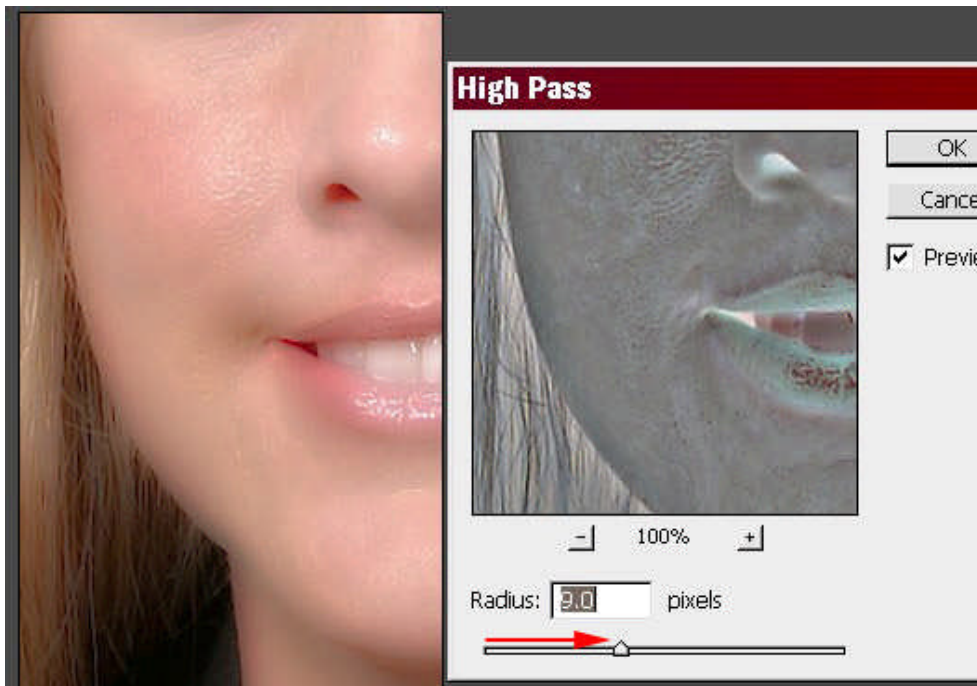
MORE TIPS:

"When you're working on a mask using a mouse, it's often hard to paint precise lines where needed - around eyes, along a jaw line, etc. If you have that problem, try the "shift-click" method. Left-click once where you want to begin a stroke. Move the brush icon to the point where you want that stroke to end. Hold shift and left-click again. The two clicks are connected by a brush stroke."

Note that this always produces straight-line strokes. So if you're painting around a curved edge, work in short increments. You'll find this method more accurate and, with a little practice, faster than painting freehand strokes"

Step 2

Open Filter > Other > High pass. Begin with a low radius. Using the up arrow key, increase the radius until all unwanted skin blemishes disappear. The amount will vary depending on the individual image. Don't get hung up on numbers. Use your eyes. At this stage, don't worry about edges and other details. Just focus on the skin.



"To vary the effect of the filtered layer, try duplicating it. Set one layer in overlay mode and the other in soft light mode. Then adjust the layer opacity of each independently and notice what happens. This is sometimes useful in controlling dark halos caused by a single layer in overlay mode"

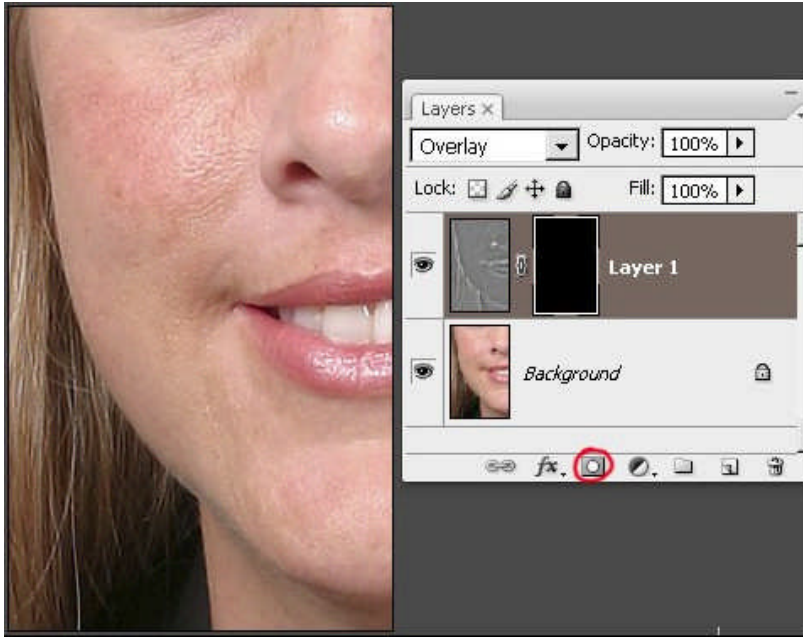
Step 3

Now open Filter > Blur > Gaussian blur and set a fairly large radius, maybe 30 or 40 pixels. The effects of the High Pass filter will vanish. Gradually reduce the G/blur radius to recover the smoothing effect of the previous steps. The purpose of the Gaussian blur is to preserve skin texture. Depending on the image, you might end with a fairly small radius, maybe less than 1 pixel. Again, use your eyes to judge how much is enough.



Step 4

Close the Gaussian blur dialog box and alt-click on the layer mask icon. This places a black mask on the layer and conceals the effects of the previous steps.



Step 5

Set white as the foreground color. With a soft brush at 100% opacity, paint with white to reveal the smoothing effects of the previous steps. At this stage it's important to paint carefully to avoid softening details such as lips, nostrils, and eyes, and also along the jaw line. Your final result should look something like this:



Additional tips

At Step 1 we set blend mode to Overlay before applying filters. For some images, Vivid Light blend mode will yield better results. Occasionally, even Hard Light will produce a nice result. For skin with relatively minor blemishes, Soft Light mode might do the job. Experiment.

If the effect seems too extreme, try adjusting layer opacity on the filtered layer. At Step 5 where you paint with white on the mask to restore the softening effects, try lowering brush opacity to 50% or less. This allows you to bring back the effects in varying amounts on different areas of skin. Use your eyes. *Play, experiment, play, experiment.*

If you're using *Photoshop CS3*, take advantage of smart filter capabilities. At Step 1 after you duplicate and invert the base image, convert that layer to a smart object. Then, when you apply the High Pass and G/blur filters, they'll appear on that layer just as layer styles appear. You'll be able to re-open either filter and make further adjustments.

PHOTOSHOPOGRAPHY: The 'Charles Schwab' Effect



Dave Seeram is a 32 year old digital photography enthusiast born and raised in Ottawa, now residing in beautiful Vancouver, British Columbia. Dave's digital photography experience started with his first digital camera, a Nikon Coolpix 880, graduating through several point and shooters up to his latest Pentax K10D DSLR. He enjoys shooting mainly landscapes and architecture, however, he is recently starting to enjoy "people" photography. Dave's other arsenal of tools include Adobe Photoshop CS3, Lightroom, and Photomatix. Through formal schooling along with over 10 years of self training and research, Dave has acquired an extensive knowledge of Photoshop and image manipulation. His Photoshop tutorials can be found throughout the web, and on his own website PhotographyBB. Dave's mission is to create a friendly online environment where beginners can learn without being afraid to ask questions, and experts can be there to share their knowledge. You can visit and chat with Dave at PhotographyBB anytime, he's always open to questions and lending assistance!

Editor's note: Based on a lot of feedback we received, for this issue we have decided to make an exception to our two column layout for the retouching section, since people complained that the effects cannot be discerned easily with thumbnail images. Let us [know](#) if this layout helps.

Greetings PBase members! My name is Dave and today I'm going to show you a very interesting technique that I developed, on how to turn a digital photo into a vector-like illustration. Before I begin, I'll give you a short word about myself and how this effect came to be.

I am a 32 year old, digital photography enthusiast from beautiful Vancouver, Canada. I've been into digital photography more seriously over the past 2 years, and I have over 10 years of experience in graphic design and my favourite tool: Adobe Photoshop. As an amateur photographer I enjoy shooting landscapes and architecture, and my small arsenal of tools include Adobe Photoshop CS3, Adobe Lightroom, Photomatix, a Canon SD630 point and shoot for those moments where a small compact will do, and a nice Pentax K10D DSLR for when I have the time to relax and really compose my shots. In October 2007 I launched a Digital Photography and Photoshop forum aimed at being "the place to be" for beginners in the digital imaging world, called PhotographyBB.

PhotographyBB has become a home on the web for myself and many of the members there who are interested in discussing new techniques and learning from one another. The site serves as a friendly environment toward those who are either just learning how to use Photoshop, or those just getting into Digital Photography. The user-base ranges from beginners who are looking to learn more, experts who are willing to share their knowledge and pass it on, and digital photo artists who simply love to share their photos with everyone. We also have some very interesting and fun digital photo games / challenges, which I would like to invite all PBase members to participate in, at: <http://www.photographyBB.com/forum>

I was asked by a member on the site if I could come up with an illustration technique that would turn a digital photo into a "vector" illustration, which is how this tutorial came to be. I think you'll find the results are quite versatile to many different image types, from people, to flowers, to cars, and so on. It's quite a nice looking cutout / drawing effect, without the hard line division of colours and noise that can result from using the cutout or posterize filters. Please feel free to use this technique on your images, and share your results. I would love to see what you create! One small caveat; this tutorial makes use of filters that are only available in Photoshop CS2 and CS3, so you'll need to be using one of those versions to effectively use this method. And now, on with the tutorial!

Dave Seeram's "Vector" Illustration Technique:

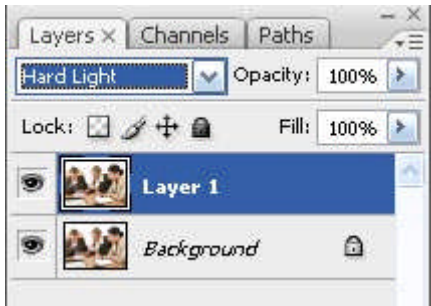
1) Open your image!

DAVE SAYS:

"I was asked by a member on the site if I could come up with an illustration technique that would turn a digital photo into a "vector" illustration, which is how this tutorial came to be. I think you'll find the results are quite versatile to many different image types, from people, to flowers, to cars, and so on. It's quite a nice looking cutout / drawing effect, without the hard line division of colours and noise that can result from using the cutout or posterize filters"



2) Duplicate the layer by clicking Control-J on a PC (Command-J on MAC). Change the blend mode of this layer to "Hard Light". The blend mode of the layer can be changed in the layer's palette as shown here:



You'll notice that in doing this, your image will appear to have a very high contrast, and probably doesn't look right at the moment. What we are going to do next, is known as "High Pass Sharpening."

3) Go to Filter > Other > High Pass

In the High Pass dialog box that appears, you will want to choose a value based on the preview of your image. Play with the slider to see the different effects of changing the Radius values. For low resolution images such as this one (I used 3.5) you can use a value between 3-4 pixels. For a higher resolution image, you may want to try somewhere between 6-8 pixels. What you are aiming for is a nice sharp look, with as little noise and grain as possible.

Here's what I have after the High Pass sharpening:



4) What we want to do now, is copy everything we have just done, onto a new single layer. To do this, we need to select everything by either going to: Select > All or by using the shortcut keys Control-A on PC (Command-A on MAC). Once you have done this, you should have the selection marquee (the little marching ants) around your image.

Now we want to copy the layers and merge them at the same time. You can use the menu: Edit > Copy Merged or the shortcut keys Shift-Control-C on PC (Shift-Command-C on MAC).

Once you have done this, you can now paste it into a new layer simply by clicking Edit > Paste or shortcuts Control-V (PC) or Command-V (MAC). You'll now see this merged layer show up as a new layer in the layers palette.

5) Here's where the magic starts to happen! With this new layer active, go to the menu: Filter > Stylize > Diffuse.

When the Diffuse dialog box pops up, choose "Anisotropic" for the mode. If you are using a high resolution image, you may need to run this filter several times. You can do this by using the shortcut Control-F (PC) or Command-F (MAC).

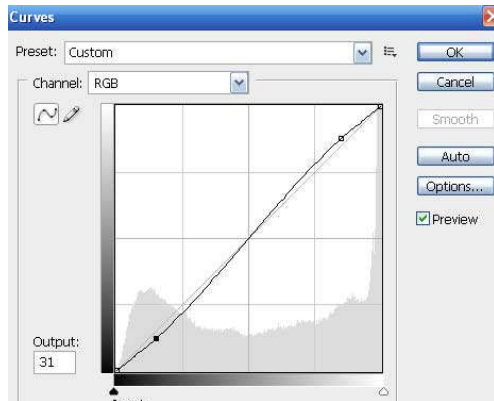
What you should be aiming for, is a nice liquid-like smooth painted look, like this:



6) At this stage we are almost finished, but before we finish up, I like to add a little bit more contrast to the photo by applying a very slight s-curve.

Go to the menu: Image > Adjustments > Curves and click on the diagonal line close to the bottom (creating an anchor point), which you can drag down to darken the shadow areas of your photo. Do the same thing but in the upper area of the curve, but this time drag your anchor point upwards, to brighten the highlight areas of your photo. This should give you a little more contrast in your image.

Here's what my curve looked like on this image (it may be more steep or less on your image, depending on your photo).



7) This last step comes in two parts. One will strengthen the edges in your photo and sharpen them, and the second will smooth out the tones in your image.

First step: Apply the smart sharpening filter: Filter > Sharpen > Smart Sharpen.. Here I used the default settings with an amount of 100% and a radius of 1.5 pixels.

Second step: Apply a surface blur to smooth out the tones in the image by going to the menu: Filter > Blur > Surface Blur Here I used the settings: Radius 5, and Threshold 15.

In both of the above steps, you may want to experiment with the values of the sharpening and blurring. They are going to be slightly different for each and every image depending on the complexity of your image, and also the image resolution. After playing around with the settings, you should be quite pleased with the results! As a final step, you can even experiment with different opacity settings on your top "Illustrated" layer to blend it with the original image layer underneath. If you have detail areas you would like to keep unaffected by the procedure, you can even use a layer mask on detailed spots.

Here's my final image with a reduction of the illustrated top layer to 80% opacity:



I hope you enjoyed the tutorial. To find out more about some of the procedures used in this method, see the info box below. Have fun with your photos! If you create a nice work of art with this tutorial, please feel free to share it in our "Digital Creations" gallery at PhotographyBB.com, we'd enjoy seeing your results, and all PBase members are welcome to participate!

What's going on here anyway?

Two methods are being used here, which may be unfamiliar or new to you. The most obvious one is the Diffuse > Anisotropic filter. Diffuse basically shuffles pixels around to achieve a softer focus, based on a particular algorithm, in this case, Anisotropic. Anisotropic diffusion shuffles pixels in the direction of the least change in colour between pixels, hence the liquid-like soft focus effect. Try this method on a photo with trees in the background and you will really see the effect pronounced.

The other method that we use to help aide the illustrated appearance is the High Pass Sharpening method in the first steps of the procedure. Most of us are familiar with sharpening our images as a final step, using the Unsharp Mask filter in Photoshop. The reason we are sharpening first, is because we want to begin the illustration process with a fully finished image. The reason we use the High Pass Sharpening method is because it does not "sharpen" or introduce unwanted noise in our image, in the way that the Unsharp Mask filter can. Since the Anisotropic filter shifts pixels based on the least change in colour between pixels, any noise in the image will produce undesirable artifacts in your final image. Try the High-Pass method on your photos instead of the Unsharp Mask from time to time, especially on images that had noise present to begin with, I think you'll be very pleased with the results!

Here are a few samples I came up with:

Before & After shots:

Before



After





TRAVEL: Tuscany, Italy

Fine art landscape and nature photographer [Guido Tramontano Guerritore](http://www.guidotramontano.com) was born and raised on Southern Italy's Amalfi coast. Although fascinated by photography since his youth, he did not begin seriously taking pictures until age 32. Guido's primary interest today is travelling and discovering new places around the world. He has taken a remarkable number of pictures, mostly of Italy and Europe, with Northern Europe being his favourite place for landscapes. However, he says there is no boring place for photography unless you don't know what to see or how to document it. "A good picture," he says, "is not necessarily related to a beautiful subject or place, but to the atmosphere surrounding it. All a good photographer has to do is to capture its essence." Before leaving for a country, Guido already has precise ideas on how the final work will look. He does not always look for the typical sun-filled landscape. He loves overcast skies as they add tension and drama to the picture, and unlike

most people, he generally prefers approaching storms to sunny days when going out to take pictures. Besides photography, Guido has two other great interests: music (he has been playing the drums for about 15 years) and chess. His works on Scotland, Ireland, Norway and Tuscany, as well as many European cities can be viewed at <http://www.guidotramontano.com>

Travelling to Tuscany and the Typical Rolling Countryside.



Offering unique opportunities for taking evocative pictures of rural life, the Tuscan countryside is a well-known place among landscape photographers from all over the world. Though each season seems perfect for taking pictures, I strongly suggest spring or autumn, as the explosion of different colors is quite impressive. But then again, going there during the winter can be even more interesting due to the colors which actually appear more crisp and saturated because of the lack of haze. Most flowers, however, such as tulips and sunflowers, unfortunately can be seen only during the summer, which remains for obvious reasons the most popular period for tourists.

The fact that many film directors have chosen Tuscany as a backdrop for their movies gives an idea of the power of its beauty. *A Room with a View*, *The English Patient*, *Stealing Beauty*, *Under the Tuscan Sun*, and *Life is Beautiful* are just a few examples.

Just exiting the Highway



Lone Tree, Asciano, Crete Senesi

This is my very first picture (*ed: see image 'Lone Tree' to the left*), and perhaps one of my best, taken during my visit to Tuscany in April 2006.

As soon as we left the motorway to enter Asciano (Siena) we seemed to fall into a totally new world, made of wide spaces, colors all around and quiet. Just a few hundred meters away from the traffic noise we ran into this scene. I suddenly asked my girlfriend Paola (a very patient and continuous supporter of my photography) who was driving to stop the car. Quickly I unpacked my camera, mounted the 70-200 and took two or three pictures of this lone tree nicely placed at the bottom of a valley. I had a feeling that it was just waiting for me to come and take a picture of it. Back at the car, Paola wondered what I was so excited about, as she did not notice a particularly interesting view. This demonstrates how often a photographer is supposed to notice something that actually would not be seen by most people. That is, in my view, one essential characteristic that each landscape photographer should have.

Framing the picture, moreover, was not as easy as it could seem. Furthermore, shooting with a tele lens involves a particular technique in order to achieve the best depth of field. In this very case I had to stop down to f11 despite the fact that a faster aperture (due to the poor ambient light) might have been a much more likely suitable option. F11 and 135mm @1/125s however allowed me to get a more than reasonable depth of field even if the foreground resulted slightly blurred and the shutter speed was at its acceptable limit (of course the 70-200 Image Stabilizer did the trick here).

Having as many details in focus as you can is considered the main requisite when shooting landscape. That is why using a tele lens is a better choice for portraits, sports or wildlife, because you isolate the subject from the background.

OH TUSCANY!

"Offering unique opportunities for taking evocative pictures of rural life, the Tuscan countryside is a well-known place among landscape photographers from all over the world"



Siena, piazza del campo, view from the tower

"The fact that many film directors have chosen Tuscany as a backdrop for their movies gives an idea of the power of its beauty. A Room with a View, The English Patient, Stealing Beauty, Under the Tuscan Sun, and Life is Beautiful are just a few examples"



Lone tree, Val d'Orcia

Without any doubt, however, the best lens to shoot a Tuscan landscapes is a medium-to-long tele lens, the 70-200 IS 2.8 being my favourite as it seems to best suit any needs. Adding a 1.4x tele converter would give you everything you need. Actually I used to have my 16-35 or 24-70 stuck on the body when shooting landscape, but in Tuscany I found wide angles quite hard to use since the vastness of the scapes are such that you can hardly point your camera around and have one single subject filling up the final composition.

Popular and suggested areas in Tuscany



Border guardian, Crete Senesi

Among the most suggested places, for those who are planning a visit to Tuscany, the following are surely the ones to be considered "must sees".

Just south of Siena is the intriguing and distinctive semi-desert landscape of the **Crete Senesi** which breaks up the enchanting green landscape of this part of Tuscany. The Crete is a harsh and wild range of hills and woods with soil made of clay, making the land almost impossible to cultivate. This area offers breathtaking views, where the only thing which may interfere with photographic skills are the limits of your imagination. It is also well worth making a visit to the atmospheric complex of the *Abbazia di Monte Oliveto Maggiore*.

Founded in the 13th century, surrounded by centuries-old cypresses, this abbey dominates the landscape of the Crete. Besides the many works of art there, the abbey also has a library of several tens of thousands of antique books. The small town of Asciano, in the heart of the Crete, has many unusual mixed Romanesque and Gothic architectural forms which are of considerable interest, especially for those who appreciate architectural photography.

The Val d'Orcia is, without any doubt, my favourite place, where I took most of my landscape pictures. It stretches from the hills south of Siena to Monte Amiata, and is made up by gentle, carefully-cultivated hills occasionally broken by gullies or patches of erosion. Towns and fortified villages have been built on the higher hills. One example, *San Quirico d'Orcia*, is well worth a visit.



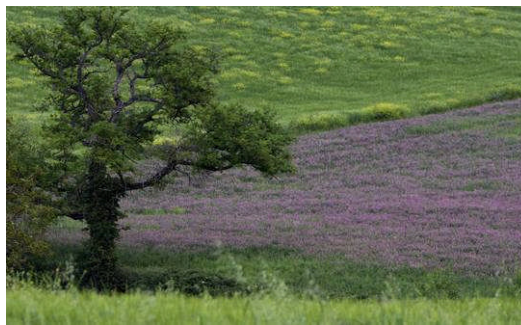
Farm in the green, Crete Senesi

The fortified town of Montalcino is another place of great interest. It is known throughout the world as the home of Brunello, an exceptional wine worth more than 10 euros a glass! Generally speaking, food and wine in Tuscany are, in my expert opinion, perhaps the best in the world. There is so much to tell about it that an entire book might not be enough. Nonetheless I am not supposed to do that here, so let me get back to photography.

Set amidst green hills, vineyards and olive groves, lies the *Abbazia di Sant'Antimo*. The complex is one of the most attractive examples of 12th-century monastic architecture. The magnificence of the abbey, built from a particular kind of veined travertine that makes it luminous, is greatly enhanced by the beauty of the surrounding countryside.

Pienza is the town where I (but I guess everyone) would love to live. Today this "ideal city" lives on tourism, the main attractions being its geographic position which dominates the valley, and its architecture. The pecorino (sheep's cheese) of Pienza is one of the best, and best-known, in Italy, and here you can sample an excellent toasted bread with cheese and oil infused with truffles, accompanied by a glass of good local wine. My girlfriend Paola and I, who both love red wine, were often happy to change our route to go back to Pienza and get a glass of brunello, while sitting outdoors enjoying the stunning landscape at dawn.

Chianti



Purple Fields, Chianti

"Without any doubt, however, the best lens to shoot a Tuscan landscapes is a medium-to-long tele lens, the 70-200 IS 2.8 being my favourite as it seems to best suit any needs. Adding a 1.4x tele converter would give you everything you need. Actually I used to have my 16-35 or 24-70 stuck on the body when shooting landscape, but in Tuscany I found wide angles quite hard to use since the vastness of the scapes are such that you can hardly point your camera around and have one single subject filling up the final composition"

Chianti has always been a wine-producing area and it is worth visiting both for the unmatched beauty of its natural landscape, inextricably inter-related with the work of man, and for the many villages, castles, and farms dotted around the area. I am currently considering making an entire photo gallery about farmhouses in Tuscany, to evoke the unique quiet rural life. Known throughout the world, this area is divided into two parts, the Chianti Fiorentino and the Chianti Senese. Running through this historic territory is the Via Chiantigiana, which joins Firenze and Siena. Off this main route there are innumerable roads (both asphalt and dirt) leading to ancient parish churches, castles, and farms, where infinite possibilities for both landscape and local life reportage photography can easily be found.

Cappella di Vitaleta



Cappella di Vitaleta, Val d'Orcia

This is perhaps among the most photographed and renowned place in Tuscany. It can be easily viewed from the road between San Quirico d'Orcia and Pienza and there are always many photographers stopping their cars to take pictures. A tele is a must here since the distance between the chapel and the road is considerable. A 300mm would be the perfect choice. I spent almost two hours looking for the chapel, as it was not as easy to find as it appeared to be. After many attempts I had to ask directions from a farmhouse owner who was kind enough to show me the way.



Cappella di Vitaleta from the road, Val d'Orcia

San Gimignano

This well known town does not need words to express the unique atmosphere it offers. The Urban structure and the numerosity of civil and religious buildings of San Gimignano, almost intact, preserve the medieval fascination. Today only 15 of the many towers built remain, somewhat broken and damaged, but they are enough to give an unmistakable characteristic to

the town. In 1300 Dante Alighieri stopped there for a few days. When visiting Tuscany, San Gimignano is not to be missed!

Volpaia

I discovered this lovely medieval town accidentally, since it was not on our route. One day Paola got a call from a friend who was on a bicycling tour of Tuscany with some friends. We decided to meet up in Volpaia. The place reportedly had a good restaurant, so to me, it represented a good stopover for lunch and a step back into medieval times. The town is an out-of-the-way fortress tucked into the Tuscan hills, quite hard to reach despite the GPS navigator, but once we arrived, we were quickly captured by its antique, yet romantic atmosphere. I wished I had a bike instead of my car, or even better, a horse! You feel like you are entering someone's home since the town, enclosed by its almost intact ancient walls, is very small but nonetheless absolutely stunning. We had a delicious lunch made of toasted bread filled up with extra virgin oil and mushrooms, tomatoes, aromatised cheese, vegetables and of course a local Volpaia white wine. We enjoyed our lunch outdoor in the main square of the little town, which despite not being well-known, was full of tourists.

My technique for Tuscan landscape



Path to paradise, Val d'Orcia

As I mentioned before, I used my 70-200 2.8 IS 99% of the time. However, there is room for wide angles as well. One place where I had to use my 16-35 and 24-70 lenses was the above-mentioned Vitaleta Chapel, which can be reached by walking a wonderful path dipped in green and surrounded by red flowers. The walking was an extraordinary and unforgettable experience which I cannot wait to repeat. It made me feel like I was walking a path leading to paradise: all those quiet rolling green hills gave me such a pleasant sensation and there were no human beings around for miles. Definitely an ideal place for relaxing and thinking, but since at 8pm the lighting was perfect for photography, I had to make my choice between relaxing and taking pictures.



Flowers in Chianti

"Chianti has always been a wine-producing area and it is worth visiting both for the unmatched beauty of its natural landscape, inextricably inter-related with the work of man, and for the many villages, castles, and farms dotted around the area. I am currently considering making an entire photo gallery about farmhouses in Tuscany, to evoke the unique quiet rural life. Known throughout the world, this area is divided into two parts, the Chianti Fiorentino and the Chianti Senese"



Cypress group, Val d'Orcia

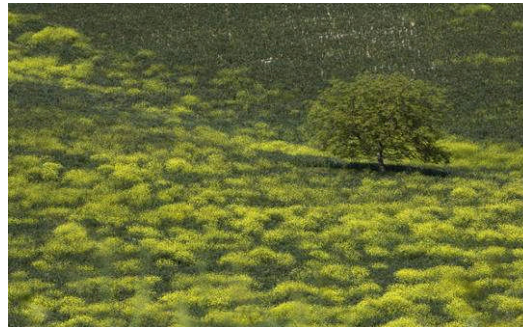
On many occasions, the use of wide angle lenses seemed to be the best choice in order to emphasize the vastness of the enchanting Tuscan landscape, thus giving the scene that so-called three-dimensional perspective. All I was required to do was find a subject (usually a small group of flowers or even just some grass detail) to put in the foreground, then compose, roughly calculate the hyperfocal distance, stop down as much as I can, hold my breath and quietly press the shutter. Personally, I am not the kind of photographer who takes total advantage of the digital era. In fact I tend not to shoot everything and everywhere.

Even if I am facing a breathtaking view, or even when I happen to be in front of a gorgeous landscape, I am much more likely to be not pressing the shutter at all if I estimate that the lighting is not appropriate. I found this technique to be very useful for improving my photographic skills. Many times, while travelling through Tuscany, I used to take note of interesting places, imagining a later visit when the light would be "the right one", rather than just press the shutter and go. Of course, this may result in missing some shots, but I prefer by far to miss the shot rather than going back home and systematically feeding my hard drives with insignificant or "normal" pictures. That would be even more frustrating. The small group of cypresses in the above picture is taken from a well known place not far from San Quirico d'Orcia.

That is a clear evidence of the fact that I needed a wide angle in order to capture the scene and give an idea of this particular place. At first, since I had the 70-200 mounted on, I tried several compositions with no success, in fact, even if I tried to isolate the subject, there was not enough space around it in the final composition to give the right idea of the place. This prevented me from pressing the shutter after several minutes of attempts. What I quickly realized was that I needed to show the surrounding environment of those trees, to give the observer the idea of how isolated the group of cypresses was. However I knew that by using the wide angle and enlarging the whole scene, the subject might have appeared much smaller, and that placing the subject in the frame according to the rules of third might also have been difficult because nothing else would have showed up in the picture.

So I ended up deciding that a good idea would have been to put the subject in the centre and simply break the rules of third. Despite all, however, there was another major problem: I had

to give the scene a good perspective to avoid a likely boring picture. Of course there was nothing between me and the subject, not even a small flower, that was frustrating, so I had to capture the scene from a much lower point, trying to get some foreground details in focus. By doing that, however, the exposure difference between the foreground and the sky was noticeable, so I still had another problem: I had to use a gradient filter or perhaps switch to bracketing mode, in order to merge the pictures later, but since the sky looked interesting, I decided for a polarizer which would have emphasized the clouds and saturated the colors and the contrast. As a consequence of all the time I needed to prepare the shot, once I went back to the car after, I found Paola almost asleep. I hope the picture was worth my efforts.



Lone tree, Crete Senesi

My personal experience in photography has taught me that, as Ansel Adams once said, "Landscape photography is the supreme test for the photographer..." I also do much wedding work on assignment and portraiture, and although I love it, these are, in my opinion, totally different applications. I am not saying that landscape photography requires more ability, portraiture might be considered even harder technically speaking. What landscape photography requires, though, is a particular eye and predisposition in seeing "elements in harmony".

"A few centimeters can make the difference."



Path to paradise, Val d'Orcia

I firmly believe that one of the components for a good picture is simplicity. Just one main or two subjects well placed in their environment, good lighting, interesting surroundings and above all, finding the right point of view. I often notice a huge difference in pictures of the same place taken from different spots, even when they are only a few centimeters from each other.

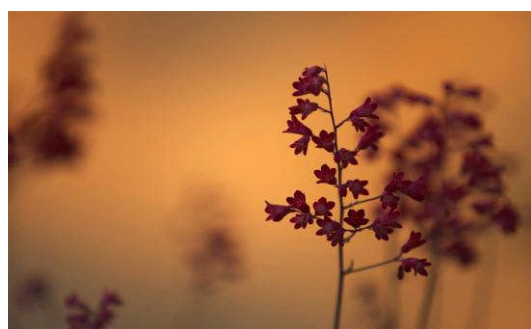
"On many occasions, the use of wide angle lenses seems to be the best choice in order to emphasize the vastness of the enchanting Tuscan landscape, thus giving the scene that so-called three-dimensional perspective. All I was required to do was find a subject (usually a small group of flowers or even just some grass detail) to put in the foreground, then compose, roughly calculate the hyperfocal distance, stop down as much as I can, hold my breath and quietly press the shutter. Personally, I am not the kind of photographer who takes total advantage of the digital era. In fact I tend not to shoot everything and everywhere"

Landscapes and High Dynamic Range



Gradients, Chianti

Photographers are aware of how difficult – if not impossible – it is to capture the whole tonal range of real-world scenes, especially when trying to capture a backlighting scene. This is a pretty common issue when we want to shoot sunsets or general landscape where the tonal range's difference between the sky and the foreground is noticeable. Although there are work-arounds to this problem, such as using gradient filters and bracketing, I usually simply do the work in postproduction by merging two RAW files with different exposures, one with the right exposure – usually measured on the foreground, and another underexposed according to my taste and the light of the scene being postproduced. Sometimes for a better result, time permitting, I use a set of three neutral gradient filters. However, I almost did not need any HDR adjustments for the Tuscan landscapes, since the telelens usually captures detailed scenes in which the sky is often missing.

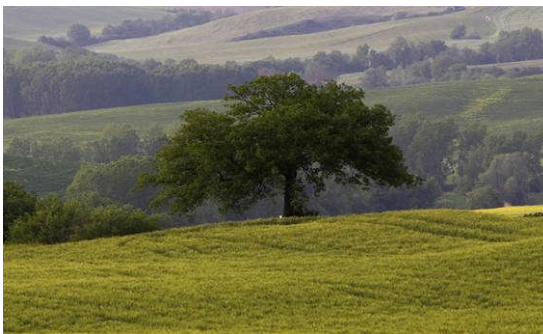


Sunset Colors, Val di Chiana



Coming Storm, Crete Senesi

Conclusion



Lone tree, Val d'Orcia

Visiting Tuscany is definitely a unique experience. I consider travelling and exploring as the main goal in my life. Although I am a travel addict, constantly researching new places to visit outside of Italy, I have been so happy to discover that one of the best places I have ever seen is just a few hours' drive from my home. If you are visiting Tuscany for the first time you will quickly realize that it is no ordinary holiday area, but a total escape into a timeless way of life. The walks through the many medieval towns, the typical tavern smells, the lack of traffic, the enchanting landscape and the quiet all bring you back into a new dimension which you would never want to leave.



Grain, Chianti

"Visiting Tuscany is definitely a unique experience. I consider travelling and exploring as the main goal in my life. Although I am a travel addict, constantly researching new places to visit outside of Italy, I have been so happy to discover that one of the best places I have ever seen is just a few hours' drive from my home. If you are visiting Tuscany for the first time you will quickly realize that it is no ordinary holiday area, but a total escape into a timeless way of life"



Guido at work

Please email your comments and suggestions to magazine@pbase.com



ENTREPRENEUR: Glenn Hollis

In this new section, we reach out to entrepreneurs who have started their own venture related to photography. For this issue, we interview Glenn Hollis, a successful radio host for twelve years who decided to open up a framing service franchise shop for Fast Frame. Here, he talks about his experiences in setting up shop, the frustrations, learning and joys in the process of starting a new business from ground up.

Photographers are a passionate bunch. My grandfather, George Hollis, Sr., was an award winning photographer. He would on occasion take a portrait style picture of his grandchildren with a camera with big film and a black cloth covering the back of the box and his head. The bright lights in his studio shining on me along with the loving attention and prompts of his direction on how to sit and pose are sweet memories.

On his wall in the family room, there were black and white photos of different models in and out of different dress. As a teen it was interesting to eat Easter dinner under my Grandfather's latest nude photo. My mother did not feel it was art. Grandfather also displayed scenes of the coast of Maine, one of his favorite places, with white topped waves crashing on rocks and majestic lighthouses.

The photos were accompanied by the ribbons, medals and certificates he was awarded from various clubs, magazines and groups.

I wish I had the talent to take a great picture. I can recognize a great picture. My grandfather once asked me, when I was fifteen, to choose one of two photos for a contest. The one I chose ended up winning top honors for him, but as I now reflect, either photo would have won something.

Someone once wrote, "Whoever does not love his work cannot hope that it will please others."

My heart at sixteen ventured to the art of radio when I began a twenty-five year career of sharing music and companionship with others over the ether, starting from a small 1000 watt AM station and ending with a nation-wide show on fifty stations.

I was passionate about music when I started in radio; back in the 80's when Punk was turning into "New Wave," everything sounded so fresh and vital.

I was at a radio station for twelve years in Washington, D.C., 97.1 WASH-FM, where I had enjoyed doing a popular program of love songs and dedications. I was also on radio stations across the country, syndicated on up to fifty stations preaching love poems and words of wisdom about love, letting listeners voice their feelings for their special someone on the air and with a special song.

In the past five years, everything started to become digitized. The music, the commercials, even my voice was pre-recorded most of the time in my last year on the radio. I started to lose my passion for radio as my performance became

more of an assembly line experience, inserting my voice files between music and commercial files to be played later.

I retired from radio in March of 2006 and started living a life that included daylight hours. Having worked the evening shift for over a decade, being awake, really awake and alert when most others also are, is wonderful. I saw more of my teenage children, more of my bride of twenty years, Irene, and slowly began to develop relationships with people in my town of Urbana, Maryland.

Retirement at age 42, though a goal of mine, ended up being very unfulfilling. After two months, while sitting in my music room listening to my stereo and playing the Scarface computer game, I started looking at franchises.

I had a goal in mind with a franchise, to open in the town I live, to meet my neighbors and to get involved in my community. There are hundreds if not thousands of franchises available and finding the right one for me and one that matched the community was a challenge. The town was opening it's first ever strip mall and that had to be the location for the business. I didn't want to work food service hours and I didn't want a lot of employees.

After searching for a month, I contacted *FranChoice*, a free service that researches and matches people to businesses.

My wife and I were interviewed about our needs, wants, our talents, our preferred hours of work and many in-depth subjects. After a week we were presented with three good franchise opportunities, one of which was FASTFRAME-Expert Picture Framing. Making custom made picture frames, preserving art and photos and all the cool tools that come with the franchise sounded great, so we did our own research.

We visited the company headquarters in California and met with everyone from the owners and the CEO to the marketing and training staff. We visited other FASTFRAME stores, even making purchases to see how well the people were trained and the quality of the product. I called stores from New Jersey to Florida to California and asked hard questions about the franchisor. Did the franchisor support them after the initial setup. What would you do differently? What is your biggest success? What do you not like about the franchisor?

Well, I had done some woodworking such as installing crown molding throughout my home. Chair rails and accent trims. My wife has a way with color and is a natural designer. My wife and I

HE SAYS:

"Photographers are a passionate bunch. My grandfather, George Hollis, Sr., was an award winning photographer. He would on occasion take a portrait style picture of his grandchildren with a camera with big film and a black cloth covering the back of the box and his head. The bright lights in his studio shining on me along with the loving attention and prompts of his direction on how to sit and pose are sweet memories"

"I had a goal in mind with a franchise, to open in the town I live, to meet my neighbors and to get involved in my community. There are hundreds if not thousands of franchises available and finding the right one for me and one that matched the community was a challenge. The town was opening it's first ever strip mall and that had to be the location for the business. I didn't want to work food service hours and I didn't want a lot of employees."

once attempted to frame a mirror ourselves, but failed miserably, so we were pleased that we would go through extensive training.

FASTFRAME has been around for over twenty years and has over 300 locations worldwide and over the years they have found what works and what does not in the framing business.

The training facility is located at the corporate headquarters in Thousand Oaks, California. The training area is set up with the same tools and equipment that is in the FASTFRAME stores so it is a hands-on experience.

The emphasis in training is to preserve the pieces when framing, to use materials and techniques that allow the subject matter to last as long as possible. From acid free mats and foam board, frame rabbit liner tape to UV protection glass. We also learned to always consider reversible procedures first in the mounting process from Japanese gum paper to clear plastic corner hinges.

The first day was filled with discussions on the differences in art and photography, on the importance of knowing an original from a copy, a lithograph from a poster, and what should never be placed in a drymount press.

Now I love the arts, but let me be the first to say I am not an artist, so I was a bit concerned about all this information I needed to be aware of concerning different papers and mediums. Besides, as important as the discussions are, I was dying to make a frame for a couple of reasons. I had paid for the franchise and I wanted to see if I could actually do it and do it well, which then answers the second question, was this franchise investment right for me.

The second day of training involved the cutting of our first moldings. We were taught the tricks of the trade on how to measure a project and allowed to select a piece of molding from an array of beautiful eight foot sticks.

The saw that is in the training facility is a beauty from Italy (we have a more updated version in our shop). The saw looks like a green double drawer file cabinet with a ten foot silver slot car track lying on top. There are two pull handles coming from the center of the machine and a windowed box that contains the saw blades that lies on top. The race track looking part is the fence where the molding is rested and cut on the saw. There are exact measurements printed on top and a molding stop to give perfect size cuts each time. The saw makes two 45-degree cuts using two different blades.

I volunteered in my group of six to be first to use the saw. I am excited and nervous as I am instructed to place my molding on the saw with the rabbit down and towards the blades. The sawdust bag is started and makes a high pitched vacuum sound. The sawdust machine seems much louder than the whirr of the saw blades when the switch is slipped on and the cutting machine begins to

vibrate with the breeze from inside the saw box brushing against my face.

Placing the start of the molding into the saw opening, I pull the left handle with my right hand and watch as the spinning teeth of the blade slice through the wood and come closer to me. A perfect 45-degree cut. I now move this cut edge to the measurement on the fence and grasp the handle on the right side of the saw with my left hand. Giving the handle a slow and continuous pull, the wood is cut into a piece of a frame. I do this three more times until I have all the wood parts needed for a beautiful framing.

Next is a lesson on attaching the corners together with a pneumatic under-pinner and special framers glue. The under-pinner is more complicated than its cool looking mechanical exterior would lead you to believe. The molding is to be measured and calculations are to be made to determine the size of the pin and its positions in the corners.

There are metal and jagged pieces on this contraption that can cause some major damage to a finger as the pneumatics are engaged. The molding is clenched, locked in place and pins are inserted. A loud "ker-pop" sound is heard as the pin enters the wood and the machine again pressurizes with air.

I got through this basic framing process with all my fingers intact and a huge sense of accomplishment.

It was time for our lunch break, so I called home and with much pride shared my morning with my family about how I put together my very first frame!

I have been hooked ever since!

At first, I suppose one of the most daunting tasks in the making of a complete frame package is the handling of glass. For safety, you are given gloves and glasses for protection in case the lites break or shatter. All I could think of was being cut by the glass or bending it till it broke. Perhaps even dropping it to the ground so it would shatter into millions of pieces and those around me would lose their sight from the shards. The lites are 32" by 40" and are carefully taken from a box and placed on an upright glass cutter. There is a measuring tape on the fence of the cutter, so you line up the edge of the glass with the corresponding inch marking. Then you move the mounted glass cutting wheel upward and then score the glass by pulling down the handle of the wheel. This process makes a scraping sound as you score the line and then a crackling noise as the glass begins to separate. By pressing on either side of the scored glass, the piece snaps in two directly down the cut. Though I now do this task almost daily, I still have great respect when cutting and handling glass.

So a molding is custom cut to and joined to the size of the matted art. A lite of glass is cut to an eighth of an inch to the inside of the frame to rest on the rabbit. The glass is to be spot and dust free. If there is a speck of dust, you open up the



Glenn and Irene Hollis in their store

*"[on his research about FastFrame as a franchisor]:
"...I called stores from New Jersey to Florida to California and asked hard questions about the franchisor. Did the franchisor support them after the initial setup. What would you do differently? What is your biggest success? What do you not like about the franchisor?"*

frame package. Clean it and do it again until it is perfect. It is all secured with framers points and then as a finishing touch, a piece of Kraft paper is applied and trimmed to the back of the frame as a dust cover.

There is an equation to find where the hooks should be placed and screwed securely and then a hanging wire is attached. There is a technique in tying the wire to the back of the frame that has been around forever and involves making a pretzel shape around and through the screw-eye or hanger and then wrapping the remaining wire around the hanger wire. We were not only taught this in out and around process but were expected to master it despite the blood spilled from the many fingertip punctures from the wire frays. To this day, my number one reason to go to the first-aid kit is to get a band-aid because I was stuck by a strand of wire!

Construction started in January after many permit details were cleared up and plans redesigned, the major problem was the County wanted a bathroom in the front/retail section of the store. The reasoning was the County did not want to expose people to the dangers of our workshop as they went to one of the two rear restrooms. Problems solved, doors open in April and my workshop is awesome.



Early days of construction

Beside the saw, under-pinner, glass-cutter, workstations and heat/vacuum press, we have a computerized mat cutter. The cutter itself looks like a computer drafting table, but instead of a pen or pencil, it contains a blade. One enters image size and border widths down to a 32nd of an inch and the computer does the rest for basic mats. Multi-windows, however, need a bit more human input during the calculation process. Different shaped openings are possible from ovals to triangle and cathedral style to art deco. V-groves, corner accents, shapes and words can be "carved" into the surface of the mat. The computer program is a lot of fun and your imagination is the limit.

The first day we opened was a Saturday and someone was waiting for the doors to open to use our services. The first customer was a needlepoint stretch and frame from a young woman who was giving it to new parents. The second was a mounted black and white photo of an airplane from the 1970's. Then we had paintings on canvas that needed stretching and a shadow box for an American flag to be made.



Almost there!

I have a passion for this business for a number of reasons. People come into the shop happy. Happy that they are about to do something special for themselves, to a work of art, to something they may have created, or perhaps memorabilia. We help highlight their piece with color and molding during the designing process. Then I take the individual parts, parts that change for each project, different art, different colors, and start to carefully put a package together in a way to enhance their presentation and preserve their value. The finished product is so different from that which was originally brought into the store. The framing brings the piece to life, draws your eye to it, and makes it special. When the customer comes to pick up their finished work, they tend to be impressed, wide-eyed with delight and happy. The experience is very satisfying.

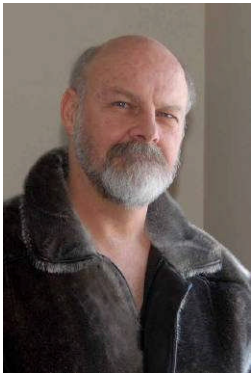
Our prices are highly competitive because of the buying power of our franchisor and the 300 franchisees it represents, yet we offer a lifetime guarantee on the craftsmanship of our products. I tell people that a frame I make will be theirs forever, and then their children will enjoy it as it becomes an heirloom.



At work in his framing lab

Glenn & Irene Hollis can be reached at:

FASTFRAME
3540 Sugarloaf Parkway Suite D-02
Frederick, MD 21704
Ph: 301-874-0506
fastframeurbana@aol.com
www.fastframeurbana.com



CULTURE CAULDRON: Greenland

[Kevin O' Hara](#) first arrived on the shores of Greenland looking for adventure in October 1993. He found that adventure and much more. At that time he knew very little of the people, the land or the culture. This changed quite quickly once he arrived and he now considers Greenland his second home. During the past 12 years, Kevin has spent more than three years during 17 trips to the land he loves so much and is now well known around the country. Each time he returns, he is greeted like one of the locals. Kevin has a special ability to capture photos of this magnificent land, and the people. Whether it is photos of the children, elders, northern lights, flowers or ice bergs, he sees our land as no one else does and it shows in his pictures. While working with Greenland Travel at the Toronto International Travel show in 1997, Kevin's photos won "First Prize" out of 300 companies. His photos now appear regularly in tourism brochures, post cards and calendars around Greenland. Kevin has done photo contracts for many companies in

Greenland and his work is seen on a regular basis in magazines and web sites by such companies as Royal Arctic Line, Royal Greenland, Air Greenland, The Greenland HomeRule Government and various travel agencies.

Kevin says that this land which he calls "Paradise" brings much joy to his life and he continues to spend a lot of time here. He is already thinking about his next book.

Many people will be surprised to know that Greenland is not just ice. Yes, there's a lot of ice with 80% of the island covered by the glacier.

But the other 20% of the coastline which is thousands of kilometers long is glacier free. And if you have ever looked at Greenland on a map, or on the Google Earth website, you would see that this coastline is like a fragmented puzzle full of fjords and islands with almost no inhabitants in most of it. It's an adventurer/photographers paradise.

It's raw, pure nature of the utmost.

smaller towns are serviced by helicopter and the rest are by a fixed wing Dash 7 plane.

If you like to fly, there aren't many places on earth where you'll have a better view from the windows of the plane or helicopter. I highly recommend always having your camera at the ready and get a seat by the window if possible. I got some good shots that way on many occasions.

I have also traveled on the passenger ship quite a few times and it's not only the cheapest way to travel, but a unique cultural experience and one of the best ways to experience Greenland. The landscape is powerful and you always have the



Fjord Magic

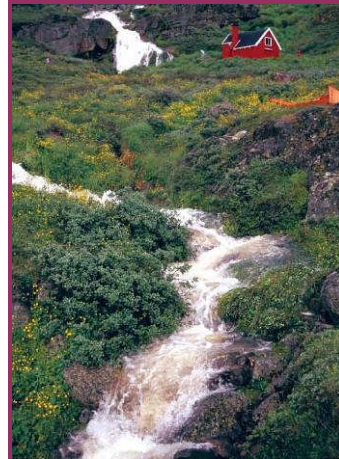
There are small but colourful towns and villages dotted along the coast with vast amounts of space between them. As an Inuit society, the Greenlanders have traditionally traveled by the sea and most of them still prefer to travel that way. It is a culture based on fishing and therefore every town and village is located on the coastline. There are no roads between the towns so travel is by boat, passenger ship or Air Greenland. The

opportunity to see whales, seals, eagles and many other kinds of birds. Sculpture shaped smaller icebergs will be seen in the south and the north will have gigantic icebergs that can be over 30 stories high. That's the part you see. The other 60 or so stories are under water. Almost hard to believe, but true. And although I already knew that was a fact, it was seeing the bergs from the plane on a clear day with no waves in the water that

ABOUT GREENLAND

"Many people will be surprised to know that Greenland is not just ice. Yes, there's a lot of ice with 80% of the island covered by the glacier.

But the other 20% of the coastline which is thousands of kilometers long is glacier free. And if you have ever looked at Greenland on a map, or on the Google Earth website, you would see that this coastline is like a fragmented puzzle full of fjords and islands with almost no inhabitants in most of it. It's an adventurer/photographers paradise"



After the rain

really brought the message home in my eyes. It's a sight you don't soon forget, believe me.

It is these very fjords that Eric the Red and his fellow Vikings spent many years sailing in and exploring. Eric who gave Greenland its name, eventually settled in the south where the sheep farming village of Qassiarsuk is now located. The foundation of his original home is still there and in fairly good condition. There are Viking ruins spread out all over the southern section of Greenland. The most prominent is the Hvalsey church ruins that are the best preserved ruins in Greenland from that era. It is located in a fjord near the town of Qaqortoq. Only accessible by a half hour boat trip, it sits alone quietly in the surroundings that haven't changed much since the Norsemen built it.



Moonlight drive

As many people learned in school, Eric the Red named Greenland as a kind of real estate prank to attract other Vikings from Iceland. And there might be a bit of truth to that but the fact of the matter is that when he arrived in Greenland in the year 983AD, there was a warming trend in the north Atlantic. It was much warmer there than it is now and was quite green at the time during the summer. But no doubt he exaggerated a little on the name. Even to this day it is very green in the southern part of Greenland due to the effects from the Gulf Stream. And as we have all been hearing lately, the forecast for the future is that many parts of our planet may soon be much greener than they are now due to the effects of global warming. I have already been seeing some signs of it in Greenland and I have heard many stories from the people in the northern part of Greenland. Something is definitely happening.

It might be a good time to go up to the arctic and experience the land, ice and beauty before things change too much

During the summer in the south of the island, there are wildflowers everywhere and grass is a common sight in many towns. And believe it or not, there are also sheep farms in the south in most of the fjords. It gets quite warm in the fjords. Summer days which average about 15 – 18 degrees, quite often reach a temperature of 22 degrees or more. Yes, that's Celsius, not Fahrenheit. But it is always a good idea to have a jacket with you because the temperature can change faster than you can change lenses on your camera.

After all, it is the arctic.

Because south Greenland is below the Arctic Circle, the sun does go down slightly below the horizon for a few hours in the summer but not until after 11 pm during May through July. However, it stays fairly bright and the sky reflects a lot of light and colour so incredible photos can be had. It's another one of my favourite things in Greenland. It's like candy to the eyes. On several occasions when I was up late I sat looking at the light and trying to figure out if it was still getting slightly darker or beginning to get brighter again. It was almost like trying to figure out whether it was still yesterday or has it in fact changed to tomorrow. That in between period can really play havoc with your mind and eyes and I love to experience it.

In the north of Greenland above the Arctic Circle there is a completely different light experience. For about three months during the summer the sun doesn't set. It begins to dip below the horizon in August and that in itself is another exciting colour and light situation. One time when I was on the midnight tour of the ice fjord in the town of Ilulissat, the sun had set around midnight and shortly after I noticed that one side of the sky was a mix of orange, red and yellows while the other side was several shades of blue.

It was almost a perfect line between them right down the middle of the horizon. Seeing this while slowly drifting past gigantic icebergs just calved from the glacier and the peace and quiet of the location was like being on another planet.

If the town of Ilulissat is ever on your travel plans, I highly recommend the midnight boat trip into the ice fjord. If you don't get prize winning photo opportunities, then you will definitely have something to tell your friends and family about for many years to come. I guarantee it. And they will pass the story and hopefully your photos on to grandchildren and great grandchildren no doubt.

The town of Ilulissat is right at the mouth of the fjord beside the glacier. It's a very convenient location for anyone who might like to take the half hour hike into where these giant beasts of nature are slowly floating by. There's a walking path that is rough in some places but otherwise not too difficult depending on the condition of the mud, leading right to the fjord. When I went, the weather was perfect with about 15 degrees and I was lucky enough to have the whole view to myself.

North Greenland is quite different than the south in many ways. The land is rougher, the weather a little cooler in summer and much colder in winter. The people have more of a European mix in their blood due to the visits by whalers back in the old days.

The language also has a different dialect although it's the same Greenland language as the rest of the west coast. When the Greenlanders travel to other parts of the island, the local townspeople know what part of Greenland their visitors are from by the way they speak.

I would also suggest that anyone traveling to Greenland pick up a copy of the Greenland-English dictionary (if English is your language). This handy little book has many useful words and phrases in it that will help you along the way and can often help you meet some of the friendly Greenlandic people. They are for the most part



Arctic flowers

"As many people learned in school, Eric the Red named Greenland as a kind of real estate prank to attract other Vikings from Iceland. And there might be a bit of truth to that but the fact of the matter is that when he arrived in Greenland in the year 983AD, there was a warming trend in the north Atlantic. It was much warmer there than it is now and was quite green at the time during the summer."



Healthy smile



Serenity

very easy to get along with and some of the most hospitable people I have had the privilege of knowing. This is one of the ways I have learned my limited amount of Greenlandic and from there people often teach you a few extra words. It just builds from there and many laughs can be had during the whole experience.

Three samples of the towns

1/ Ilulissat in north Greenland which means Big Ice as I have already mentioned is in the north just by the glacier. It has a population of about 5000 people and almost twice as many dogs. They are sled dogs and should be avoided at all times. It is not safe to get close to them because they are kept wild in order to be better at what they do, hauling people and sleds filled with supplies across the ice.

Photographing the dogs is popular with the tourists but just keep your distance and you'll be fine, as most of them are chained.

The town has a lot of tourist shops all right beside each other on the main strip and they all offer different possibilities for excitement such as helicopter trips over the glacier, boat trips into the fjord or up the coast to small villages and possibilities of renting cabins in the fjord. There are also a few bars and restaurants as well as the local shops for just about anything you need. The town has the biggest tourist visitors of all the places in Greenland so they're ready for everything.

You can also stay in youth hostels, Bed and Breakfast or if you're loaded with cash, there are a couple of hotels that are not cheap by any stretch of the imagination. However, if you can afford it they have great views of the ice and first class food both European and local. For the seafood lovers, you'll think you died and went to heaven. Arctic char, fresh salmon, cold water prawns, smoked halibut are a few of the choices.

Meat lovers will have the chance to eat reindeer, Greenlandic lamb, muskoxen or the regular stuff like pork and beef.

And for the more adventurous, there's also seal, whale, mattak, (frozen whale meat) dried fish and some other local delicacies.

I've tried just about everything over the years and I enjoy most of it but I must admit to preferring my meat cooked.

2/ Nuuk

The capital city of Nuuk which means "peninsula" is located in the area generally referred to as mid Greenland because it is more or less on the dividing line between where the populated towns are on the map. It has everything a modern city would have in Europe. And now I have noticed that it is becoming quite modern and you can eat in high quality restaurants, shop for clothes with a decent selection or buy just about anything you could need in the three sport shops which includes outdoor and camping equipment. The prices range from basic to top end high quality. It's the arctic so they have it all.

I've also been impressed over the last couple of years seeing that the local grocery shops have almost everything I buy here in Canada when thinking about dinner time. And there's a shop in Nuuk called KAMIK that imports food from Canada so I also get my peanut butter fix. And Canadian apple pie is also now available, definitely one of my favourite desserts.

There is an art and cultural centre right in the middle of Nuuk. It can't be missed when you're walking around. It was built in the late 90's and has a stunning design that depicts the northern lights in its architecture. Katuaq, as it's called has art festivals, photo exhibits, theatre and a small but comfortable movie theatre showing the latest Hollywood releases. The café has possibly the

"I would also suggest that anyone traveling to Greenland pick up a copy of the Greenland-English dictionary (if English is your language). This handy little book has many useful words and phrases in it that will help you along the way and can often help you meet some of the friendly Greenlandic people."



East coast dancer

best lunches and brunches in the city as well as great ambience. It's a meeting place for many business and government types.



New Year Celebration in Nuuk

3/ Qaqortoq

This is the hub of south Greenland. The name of the town means the white place, most likely named because of the large amounts of ice that can occasionally cover the water for a hundred kilometers or more along the coast. Sometimes it blocks travel by sea for days at a time, then magically disappears overnight.

It's quite a spectacle and also makes for some interesting photo opportunities. And you should always use a UV filter when in the arctic. It's a necessary tool due to the large amount of reflections from ice and clean air.

This is the town that I arrived in when I made my first visit to Greenland in October 1993. I had planned to travel to several towns on that first trip but got held hostage in Qaqortoq by the hospitable, friendly down to earth people of that town.



Fjord fog in Qaqortoq

I made many friends and had so much fun in Qaqortoq that I spent my whole three week vacation right there. And it's the town I call home when I'm in Greenland.

It's an extremely colourful town with a population of about 3000 people.

Much of the town is built on the side of a mountain and resembles a big Lego project when you first see it. In my opinion, it's the most photogenic town in all of Greenland. And that's why it's the largest section in my photo book

My book has 224 pages, with 300 photos and 62 of those pages are dedicated to the town Qaqortoq.

The book which is titled: **South Greenland, An Arctic Paradise**, is available in most of the shops in the south and in the city of Nuuk as well. Any one interested in seeing some info and a few photos from the book can visit my web page: www.greenlandphotos.com

This town has a hotel, a couple of restaurants and two bars; one of them is a Disco type bar on the week-ends. They are a great place to meet people and exchange stories, life experiences and get good information about the culture and the land.

Qaqortoq is situated in close proximity to the other two towns in the south. They are Narsaq, which means the plain (pop. 2000) and Nanortalik which means place of the bear, yes that's polar bear, (pop. 1200). And by the way, it got that name because there are polar bears quite often not too far from shore following the ice which has the seals they eat.

There are also several small villages in the area that are easy to get to by a short boat trip. And hiking trails are another way to take a day or several days to explore. Sheep farm cabins can be rented through the tourist office in the event you have the time in your schedule.

The people of Greenland are the cream in the coffee and the icing on the cake. They are one of the main reasons I have kept returning again and again over the past 13 years.

Yes the land is incredible but without the warmth of the people, it wouldn't be the same experience. I have heard that from many other visitors over the years and it is an undisputable fact.

The air in Greenland is so clean and wonderful it's hard to describe. Every time I go out into it, I get that ahhh feeling. It's something that I never seem to get used to or take for granted. And the best part is that it is absolutely free!

Travelers to Greenland should be prepared for the prices. Being that most things have to be shipped or flown in, they average about twice the cost of Canadian goods. But my thinking is that its part of the deal to be in such a wonderful part of the planet. And at the same time, you won't have to deal with thousands of tourists. It's not the most popular destination, however that is beginning to change with so much focus on the arctic and the effects of global warming.

The arctic is not for everyone, but those who venture up there and do like it are usually hooked for life and many return again.

Good luck with your travels and photo adventures wherever they may lead you.

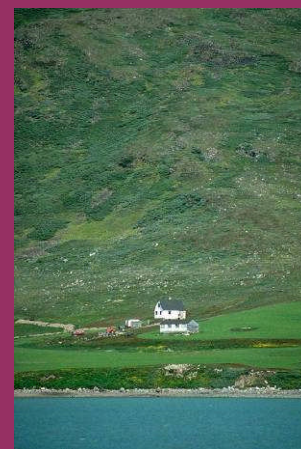
~ Kevin O'Hara



Moonrise reflections



Char fishing



Sheep farm

Please send comments and suggestions to magazine@pbase.com



THE: Photographer's Notebook

Shay Stephens is a professional photographer working in New York. He uses a stylish fusion of photojournalism, formal wedding, and studio photography. His commercial clients range from NASA, Ripley's Believe it or Not, to the Sony Corporation. His work is published in many languages around the globe via textbooks, magazines, television, and an array of digital media.

When your car breaks down

I had a wedding at 2pm on April 3rd to shoot, a short 2 hour wedding elopement in NYC. So my wife and I got everything together and headed downtown. We just made it across the New Jersey border on the Palisades Parkway and were headed up a hill when the power to the wheels of the car sputtered. The engine was still running and revving, but the car was slowing down. I pulled off to the side of the road just as the engine died. I tried restarting the car and after 3 failed attempts the battery died too.



Jen got on the phone with the insurance company to have a tow truck come and get the car. She also called the church to let them know about the situation. They said they would wait for us as long as they could, but they had a second wedding coming up today and to call at 1:45pm to give a status update. After about a half hour we had a tow truck coming and then a NJ cop pulled up behind us to get our license and registration. Once he ran us through the computer he left to find sweeter meat. A class "A" jerk. A few minutes after the cop left, the tow truck pulled up and loaded our car. We told him the story and asked if he could call a cab for us, he did and when we got to the tow yard, a cab pulled up to take us in to town. Jen said "I have always wanted to say this, but please, get us to the church on time!" We all had a good laugh.

We crossed the George Washington Bridge and

made it uneventfully to the FDR highway. Around 96th street the traffic started to slow down. The driver said if we got off the highway now it would take twice as long to get there and suggested we might get off at 71st. At 71st he wavered and we said to do what he thought best. At the last minute he veered back onto the highway and around the next bend the traffic cleared up. We got off at 53rd and a few blocks later we were at the church. We walked in at 1:45pm much to everyone's surprise and delight. After a few minutes of setup, I was ready and shooting pictures at 1:55pm and the wedding began at 2pm sharp, on schedule, and on a beautiful spring day.

Now you may be wondering how this feat was accomplished. I know the people at the church wondered that, as they thought there was no way we could make it.

The secret, and one you should never forget and always employ is to.

!! Leave Early!!

You never know what will happen between here and there.

We usually give ourselves an extra 1.5 hours more than we need to get to the city. Usually if there is traffic that is enough to account for the worst of it. But today it helped us to get ourselves to the church despite a completely broken down car. We used the tools at our disposal, cell phone, contact phone numbers, insurance, tow truck, and cabs to keep our cool and not waste time. We made sure the church knew what was happening, and we turned a potential disaster into a great success.

Getting home was another adventure, but that is another story.

Moral of the story, be prepared, keep your cool, and leave early, early enough to account for most possible slow downs. The further you have to go, the more time you will need as a buffer for problems. The photo on the left is a parting shot of the car at the tow yard and the last time we saw the car in one piece, it is now scrap metal. Farewell trusty car, you treated us well up to the bitter end.

Titling your photos

Titling your work can have a big impact on its reception by the viewer. While a title can't carry a bad photo, like a great spice on food, it can make a great photo seem all that much better. Choose it well. In the Last Photographer Standing contest,

POST-IT NOTES:

"Whether you are a violinist, actor, or photographer, telling a story is key to your success. But what does that mean? As a photographer, you have to layout a story using pictures. You need to draw the viewer in, make them feel a part of the action, make them want to see more"

"Titling your work can have a big impact on its reception by the viewer. While a title can't carry a bad photo, like a great spice on food, it can make a great photo seem all that much better. Choose it well."

we spent some time getting the contestants used to the idea of not repeating the contest theme in the title but instead, thinking of unique and descriptive titles. For example, say the contest theme was "Irregular or Picturesque". The challenge was to title the photo without using the word "Irregular" or the word "picturesque" anywhere in the title. It sounds simple enough, but actually doing that takes a little bit of mental effort. But the results really speak for themselves. The quality of the titles, and the extra pleasure they now elicit from the work have been well worth all the photographers effort. It has added a depth and quality to the work that is not there in a poorly thought out and ill fitting title.

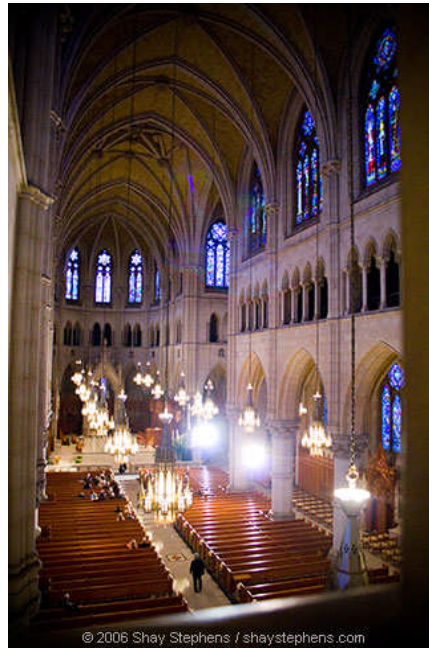
The key to photojournalistic style photos - telling a story

Whether you are a violinist, actor, or photographer, telling a story is key to your success. But what does that mean? As a photographer, you have to layout a story using pictures. You need to draw the viewer in, make them feel a part of the action, make them want to see more. You can do that with compelling visual story telling. There are two aspects of this that have the largest impact, capturing the photos (naturally) and using judicious content editing.



When it comes to capturing the photos, one needs to always keep the viewer in mind. Don't get tunnel vision on the action alone, look around and see if there are people interacting, coming, going, etc. Take photos that set the context of the action. Where is this place, how did you get there, how will you leave. Take those shots that will establish for the viewer where all of this is happening. They should feel as if they were there themselves when done looking at the photos. And when it comes to the action itself, do the same. Show the person or subject in context as well as close up and frame

filling. Show the interaction between the participants, the action, and the reaction.



And don't be stingy with the memory cards, shoot more than you think you will need. If you captured xyz already, do it again from a different angle, show it in relation to a different aspect of the scene or another participant, in other words, work the scene. None of us can predict the future or know exactly when a peak expression or action will occur. Sure, experience will tell you when things are leading to a potential climax, or perhaps the subject is repeating an action you have already witnessed and can anticipate a repeat performance, but in the end, you are better off taking a few more shots than what you think you minimally need. You run the risk of short-changing yourself and your client by adopting the elitist attitude that you can predict the peak time to take a shot every time. You can't. And life has a way of surprising you. That oft repeated action you are anticipating may morph into something new and unexpected in a few moments, so lingering and being ready to shoot more can yield big rewards. Approach the job mentally prepared to take more shots than you will need to deliver, and be prepared to toss photos that don't make the grade or tell the story with maximum impact.

Once you have your raw material, it is time to do some editing, and I don't mean image editing. No, what we need now is good content editing. I start by selecting all the good photos that are usable and unique and move them to a separate folder. Then I go over those select photos and start to assemble my story. It is at this time I also remove more photos that are repetitious without being uniquely interesting. Look for those peak expressions and actions, look for the right context shots, move photos around for visual impact. Here is a good example, let's say I have a photo of a person looking up into the ceiling of a church, wouldn't it look great to put a context shot of that same roof as the very next photo? It is not chronological to when I shot the photo, but it is from the point of view of the subject, and it will keep the viewer in the moment too, as if they are

there experiencing what the photos, and those portrayed in them, are showing.

When doing content editing, I go for storytelling. What will lead the viewer along in this story, what photo will have the most impact *right now*. I tell a true story, but I do shift some elements around in the cause of good story telling. For example, say there is a portrait session before the wedding ceremony and one after. Visually, keeping them separate in time may look boring and repetitious. I will combine them into one time-frame if at all possible to keep the story moving forward and not going *herky-jerky* from one element to another and then back again. If I err, it is on the side of telling a good story. And in the end, that is what it is all about anyway.

The Wedding Photographer Boot Camp

I am putting together a four day intensive wedding photography workshop for photographers new to wedding photography or who just want to get to the next level. The workshop covers:

- Photojournalistic style wedding photography
- Attracting and booking the right clients and avoiding "bridezillas"
- Lighting techniques, including off camera and available light
- Shoot a ceremony in a real church with models or actors dressed in stunning bridal attire
- A photojournalistically inspired portrait session with the bride and groom in a beautiful park setting. The church and park photos you take can be used on your website and portfolio
- Efficient post wedding workflow and batching

Managing deliverables like books, images on disk, and video DVD slideshows

You can find more information [here](#).

Shooting in foul weather



I have heard it said that there is no such thing as bad weather for a photographer. I have to agree. It may be harder to shoot in a downpour, but the results can be well worth the added effort. I recently shot a wedding proposal in record rainfall in Central Park back in April. It was pure magic. With a little bit of planning and equipment, you can make an outing in the rain a successful and rewarding experience. You can see some of the photos here:

<http://www.dgrin.com/showthread.php?t=60134>

I did have help, Jen was with me to hold a big golf umbrella over us and the equipment, and I used a Storm Jacket camera rain cover with a lens hood attached to keep the camera and lens dry. We all wound up soaked, but the equipment stayed dry and the results were stunning. For one thing, we nearly had the park to ourselves. It also added something to the air, an optical element that is not often seen in photos simply because people tend to avoid bad weather. It made the ground look different too. Think about car commercials, they almost always hose down the roads that cars drive on because it makes them look different and interesting and not what we are used to seeing. But the unique look it gives is hard to get without some nasty weather. Next time some nasty weather comes through, think about a photo excursion. The atmosphere and mood that bad weather lends to photos is really magical and I highly recommend it, just remember to take steps to keep your gear dry.

Flash Longevity

Last time I talked about the longevity of the Sunpak 555 units. In the time since the last article, the Sunpak 555 has been put out to pasture and discontinued. So I went ahead and replaced it with its bigger brother, the Sunpak 622 Super Pro-System with a zoom flash head. I just started using them so I don't really have much to say about them other than I like the zoom head as it gives more options on light spread from wide to zoom as well as improved recycle time. I hope to have more to report about them next time.

Linux Based Photography

Lightzone

It would also seem that soon after I mentioned the Linux version of Lightzone it promptly disappeared from the official website. I don't know if this is temporary or permanent, but I will keep an eye on it and report back when and if it reappears.

Scripting with gimp

Scripting with gimp right now is challenging. The two main scripting languages enjoying the most support right now in the version that is preloaded with Ubuntu are scheme and python. I have created scripts for batching photos using both languages, and I like using python more than scheme, but scheme has wider gimp support right now. Though I suspect that python will be widely supported as well. So I am leaning toward concentrating on python scripting. I don't have the ability to go into great detail in this article, but I want to at least introduce the idea of scripting by showing a simple script that will create a B&W layer that uses a channel mixer conversion.

```
1) #!/usr/bin/env python
2)
3) from gimpfu import *
4)
5) def do_bw(image, drawable):
6) image.undo_group_start()
7) #Create B&W layer
```

*"When doing content editing, I go for storytelling. What will lead the viewer along in this story, what photo will have the most impact *right now*. I tell a true story, but I do shift some elements around in the cause of good story telling"*

```

8) pdb.gimp_selection_all(image)
9) pdb.gimp_edit_copy_visible(image)
10) bw_layer = gimp.Layer(image, "bw",
image.width, image.height, RGBA_IMAGE, 100,
NORMAL_MODE)
11) pdb.gimp_drawable_fill( bw_layer,
TRANSPARENT_FILL)
12) image.add_layer(bw_layer, 0)
13) floatingLayer= pdb.gimp_edit_paste(bw_layer,
1)
14) pdb.gimp_floating_sel_anchor(floatingLayer)
15)
16) #apply channel mixer to the b&w layer
17)
pdb.plugin_in_colors_channel_mixer(image,bw_layer,1,.5,.5,0,.5,.5,0,.5,.5,0)
18) image.undo_group_end()
19)
20) register(
21) "python_fu_bw_conversion",
22) "Create a B&W layer",
23) "Create a B&W layer",
24) "Shay Stephens",
25) "Shay Stephens",
26) "2006",
27) "<Image>/Python-Fu/Color/B&W Layer",
28) "RGB*",
29) [],
30) [],
31) do_bw)
32)
33) main()

```

It looks scarier than it is, trust me. The line numbers (1-33) are there for reference, you don't need to type them in. In fact you don't have to type anything, you can download this script here:

<http://www.shaystephens.com/linux/download/python/bw.py>

You can find a little help in creating your own python scripts by reading the documentation:

<http://www.gimp.org/docs/python/index.html>
<http://carol.gimp.org/gimp/scripting/>

Line 1 tells gimp that this script is written in python and line 3 tells it we will be reusing some basic utilities already made in the gimpfu module. Line 5 begins the actual B&W conversion code. In line 6 we start the undo function so if the user does not like what just happened, they can do a single undo and get to the point they were at before starting the script. Lines 8-14 copies the image and pastes it into a new layer so we can leave the original untouched. And in lines 17-18 we apply a 50% red, 50% green, and 0% blue channel mixer to the new image layer. In line 18 we turn the undo function off. And lastly, lines 20-30 register the script and let you choose it from the gimp menu while line 31 kicks off the whole fireworks show.

This script is member of a larger web gallery batching script I use to prepare images for web viewing. I will go more into that next time.

Linux and hardware

I have some very simple advice. Don't fight the hardware. If something isn't working, chances are it isn't going to work after contorting the system into a pretzel either. Linux works great with

compatible hardware, but there is some flakey stuff out there that just isn't worth the time. If your wireless card doesn't work for example, just drop a few bucks and pick one up that will. Problem solved, frustration ended, and productivity soaring. Using Linux is not hard and does not require Herculean configurations to get it to do so either.

If you plan on buying something new, do yourself a favor, spend some time researching it for Linux compatibility. The minutes you spend up front can save hours of frustration later.

My Mail Box

If you have questions or comments you can send them to me here:

<http://www.shaystephens.com/contact.php>

Resource Repository

[Last Photographer Standing contest](#)

[Storm Jacket](#)

[Sunpak 622 Super Pro flash](#)

[GIMP](#)

[Python](#)

[Scheme](#)

LEARNING: Camera less Photography



Carol Pfeffer is a seasoned trial attorney practicing law for over twenty years. She served as the Assistant District Attorney in Queens County and is currently a senior staff attorney with the Legal Center of My Sister's Place, Inc., representing indigent victims of domestic violence.

Born and raised in New York City, Carol Pfeffer attended Walden, a small independent school on the upper west side of Manhattan. She earned her undergraduate degree in Physics as the only woman to graduate from the physics department of Boston University. Carol went on to law school and the practice of law and later pursued an associated degree in the visual arts.

Carol's love for composition, color and conceptual art led her directly to the darkroom. This is where the artist met the scientist. Her formal background in the science of light, chemicals and geometric optics came to bear on the making of art and brought this artist full circle, combining art and science, to her alternative medium of Camera less Photography

Introduction

I am often asked, "How do you make photographs without a camera?" As Ansel Adams once said, "I don't take a photograph, I make it."

In order to master camera less photography, I had to reach back to the history of photography and even further back to the history of Optics, the physics of light. The nature of how light is transferred to paper by emulsion is at the very heart of the medium of photography. It also is at the heart of the interaction of light with matter. This is still one of the most basics questions at the forefront of theoretical physics today.

Camera less photography is a printing technique. The color darkroom printing process is chromogenic, producing what is commonly known as a C-Print. What do I mean by "chromogenic?" Do you know what "photogenic" means? "Photo" comes from the Greek *phos* or *photo* meaning "light." As in "photon" *photo* (light) + *on* (unit) a unit of electromagnetic radiation in the visible range. So, photogenic *photo* (light) + *genic* (produced by) means produced by light. Similarly *chroma*, coined in 1797 by the French chemist Nicolas-Louis Vauquelin when he discovered chromium, comes from the Greek word for color *khroma* or *khromatos*. So chromogenic means to produce color. In 1839, Sir John Herschel coined the term *photography* combining *photo* + *graph*, from the Greek *graphis* "stylus." He defined a photograph as a picture obtained by an instrument for recording light. Incidentally, he also invented fixer.

Today, we interchangeably use chromogenic which refers to a process and C-print to describe the photographic print. The system for processing C-prints is called C-41. Do not mess around with C-41 chemistry! It is so much more toxic than any black and white chemicals you may have worked with.

Chemistry of the Chromogenic Process

A Chromogenic Print refers to the process of chromogenic developing. Between 1911 and 1914 Rudolph Fisher of Germany and Karl Schinzel of Austria invented a color film that had in it the color-forming ingredients known as color couplers. This was an advance over the dye inhibition processes that had currently been popular, whereby a dye image is transferred from a gelatin relief image to the paper or film. This discovery, that color couplers could produce images by

chromogenic development, basically laid the foundation for most color processors used today.

In this type of process, three layers of emulsion are stacked one on top of each other. Emulsion, the light (photo) sensitive coating, typically made of silver halide grains, is spread in a thin gelatin layer onto the paper or film. Actually, you can lay emulsion onto almost anything. Ever hear of Liquid Light? It is proprietary. It is emulsion that you can apply to almost any surface. Shop at B&H on 34th Street or [here](#). During the chromogenic process the dye image is made at the same time that the silver halide image is developed in the emulsion. The silver is eventually bleached away, leaving only the dye which forms the final image. A dye is a colorant that is not water soluble. In chromogenic paper or film there are three layers of emulsion. Each layer is sensitive to a different color, or wavelength, of light. Each layer of the emulsion is sensitive to either blue, green or red. The color couplers in each layer of the emulsion form a dye image in the complementary hue, the opposite of the color of the emulsion layer. I am getting to that.

Basically, here is how the film produces color: during the processing, each layer makes a different black and white image that corresponds to the amount of colored light that was recorded in each individual layer from your exposure. Think of this as adding the density. The developer oxidizes and combines with the color chemical couplers in the emulsion to create these dyes: the Green-sensitive layer forms a Magenta dye; the Blue-sensitive layer forms a Yellow dye; and the Red-sensitive layer forms a Cyan dye.

During the remaining stages of processing, the silver is removed from each of the three layers. This leaves an image created solely from the dyes in each of the three layers. A mixture of these dyes will render the local color of your image. (By "local color" I mean the representational color of the object photographed.) Then basically it is fixed, washed and dried. This is referred to as Color Reversal Paper or Color Reversal Film because the dyes reverse in hue from the emulsion sensitive layers.

Why are the layers of emulsion specifically blue green and red? And why do blue green and red reverse to yellow, magenta and cyan? This is where color theory comes in.

NUGGETS:

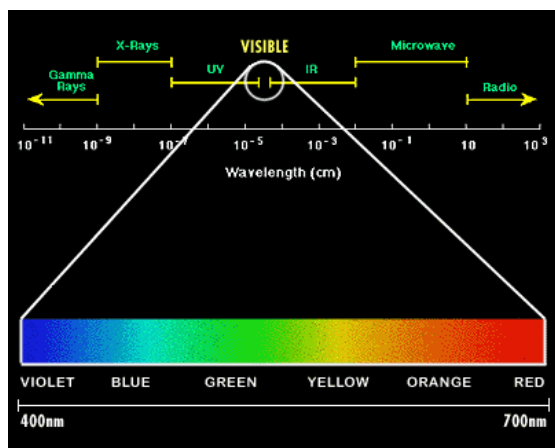
"In order to master camera less photography, I had to reach back to the history of photography and even further back to the history of Optics, the physics of light. The nature of how light is transferred to paper by emulsion is at the very heart of the medium of photography. It also is at the heart of the interaction of light with matter. This is still one of the most basics questions at the forefront of theoretical physics today"

The Physics of Color

What does Color have to do with physics? Color begins with light. Light is energy. And physics is the study of energy and its interaction with matter.

To understand the nature of light and how we get color from light, requires a bit of physics history. No, don't worry! We are not going to go through the entire history of physics. We are going to start at the end, well almost the end. Because at the end, is where we find the basic principles of optics that are applied to chromogenic printing.

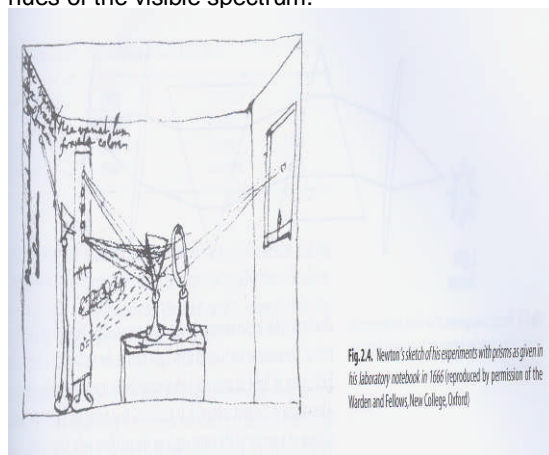
Light waves consist of electric/magnetic fields that interact with the charged particles of matter, especially the electrons. The energy that is transported in the form of light is contained in small, for lack of a better word, packets we call photons. These packets can exhibit both particle-like, as well as wave or string-like behavior. Most color that we see is the result of photons being emitted or absorbed by matter. Some wavelengths are absorbed and some are reflected. If all are absorbed and none are reflected the surface looks black. If all are reflected and none absorbed the surface will look white. We rely on the wave-like behavior of light to explain Color.



On an atomic level, the explanation for why a given surface absorbs only certain wavelengths is that the electrons are limited to particular energy levels. If a photon had just the right energy needed to raise an electron from its normal energy state to a higher one, then the photon could be absorbed. The sensation of color is perceived by the way our brain interprets different wavelengths. Color perception is a neurological function and is part of our object recognition system. Visual cues from the retina travel through the optic nerve for information processing, which takes place primarily in the occipital lobe.

Color is explained by a variety of principles of optics, the most common being Reflection. When we see a red barn, we perceive it as red because the pigment in the painted surface of the barn absorbs all of the incoming wavelengths of white light except red wavelengths. How do we know the incoming wavelengths of white light have all the other colors? That answer, proved by Isaac Newton, is based on the optical principle of Refraction.

Refraction means "to bend." It comes from the Latin *frangere*, meaning to break or to bend, like something that is fragile. When white light is refracted by a prism, it is deconstructed into the hues of the visible spectrum.

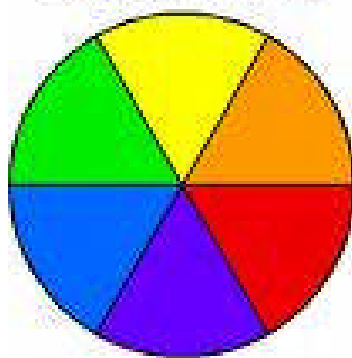


Now that we understand a bit about the physical nature of color we can make sense of the how chromatic relationships are at work in the chromogenic printing process.

Color Theory and Reversal Processes

When white light is refracted by a prism it spreads out in its spectral hues, vernacularly known as 'the colors of the rainbow.' The spectral hues are red, orange, yellow, green, blue and violet. "Hue" means the name of a color. The spectral hues are found in nature in a linear progression as in a rainbow. A color wheel is a color theory model that you get when you take the linear sequence of spectral hues and bend them around to form a circle.

COLOR WHEEL



The color wheel shows, among other things, the chromatic relationships. Complementary hues are colors that are directly opposite each other on the color wheel, for example red and green are complements. Complements, not Compliments.

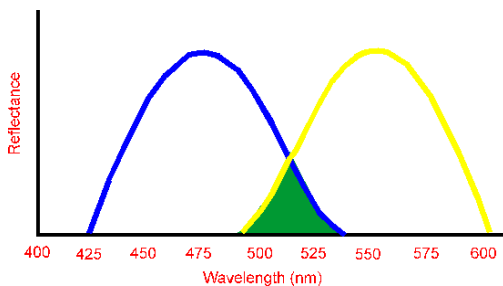
The color wheel also tells us how to mix colors. The wheel shows us that the secondary hues (orange, green & violet) sit between the primaries (red, blue & yellow) and that they can be made by mixing two primaries, e.g. red + yellow = orange. This is called subtractive color mixing. Visit the [Color Playground](#) for color theory fun.

"What does Color have to do with physics? Color begins with light. Light is energy. And physics is the study of energy and its interaction with matter."

"To understand the nature of light and how we get color from light, requires a bit of physics history"

"Color is explained by a variety of principles of optics, the most common being Reflection. When we see a red barn, we perceive it as red because the pigment in the painted surface of the barn absorbs all of the incoming wavelengths of white light except red wavelengths. How do we know the incoming wavelengths of white light have all the other colors?"

Blue paint reflects most light at the short wavelengths and absorbs light of long wavelengths. Yellow paint reflects most light at long wavelengths and absorbs light at short wavelengths. Because blue paint and yellow paint both reflect middle wavelengths, when blue and yellow paint are mixed together, the mixture appears green.



But, and this is a big but, this is not the color wheel we use for Chromogenic Printing.

What? There is another color wheel?

Yes. There is another color wheel: the color wheel for light. And with it comes its own set of chromatic relationships and color mixing system.

Color Arithmetic: Additive and Subtractive Color Mixing

You can think of the color wheel we already discussed as the color wheel for paint. The primary hues were red, blue & yellow. It is subtractive because of the way color is produced. The color red is produced by the pigment in the paint absorbing all of the wavelengths of light except red. The physical explanation for the way it subtracts wavelengths is based on principles of destructive wave Interference (see [here](#))

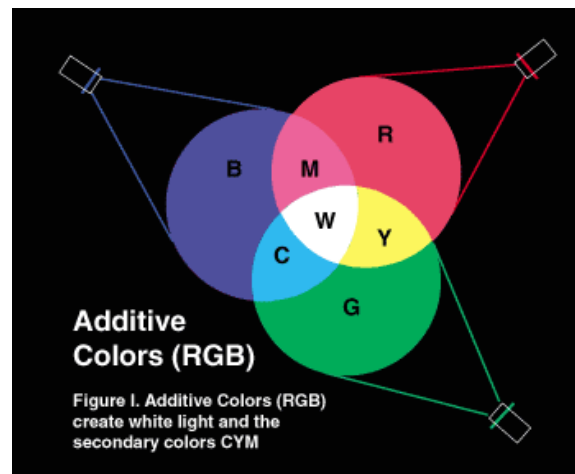
You may be wondering why it is called *subtractive* color mixing when it involves *adding* colors together? Any wavelengths of light that are not absorbed, are reflected. It is the addition of those wavelengths that perceive as the color. Goethe may have said this more poetically, " Thus if two opposite phenomena springing from the same source do not destroy each other when combined, but in their union present a third and pleasing appearance, this result at once indicates their harmonious relation." Johann Wolfgang von Goethe, *Theory of Colors*, 1840.

The language and vocabulary of color mixing is a minefield of linguistic problems much like the language of color theory itself. But this is a linguistics problem-not a color theory problem.

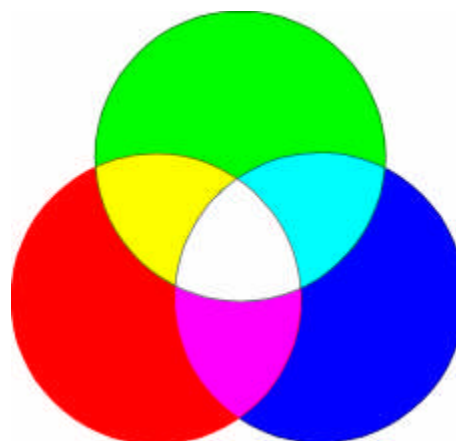
One set of descriptions is appropriate to describe light, or the results we get from additive color mixing. The other is appropriate to describe the perceived color of an object, the result of a surface subtracting light.

Color mixing with light is called additive color mixing. This three color mixing theory of color vision proposed in the 1800s by Thomas Young is the basis for all film, video and computer color systems today. Young propose that adding red,

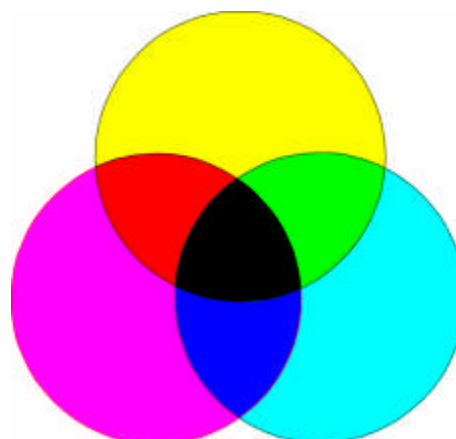
green and blue light together would make most of the colors of the spectrum. These he determined were the primary colors of light because they create a reasonable white. You can think of it as the opposite of Newton's famous prism experiment. Instead of decomposing white light with the prism, he added the spectral hues together to form white light (Newton had also proved this with a second prism.)



The primary colors of light are red, blue & green. The primary colors of paint are red, blue & yellow. Spend a few moments comparing these color wheels.



Additive Color Model



Subtractive Color Model

Can you see how they are related? Look at red, blue and green? Red, blue and green are the colors of the three layers of emulsion used to make C-Prints.

Just as with the color wheel for paint, adding any two primary colors of light creates secondary colors of light. But the hues are very different. Mixing red paint + green paint = muddy paint. Mixing red light + green light = yellow light; Green light + blue light = cyan light; and red light + blue light = magenta light.

Cyan, magenta & yellow (CMY, hereinafter) are the secondary additives or the primary subtractives. This is called an additive color mixing system because the process is additive in nature. Adding red light, blue light and green light (RGB, hereinafter) together make white light. Try it [here](#).

The primary colors of the *subtractive* system are RBY (the primary colors of the color wheel for paint.) But the printing industry calls CMY the subtractive primaries. Using the same language to describe primary colors in both the additive and subtractive mixing system causes a tremendous amount of confusion.

In order to see an object, it has to either emit light or reflect it. Objects that do not produce light are given their color by the subtractive process. The pigment in paint produces color this way. The confusion is caused by the fact that RGB are referred to as the primary colors in a subtractive mixing system. When you add RGB, the primary subtractives, you get CMY, or secondary colors of the additive system. So RGB are the primary additives in the subtractive system. They add together to make the light primaries, CMY (the secondary additives / primary subtractives) producing complements.

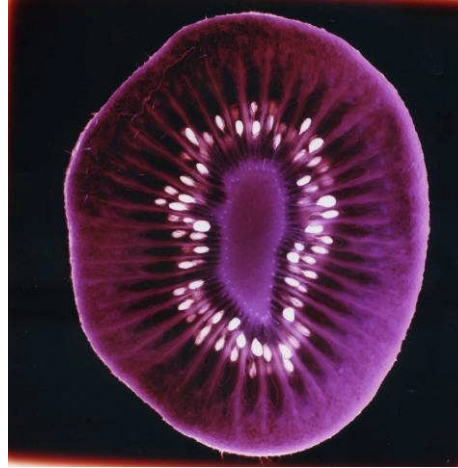
Cyan, magenta & yellow are the reversal colors of chromogenic printing. This explains why color film will show the complementary hues. A red barn will be green on the film. But when you print, the hues reverse again. The chromogenic printing process reverses the green barn on the film back to red.

Your enlarger head uses subtractive mixing as well. The dichromatic filters in the enlarger subtract their secondary additive complement. Remember we said that white light is made up of the three primary colors of light RGB. The three colors that result from mixing additive primaries are CMY, secondary additives/ primary subtractives. The subtractive primaries are the complements of the additive primaries. Cyan is the complement of red, magenta is the complement of green, and yellow is the complement of blue. To determine your 'filter pack' for printing think subtractive!

Blue=Magenta + Cyan; Green=Yellow+ Cyan; and Red= Yellow + Magenta. This is how you convert additive colors to their subtractive equivalents. The filter subtracts its complement. Here is how the magenta filter works: white light (RGB) passing through a magenta filter, subtracts its complement green, transmitting R+B. Red light + blue light = magenta.

Conclusion

Understanding the printing process, how color and light is transferred to paper, is fundamental to photography. In fact, it is photography. With an understanding of the color reversal process, I know that the hue of the object placed or projected onto photogenic paper will reverse to its complement. A color photogram of a kiwi will be magenta.



Knowing this, I work accordingly when I am going to transfer a painting in the darkroom. I have to paint in the subtractive. I know that my composition in green and cyan will print as magenta and red.

Informed use of color theory and printing materials helps you make intelligent choices in the darkroom. Enjoy!

Further Learning

- *Conceptual Physics*, Paul G. Hewitt
- *Exploring Color Photography* by Robert Hirsch
- *Color Photography*, by Henry Horenstein
- *Watercolor Mixing: The 12 Hue Method*, by Christopher Willard
- *Art Fundamentals Theory and Practice*, by Ocvirk, Stinson, Wigg, Bone & Cayton
- *Opticks*, Sir Isaac Newton
- *Interaction of Color*, Joseph Albers
- *Vision and Art: The Biology of Seeing*, by Margaret Livingstone
- *The Color Compendium*, by Hope and Walch
- *The Essential Tension*, by Thomas S. Kuhn

Photo credits

- Press portrait , © Andrew Epstein 2007
- "Magenta Kiwi" © Carol Pfeffer 2007
unique chromogenic projection print

"Understanding the printing process, how color and light is transferred to paper, is fundamental to photography. In fact, it is photography"

PARTING SHOTS

In January of 2006 I sent an e-mail to Eric Draper, the White House Photographer, requesting an interview for PBase Magazine. We were about to publish the fourth addition of this magazine. But, it was also a busy month in Washington, D.C., from Samuel Alito being sworn into the United States Supreme Court, to Jack Abramoff pleading guilty to corruption charges, to peace activist Cindy Sheehan being thrown out of the US Capital moments before President George Bush delivered the State of the Union address to Congress. In other words, the President's photographer was booked solid.

An extremely busy schedule involving the President, world leaders and national events would probably not allow the White House Photographer to be interrupted for an interview with PBase Magazine! After the initial e-mail was sent, and a few additional tries which did not lead to success, the reality set in that the chances of an interview were slim.

Exactly one year later I arrived in D.C. to spend a semester studying and doing an internship. I re-contacted Eric and told him PBase Magazine would still love to interview him. He agreed, at last, and after forwarding my social security number and birthday (measures necessary to gain access into the West Wing), I eagerly began counting down the days. However, when we arrived closer to the date, our photographer had to cancel to be with the President.

My second to last day in Washington was devoted to finishing up my thesis which I had to write for school. It was a major paper in which the final touches were put on in the wee hours of the morning. I stumbled into bed and figured, for the first time this semester, I did not need to set my alarm clock. At approximately 10:30 I woke up and, rubbing my eyes, walked over to my desk. My phone showed a new message. It was Eric Draper. He had a few minutes to meet with me at 12:30. Since I was exhausted, to make sure I was not dreaming I re-played the message. Now I was fully awake. I began racing around my apartment to get ready, jumping into the shower while calling him back to confirm I would be there!

Grabbing a cappuccino in our local coffee shop, I hailed a cab. "The closest you can get to the West Wing of the White House," I told the cabbie. He turned around to see who was sitting in the back of his car, but was probably very disappointed when he saw me! Traffic was minimal and I arrived a little early. As the cab pulled up the driver wished me luck. The White House stood in front of me. Having been outside these gates numerous times before, and having watched every episode of the television show *The West Wing*, the thought of my walking through those black gates was surreal. Yes, this was the

real West Wing. I guess you could say I was in heaven, but quickly came back to Pennsylvania Avenue when a mother tapped me on the shoulder and asked me if I could take a picture of her family. Sure, I love photography!

I walked over to the security guard building and told the guard I was here to see Eric Draper. I am given my pass and walked through the metal detector. To the right, lined up, was the White House press core. I walked past them towards the familiar entrance I had seen on TV, as a backdrop, countless times. Eric welcomed me in the West Wing lobby. The room was very small, but the moment was huge. We walked to his office, down a flight of stairs, past a major presidential advisor and into the old barber shop, now the White House Photography Office. We spoke for about 20 minutes before Eric got word that the President would be landing on Marine One earlier than scheduled, meaning that our interview was almost done.

Before heading out to photograph the President landing, he quickly showed me around. Lining all the halls were photographs Draper had taken of President Bush with major leaders and advisors, in times of great historical importance and small presidential personal moments. This was history, and I had just spoken to the man who was in charge of documenting it.

So while it took a while (PBase Magazine is now proudly on its tenth issue) to obtain a few minutes with Eric Draper, I certainly think it was worth it! My time in Washington ended with a bang! As I headed out of the White House grounds to catch my train, I looked up to see the landing of the helicopter carrying the President of the United States.



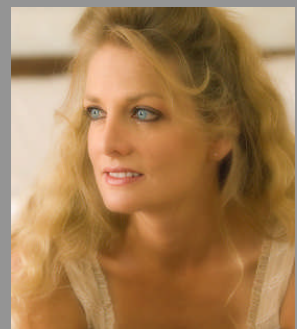
Eric outside the Whitehouse

~ Eric Kuhn

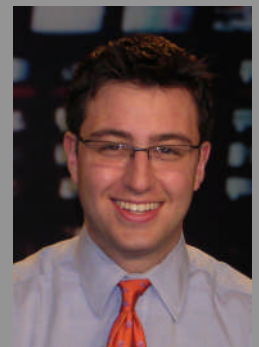
PBASEMAG GANG



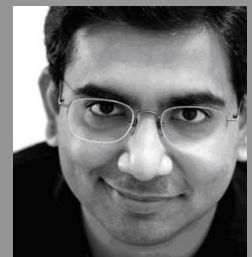
Gary Blanchette,
Cover Design
www.pbase.com/gpaai



Wanda Bates, proof reading
www.pbase.com/slowpokehill



Eric Kuhn, co-editor
www.pbase.com/ejkphoto



Arjun Roychowdhury,
Editor
www.pbase.com/arjunrc

PBASE.com IS HIRING !!

NOTE: This is an Advertisement for the "PBase Magazine" NOT PBASE.COM, so please don't start emailing PBase for joining their staff!

That's right. You heard us, we are **HIRING ! PBase Magazine** is looking for 'columnists' who are talented photographers, artists or experts in their own fields who would like to contribute articles for our magazine.

See below for the great perks that we offer for this job. Do note that there will be several levels of strict interviewing that you will need to go through. After all, we can't afford yet another loony to be a part of our team. We already have ourselves to worry about!



Perks:

- **NO** Pay !
- **NO** 401k
- **NO** Medical
- **NO** Dental (clean teeth is a must before you apply)
- **NO** whatever else you think you deserve!
- **YES** one free PBase Magazine T-Shirt from [here](#)



Do you have it in you? If so, send an email to magazine@pbase.com

(Please provide details of how you can contribute)



To our valued
PBase Magazine Readers,
We thank you
for your continued support.