

Fundamental Editing Case Study #5

NIGHT PHOTOGRAPHY WITH EXCESSIVE NOISE AND WHITE BALANCE ISSUES

By Kent DuFault

Image 001 is the original image file as it emerged in the camera RAW format from my Panasonic LUMIX camera.

Upon first inspection, it looks pretty good.

However, it does have digital noise problems. The color is weak and off hue, as compared to my memory of the scene. Plus, the composition suffers a bit from a lack of direction (like we saw in Case Study #4).



Image 001 – Photograph by Kent DuFault



Image 002 – Photograph and Illustration by Kent DuFault

When I shot this picture, my fascination was in the juxtaposition of the old style of architecture compared to the new form.

The blue oval, depicted in Image 002, is my intent for the picture. I really want to focus a viewer's eyes on that portion of the frame.

The red arrows point to a couple of problems that draw visual weight away from my subject area.

I also find the color to be less dramatic than I remember seeing with my eyes.

All of this will be addressed in the Fundamental Editing steps.

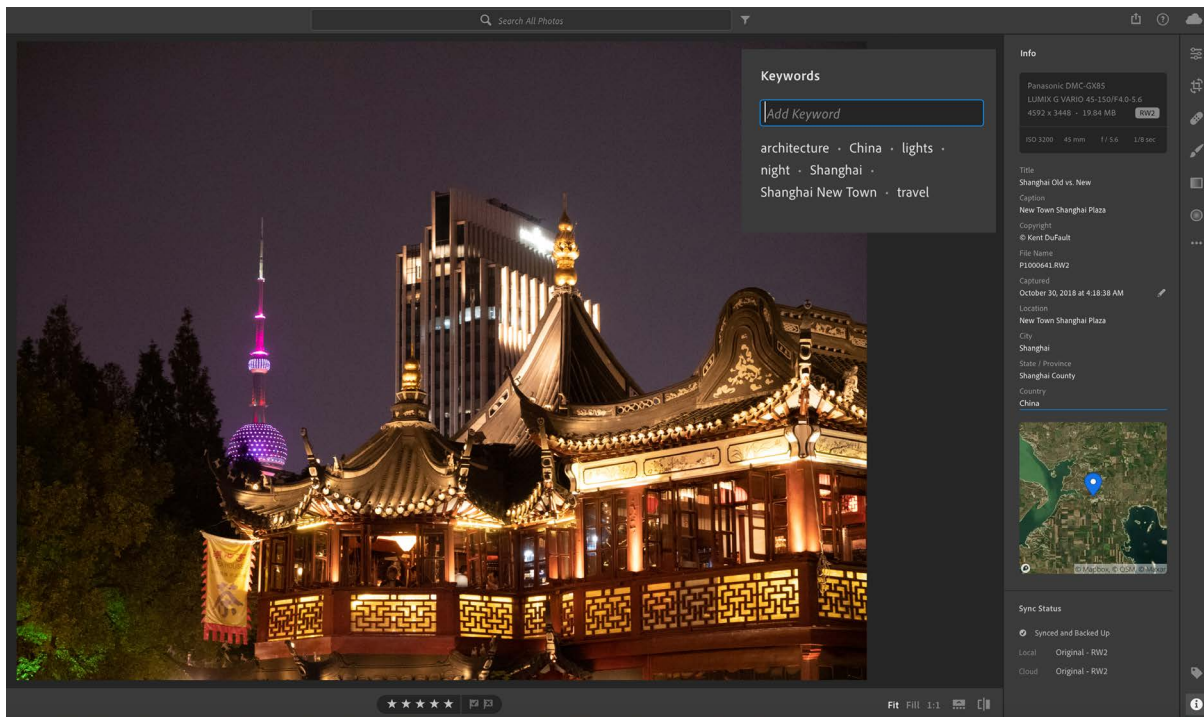


Image 003 – Screenshot by Kent DuFault

As always, I complete my metadata and keywords first.

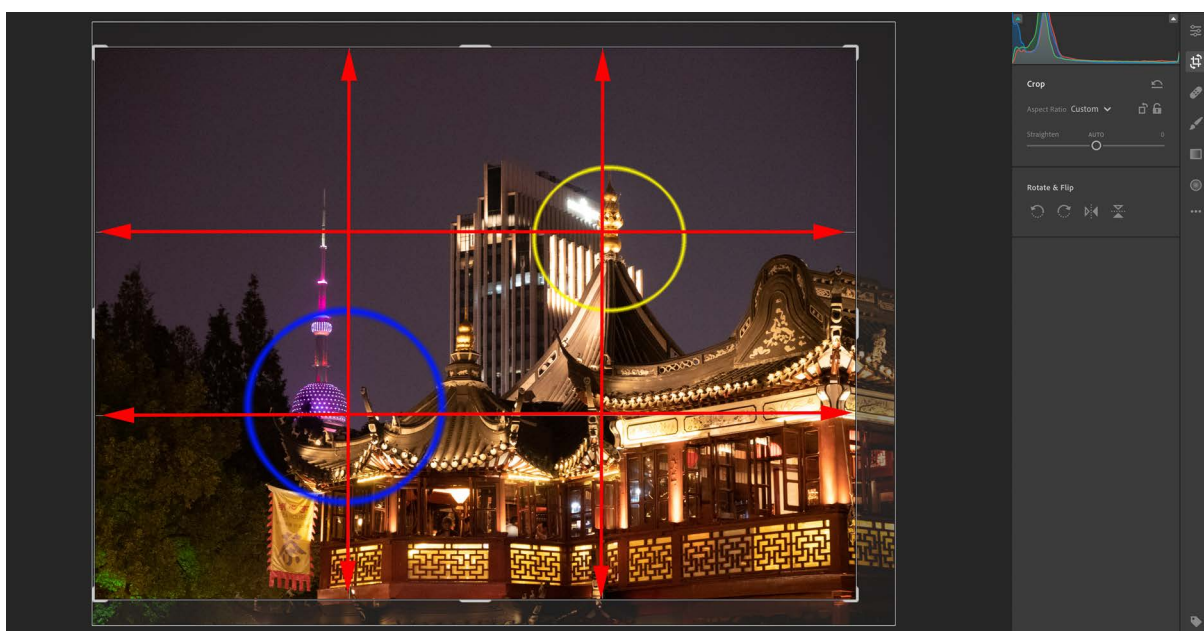


Image 004 – Screenshot by Kent DuFault

A slight crop will definitely improve my use of space for this photograph.

I can place my subject area onto the left-side crosshairs for the Rule of Thirds. I can also place the office building onto the right-side set of

crosshairs for the Rule of Thirds. This will set me up to use that right-side building as a focal point.

By removing some image area from the bottom, it helps lessen the impact of the bright green trees as an eyesnag on the left.

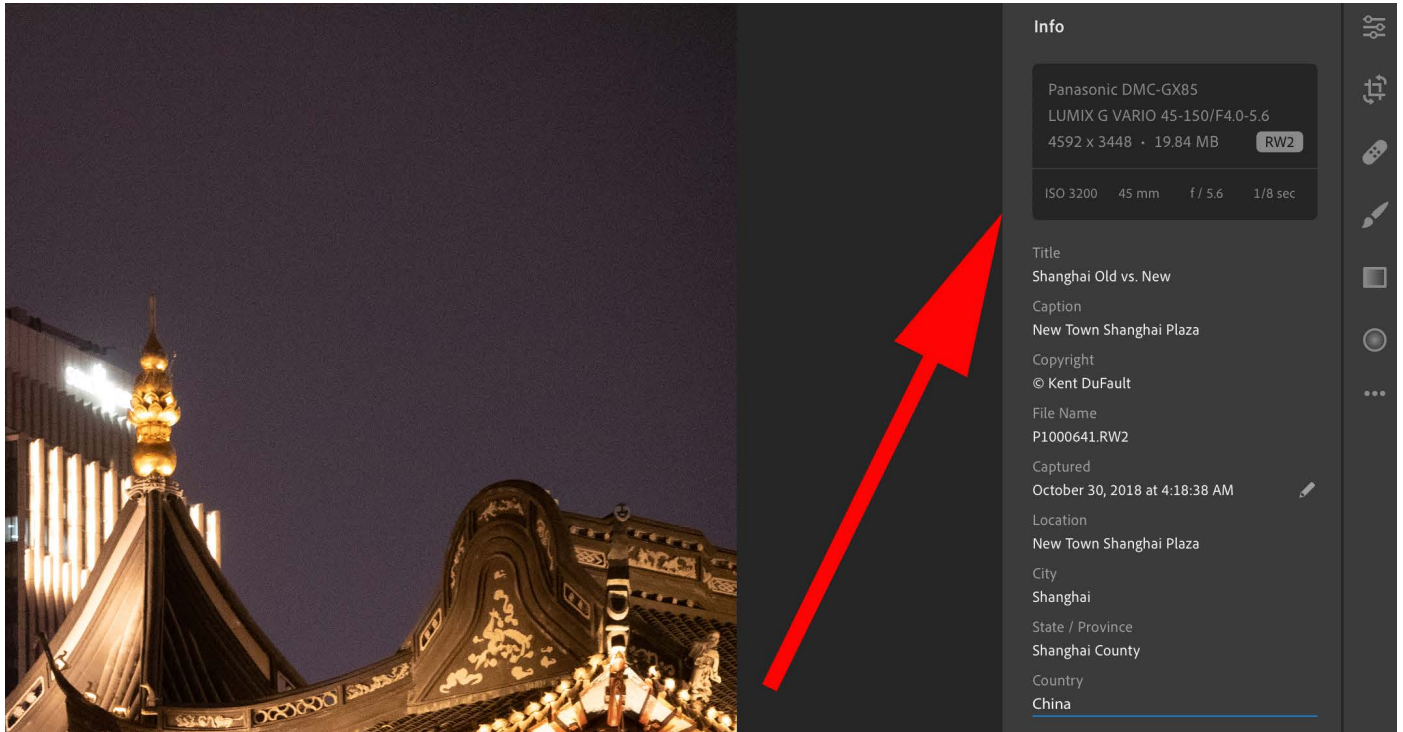


Image 005 – Screenshot by Kent DuFault

This photograph was created at an ISO setting of 3200. For my particular LUMIX camera, that ISO setting will generate a lot of noise.

This will be a significant problem that needs to be addressed first.



Image 006 – Screenshots by Kent DuFault

I've included Image 006 so that you can compare the difference between Lightroom's Noise Reduction tool and the Topaz Labs software called, DeNoise AI.

I touched upon DeNoise AI in Case Study #4.

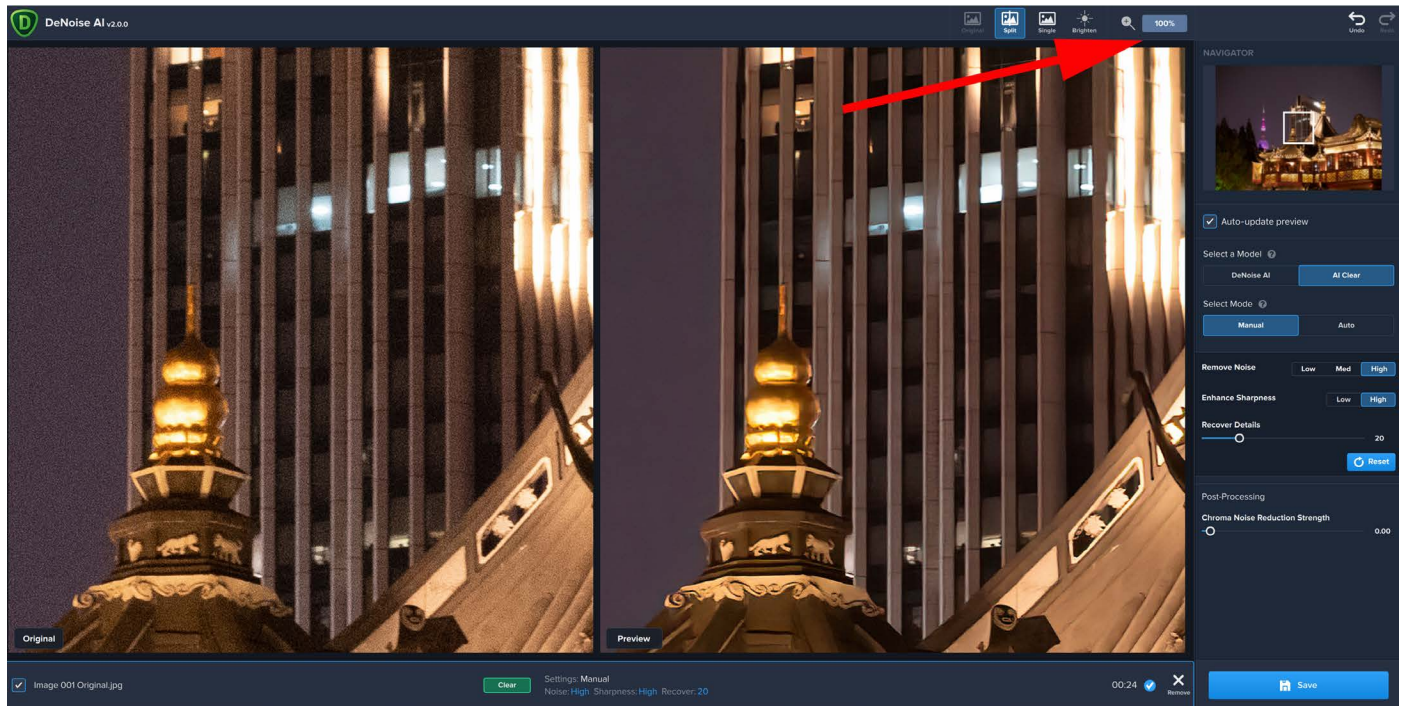


Image 007 – Screenshot by Kent DuFault

Here is a screenshot of the DeNoise AI workspace.

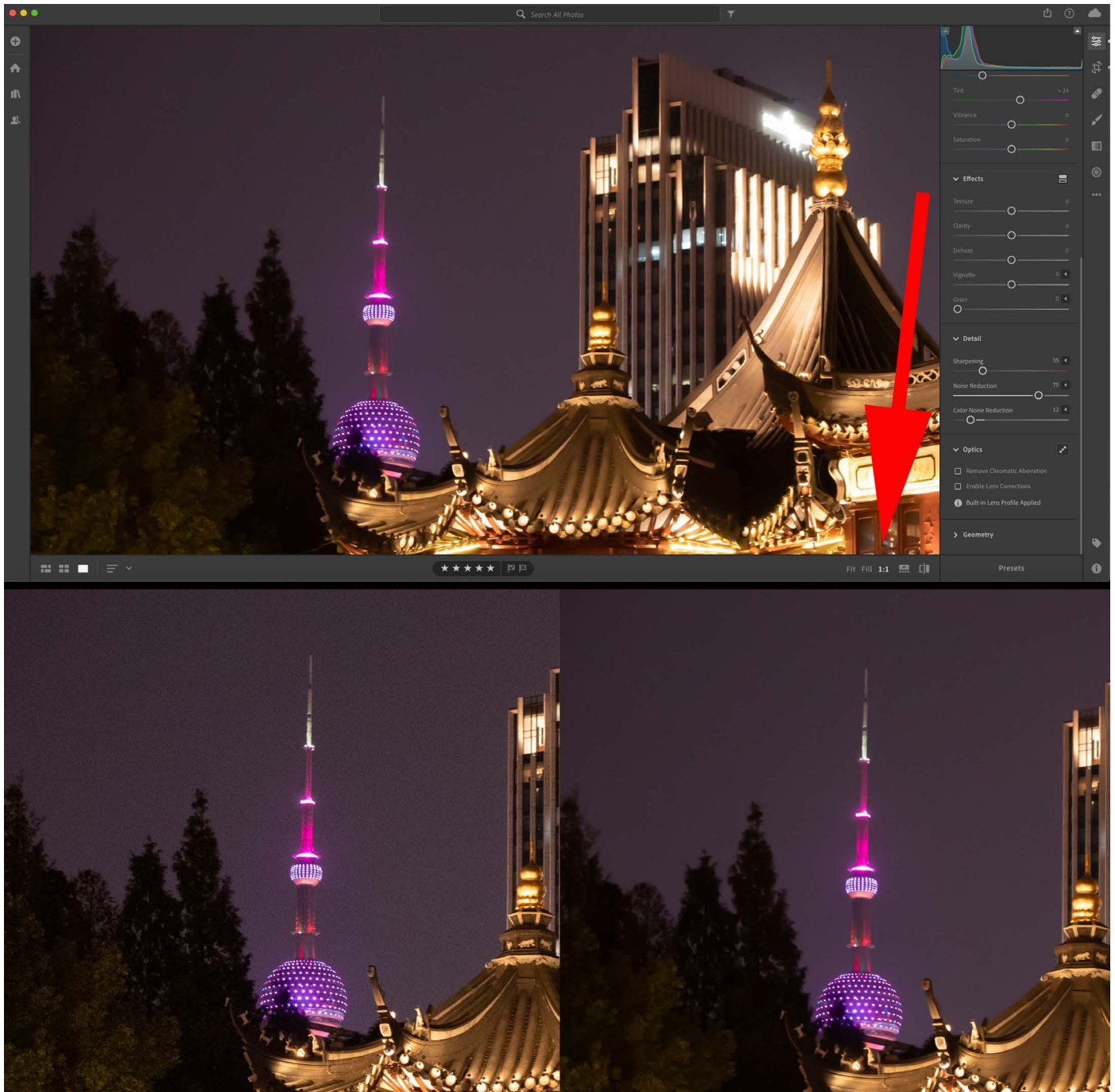


Image 008 – Screenshots by Kent DuFault

Here you can see the Lightroom Noise Reduction tool. To eliminate the noise, I had to raise the Noise Reduction slider all the way to 75, and I also had to set the Color Noise Reduction slider to 12.

The bottom section of Image 008 shows the noisy version on the left and the noise-reduced version on the right. The previews are both at 100%.



Image 009 – Photograph by Kent DuFault

After examining the results from both programs, I decided to go with the DeNoise AI software. The Topaz Labs product held better details after cleaning up all of the digital noise.

Image 009 shows the full picture after the DeNoise AI application.

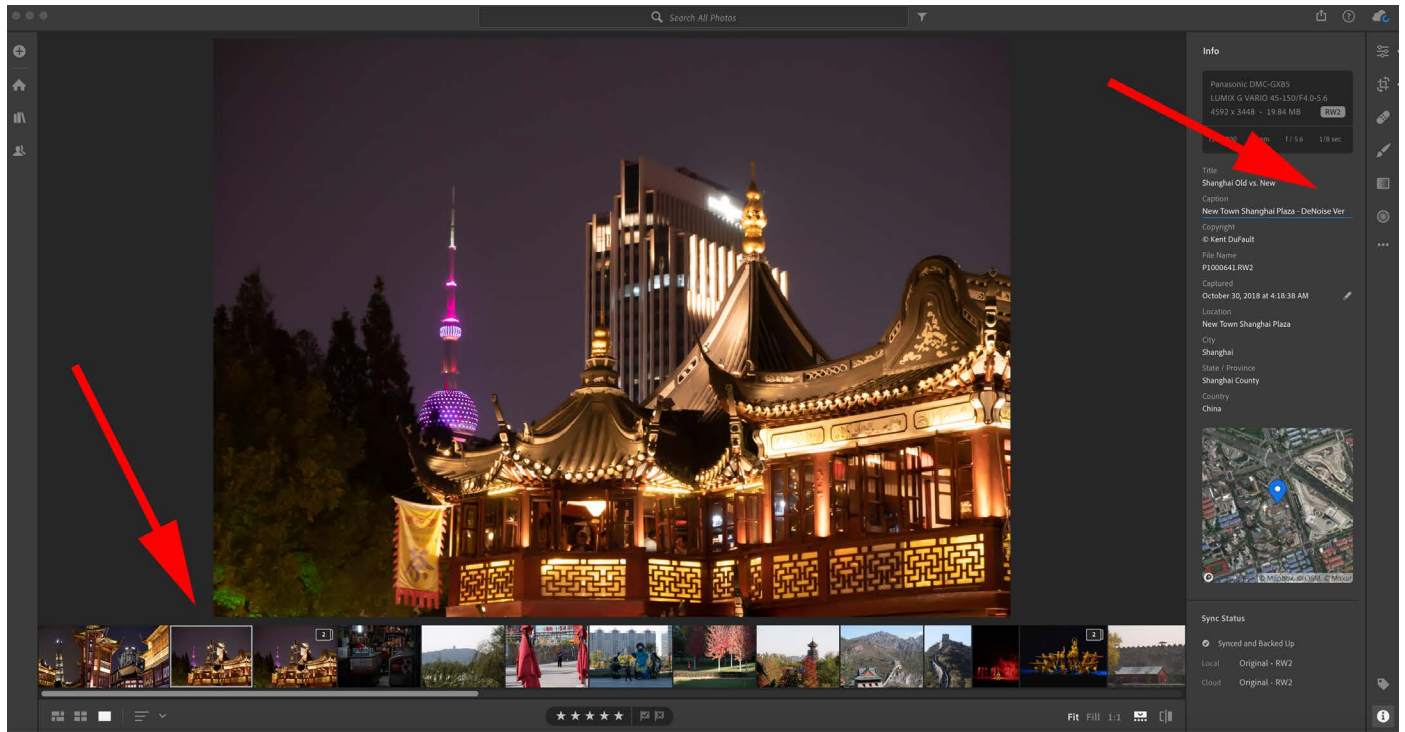


Image 010 – Screenshot by Kent DuFault

In Case Study #4, I talked about the importance of labeling if you use a third-party software program after you've already loaded your image into Lightroom.

Image 010 shows you how the two versions sit side by side in the Lightroom Filmstrip Mode, and how one is identified as the DeNoise AI version.

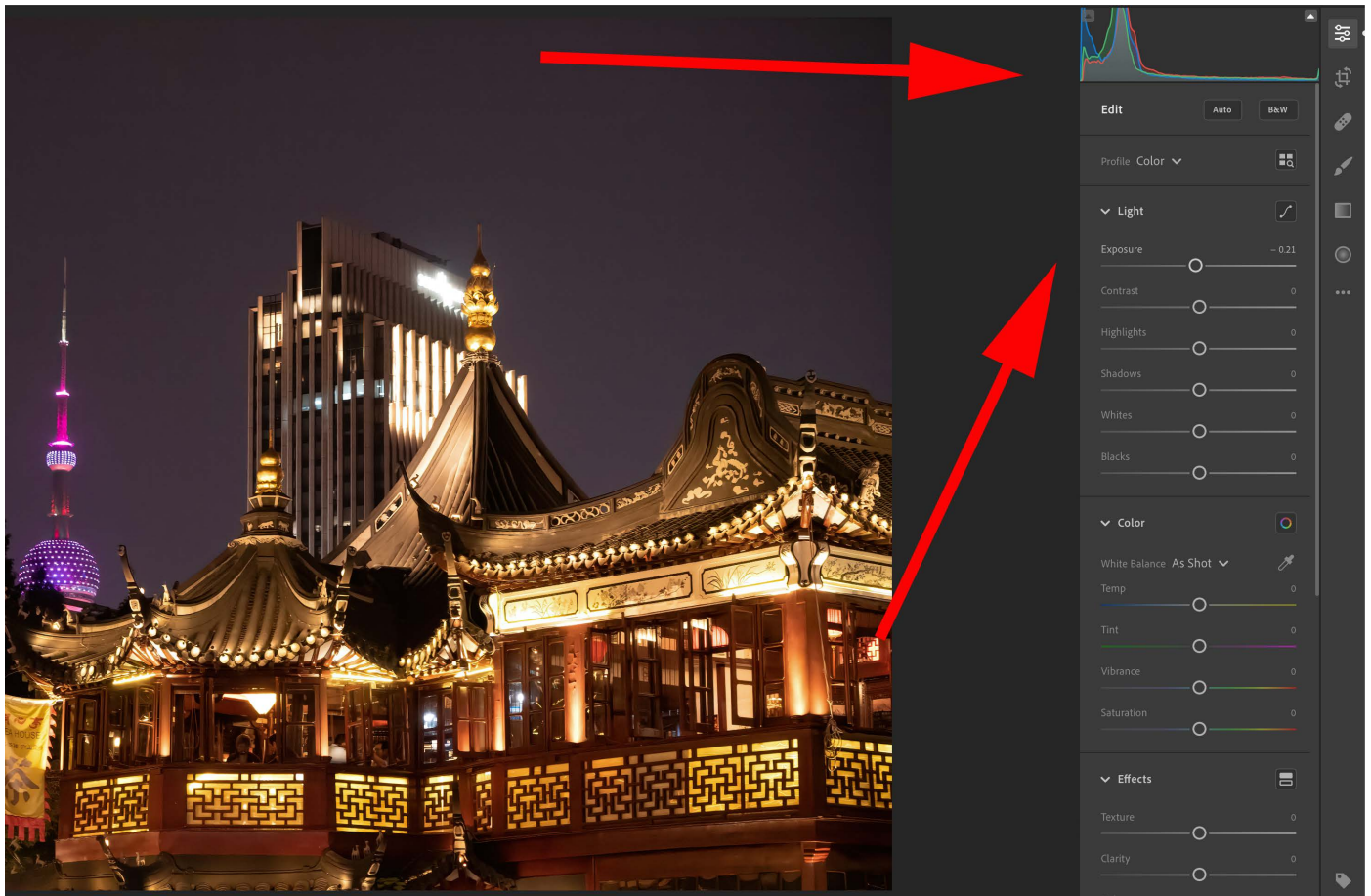


Image 011 – Screenshot by Kent DuFault

The next step in Fundamental Editing is the global Exposure adjustment. For this photograph, I reduced the Exposure to -0.21.

It seems odd to reduce Exposure for a night shot, doesn't it?

But based upon my camera settings, the camera meter pushed the exposure to the right on the histogram. So, my shadows were somewhat washed out.

The global reduction in Exposure helps to deepen the shadows, which also results in better color saturation overall.



Image 012 – Screenshot by Kent DuFault

I remembered to turn on my Clipping Indicators. As you can see, I have quite a bit of Highlights Clipping. But the Shadows aren't Clipped at all. They fall nicely right at the end of the histogram scale.

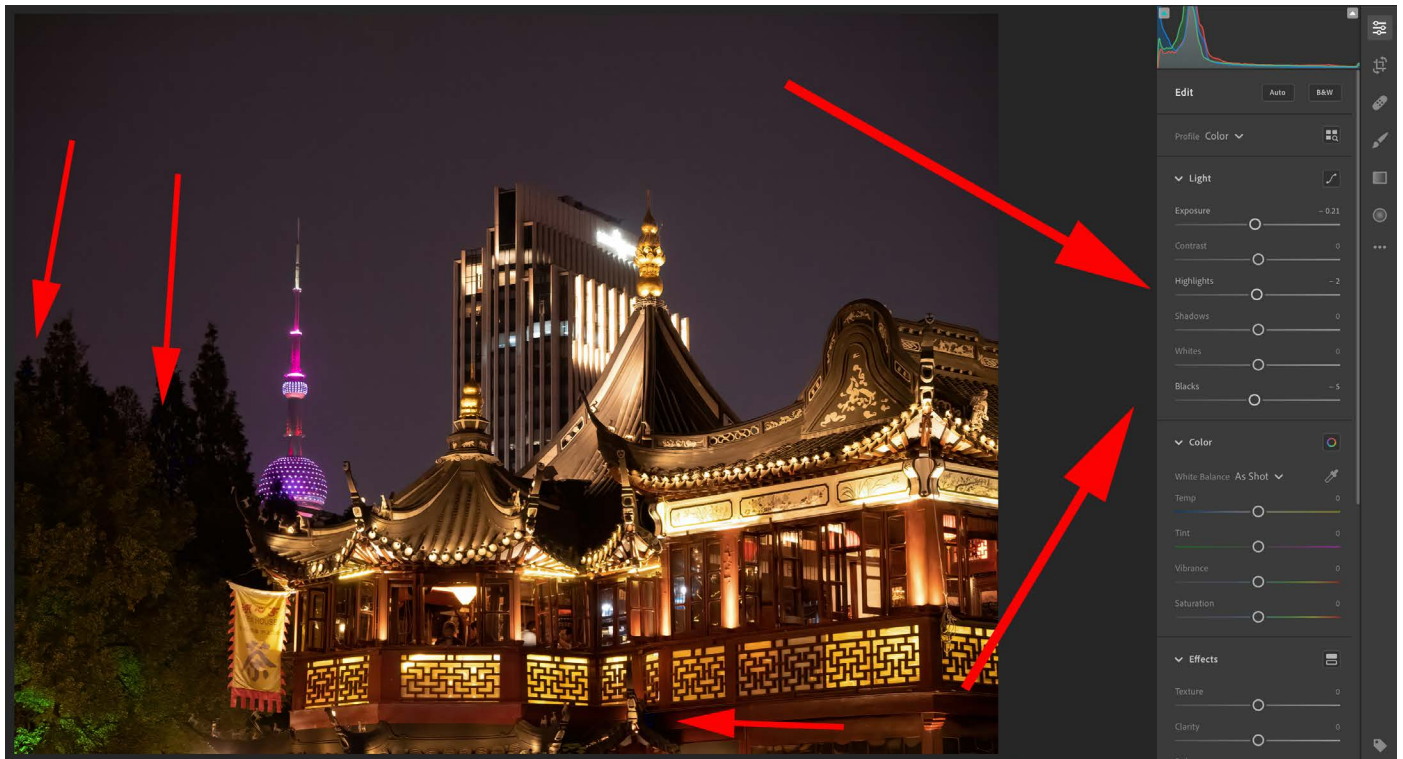


Image 013 – Screenshot by Kent DuFault

It's essential to set a Black Point (total black with no detail) and a White Point (complete white with no detail) to give your picture a full tonal scale. For this photo, setting the Highlights slider to -2 eliminated the Highlights Clipping, and setting the Blacks slider to -5 brought in the tiniest bit of Shadows Clipping into the left central part of the frame in the trees.

You can use the Clipping Indicators to help you set the Black and White Points. When the mask begins to show up on the Preview image, you have your

Point set. Just make sure that the Black and White Points are **not** on the subject area.

Note: Not all images will have an exact Black Point or White Point. It can depend upon how the scene was lit and the conditions of the environment. If you find yourself widely moving sliders around trying to get the Clipping Indicator masks to light up, then stop right there! Put the sliders back where they were and move on through the FE list without setting these points.

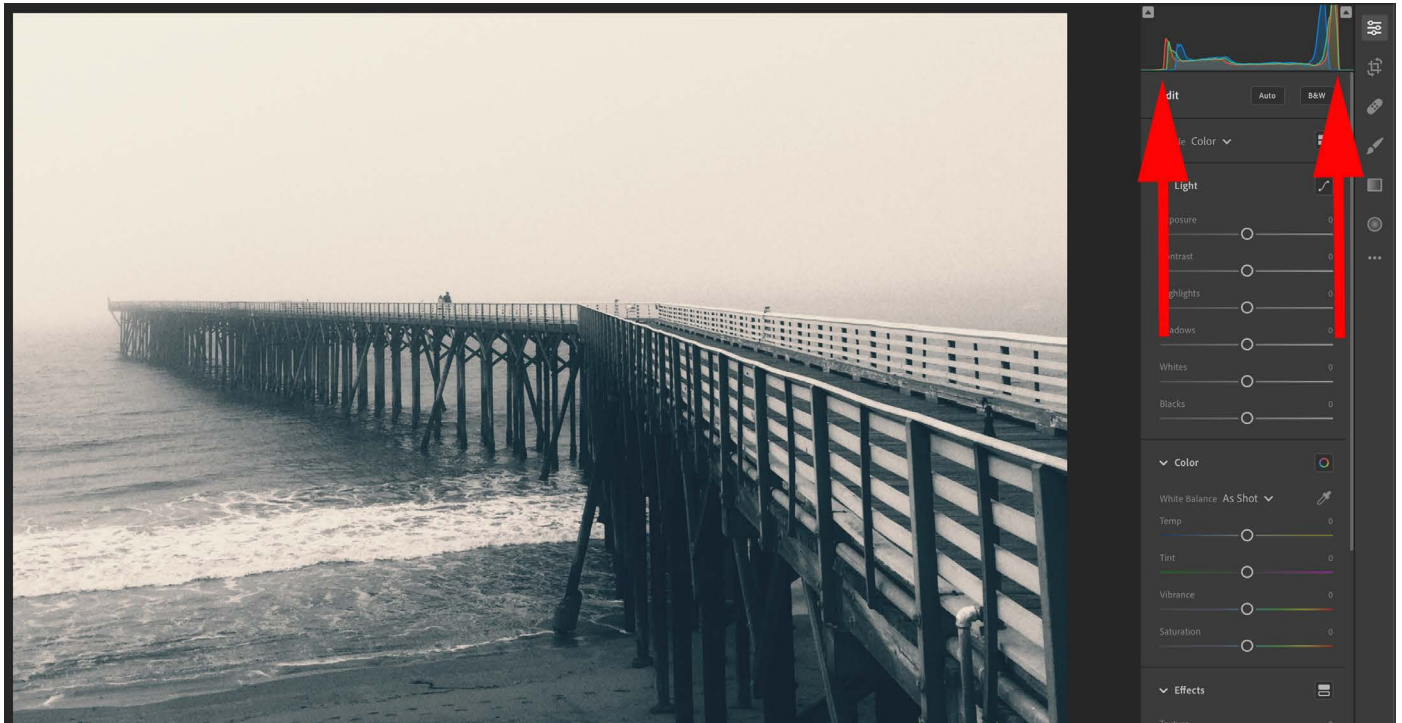


Image 013a – Photograph by Kent DuFault

I thought it might be helpful to show you an example photograph, where setting the Black Point and White Point doesn't work.

Look at the histogram in Image 013a. Do you see how it doesn't reach the end of the scale on either side? This indicates that there isn't a pure black

or true white within this picture. The Clipping Indicators have no clipping to show.

Fog and misty environments are two types of photos where you probably won't have to set a Black or White Point.

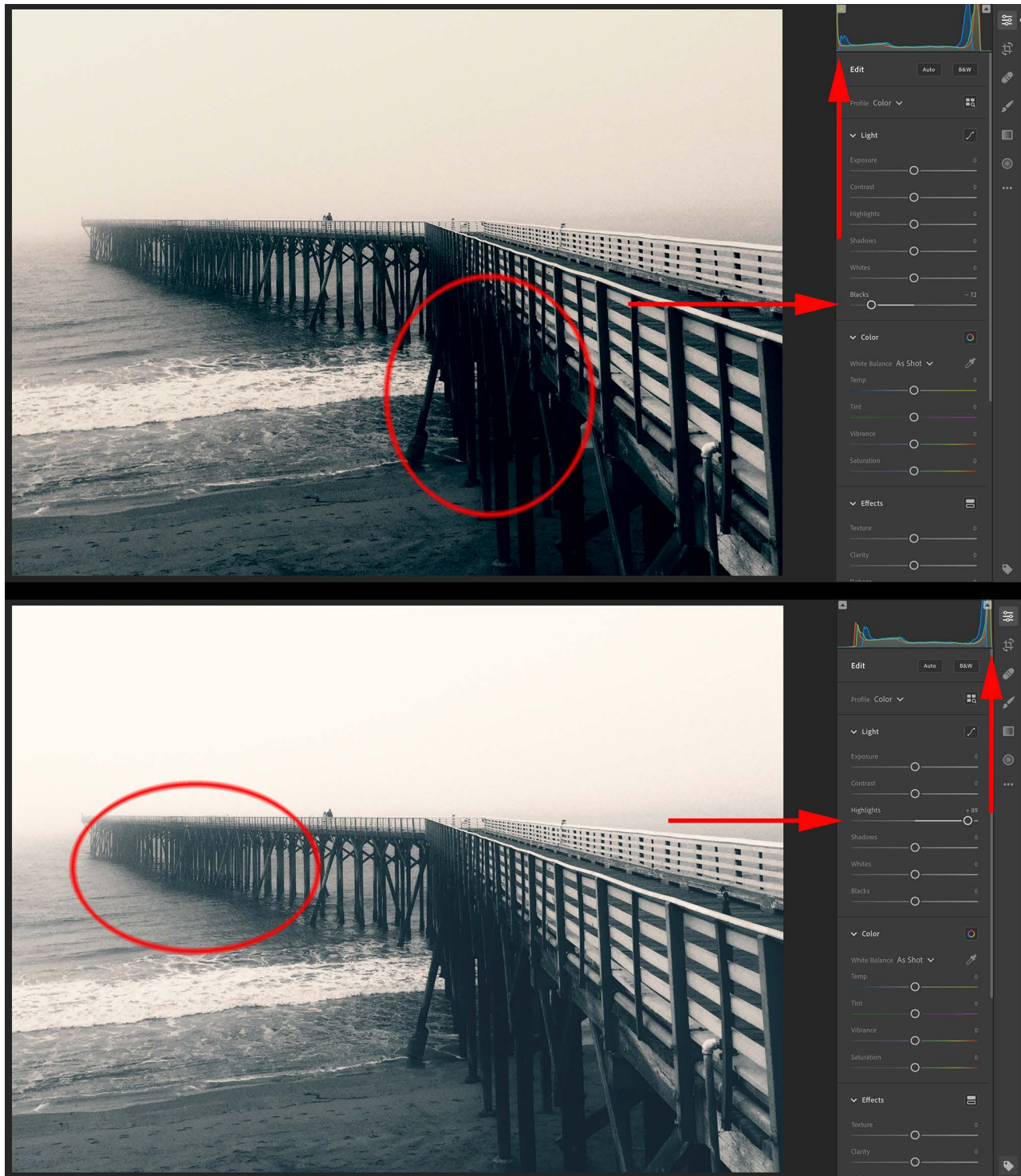


Image 013b – Screenshots by Kent DuFault

The top example shown in Image 013b shows what happens when I try to create a Black Point. The shadows become inky and unnatural-looking. It ruins the mood of the picture.

The bottom example shows what happens when I try to create a White Point. I practically maxed

out the Highlights slider and still couldn't achieve any Highlights Clipping. Also, some of the middle tones became washed out and noisy. This also ruined the mood.

This picture is a perfect example of when to ignore the Black and White Point steps.

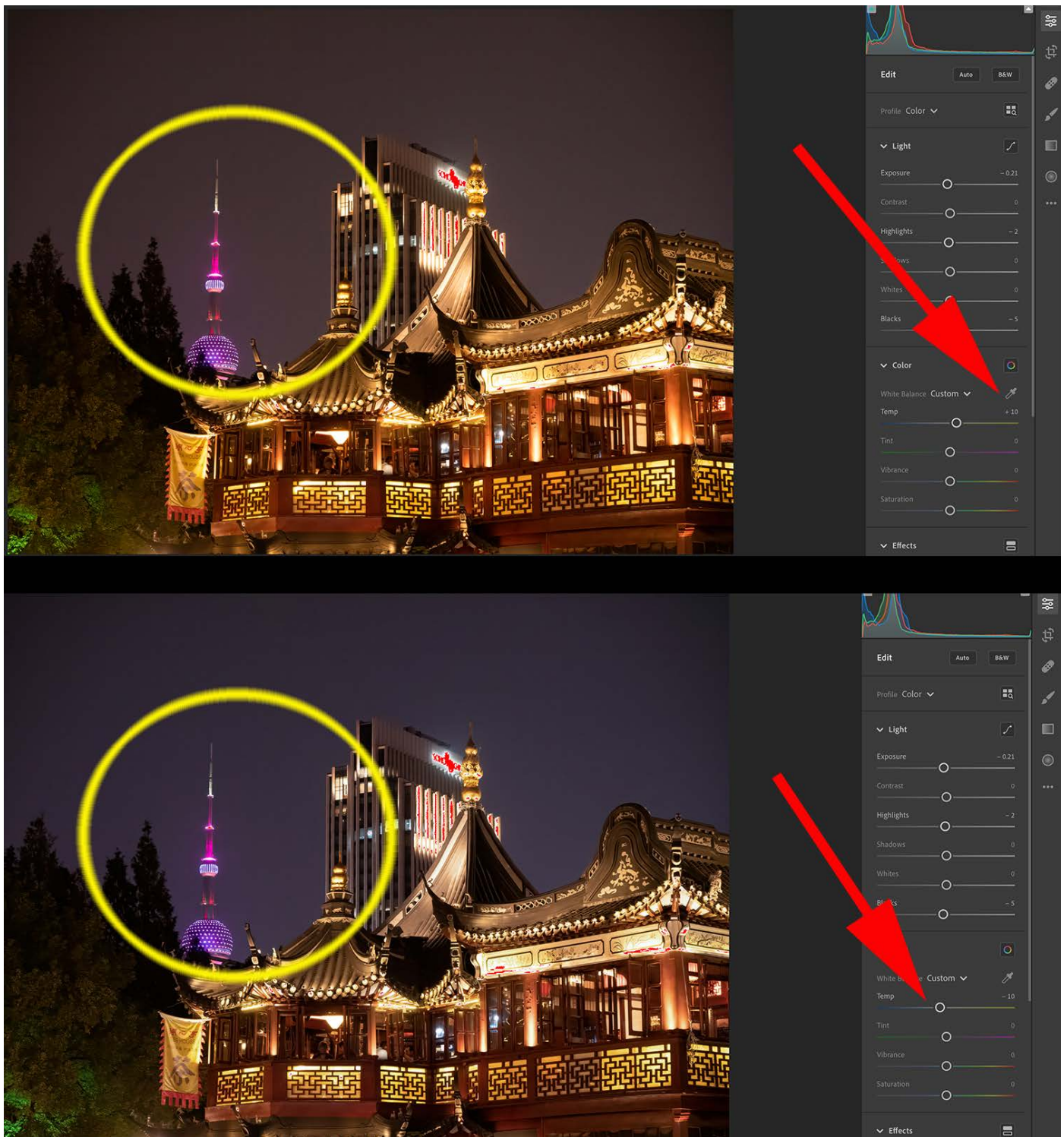


Image 014 – Screenshots by Kent DuFault

I started the White balance adjustment step by choosing the White Balance Selection tool. I then clicked around on this image and created a wide-ranging change of WB, none of which

totally pleased me. So, I decided to set the White Balance by merely looking at the Preview Image while manually moving the Temp and Tint sliders.

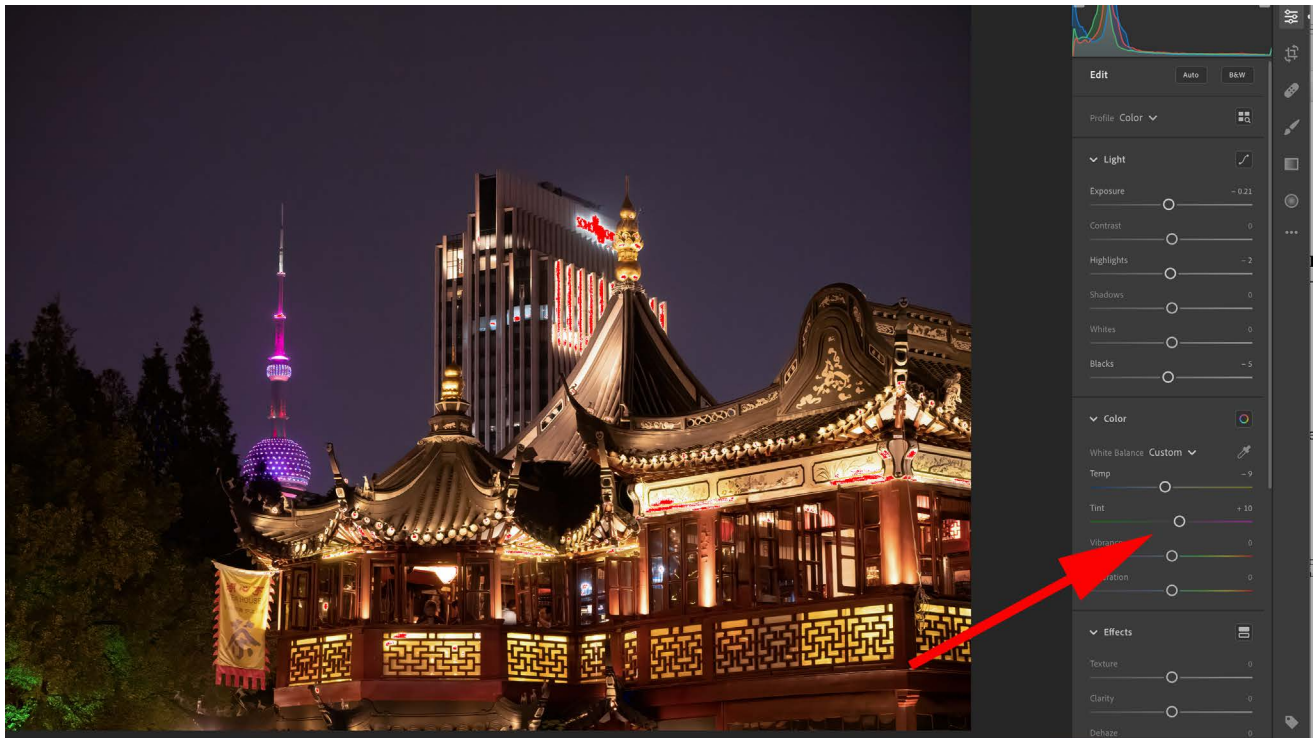


Image 014a – Screenshot by Kent DuFault

Using my eyes as the guide, I set the WB Temp to -9 and the Tint to +10. These settings best mimic what I remember seeing on that evening.

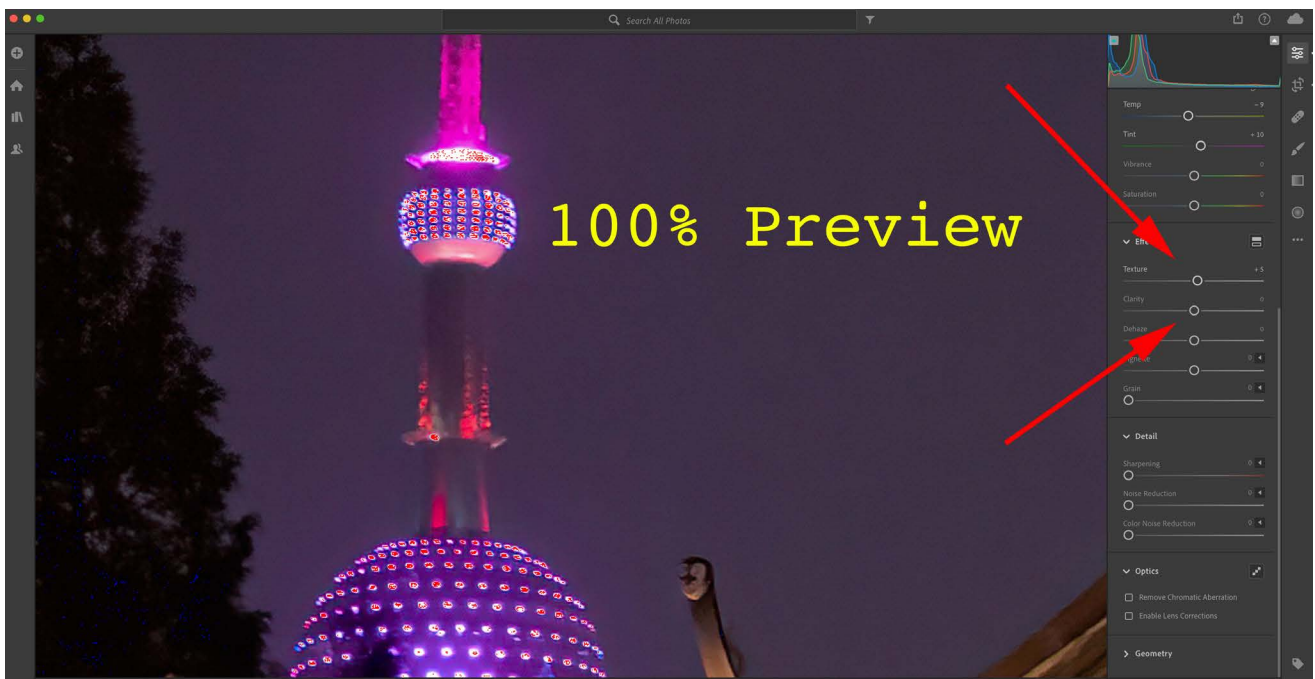


Image 015 – Screenshot by Kent DuFault

When I'm working on a photo that started out with a lot of digital noise, I often don't apply any Clarity or Texture.

However, this shot seemed to improve slightly with a Texture bump of +5.



Image 016 – Screenshots by Kent DuFault

As you study the 10 case studies included in this set, you will come to realize that I often work in tandem while setting the Clarity and Texture sliders, as well as the Saturation and Vibrance settings.

I find that most of the time, the best result occurs when combining them at some level.

Above (Image 016), you can see what a Vibrance setting of +100 did to the picture, and also what a Saturation setting of +100 did to the picture.

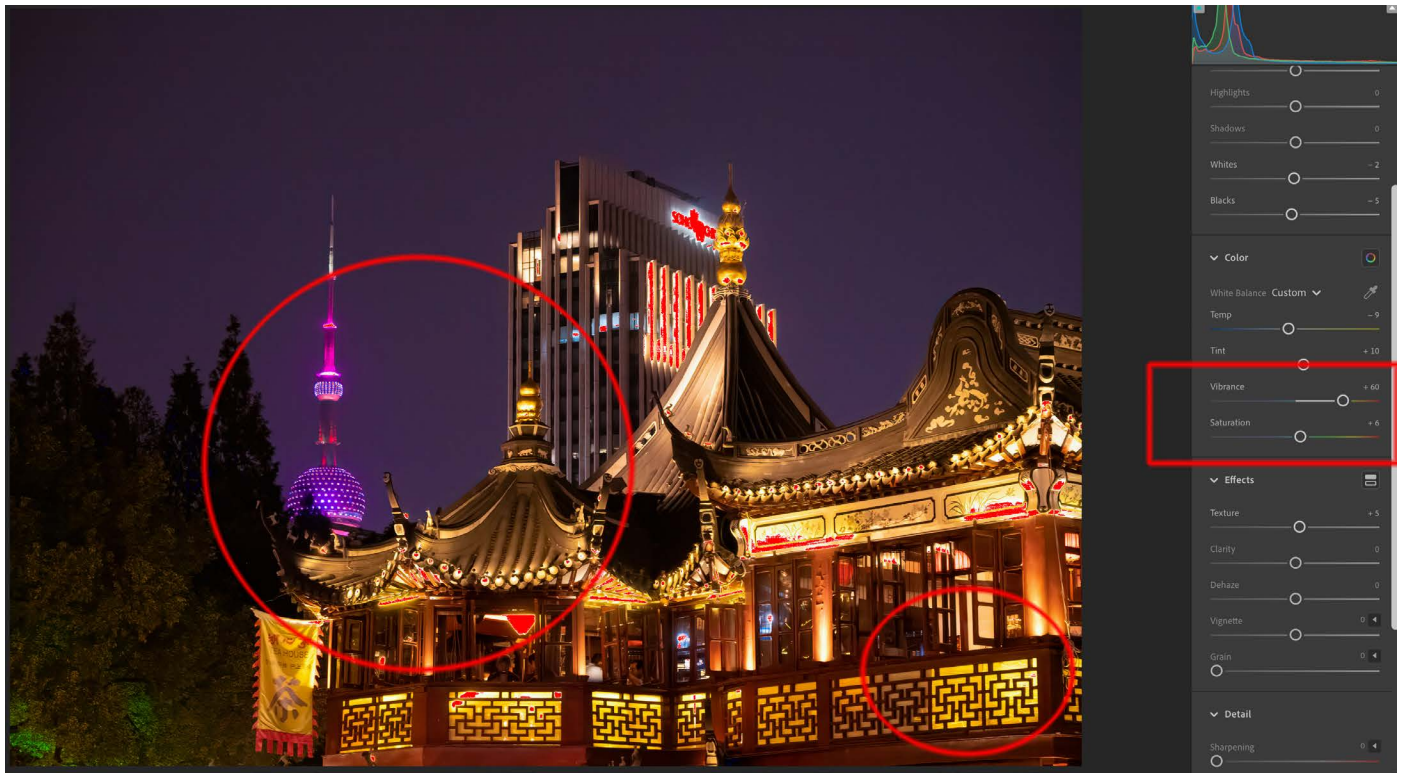


Image 017 – Screenshot by Kent DuFault

My final adjustments were Vibrance +60 and Saturation +6. I came to those numbers by visually watching the area in the red circle and the red oval.

Take notice that the Highlights Clipping has returned because of this change. I'll address that at the end of the FE list.



Image 017a – Screenshot by Kent DuFault

The next step on the FE list is the application of a Vignette.

For this photograph, a dark Vignette setting of -7 helps to darken the corners of the frame and push the viewer's eyes towards the green oval.

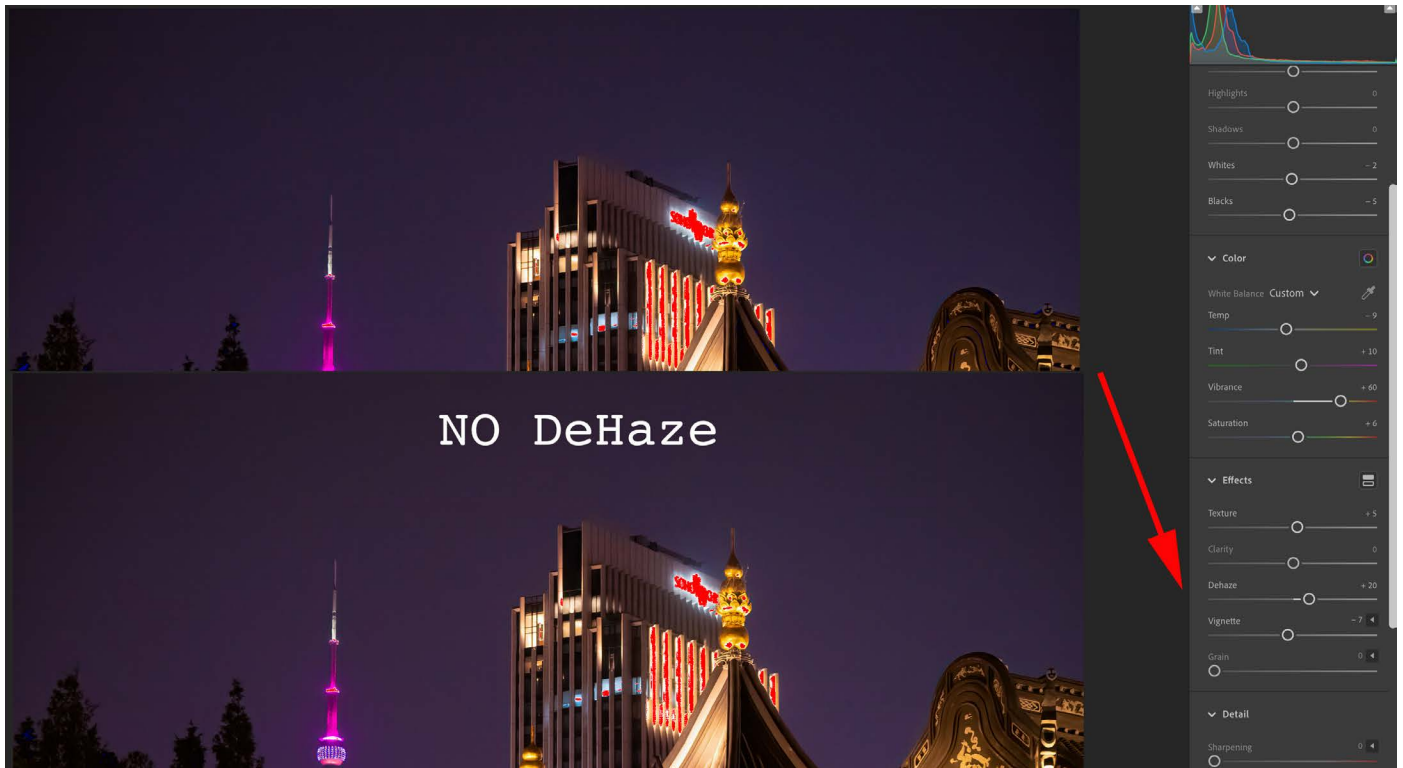


Image 018 – Screenshots by Kent DuFault

Dehaze is my next step.

The Dehaze tool helped to create a luminous effect in the sky.

The top half of Image 018 depicts a Dehaze setting of +20. The bottom half illustrates no Dehaze configuration being used.

I ended up setting the Dehaze slider to +20.

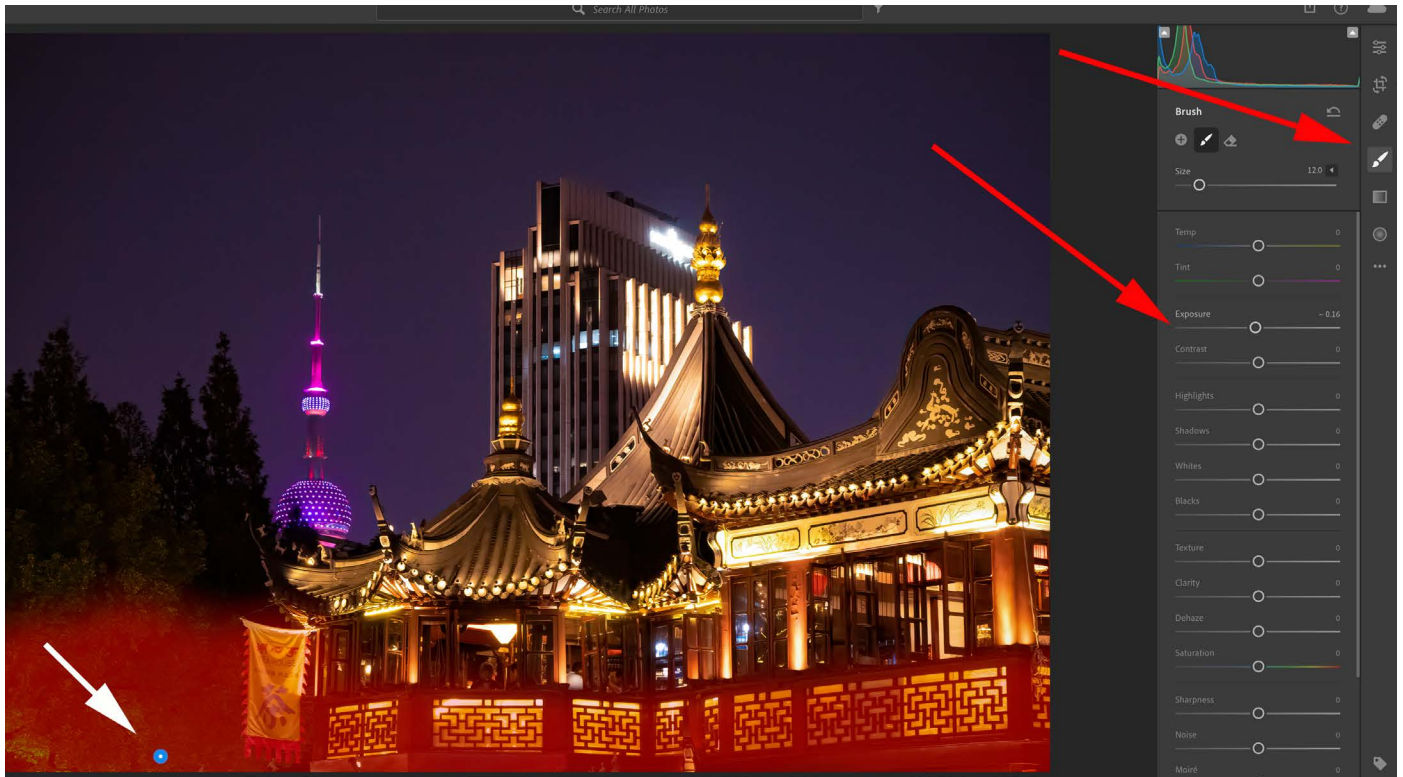


Image 019 – Screenshot by Kent DuFault

Now, we come to the localized editing portion of FE. This is my favorite part of FE post-processing. I feel that the localized edits with the Adjustment Brush really put the magic into digital photography.

My first Adjustment Brush edit was to lower the Exposure -0.16 on the lower portion of the frame. This will reduce its visual weight within the composition.

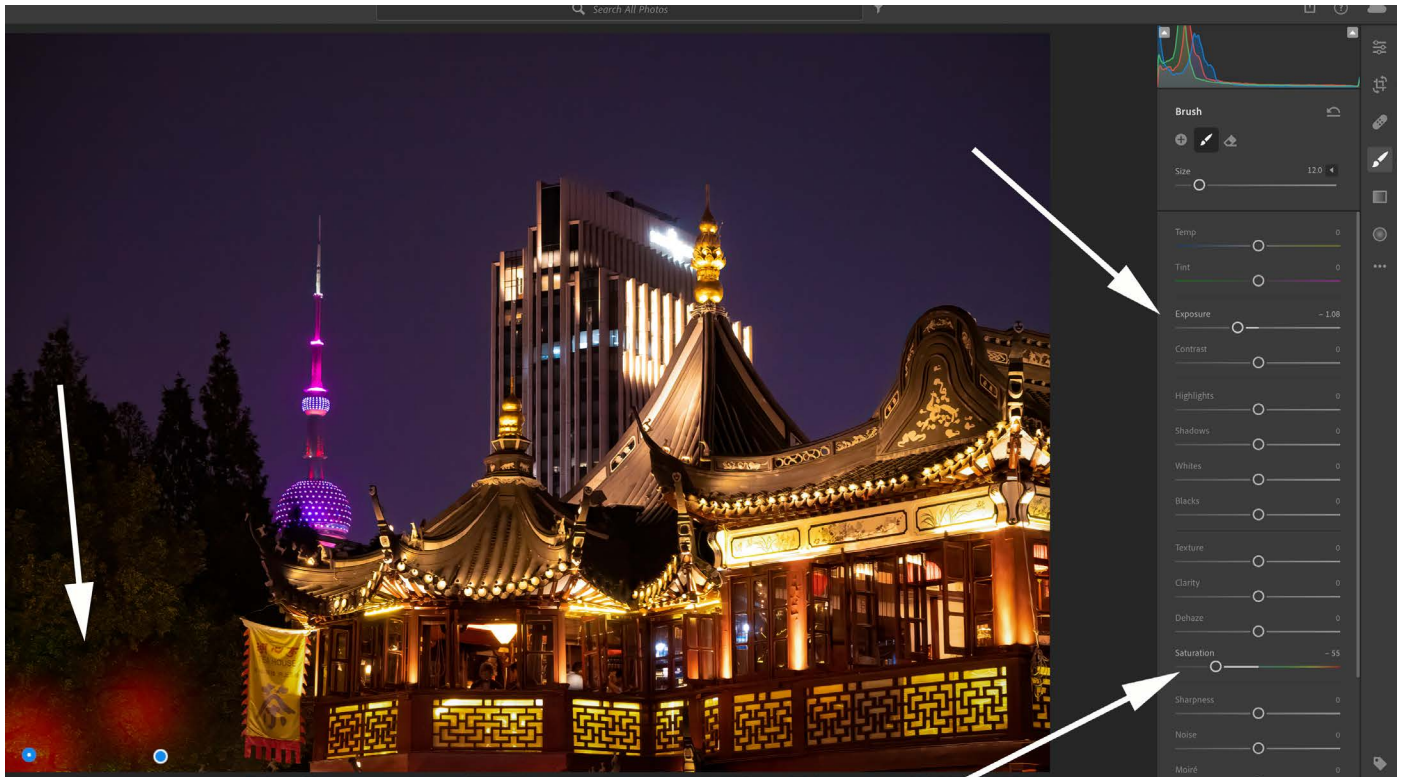


Image 020 – Screenshot by Kent DuFault

Next, I'm going to get even more localized with my editing on those green trees in the lower left of the frame. I want to reduce the visual weight of those trees to almost zero.

I reduced their Exposure to -1.08, and I cut the Saturation by -55.

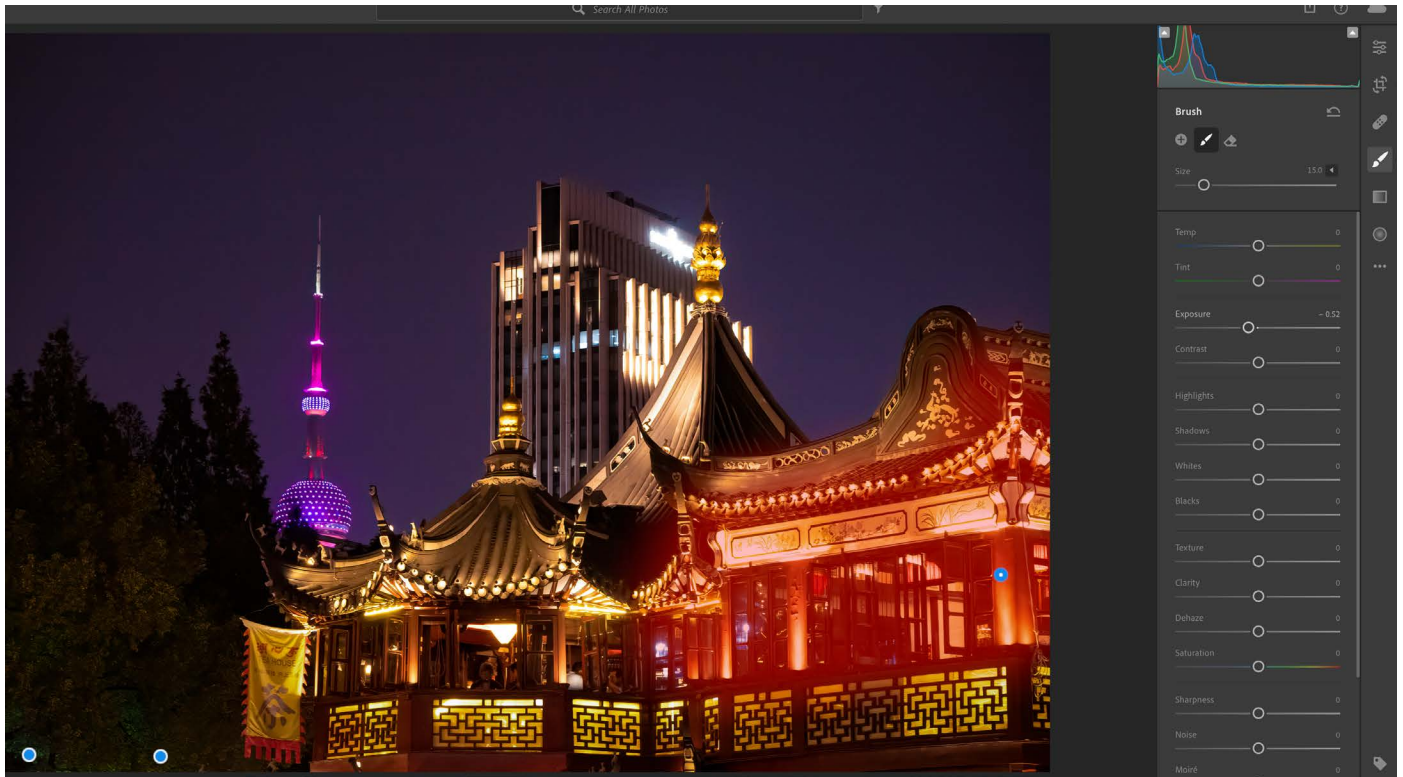


Image 021 – Screenshot by Kent DuFault

Remember, back in the Intent section of this case study, I pointed out the eye snags. One was the trees, and the other was the right side of that building in the foreground.

I want to reduce the visual weight of that area as well.

However, unlike the trees, I don't want to remove all of the visual weight. I simply want to reduce the brightness of that area to a level that supports the subject area rather than override it.

I reduced the Exposure by -0.52.

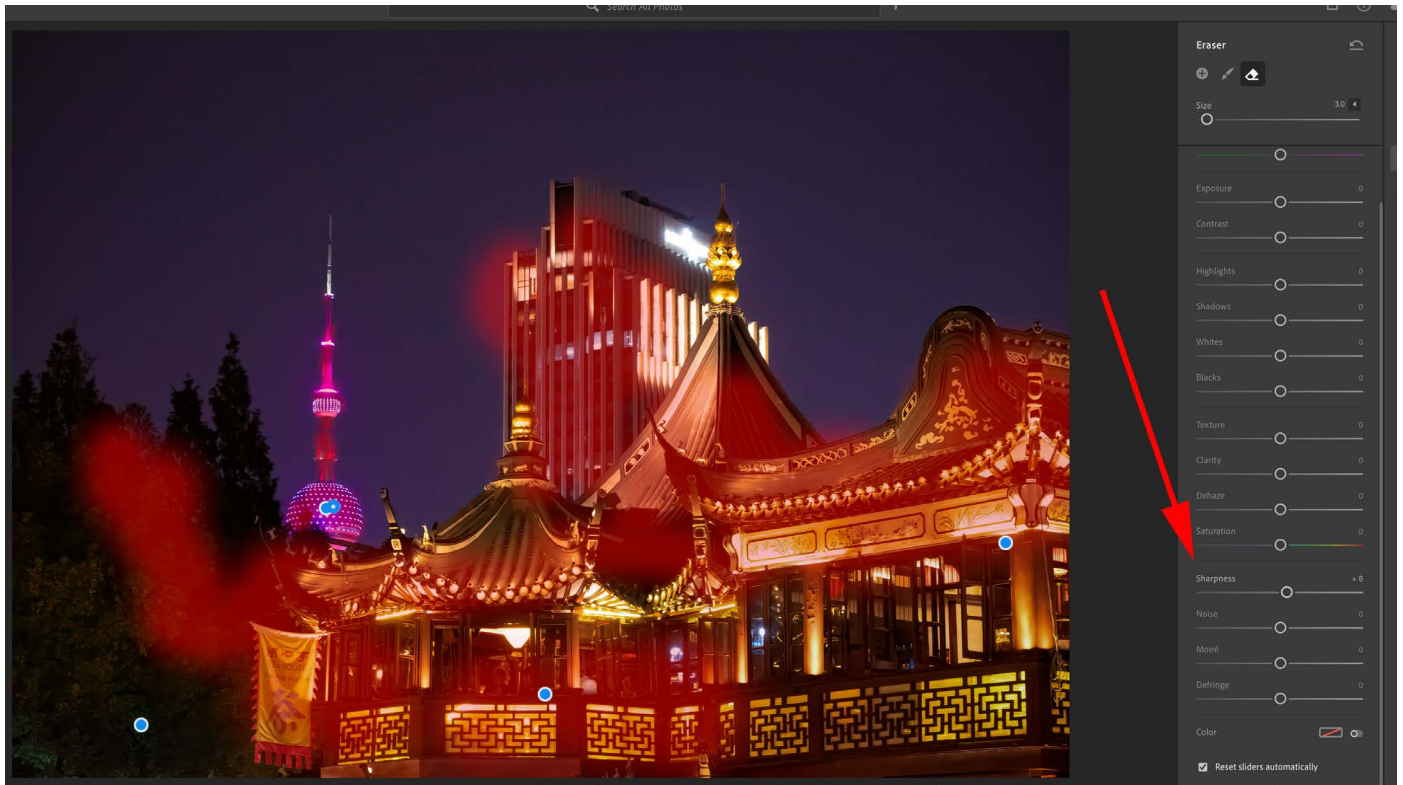


Image 022 – Screenshot by Kent DuFault

I used localized Sharpening in essential areas of the buildings and parts of the trees.

I usually only locally Sharpen right around my subject area at the final resting spot.

This case is different because of the amount of digital noise that had to be cleaned up. Noise reduction softens the Sharpness of a photo.

Global Sharpening at anything above a very low setting will start to create artifacts from the noise reduction, especially in the sky and along the rooflines of the buildings.

So, step one for Sharpening this shot is a light dose of localized Sharpening right where I want it. Then, in a minute, I'll add another very light dose of global Sharpening.

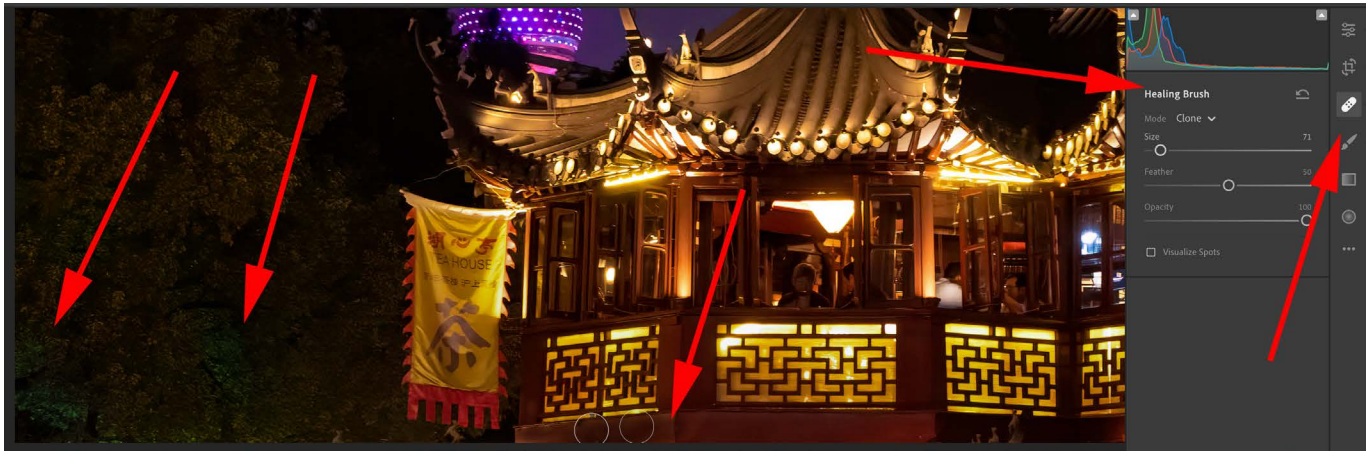


Image 022a – Screenshot by Kent DuFault

In these case studies, you will see that I have added the Healing Brush to the Fundamental Editing list.

I don't use the Healing Brush to significantly alter a photograph, but more to reduce or eliminate eye snags.

In this case, I took out some bright highlights and reduced the visibility of the trees in the lower left even further.



Image 023 – Screenshot by Kent DuFault

I will now execute step two in the Sharpening process, which will be a very light global Sharpening of 5.

Even with those light settings, I still saw some artifacts forming in the sky. A Lightroom Noise Reduction of 21 cleared that up.



Image 024 – Screenshot by Kent DuFault

With my Fundamental Editing list almost complete, let's go back and check the Clipping.

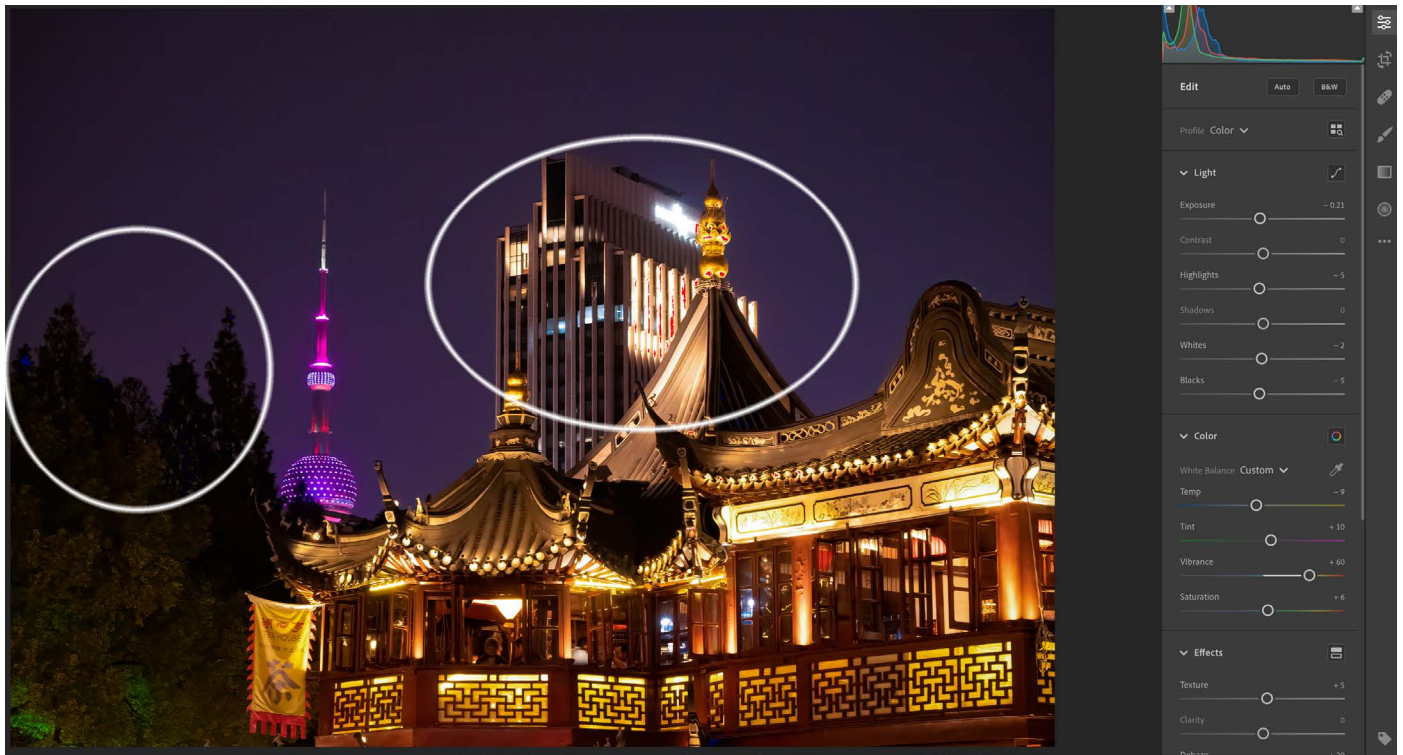


Image 025 – Screenshot by Kent DuFault

The Shadows Clipping looks fine. There is an excellent Black Point set in the upper part of the trees on the left.

The Highlights had some significant Clipping, particularly in the upper part of the building in the background, as well as a few spots on the building in the foreground.

By reducing the global Highlights slider to -5, all of the foreground Clipping was removed, and the background Clipping was reduced to a lovely White Point setting.



Image 026 – Photograph and Editing by Kent DuFault

On the left is the original image file as it came out of the camera. On the right is my final photograph with the Fundamental Editing completed.



Image 027 – Photograph by Kent DuFault

Here is the final photograph.