



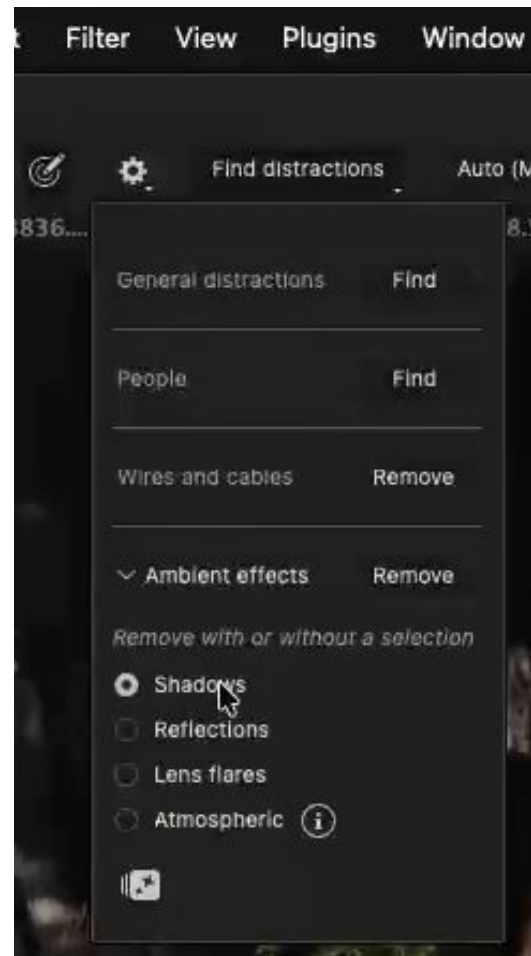
Remove Ambient Effects

In this lesson I'll take a deeper look at Remove Ambient Effects, a new feature in the Remove tool. Right now it's only in the beta version of Photoshop, but it should move to the main version within about a month, around the Adobe MAX conference. I did a lot of testing with it, and I'll share what I learned about where it works, where it falls apart, and how to refine the results so they look natural.

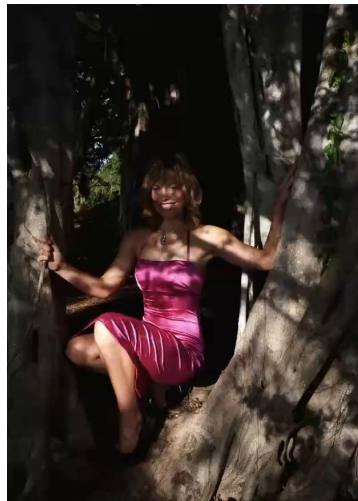
You'll find it in the options bar when the Remove tool is active. Click **Find distractions**, and the **Ambient effects** section gives you four choices: **Shadows**, **Reflections**, **Lens flares** and **Atmospheric**. Pick one and click **Remove**. As the menu says, you can use it with or without a selection.

Key Concepts

1. **Refine with Masks (01:56)**: The result often goes too far. Use a layer mask to limit where it applies, and a group mask to paint some of the original back in.
2. **Two Variations (05:06)**: You always get two variations. One usually looks like it has clarity turned up, and the second is often smoother and more natural. Zoom to at least 100% to compare them.
3. **Fully Hidden Detail Gets Invented (05:06)**: Where haze or smoke completely hides the detail, Photoshop creates new detail, which can look cartoonish. Lower the layer's opacity to hide that.
4. **Selections Tell It Where to Look (11:51)**: If it ignores an area, select that area and run it again. A selection concentrates the analysis there, but the change still fades out beyond it.
5. **Try More Than One Choice (16:02)**: Lens flares and Atmospheric can give very different results on the same image, so try both.
6. **Related Elements (20:22)**: Set the Remove tool to remove related elements, and removing a light source can also remove the light it casts.



Remove Shadows (01:01)



Original

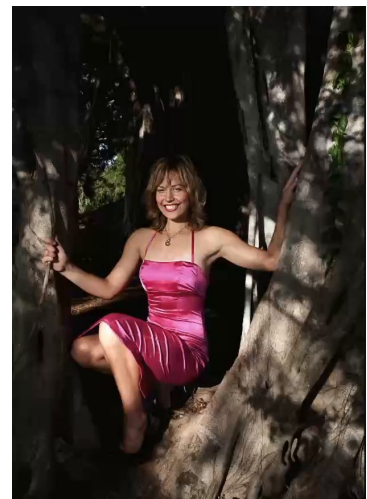


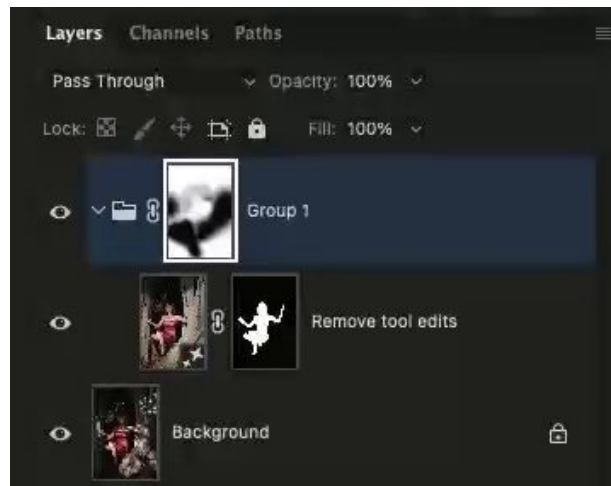
Shadows removed

1. **Choose the Remove Tool:** Grab the Remove tool from the toolbar.
2. **Pick Shadows:** In the options bar, click **Find distractions**, choose **Shadows** in the Ambient effects section, and click **Remove**.
3. **Evaluate the Result:** The result goes onto a new layer called **Remove tool edits**. I expected it to reduce the shadows on her face and chest. Instead it removed every shadow in the image. She looks great, but the trees look like I lit them with a flash. The next section shows how to fix that.

Refine Results with Masks (01:56)

1. **Select the Person:** Choose the Object Selection tool. In the options bar, click **Select people**, click the person it found (it defaults to Entire Person) and click **Apply**.
2. **Limit the Result to Her:** With the Remove tool edits layer active, click the layer mask icon at the bottom of the Layers panel. The trees go back to their original look.
3. **Add a Group Mask:** To bring back shading without messing up the selection of her, put the layer in a group and add a layer mask to the group. Painting with black on the group mask reveals the original layer underneath, and painting with white brings back the result.
4. **Paint the Shading Back:** Use the Brush tool with black and a soft-edged brush. I brought back shading on her hands so they look like they belong on the tree, plus a little on her legs and hair to blend her into the background.
5. **Lower the Brush Opacity for Partial Shading:** Type a number to set the brush opacity (4 gives you 40%). Painting at 40% brings back 40% of the original, which is great when you want some of the shading but not all of it.





The end result looks like I used a flash with a snoot or grid on it, which limited where the light fell. It saved this image.

Remove Atmospheric (05:06)



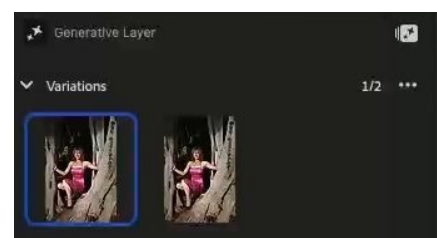
Original



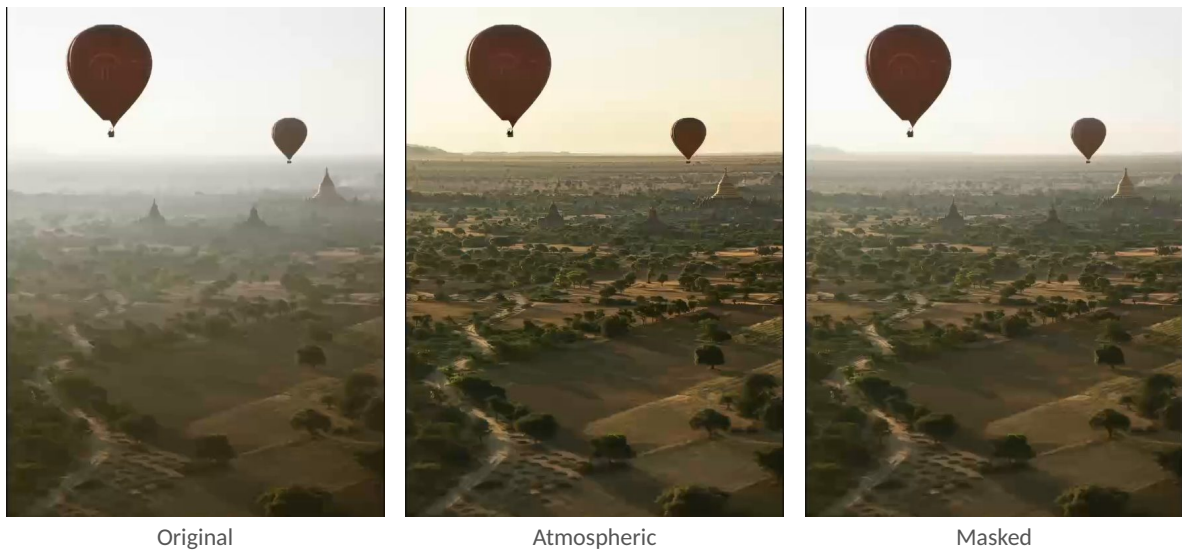
Atmospheric removed

Here the steam hides the detail in the distance. I chose **Atmospheric** in the Find distractions menu and clicked Remove. Where the steam completely or almost completely hid the scene, it created brand-new detail that looks a little cartoonish. That will happen whenever the detail can't truly be seen.

1. **Compare the Two Variations:** Click between the two variations in the Properties panel. One usually looks like it has clarity turned up and the other doesn't. Which one looks better depends on the image.
2. **Lower the Opacity:** You don't have to remove all of it. Click on the word **Opacity** in the Layers panel and drag left to bring it all the way down. Then drag right until the result just breaks through some of the haze. The remaining haze hides the cartoonish look.



2nd Atmospheric Example (06:47)



There's no lens flare in this one. It's all haze, and the contrast Atmospheric achieved is pretty amazing.

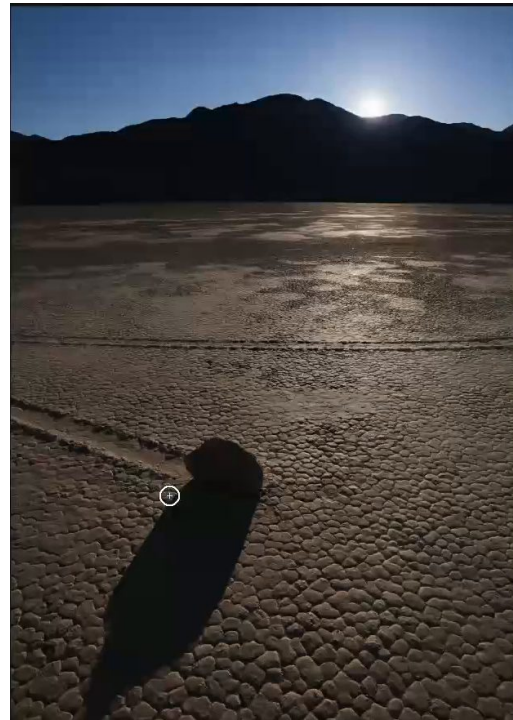
1. **Zoom to 100% and Pick a Variation:** Make sure you're at least at 100% before you choose between the two variations.
2. **Lower the Opacity:** Bring the opacity down if you want some of the haze back.
3. **Mask In Distance Haze:** Add a layer mask and paint with black, using a soft-edged brush, near the horizon. Set your brush opacity back to 100 first. Now the scene is hazy in the distance with less and less haze as it comes down.
4. **Protect a Subject:** You can also select an object, such as the temple, and fill it with white in the mask so it keeps the dehazed look while the area beyond it stays hazy.

Remove Lens Flares (08:38)

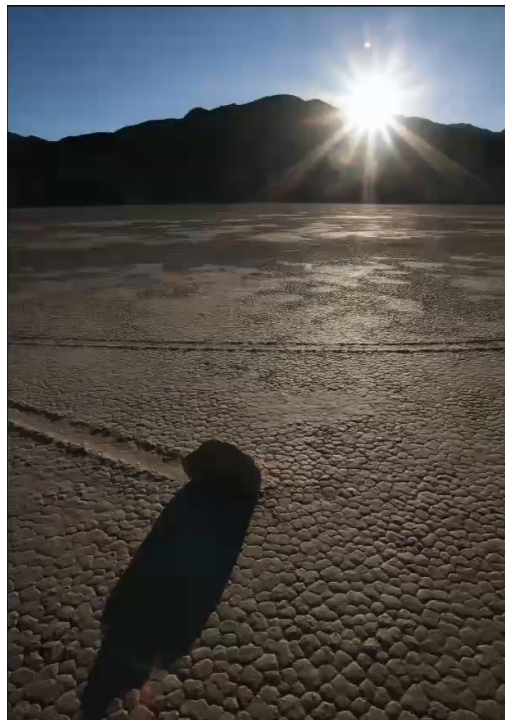
I wanted to get rid of the green shape and the aperture-shaped flares but keep the starburst on the sun. Choosing **Lens flares** removed the flares nicely, but it also removed the starburst and completely changed the look of the sun.



Original



Lens flares, whole image



Lens flares, with selections

1. **Select Around the Flares:** I made selections that contained the flares while leaving enough of the starburst outside them that it might decide to keep it. That removed a good amount, but it missed some areas, including the bottom of the picture.

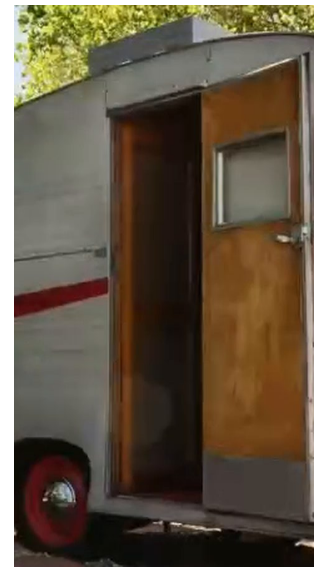
2. **Combine the Two Results:** Deselect, and keep the result from the selection visible. Move the whole-image result above it, make it visible, and hold **Option** (Alt in Windows) while clicking the layer mask icon to add a black mask. Then paint with white wherever you want that version, such as the bottom of the frame.
3. **Watch the Brightness:** Removing the starburst darkens a lot of the image, so be careful where you paint.

More Lens Flare Examples (11:51)

Make a Selection When It Ignores an Area: The flare on this trailer's doorway is easy to miss (circled below). Anything shaped like an aperture is a flare. When I ran Lens flares on the entire image, it ignored that area. When I selected the doorway and ran it again, it found the flare. The second variation looked better, with less of the clarity look.



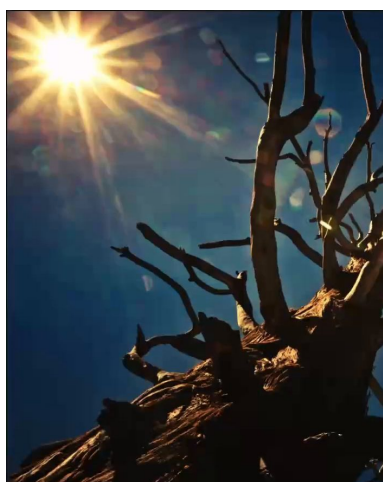
The flare in the doorway



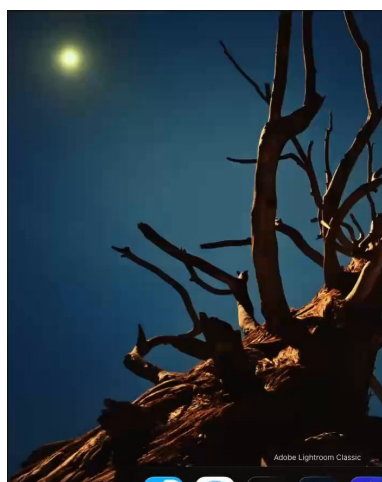
Doorway enlarged

Use the Second Variation: On a night shot of a tree, the default variation still showed the outline of the flare. The second variation is often the one with less sharpening and clarity. Here it looked dramatically better and was the only acceptable one.

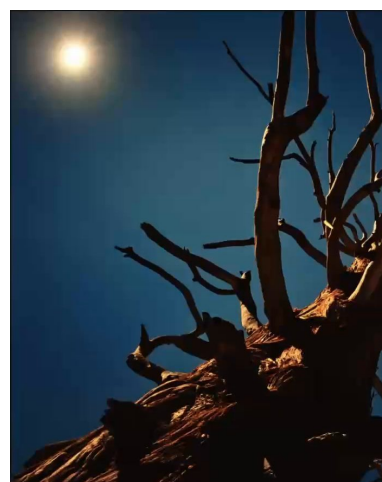
Add Your Own Starburst (13:20): If you want a star shape on the light again, add your own. In an earlier lesson I showed how to capture starbursts by pointing a flashlight at the camera at night. Export one from Lightroom, drag it onto your image, set its blend mode to **Screen** and position it over the light.



Original

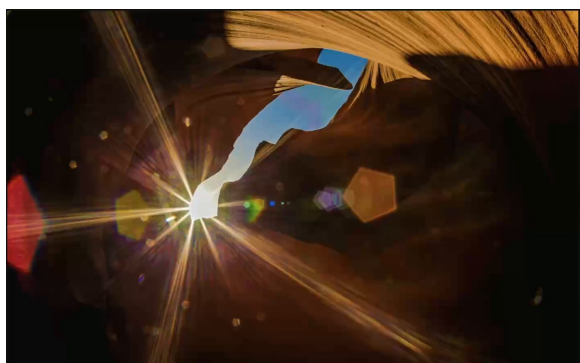


Lens flare removed

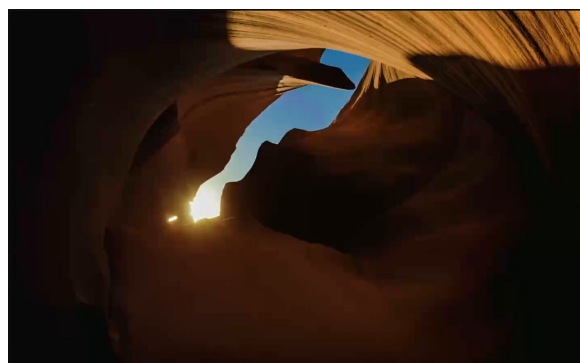


Starburst added

Another Lens Flare Example (14:34)



Original



Lens flares removed

This is one of those images I would normally skip because nothing could be done with it. After Lens flares, I could still see where the flares used to be in the default variation, but the second one was smoother. Add your own starburst if you need one. This feature can save images that would otherwise be complete throwaways.

Removing Smoke/Steam (15:27)

Atmospheric also clears smoke. If the smoke is dense enough to hide the detail underneath, you'll get cartoonish results, which I find unacceptable most of the time. If you only want to cut through a hint of it, lower the opacity. Around 20% can still look natural.



Original

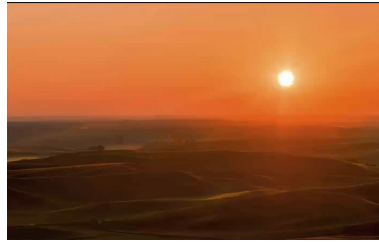


Atmospheric (smoke) removed

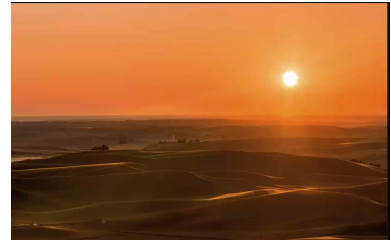
Lens Flares vs. Atmospheric (16:02)



Original



Atmospheric



Lens flares

This scene has a lens flare plus god rays, which could count as atmospheric. Lens flares got rid of too much of the god ray look. Atmospheric kept just enough of it to be usable, and I could lower its opacity to bring more back. On the next image (a truck), Lens flares made it too dark and Atmospheric was better. So switch between the two to see which works best.



Atmospheric



Lens flares

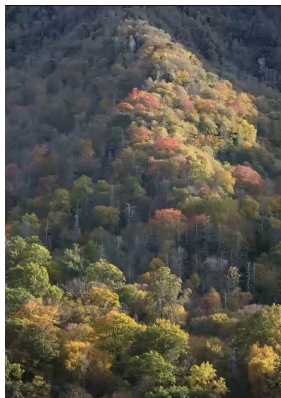


Lens flares, with a selection

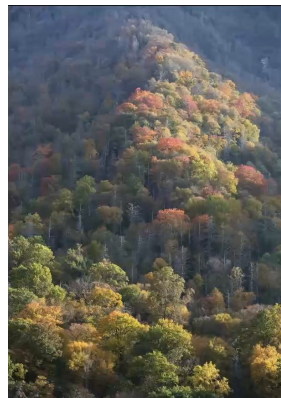
A Selection Isn't a Limit: When I selected just the area with the most flare, it still changed areas outside the selection. The selection tells it where to concentrate its analysis, and the change fades in beyond it.

Trying Many Choices (17:41)

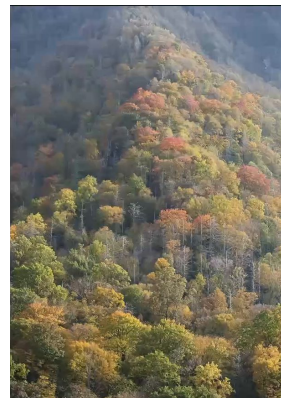
On a fall forest, I tried Atmospheric, Lens flares, Shadows (which took part of the scene out of the shade) and Reflections. They all gave different results.



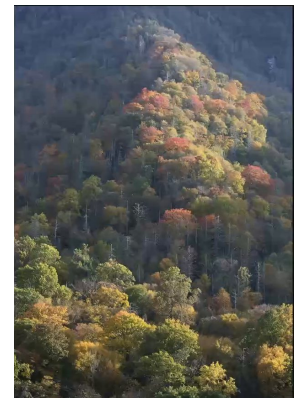
Atmospheric



Lens flares



Shadows



Reflections

On the next image (18:10), Atmospheric kept the lens flare while Lens flares removed both the flare and the starburst. Often I need more than one version, combined with masks.



Atmospheric



Lens flares

Shadows Examples (18:33)

Mask It to the Subject: Shadows removed the dappled light across the whole image, which looked too generic. Adding a layer mask so it only changed my wife's pants evened out the light there.



Original

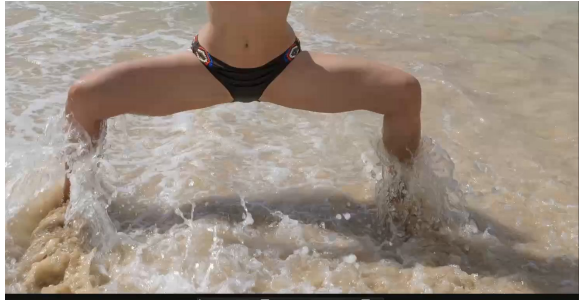


Shadows, whole image



Masked to her pants

Check It Zoomed Out: On a beach shot, I only wanted to remove the shadow by my wife's legs. Up close, it was fine, but zoomed out it looked very artificial. The first variation always seems to be the most crunchy and sharpened. The second is usually more natural.



Shadow by her legs



Shadows removed

A Surprising Atmospheric Result (19:20): On this night shot, I chose Atmospheric, and look at what it did. The glow around the streetlight and the haze in the air were nearly all removed.



Original



Atmospheric removed

Reflections: I shot this through a shop window, with the camera right up against the glass. I hoped Reflections would remove the reflected people and show what's inside the store. Instead, it removed the inside of the shop and kept the reflection. It still improved the image, because the double image on the right is gone.



Original

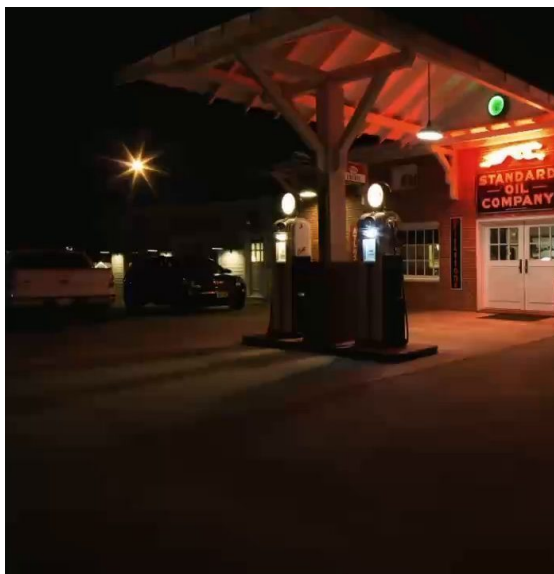


Reflections removed

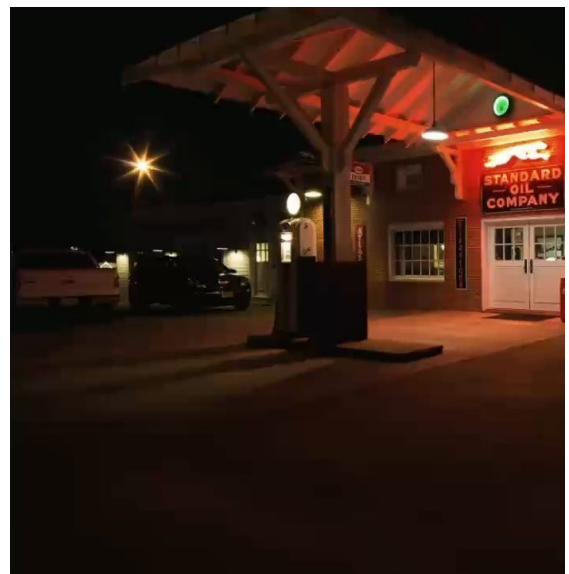
Remove Related Elements (20:22)

When the Remove tool is set to remove related elements, it's supposed to remove things connected to the object you retouch, such as its shadow or reflection.

1. **Paint Over the Object:** I painted over the gas pump. It removed the pump nicely and redrew the window behind it. It didn't remove the pump's reflection in the window, and it only removed half of its shadow.

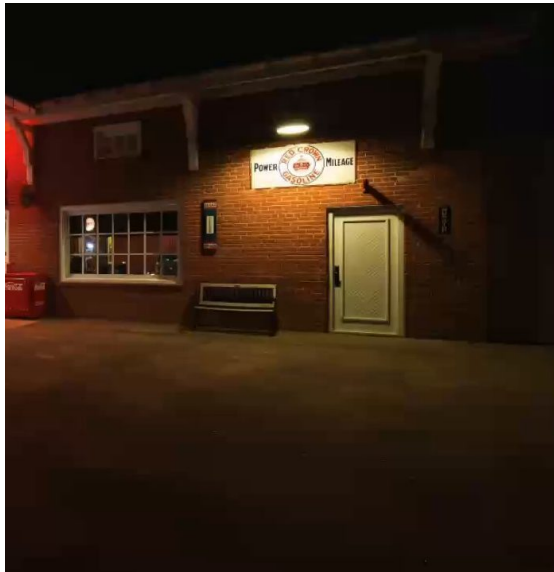


Original (left half)

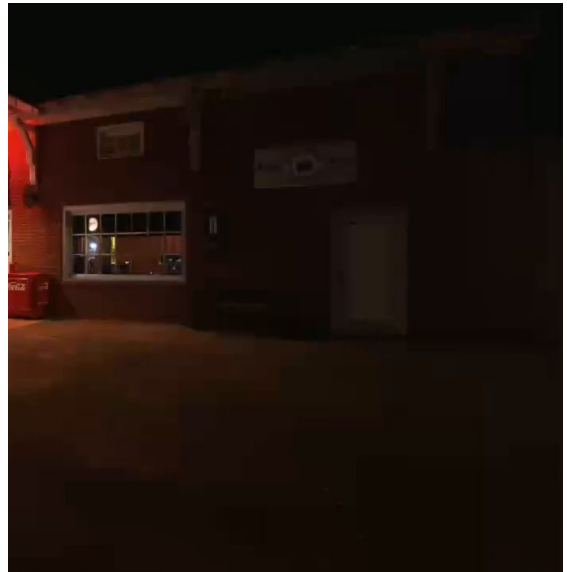


Pump removed

2. **Accept or Enhance:** After each removal, the options bar offers an **Enhance** button and a checkmark. Press Return to accept the result.
3. **Remove a Light Source:** When I painted over the light fixture on the right, all the light it cast on the wall went away, along with the long shadow it created. That blew my mind.



Before (right half)



Light fixture removed

4. **Fix It When It Goes Too Far:** When I removed a light near the neon Greyhound sign, it removed far too much light. It didn't realize the neon would still be lit. To fix it, add a layer mask to the result and paint with black using a soft brush, perhaps at 50% to knock the light down without removing it. Be careful where you stop painting, because the edges may not blend into the dark areas.

Tips

1. **Always Check Both Variations:** Zoom to at least 100% and click between them. The second one is often the more natural one.
2. **Opacity and Masks Do the Fine-Tuning:** Lower the opacity of the result to keep some haze or shading, and use layer masks (or a group mask) to control where it applies.
3. **Select Problem Areas:** If the whole-image pass ignores something, select it and run the command again.