

## Photoshop II Class 7 Notes – Robert Berdan

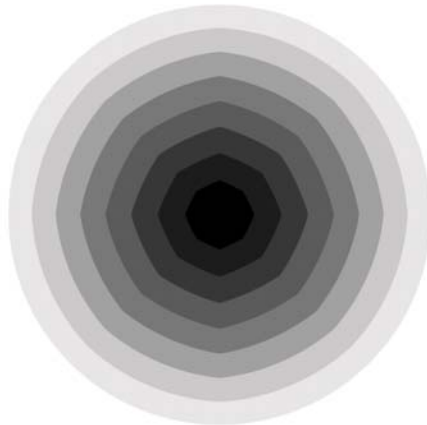
In this class we will utilize a variety of tools to improve your photographs specifically:

1. Shadow Highlight Tool
2. Extend or expand the dynamic range of a photograph
3. Replace the sky in a photograph with detailed components like trees
4. Match color to a product
5. Students will show their PDF slide portfolios
6. Course evaluation

### Hour I

Shadow Highlight tool is used to open up shadows or bring detail back into burned out highlights.

View movie – In the Shadows – 5 minutes shows various sliders and how to create a custom short cut key.



Open the image above select the Shadow Highlight tool and modify the settings to view how it affects the various shades.

**Example 1** – text book page 60 open and adjust the image using the Shadow highlight tool as per instructions.

Additional examples – the Shadow highlight tool does a very good job of opening up the shadows in images that were underexposed due to strong backlighting – see portrait image, kayaker – try the shadow highlight tool on these images to improve their overall appearance.

### Extending the dynamic range of a photograph

The dynamic range of an image refers to the ability of the camera and film or digital chip to capture light from the darkest areas to the lightest areas in the image that still contain detail.

The dynamic range varies with different types of film and with different digital cameras. The range is measured in F-stops.

Dyanmic Range

Veliva - approx 5.5 F-stops

Color negative film – about 7-8 F-stops

B & W film (depends on how its processed) - approx 6-10 F-stops

Digital Cameras – dynamic range varies from about 6-12 F-stops, the Fuji S3 digital camera has the greatest dynamic range of any digital camera, the Nikon D2X has about 7 –F-stop range (RAW format).

For a more complete description see the following web site by Norman Koran:

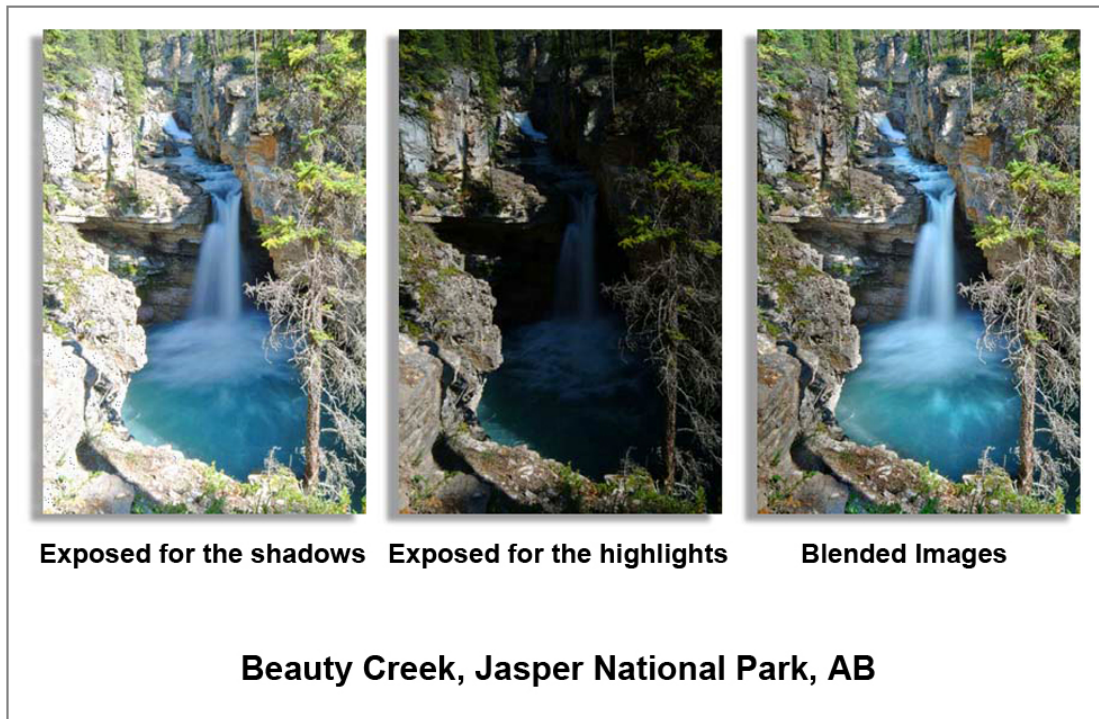
[http://www.normankoren.com/digital\\_tonality.html](http://www.normankoren.com/digital_tonality.html)

You can expand the dynamic range of a photo a variety of ways – with digital it becomes particularly easy to do.

Method 1 – take two pictures and combine them, expose one for the highlight and the other for the shadows. You can combine them in photoshop using layers then blend the two (see text book page 62), or you can use a dedicated program like photomatix

(<http://www.panoscan.com/PhotoMatrixPage/Photomatix.html>) Download free version here:

<http://www.hdrsoft.com/download.html>



Photography Rinus Borgsteede ©

Science & Art © [www.scienceandart.ca](http://www.scienceandart.ca) & [www.scienceandart.org](http://www.scienceandart.org)

Here are two images one exposed for the shadows (left) the other for the highlights (middle) and then the combined image (right). The images were taken in a canyon on a sunny day with an extreme dynamic range. The combined image resembles images taken on an overcast day with a much lower dynamic range.

Fred Miranda also provides a custom Action and a plug-in called DRI – that can be purchased to automatically extend the range if you have two differently exposed images. I will demo this tool in class. More information available here: <http://www.fredmiranda.com/DRI/>

Also check out digital blending technique at Luminous Landscape web site:

<http://www.luminous-landscape.com/tutorials/digital-blending.shtml>

Another technique for expanding the dynamic range of an image requires Photoshop CS2 – called the HDR function. This function is under the Automate menu. In this case you take a series of images over and underexposing. I tested this by shooting directly into the sun and making a series of exposures in 1 F-stop increments 5 over and 5 under then combining them.



The resultant image showed detail in the water and clouds around the sun that was far better than using a grad filter or any other technique I have ever used. I estimate the dynamic range to be about 12 F-stops.

This technique requires CS2 – so will not be demonstrated in class, but those students owning CS2 may want to give the technique a try. There is some tweaking you will need to do – see your Photoshop manual.

### **Hour II - approx 30 minutes**

Sky Replacing – page 86 in text book. We will create a mask using a channel to make a selection then drag a new sky into the image and blend it.

Match color to product – page 176 – 178. This technique permits you to match colors in different images.

### **Final 90 minutes:**

Students will present their PDF slide presentations including a portfolio of 20 images. The class is invited to make comments.

### **Course evaluation by Students – future directions, additional workshops**