Varis PhotoMedia Tutorials

Welcome

This tutorial has been prepared for the photographer who is striving to learn digital imaging. I make an effort to supply current information about digital imaging techniques and general information about computer technology that is pertinent for today's professional photographer. This information is based on my personal experience down in the trenches at the front lines of the digital revolution that is sweeping the photographic industry.

One thing is certain: all of the information contained herein will be obsolete in a fairly short time - how short, I can't say. Be forewarned that things are changing very rapidly and the only way to stay competitive is to keep learning. I devote a good percentage of my time learning new things and I am attempting to share what I learn with you but this information will go out of date so you should be flexible and not take this tutorial to be the ultimate statement on the subject.

I consider the knowledge contained in any of my tutorials to be public domain but the form in which this knowledge is presented is copyrighted as are all the photographic images used as examples. Unless otherwise noted all imagery is copyrighted by Lee Varis and any use of these images without permission is forbidden. You are permited to use this tutorial for your personal education - you are not permited to sell or otherwise distribute this material. Please contact me for any other use.

I maintain a web site where I post additional information, examples and tutorials. You are invited to browse various portfolios as well as download free material and purchase additional tutorials at:

http://www.varis.com

I hope you find the information contained in this tutorial helpful. Please let me know if you find any errors or ommissions - I'm always trying to improve these materials! You may contatct me via email at:

varis@varis.com

best regards, Lee Varis 2002

Digital Light Painting

This image was created using digital capture and a special layered lighting technique utilizing Photoshop layer blend modes. We will explore the whole process, from start to finish, in the following pages. Digital capture opens up a whole new way of photography in the studio and complex lighting like this becomes easy to achieve. The key to this procedure is to lock the camera down on a tripod — then each image captured is in perfect registration with the previous image. The photo-digital process becomes more dynamic when images can be manipulated in the computer while you are capturing them, providing creative feedback for photographic decisions.
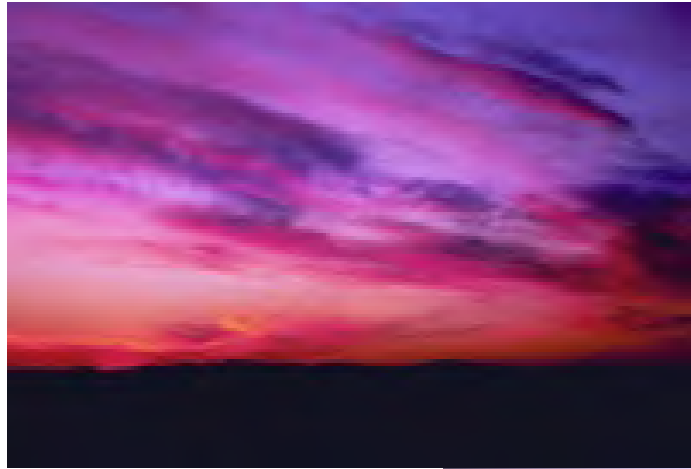
Lighting in Layers

Screen

Screen

Screen

Screen

Multiply

=
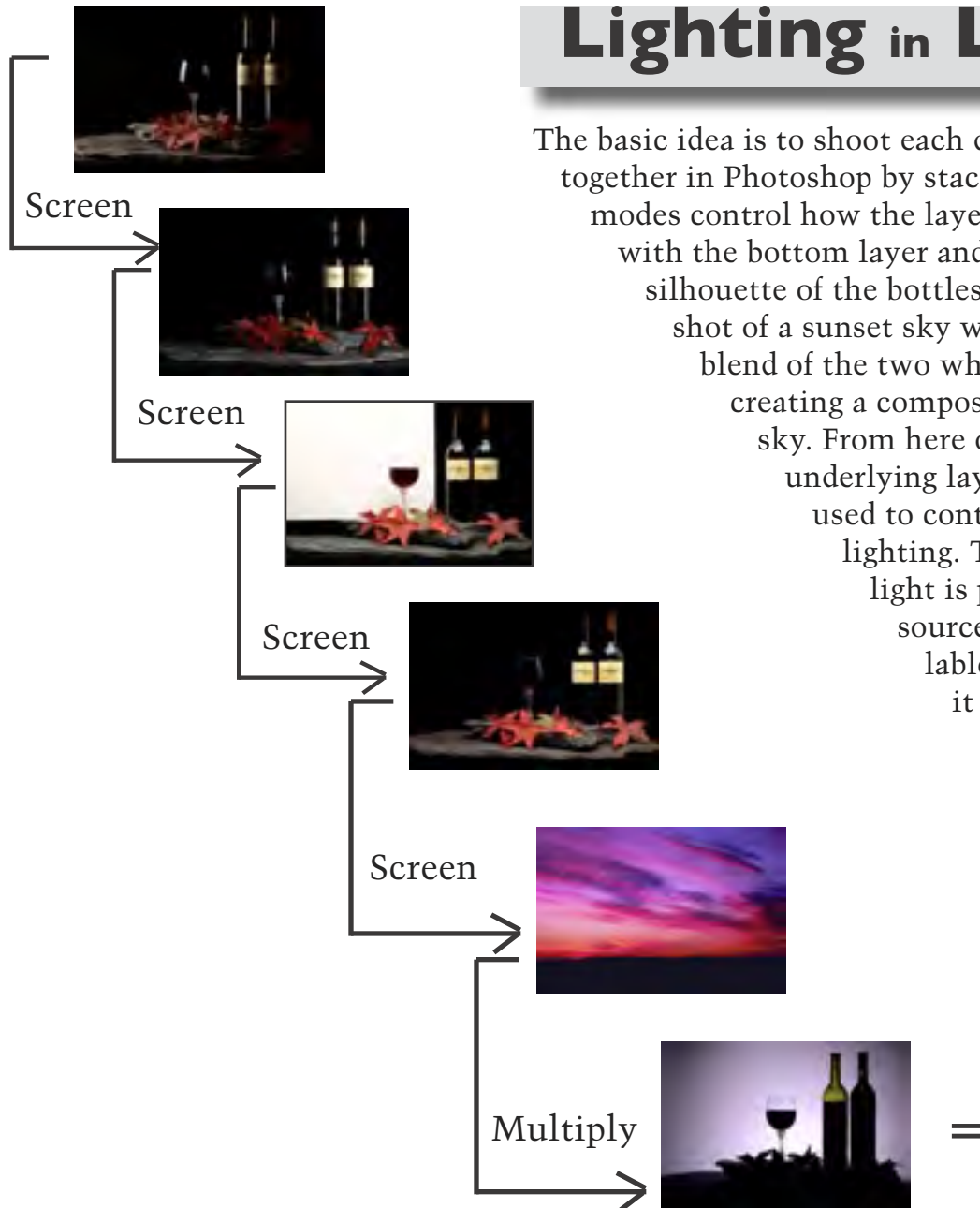
The basic idea is to shoot each different lighting direction separately. Then blend them together in Photoshop by stacking the layers one on top of the other. Different blend modes control how the layers interact with one another. The strategy is to start with the bottom layer and work your way up. In this case the bottom image is the silhouette of the bottles against a white background. The next image is a stock shot of a sunset sky which is multiplied over the first image. The result is a blend of the two where the dark parts darken the light parts of both images creating a composite image with dark silhouetted bottles against a sunset sky. From here on additional image layers will be screened over the underlying layers, gradually building up the lighting. Layer masks are used to control which parts of each layer are used to build up the lighting. The result is similar to "Hosemaster" lighting where light is painted over the subject with a special fiber optic light source. This Photoshop light painting is much more controllable and because the results are immediately apparent, it allows for more experimentation and a much tighter polished look.

Shift drag

Multiply layers to add image detail to clear white areas of background.

```
Dissolve
• Multiply
Screen
Overlay
Soft Light
Hard Light

Color Dodge
Color Burn

Darken
Lighten
Difference
Exclusion

Hue
Saturation
Color
Luminosity
```

The first step is to light the background only – creating a silhouette for the foreground. Place a large white card (foam core) behind the subject with a fair amount of space separating it from the foreground set - that way it is easier to keep unwanted light from spilling onto the foreground.

After you have this shot go into Photoshop and drag the sunset sky file onto the wine silhouette image file. The sky should be pre-scaled to match the size of the wine file. Then the images can be automatically lined up by holding down the shift key while you drag.

At this point you will not see the wine bottles because the sky is on top. Changing the layer apply mode (the drop down menu directly under the layer tab) to multiply will blend the two images by darkening the white card background with the image of the sky.

Shift drag

Shoot a new lighting setup
and screen the layer in
Photoshop to add light.

Next add overall foreground lighting — in this
case supplied by a medium softbox. Change
out the white background for a black one
(black Tuflock) before you shoot.

Assuming that the camera is locked down on
a tripod, all the subsequent shots will be reg-
istered; shift drag the file on top of the silhou-
ette sky combo to add this foreground light to
the background. This time change the apply
mode to screen. The foreground light will be
added into the silhouetted wine set.

Output Levels: 17 255

To control where the light is applied add a **layer mask** to this top layer by clicking on the mask icon at the bottom of the layer pallet

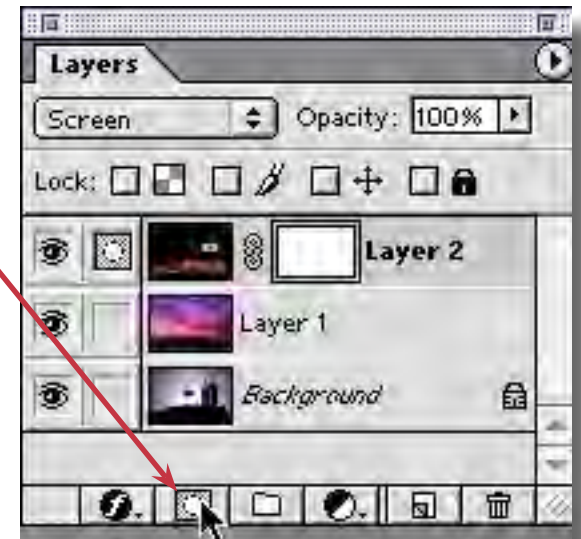- then **invert** the mask to black: (press Cmd/Ctrl-i) Add in the light slightly by bringing up the levels dialog - (Cmd/control-L) and slide the black triangle at the bottom of the dialog to the right just a bit.

This will gray up the mask revealing a little bit of the overall light.

Layer Mask

Use layer masks to control light: paint with white in the mask to add light from the layer, paint with black to hide it.

Now choose a soft airbrush and paint into the mask with white to "paint in" the light where you want it — in this case lightening the labels and the right side of the wine bottles.

Use a lower opacity setting (10-30%) with the airbrush to gradually build up light. Mistakes can be corrected by painting with black into the mask. Very subtle lighting effects can be achieved this way, blending different light sources and building up the light one layer at a time.

Continue adding new lighting directions, reflections, etc... by screening on top of the composite-in-progress. Hide reflector cards with layer masks.

The next layer is a shot with a white card placed right behind the wine glass. Shift drag this file over the composite, change apply mode to screen and create a layer mask to hide the layer. Now use the airbrush and paint into the mask with white to put a soft glow behind the glass. Next, add the highlights from the left bottle.

This layer mask technique allows a much freer placement of white cards and other light controllers because now you don't have to be concerned with these things showing up in the shot. Reflections and shadows can be created in the ideal position and simply painted in to avoid showing the source.

The next lighting set up is used only for the leaves. Shift drag this shot onto the composite, create layer mask and paint in the mask to create the dappled lighting effect. Sometimes where we *don't* see light is more important than where we do see it — less is more! Keep examining the light and add only those areas that have really good light quality, like the highlights on the stem of the wine glass in this shot.

Use only the best parts of the individual images for the composite.

Don't be afraid to change the intensity of the layer or even do a curve or levels adjustment in the new layer once you have the lighting in place. It is easy see how the newly added light interacts with the rest of the image — make adjustments as needed.

The final lighting layer brings in light from the left to add texture to the stones and leaves.

Proceed as before by shift dragging, screen, layer mask and paint into the mask with white. Because this light is in a separate layer it is easy to change not only the intensity but the color of the light as well...

Make sure you have the image layer selected and call up the Hue/Saturation dialog (Cmd/Ctrl - U.).
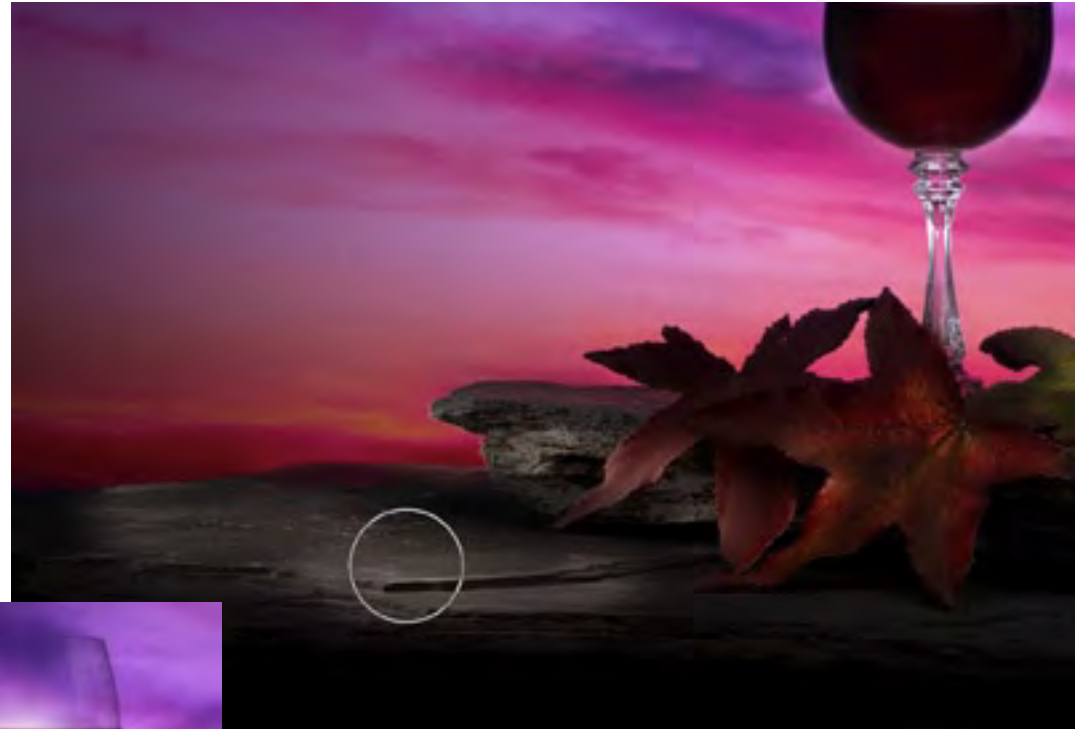
Check the Colorize radio button and slide the Hue triangle to the desired color. This kind of control is much better than using gels over the lights.
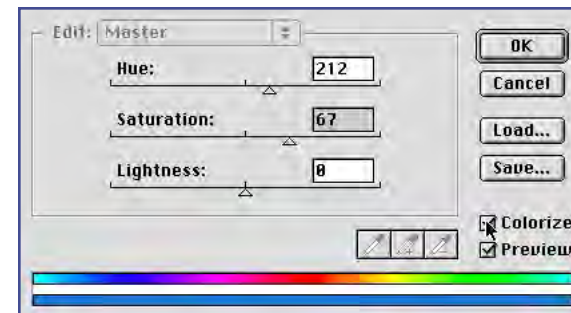
Create color effects by using Hue/ Saturation to colorize individual lighting layers.

Conclusion

The final image can be further refined with adjustment layers and a blur layer. These additional layers are treated the same way — create a layer mask and paint in where you want the effect. Here the color of the wine was enhanced with a levels adjustment layer that brightens up the red channel in the image, painting it into the wine glass and the bottles with a soft airbrush. The subtle diffusion effect is created by duplicating the merged layers, running a Gaussian blur and bringing this image over the rest of the composite at a reduced opacity. A layer mask can be used to further control the effect.

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Thank you

I hope you enjoyed this tutorial. The techniques outlined here represent just the tip of the iceberg. Photoshop is a very deep application - a person could spend years studying it and there will always be more to learn. If all this seems a little overwhelming, take a break, do what you feel comfortable doing in Photoshop and return to this tutorial again later on. Often, it takes several weeks for a particular technique to sink in so give it time.

I have other tutorials available online (navigate to the methods section), some are free and some are available for a modest charge. See tutorials and some examples of my work at:

http://www.varis.com

There are many learning resourses available on the web - here are a few other sites with good information:

http://www.russellbrown.com   http://www.creativepro.com

http://luminous-landscape.com/   http://www.imaging-resource.com/HOWTO.HTM

http://www.photoworkshop.com/   http://www.adobe.com/misc/training.html

http://studio.adobe.com/expertcenter/photoshop/   http://www.ledet.com/margulis/articles.html
main.html

http://www.steves-digicams.com/   http://www.photoshopuser.com/

http://www.handson.nu/   http://photoshopgurus.info/

Thes last two links are typical of the majority of Photoshop tutorial sites - they are focused on cool graphics effects not photography. You might want to look over this material anyway - sometimes you can learn alot about basic functions in Photoshop.

I'm always trying to improve these materials and I'm always open to your feedback. You may contatct me via email at:

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best regards, Lee Varis 2002