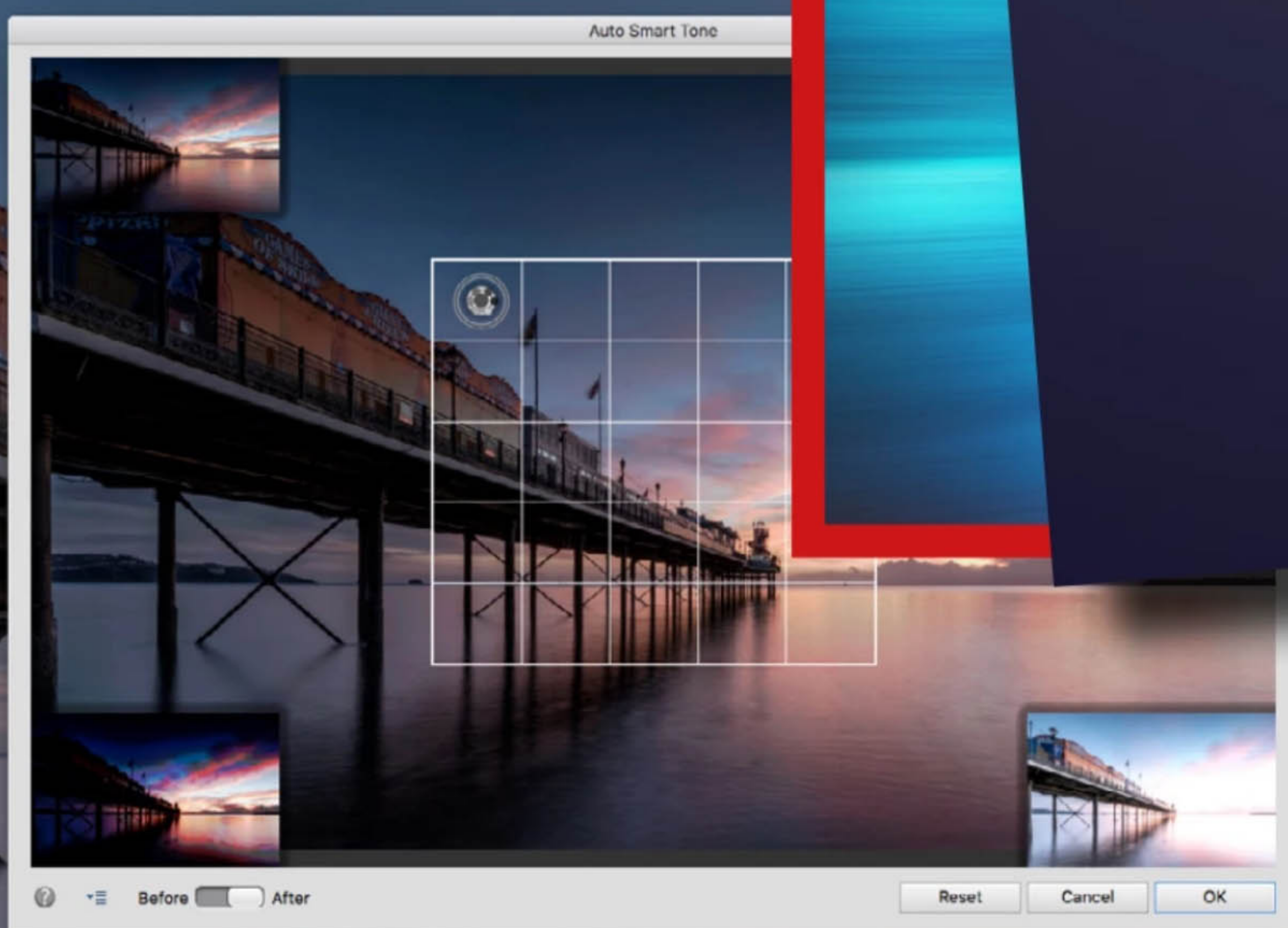


NEW TAKING YOUR SKILLS FURTHER

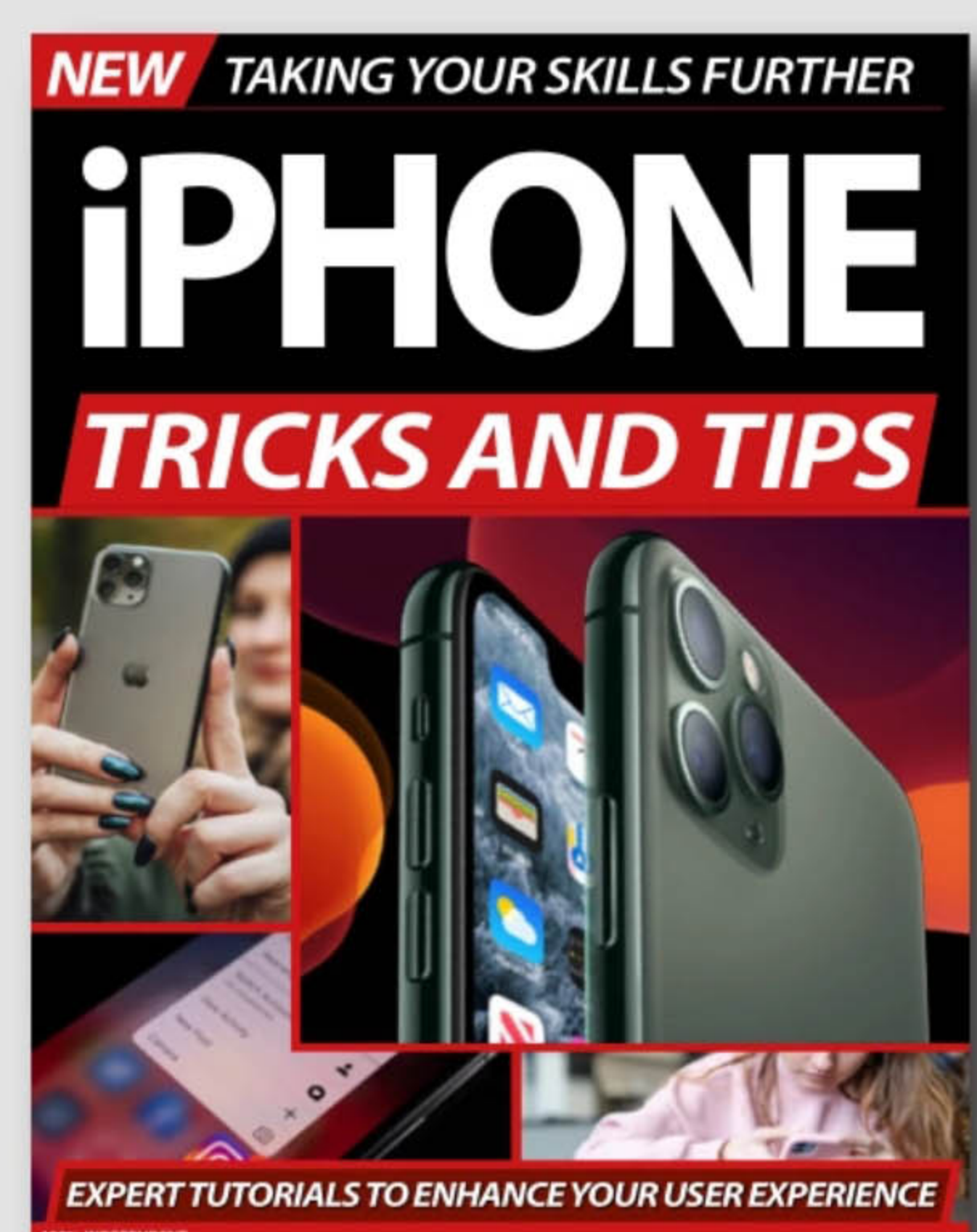
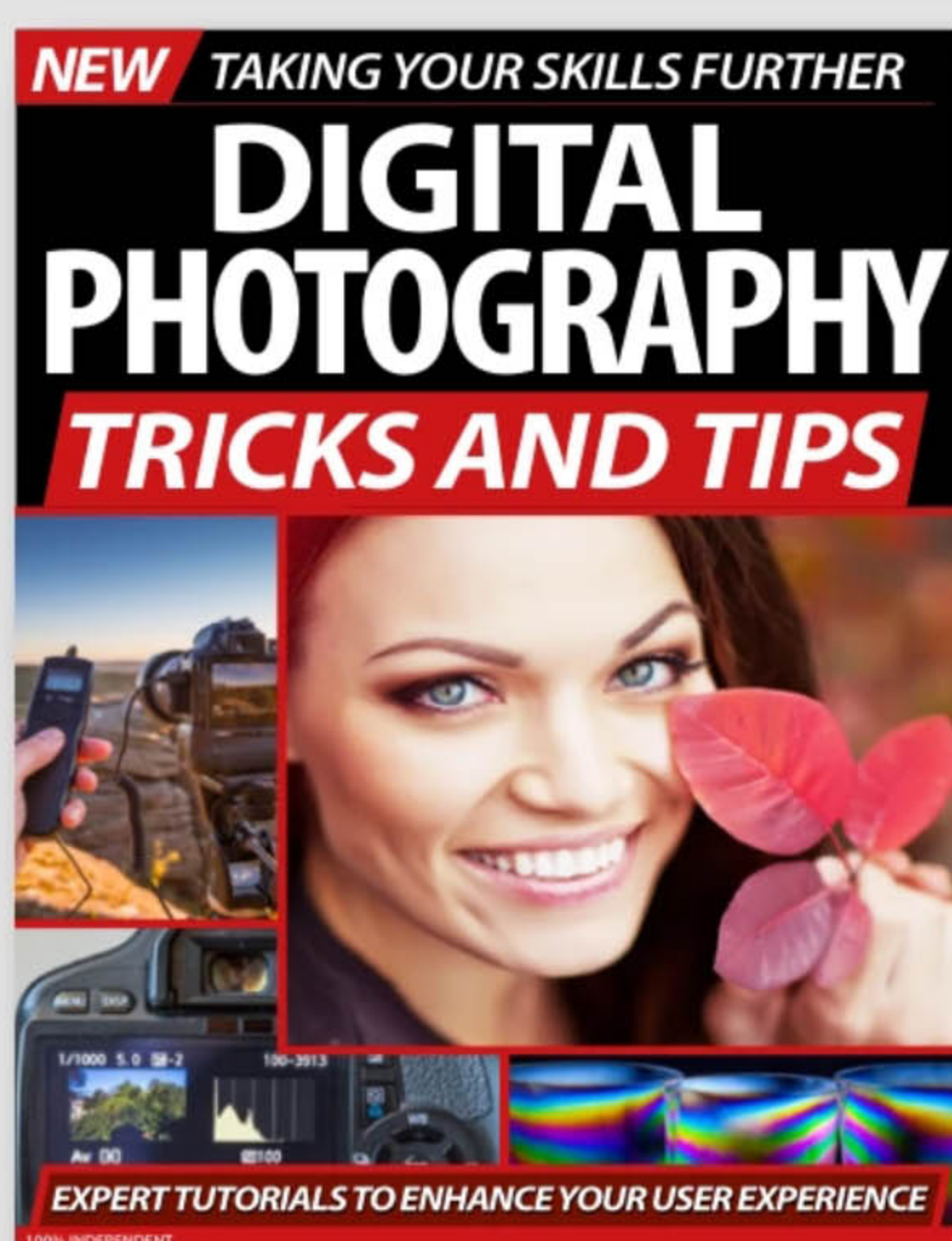
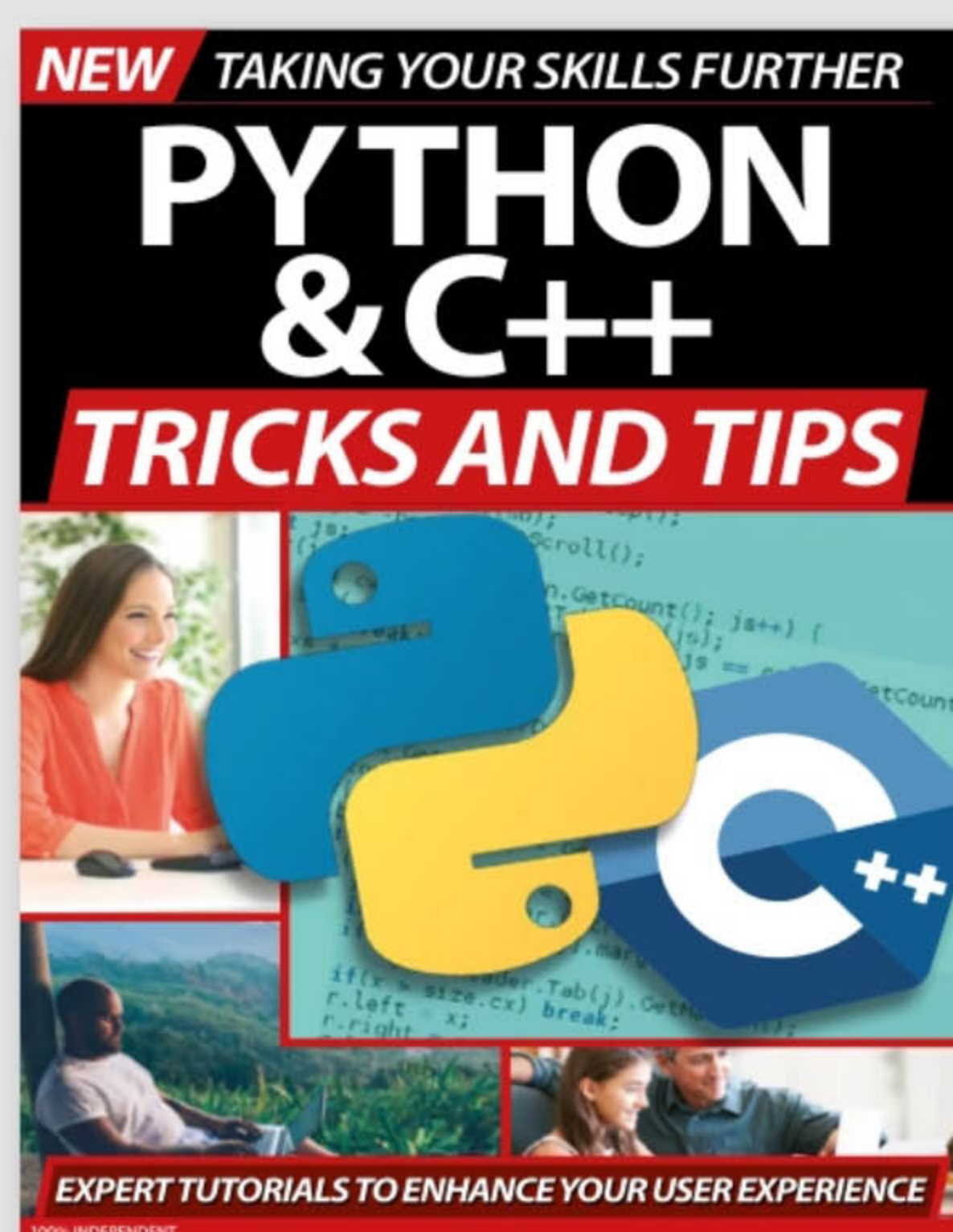
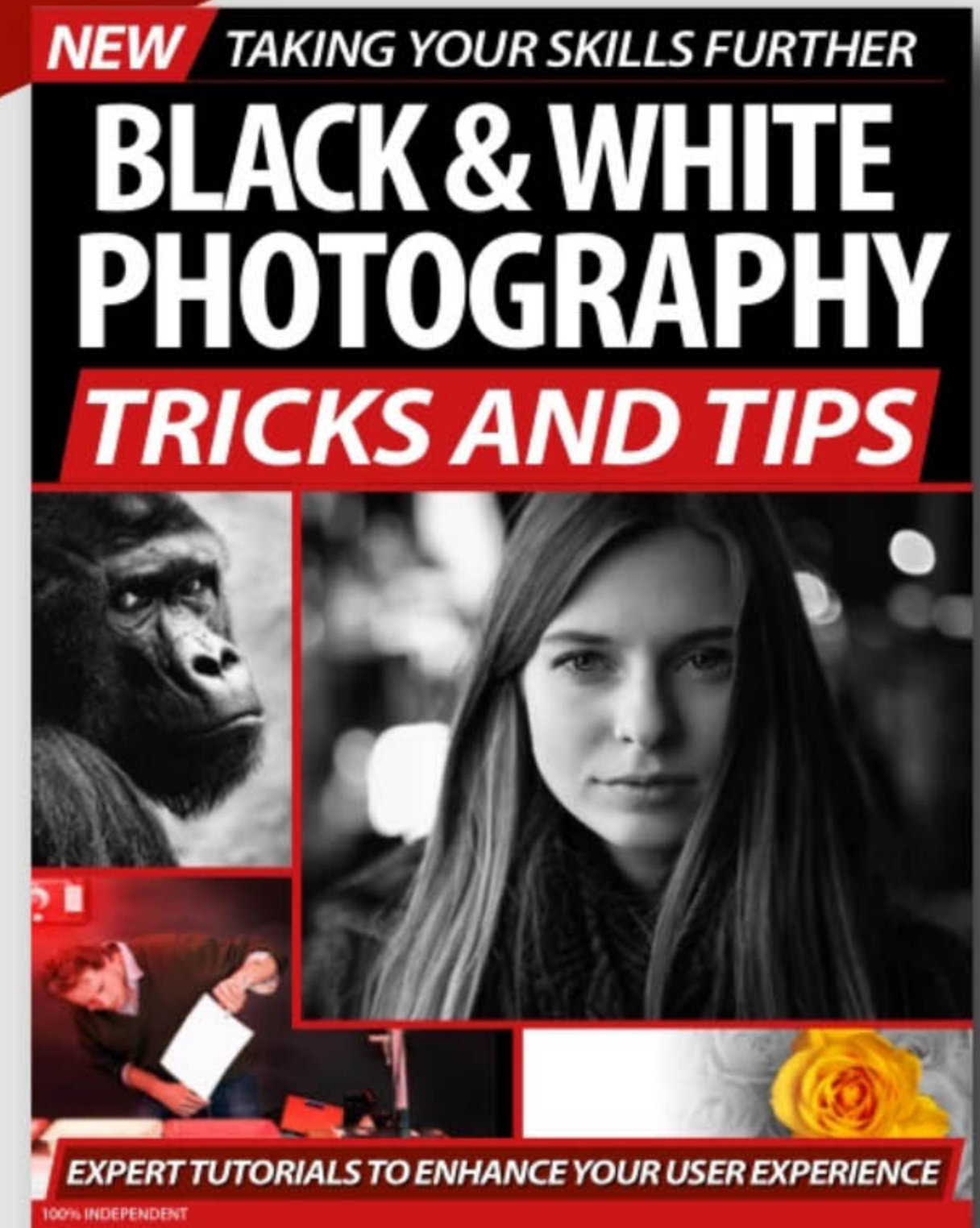
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Over the page our journey continues, and we will be with you at every stage to advise, inform and ultimately inspire you to go further.

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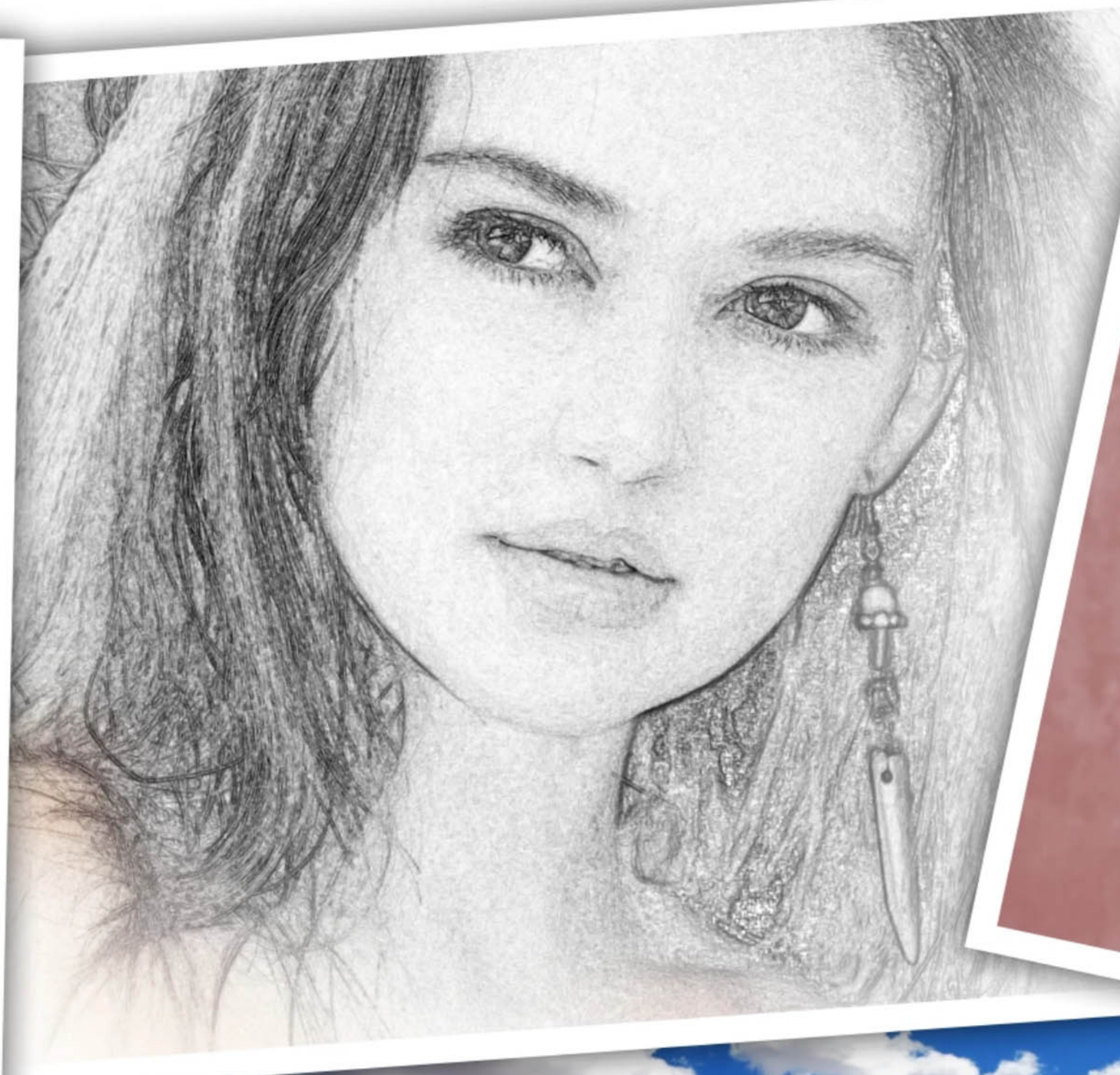
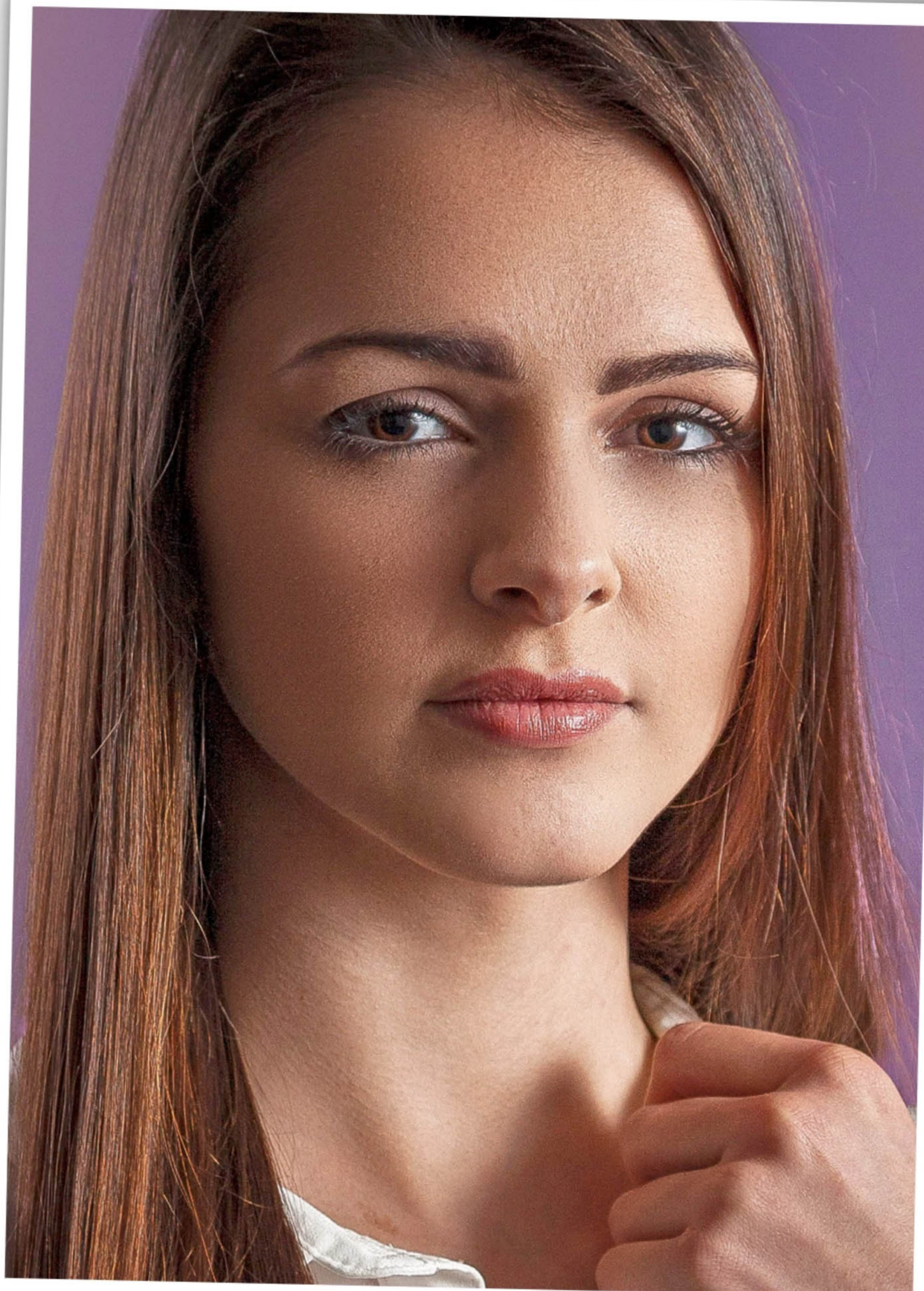
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"...make your images look amazing with just a few clicks of your mouse. From automated and guided edits to hands-on expert modes, you can create exactly what you want. The only thing holding you back is your imagination..."

Photoshop Elements Tricks and Tips

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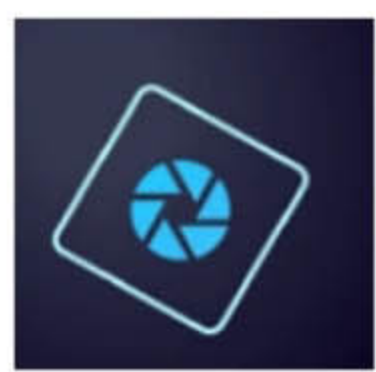






Your Guide to Image Editing

The great thing about Adobe Photoshop Elements is that it can cater for all skill levels when it comes to image editing, digital manipulation and creating new works of art. Whether you are a complete novice who is starting out and wanting to learn the ropes or an experienced digital artist who needs more advanced tools to complete their project, Photoshop Elements has all the power and sophistication you need to get the most out of your photos.



A Guide to Using Layers

Layers are one of the fundamental aspects you can employ when it comes to non-destructive image editing.

The use of layers has become the very core of image editing since its introduction in the early '90s. As you might imagine, layers are exactly what they sound like. You can have a number of separate elements, each on its own layer, that are stacked one on top of the other. When all viewed together, they create the final image.

The advantage of using layers is clear. It means you can change an element on one layer only and not have an impact on the rest of the image. It also means that you can take an image and duplicate it on another layer and perform any edits you want on that one in the knowledge that the base image

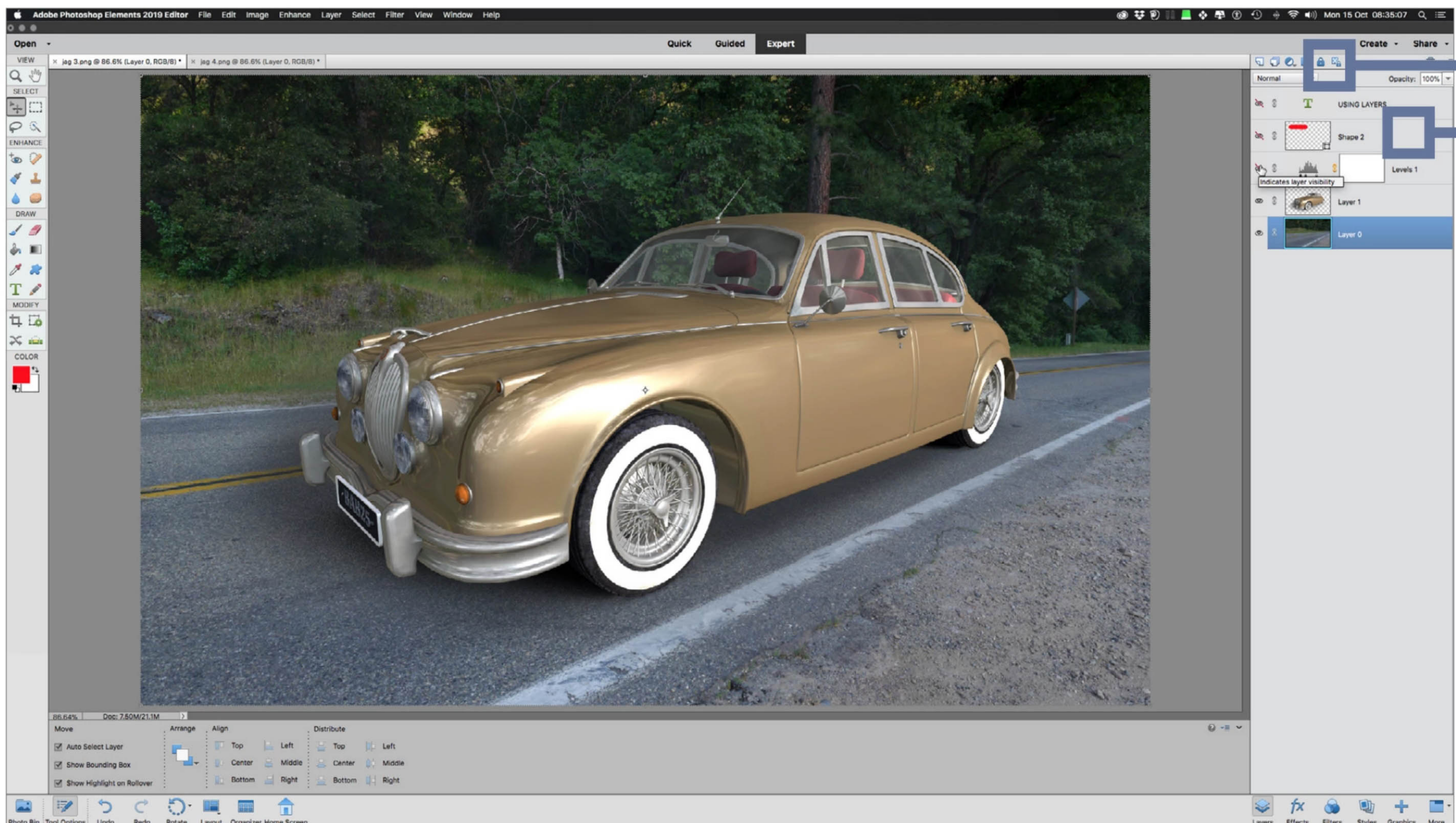
will remain untouched in case it doesn't turn out quite as you had hoped. Within Elements, there are four main types of layer. There is the basic pixel layer which contains the main photo elements of the project. There are text layers where you can type text and change the size and colour. Then there are fill/adjustment layers that are designed to affect the layer below it such as changing the saturation or brightness of the layer below, or just adding a colour to that layer. Finally there are vector layers that contain scalable graphical elements such as shapes and work paths. Each layer type can also have a mask added to it so only part of that layer can be seen.

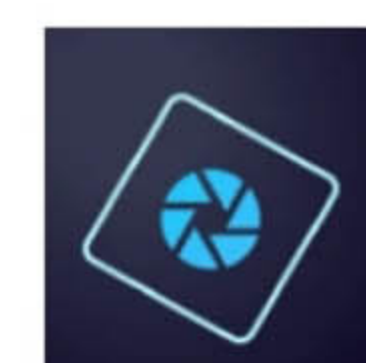
1 Create New Layer

You can click the Create New Layer button at the top of the layer panel, use the key board shortcut or go to the file menu and choose Layer > New > Layer to add a new layer to the stack. You will be prompted to name the new layer. You can rename it at any time.

2 Create New Group

Sometimes it may be necessary to take a number of layers and group them to make things more manageable, as the number of layers increases in your document. You can highlight each layer





you want and then press the Create New Group button to group them. Alternatively, you can go to the file menu and select Layer > New > Group

3 Fill or Adjustment Layer

Fills and Adjustments allows you to add colours, gradients and patterns to a layer. They also allow you to add adjustments such as Brightness and Contrast, Hue and Saturation and Levels. Adjustment layers affect the layers directly beneath them in the stack or they can be clipped to the one layer directly below them only.

4 Add Layer Mask

Each layer you use in a document can have a layer mask added to it. The mask is designed to let you hide or reveal

specific parts of that layer only. Areas of the mask in white let the layer remain visible, while any areas of the mask in black hide that part of the layer. The rule of thumb is: white reveals pixels and black conceals them.

5 Lock all Pixels

Clicking this button locks the layer completely and no further edits can be made to it. You will also be unable to reposition the image on a locked layer.

6 Lock Transparent Pixels

If you click this button, any area of a layer that has no image pixels in it is considered transparent. An area that is transparent is then locked and no edits can be made so it remains transparent.

7 Delete Layer

The trashcan shaped button lets you delete any selected layers if you wish to remove them from the layer stack.

8 Panel Options

There are a number of menu options available here such as Rename Layer, Duplicate Layer, Delete Layer, Link Layers, Merge Visible and Merge Down.

9 Blend Modes

Blend Modes determine how the image colours on the layer interact with the layer below it. It can be changed for every layer individually or as part of a group for certain visual effects.

10 Visibility

The small eye icon on the left of each layer lets you turn that layer off so it is not visible. Any effects associated with that layer are also rendered invisible until the eye icon is clicked once more.

11 Link/Unlink Layers

This lets you link a number of layers so that any transformations and move commands you make are all applied to the linked layers at the same time.

12 Background

The Background layer is the default bottom layer. Whether it is an image you have opened or a new document, the Background layer is always partially locked until you choose to unlock it.

13 Standard Layer

A typical layer with pixel information displayed on it.

14 Adjustment Layer

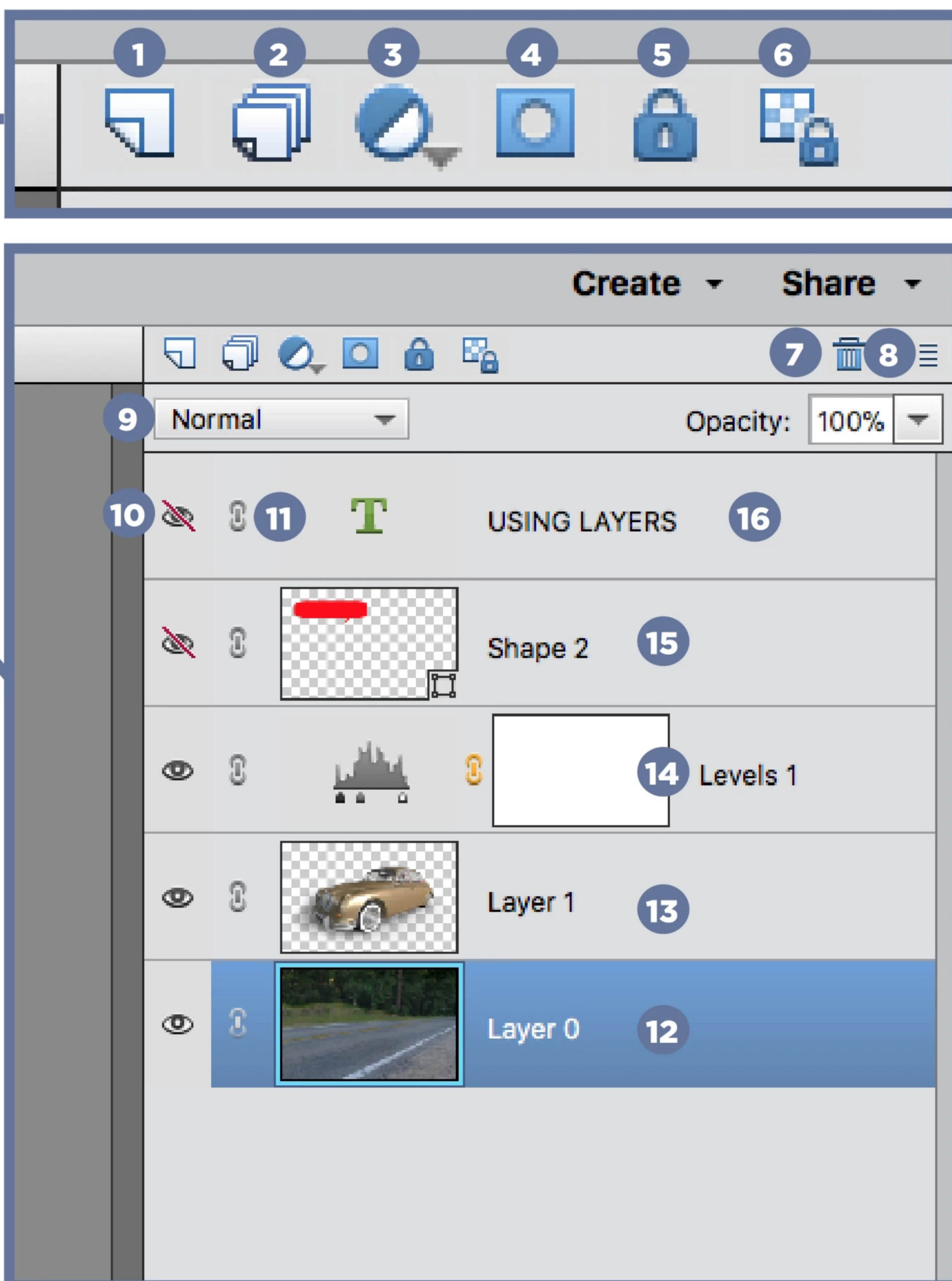
An adjustment layer is designed to affect the layer below it. In this example, we have a Levels adjustment that alters the brightness and contrast of all the layers stacked below it.

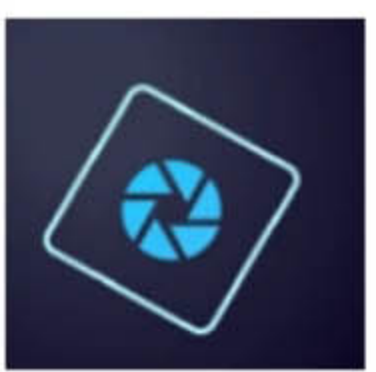
15 Vector Layer

A vector layer contains scalable data such as shapes in the case of our example. A small icon in the lower right corner of the thumbnail indicates it is a scalable graphic.

16 Text Layer

The thumbnail of a Text layer displays a T to indicate the layer contains scalable text. The layer name also reflects whatever text is on that layer.

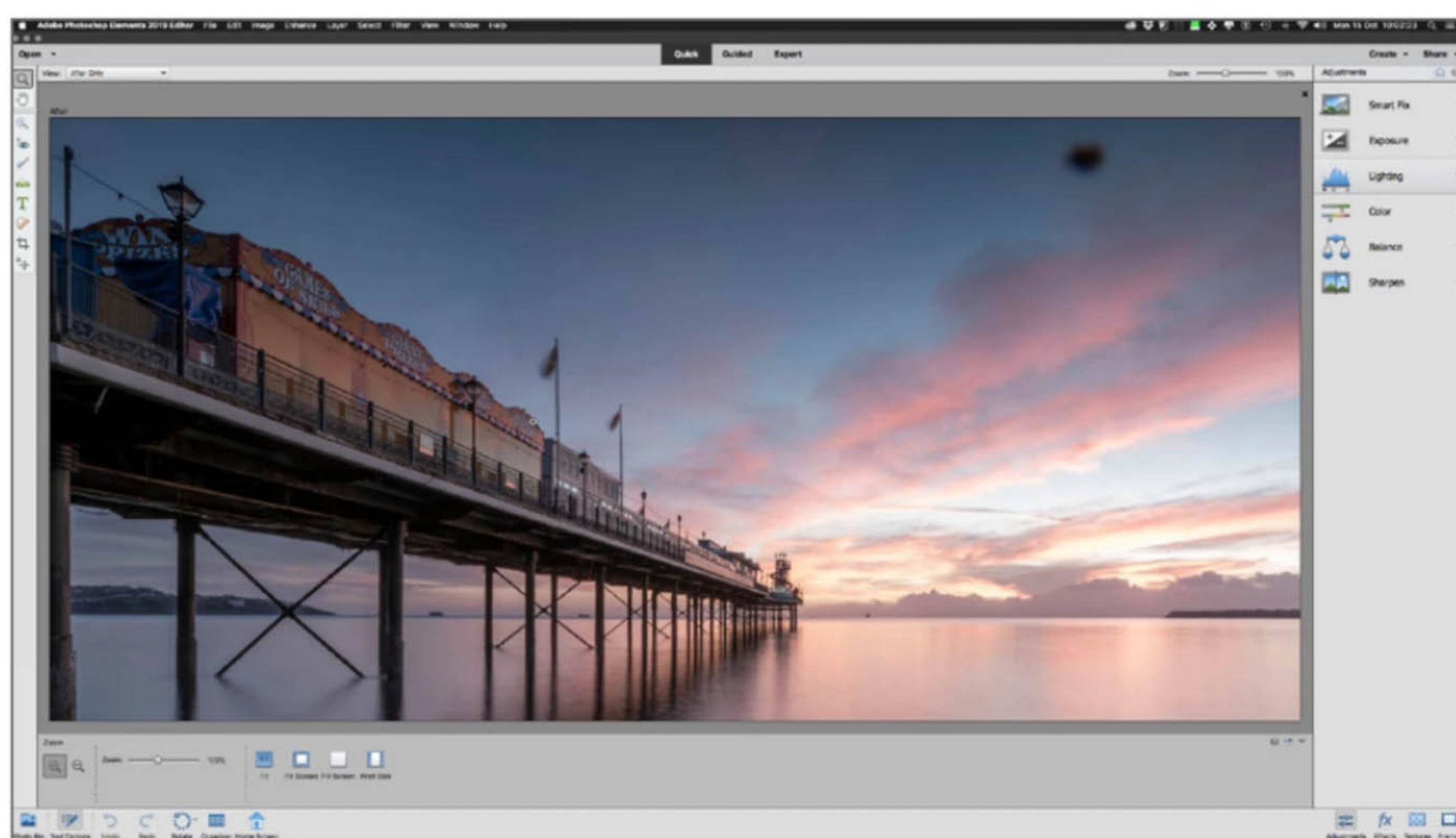




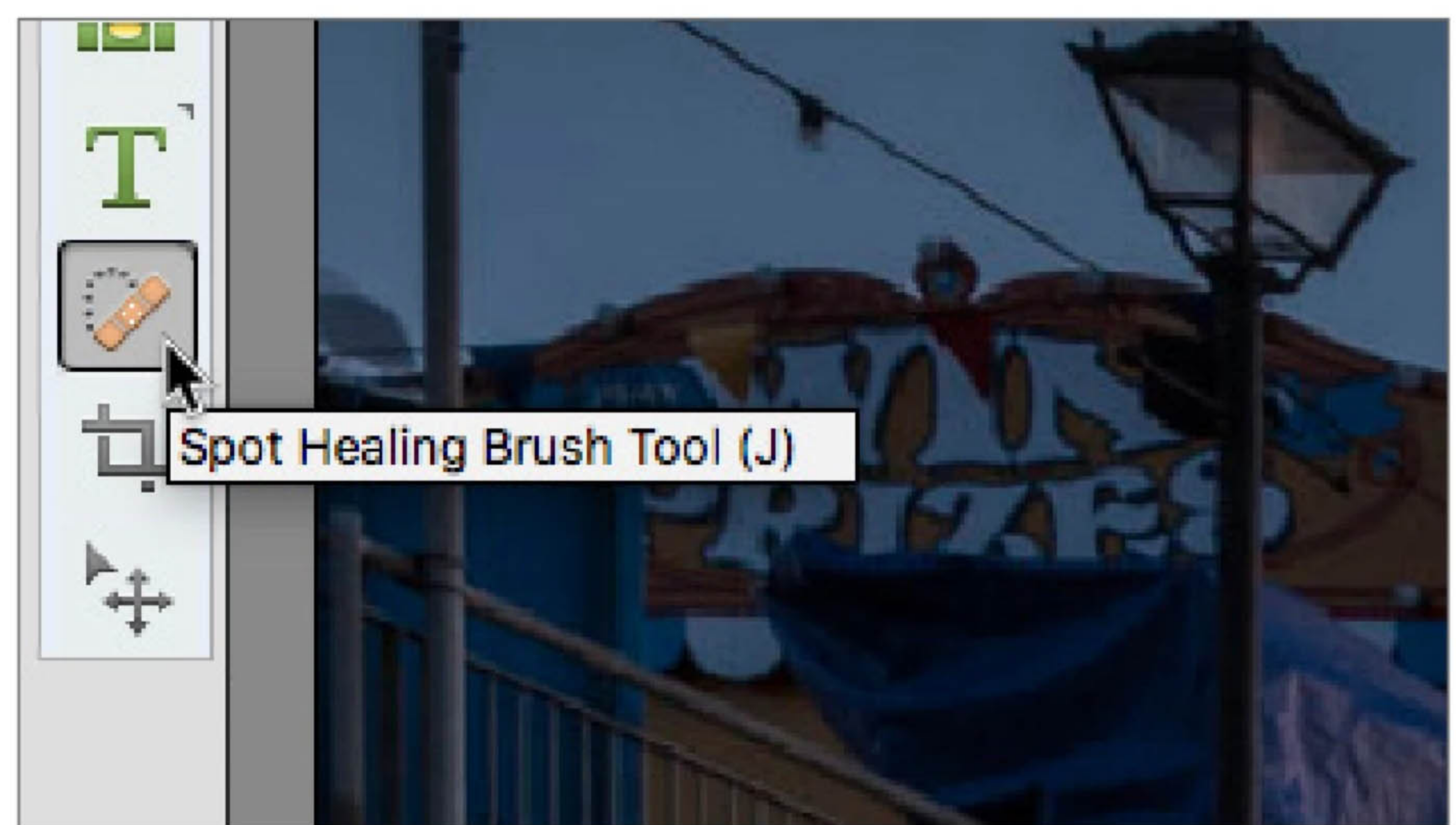
Methods for Adjusting an Image

When it comes to methods for adjusting your images in Elements, you are spoiled for choice. There are a number of methods to get an image looking great. We'll show you how each one works, with some examples, to help you choose which method suits you best.

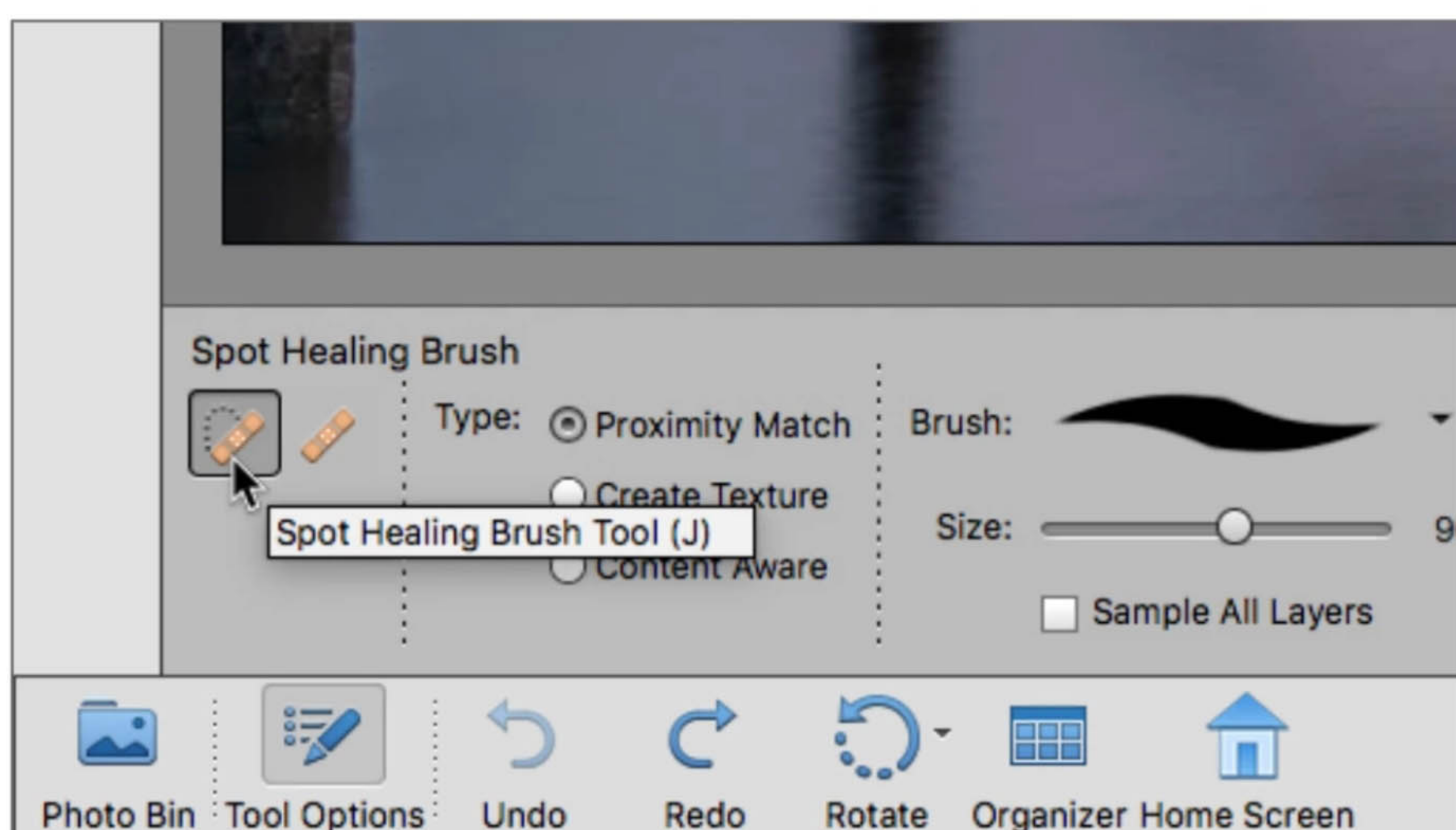
Quick Mode



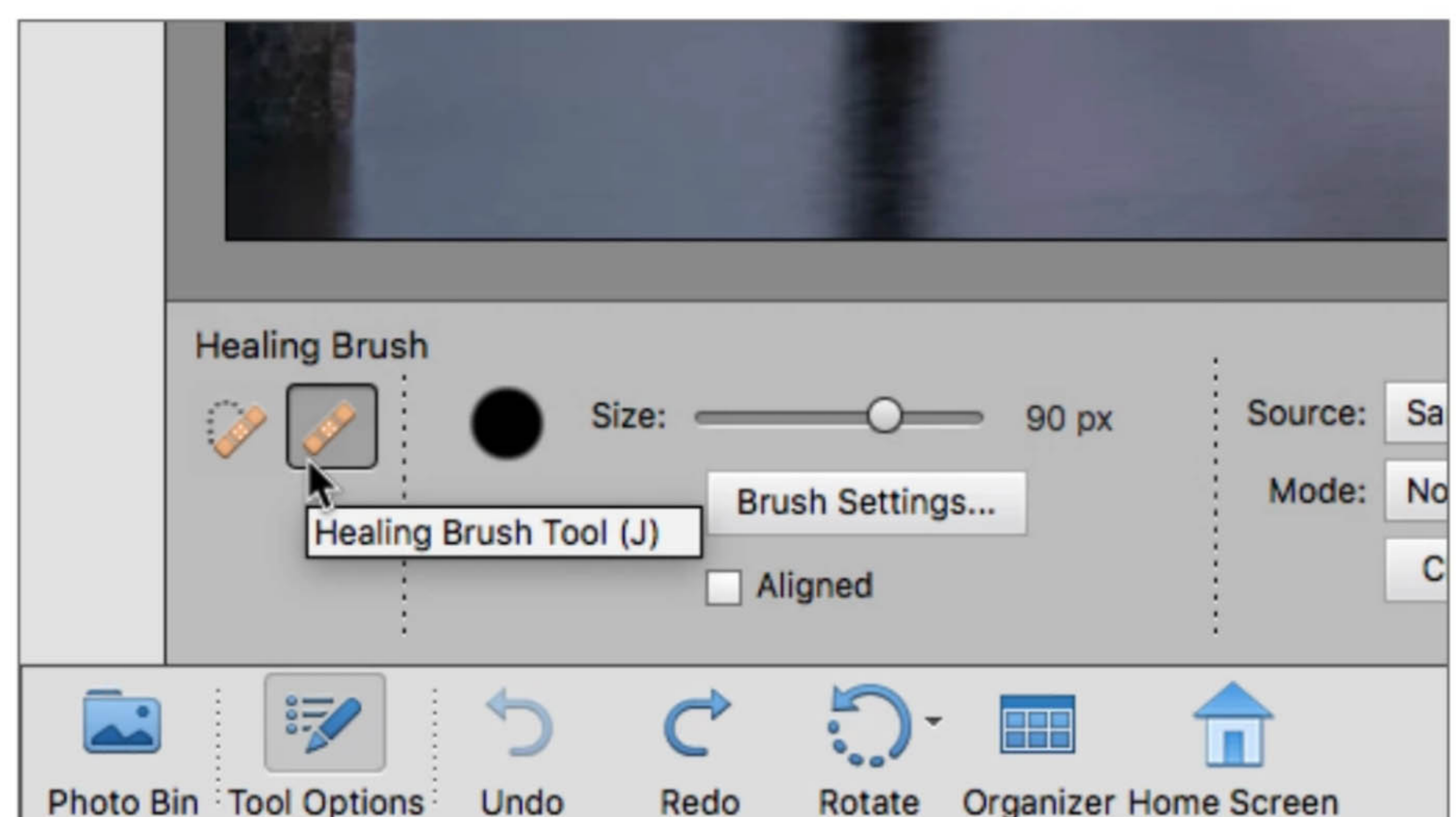
1 We start in the Quick mode workspace with a sunrise image of a pier that is in need of some work to make it look its best. The first thing to do is remove that large black spot in the top right corner: probably a bit of mud stuck to the lens, currently spoiling the shot.



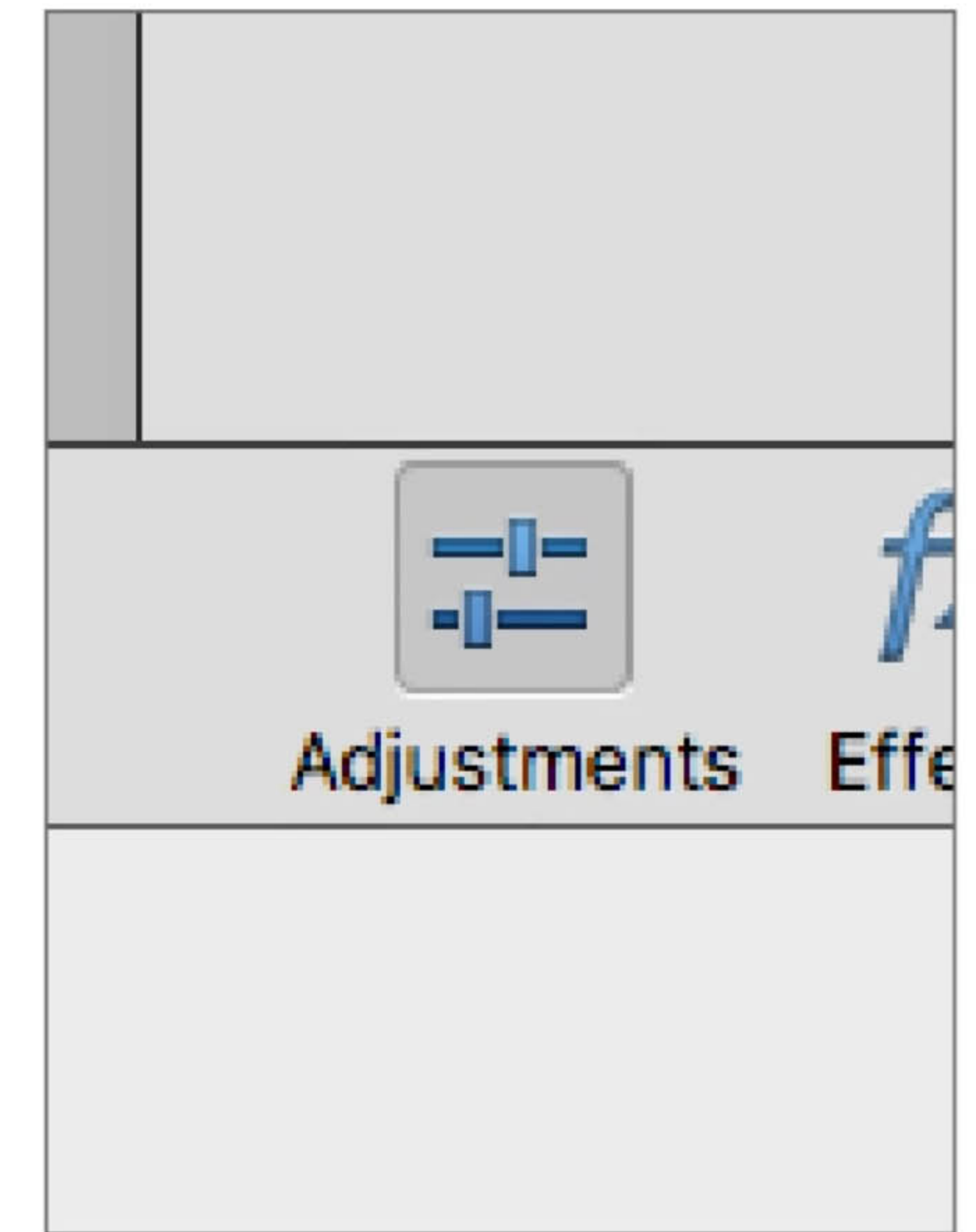
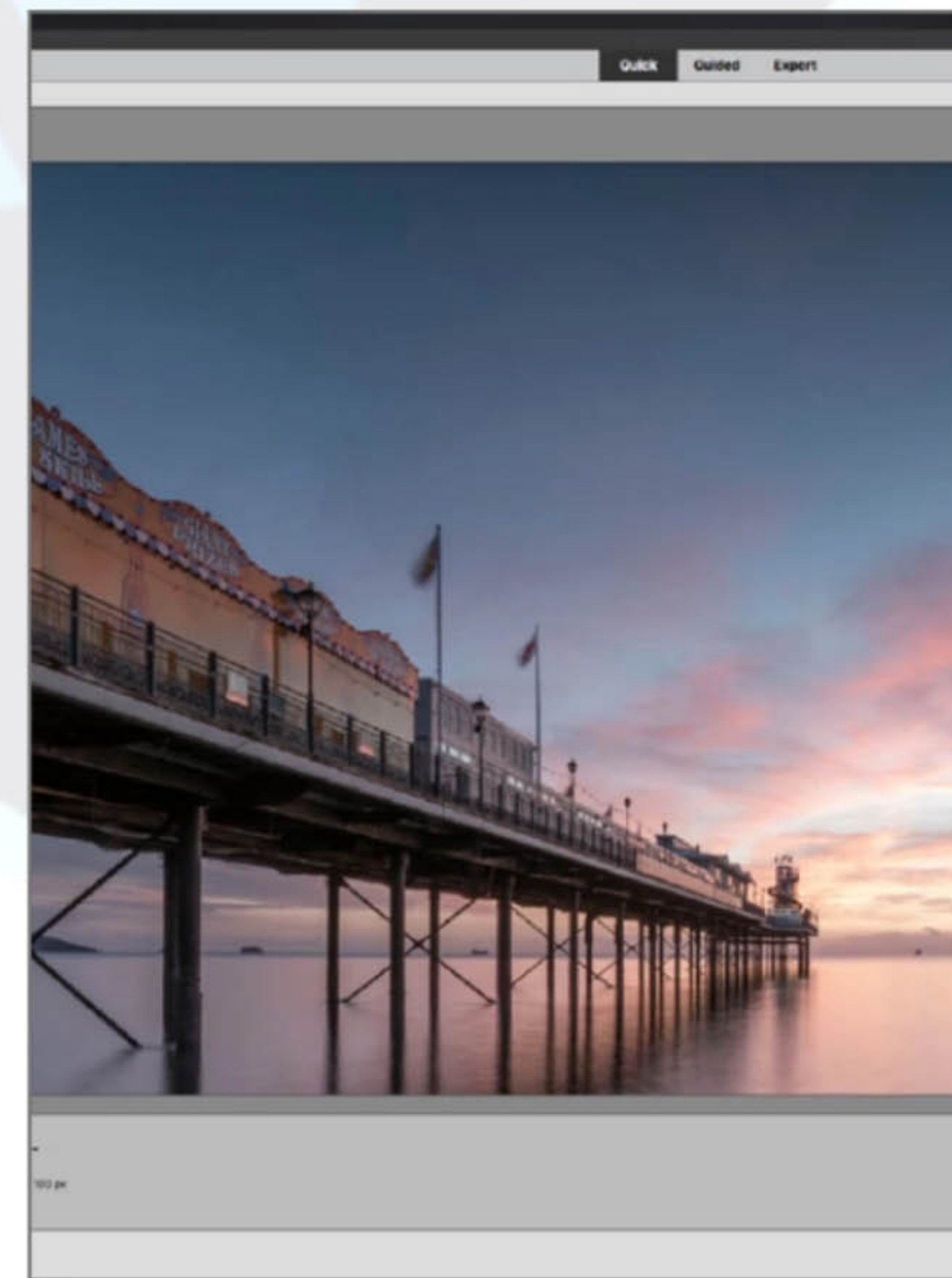
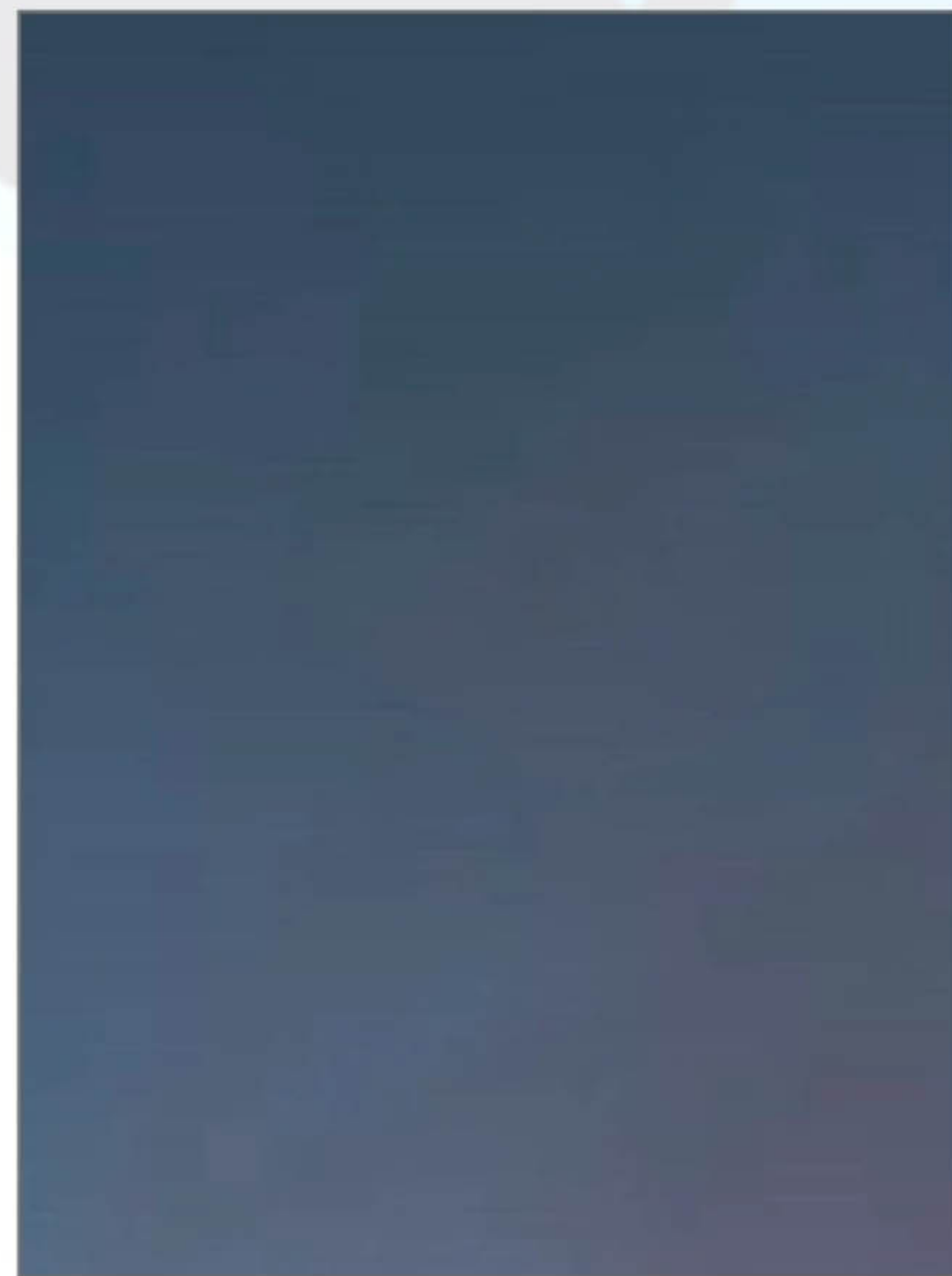
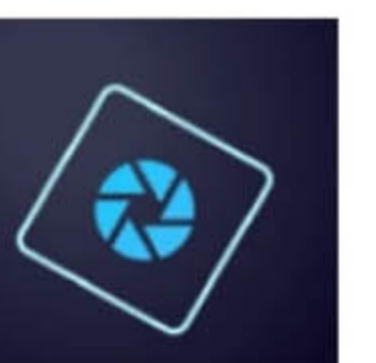
2 To remove such a blemish, you can go to the toolbar and choose the Spot Healing Brush Tool (J). When you choose this tool, the Tool Option panel displays Spot Healing Brush options. You can choose Spot Healing Brush or Healing Brush to remove the spot.



3 The main difference between the two brushes is that the Spot Healing Brush lets you paint directly over the blemish and then works out what to fill it with by analysing the area around it. Proximity Match and Content Aware are the best options here for this kind of blemish.

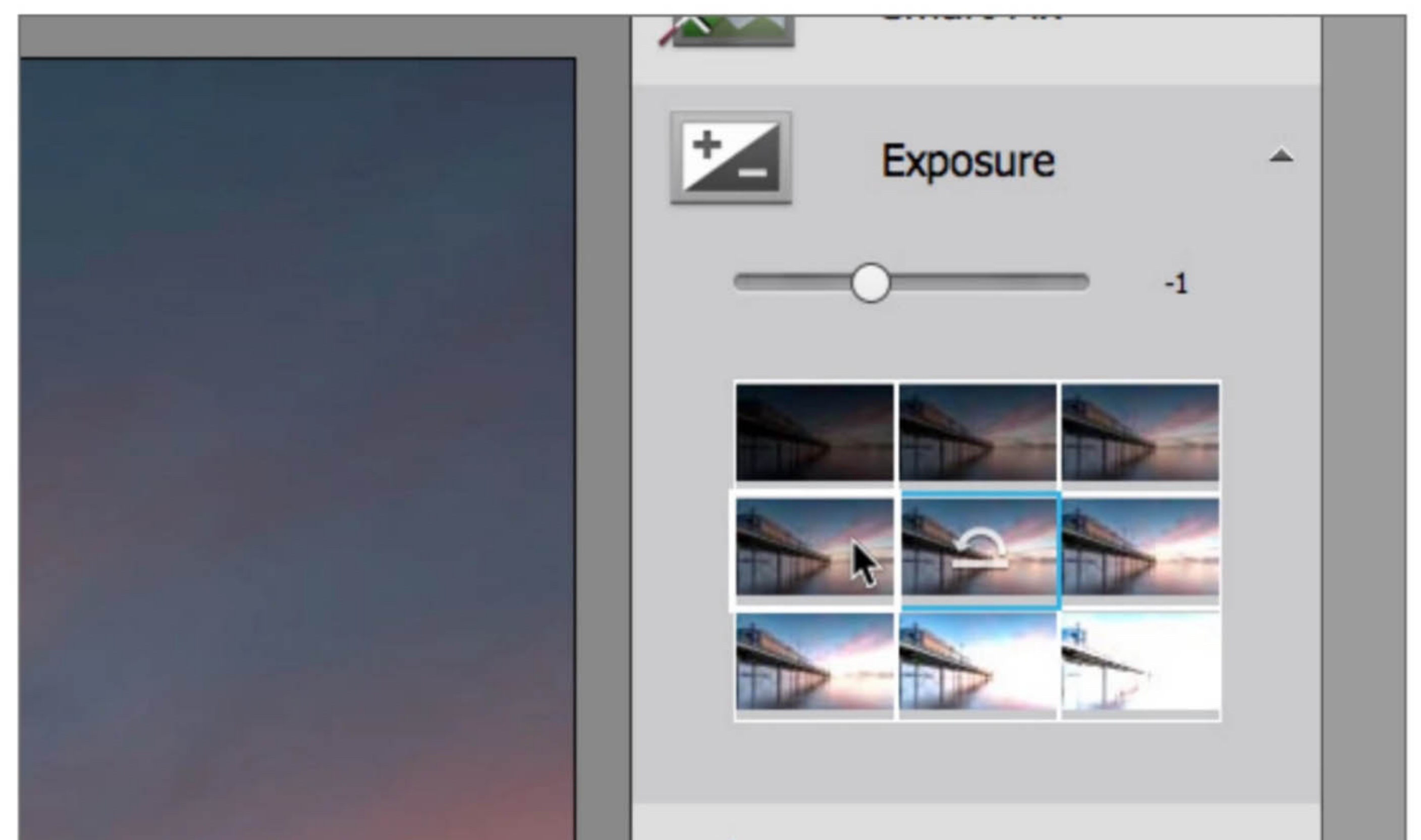
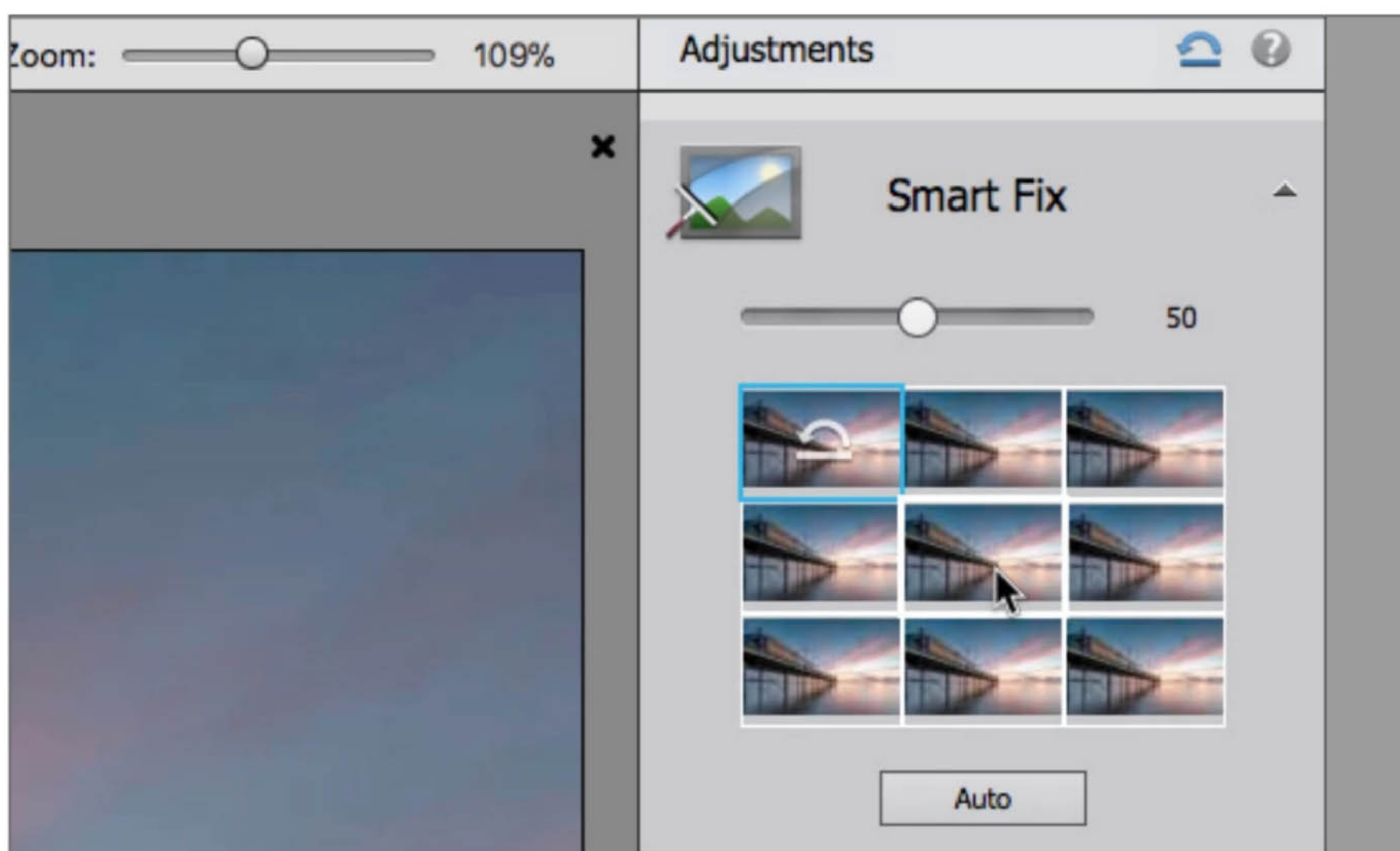


4 The Healing Brush Tool asks you to select an area to be the clone source by clicking on a clean part of the image next to the blemish. This chosen area will then be cloned over the blemish when you paint over it. The cloned source will be blended in to be as seamless as possible.



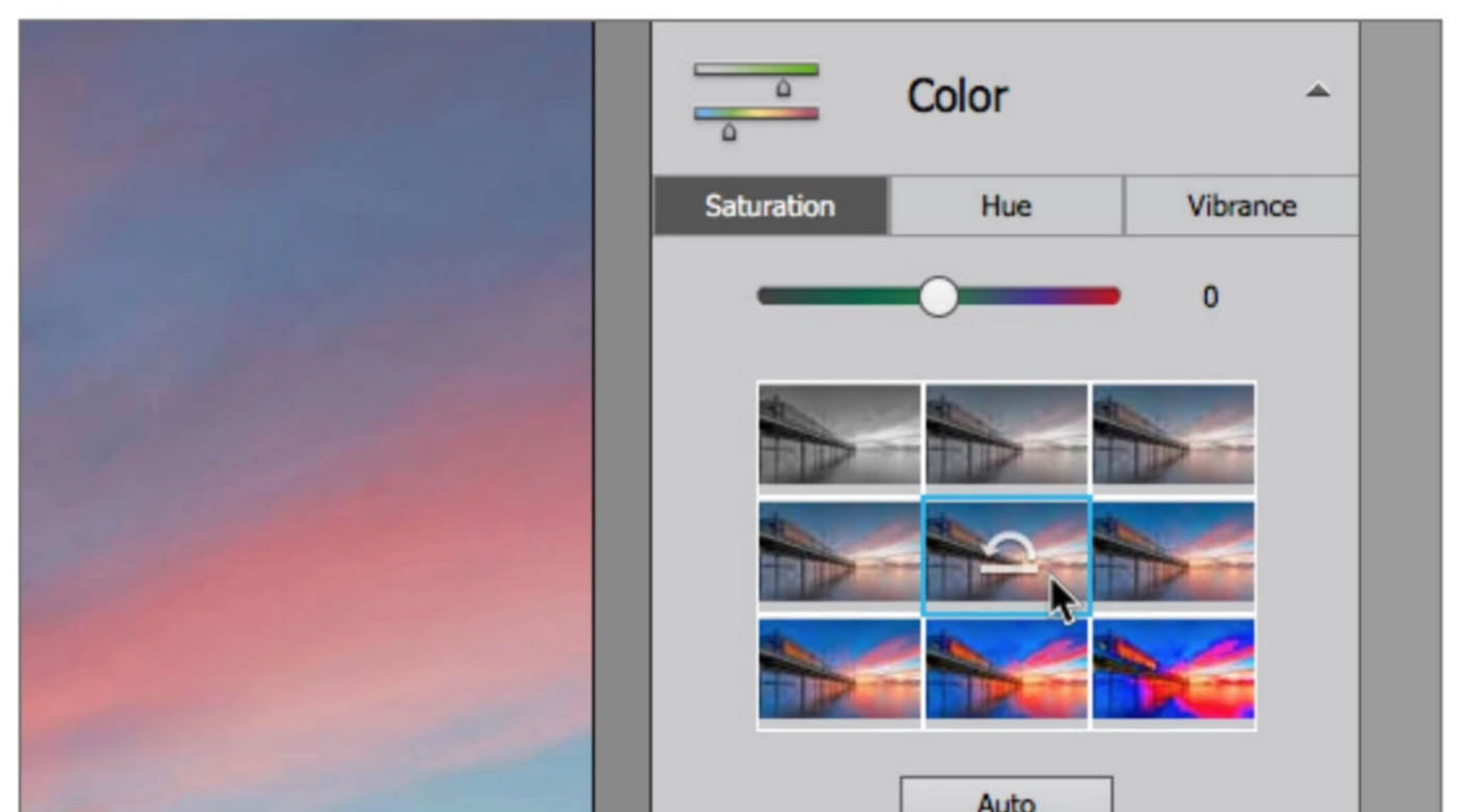
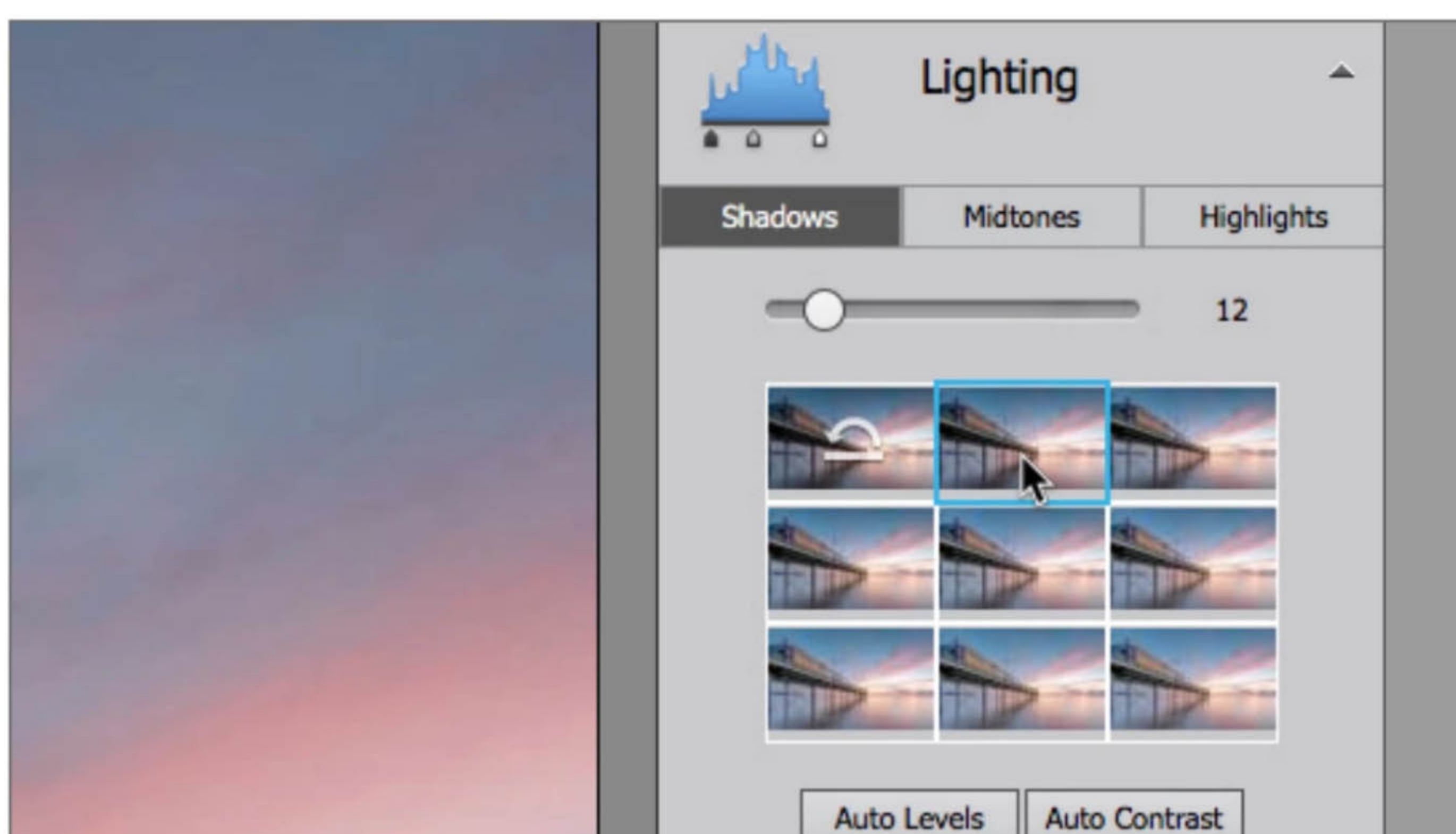
5 You can alter the brush size by using the Size slider in the Tool Options panel or by pressing the left and right bracket keys. Pressing [will reduce the size of the brush and pressing] will increase the brush size. This lets you clone with greater accuracy and detail if you need it.

6 Now that the blemish is gone, we can look at making the image more vibrant and appealing. Layers are not available in Quick mode, so it comes down to choosing the right method for the best overall effect. The easiest way to see the effect you can have on the image is to choose Adjustments from the taskbar.



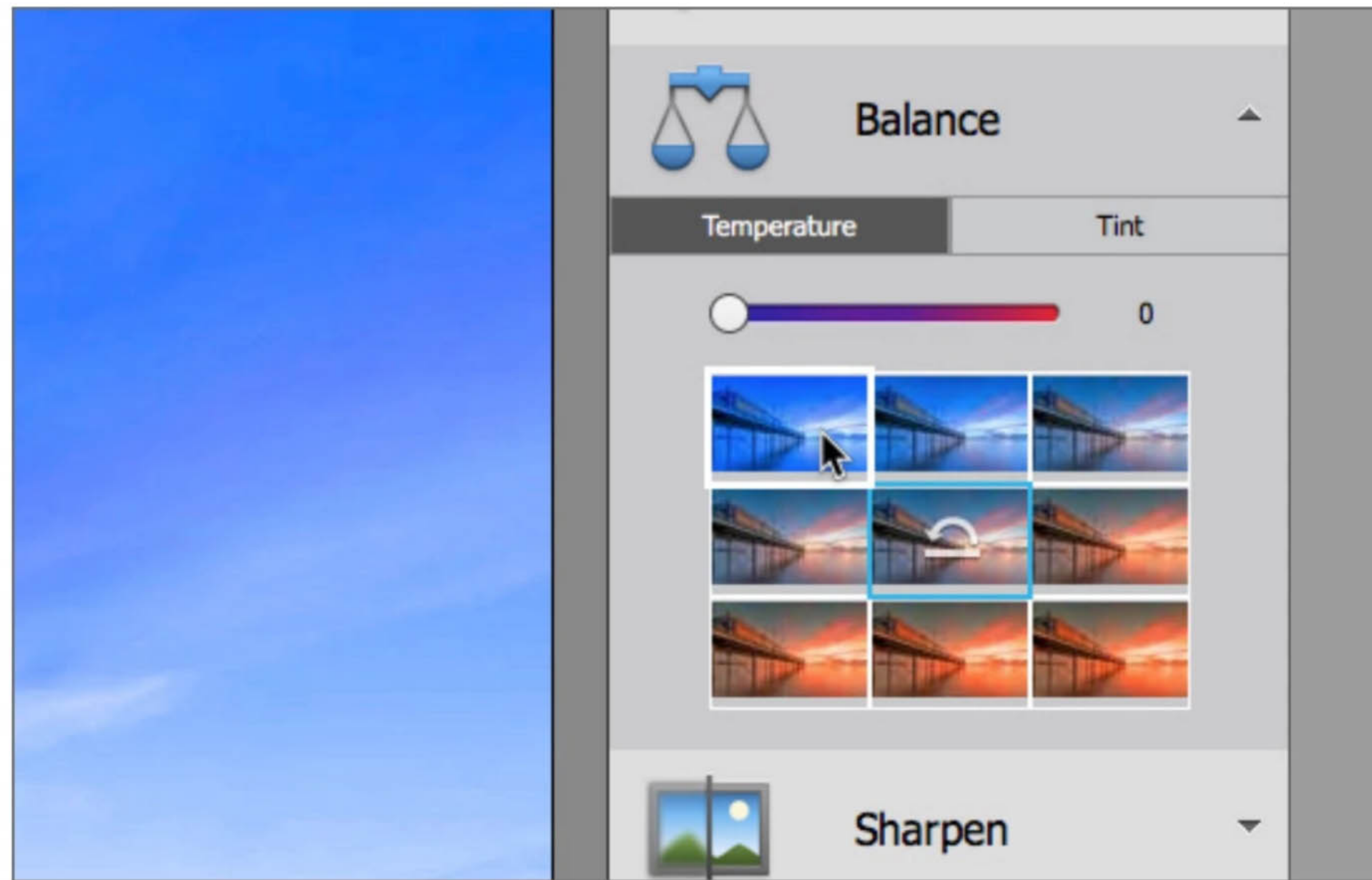
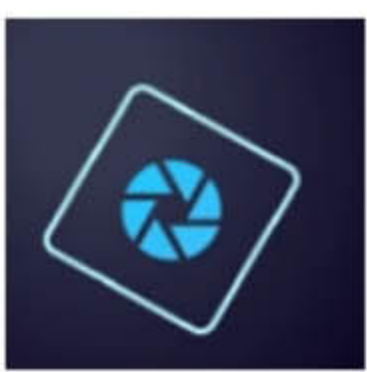
7 This calls up the Adjustments panel. You can choose Smart Fix and select from a number of options that make subtle changes to the image and recover detail in the highlights and shadows. Hover over each one to see a preview of the effect applied to your photo. Click the one you want to apply.

8 Next, you can go to the Exposure adjustment and choose to make the image brighter or darker. Again you can hover over a number of options and see a preview of the effect or use the slider to make more subtle adjustments to the brightness of the image.

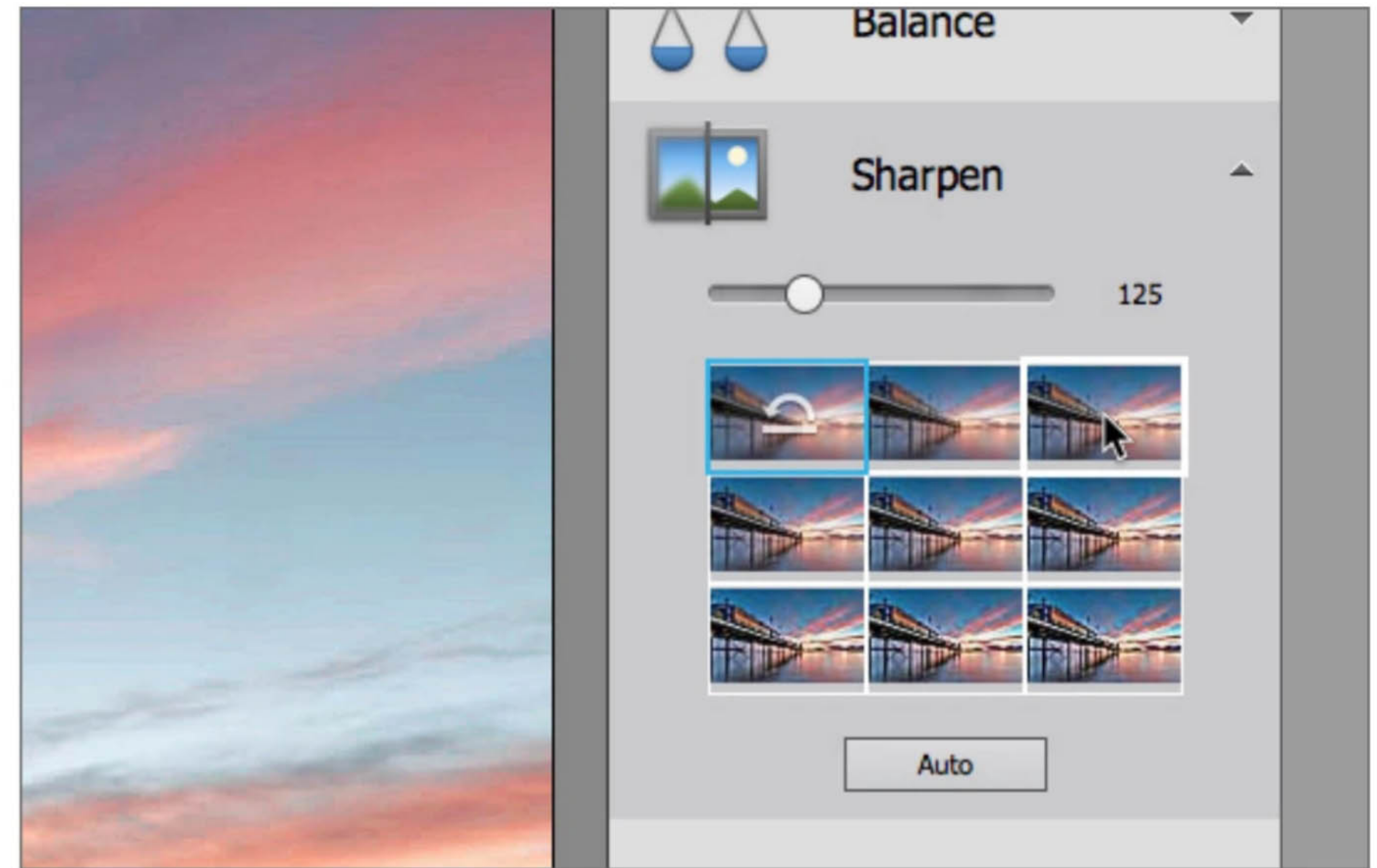


9 The Lighting panel is the key to really controlling the brightness of your Highlights, Midtones and Shadows, each of which has its own tab for you to access. Choose from the options provided or use the sliders for more subtle control of each of the tonal options.

10 The vividness of your image can be controlled in the Colour panel. Increase the Saturation globally or use Vibrance to increase the most subdued colours first. Hue lets you shift the entire colour palette for a surreal colour effect if you require it.

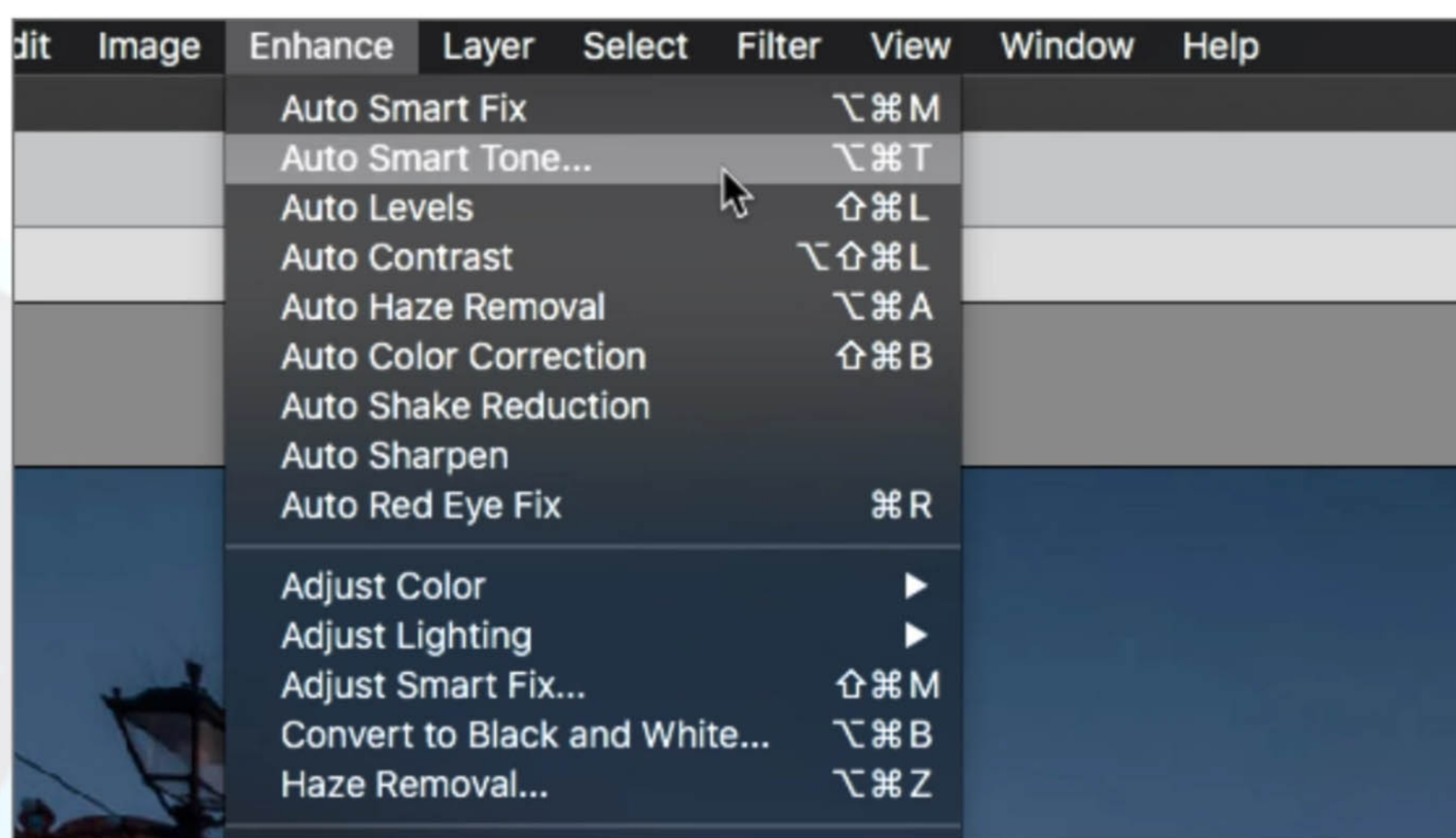


11 Balance lets you shift the colour temperature from cold to warm and Tint allows you to add either an increasingly green colour cast or a magenta cast to help offset any colour inconsistency in your original image.

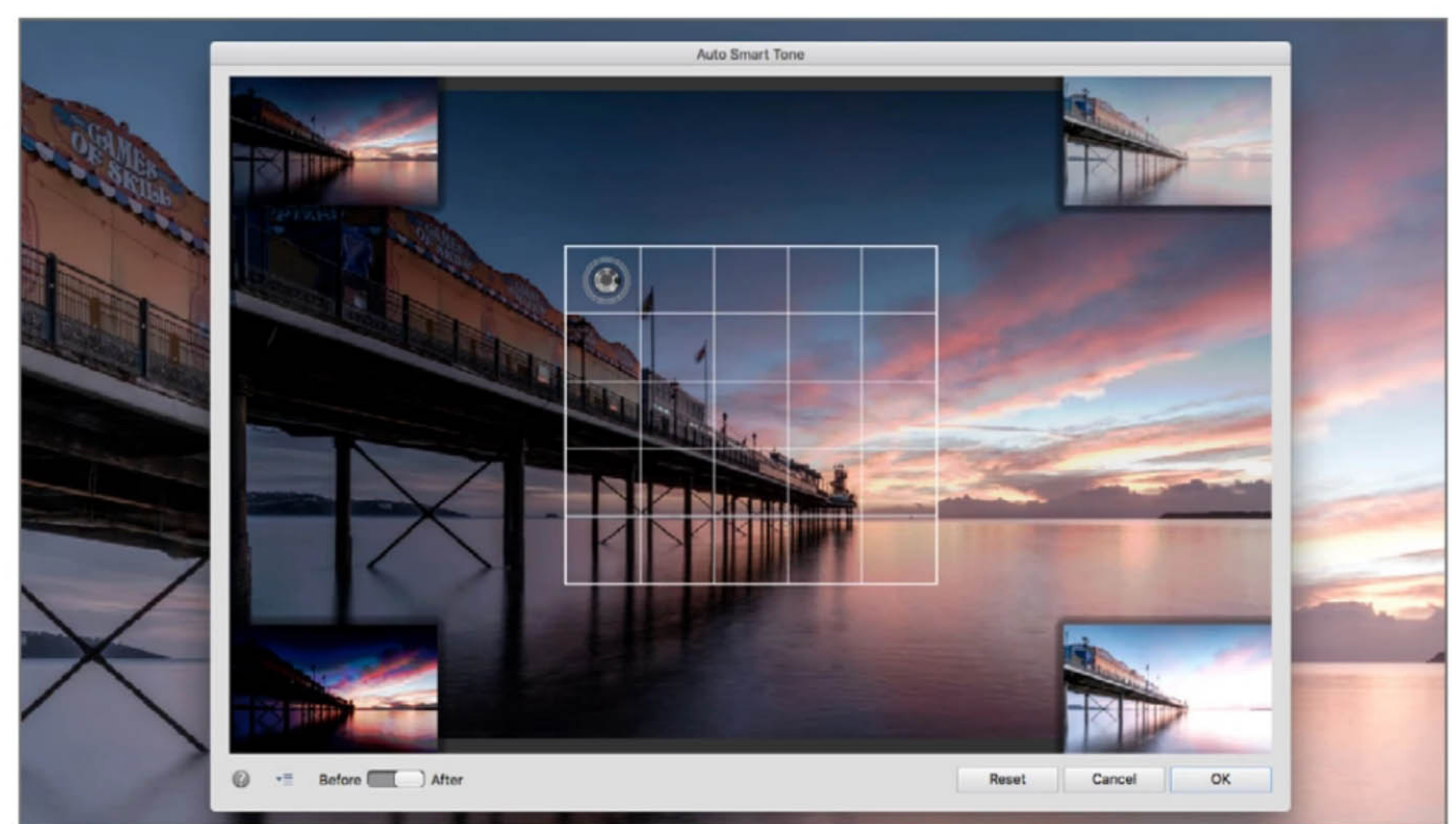


12 Finally, you can go to the Sharpen panel and apply levels of sharpness to your image; but beware of overdoing it and creating artefacts and halos as the contrast increases and bright unwanted highlights appear around areas of high contrast in your photo. If you are happy, you can save the result.

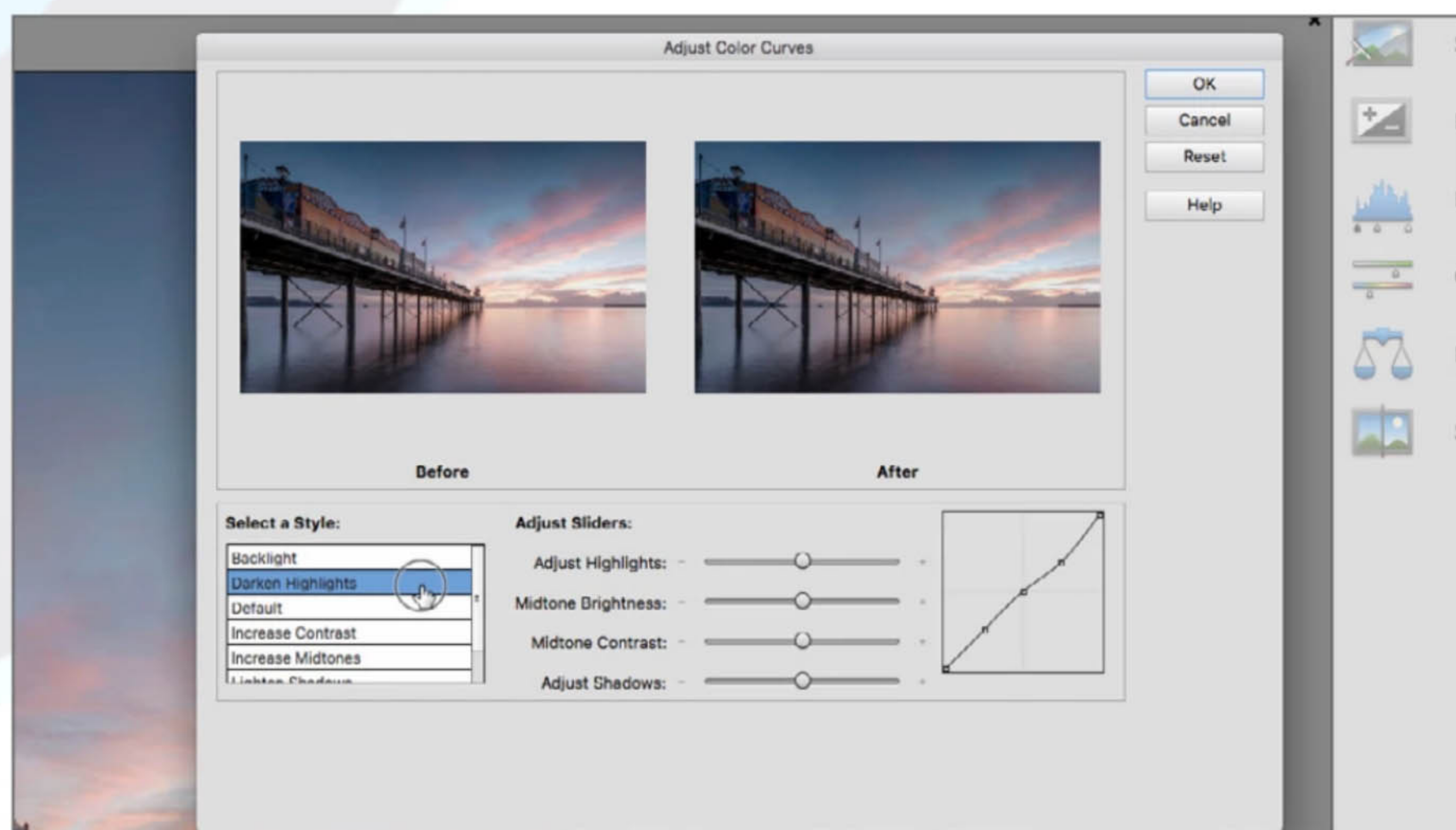
Quick Mode Auto Modes



13 Under the Enhance menu are a number of Auto features to improve your image. These are quite broad in their effect and do lack a certain finesse, so you have no real control over the outcome. If you want some more input in the effect there are a couple with a bit more control worth looking at.



14 If you go to Enhance > Auto Smart Tone (Shift + Cmd + T) an interactive panel appears, where you can drag a cursor around a grid. Each corner of the grid shows a possible outcome that can be achieved by moving the cursor further in that direction. Move it around until you get the result you want.



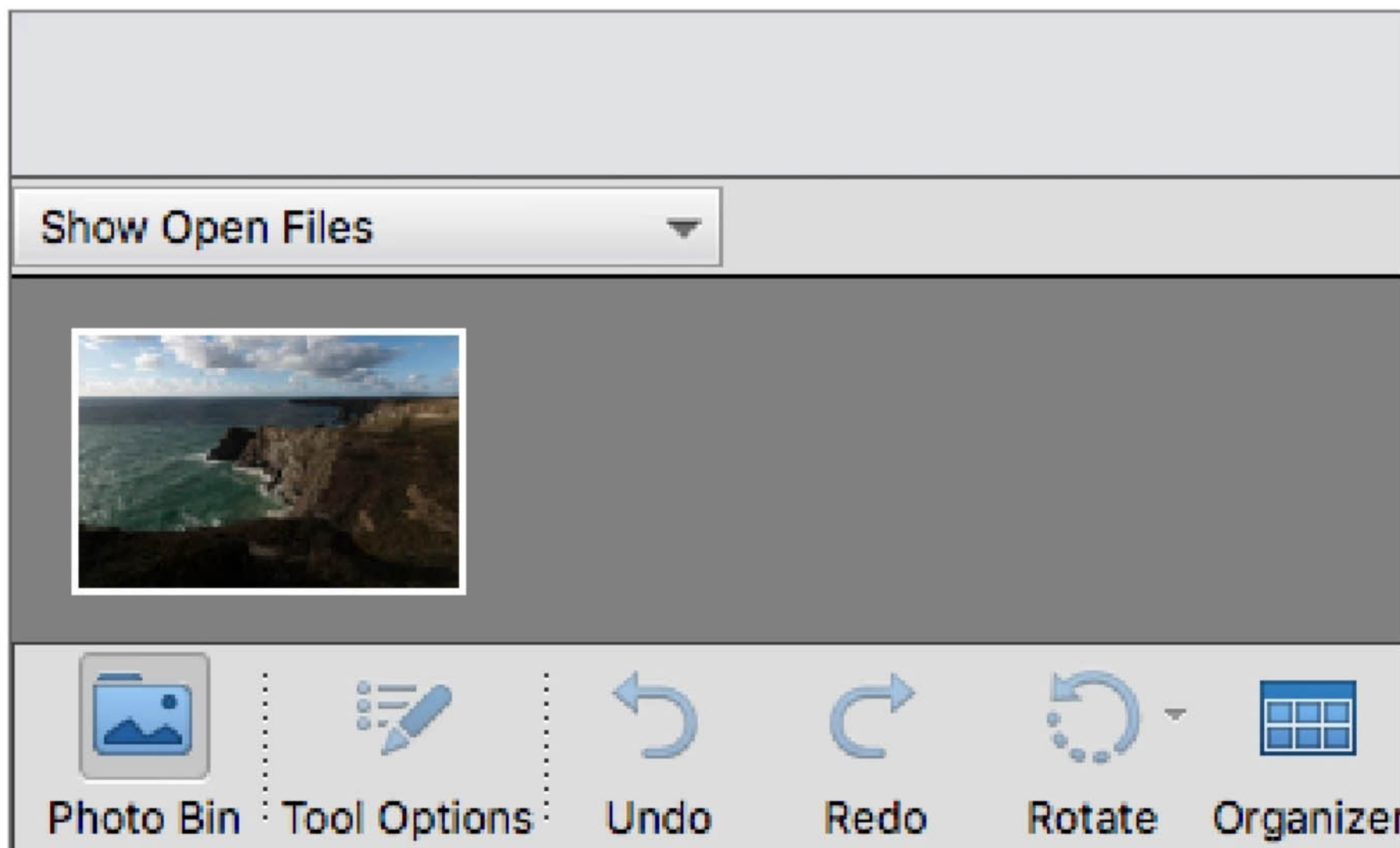
15 If you go to Enhance > Adjust Colour > Adjust Colour Curves, you can adjust the Highlights, Midtones and Shadows of your image. There are a number of preset styles you can choose from to enhance the colour in your image as well as the option to manually adjust the tone sliders.



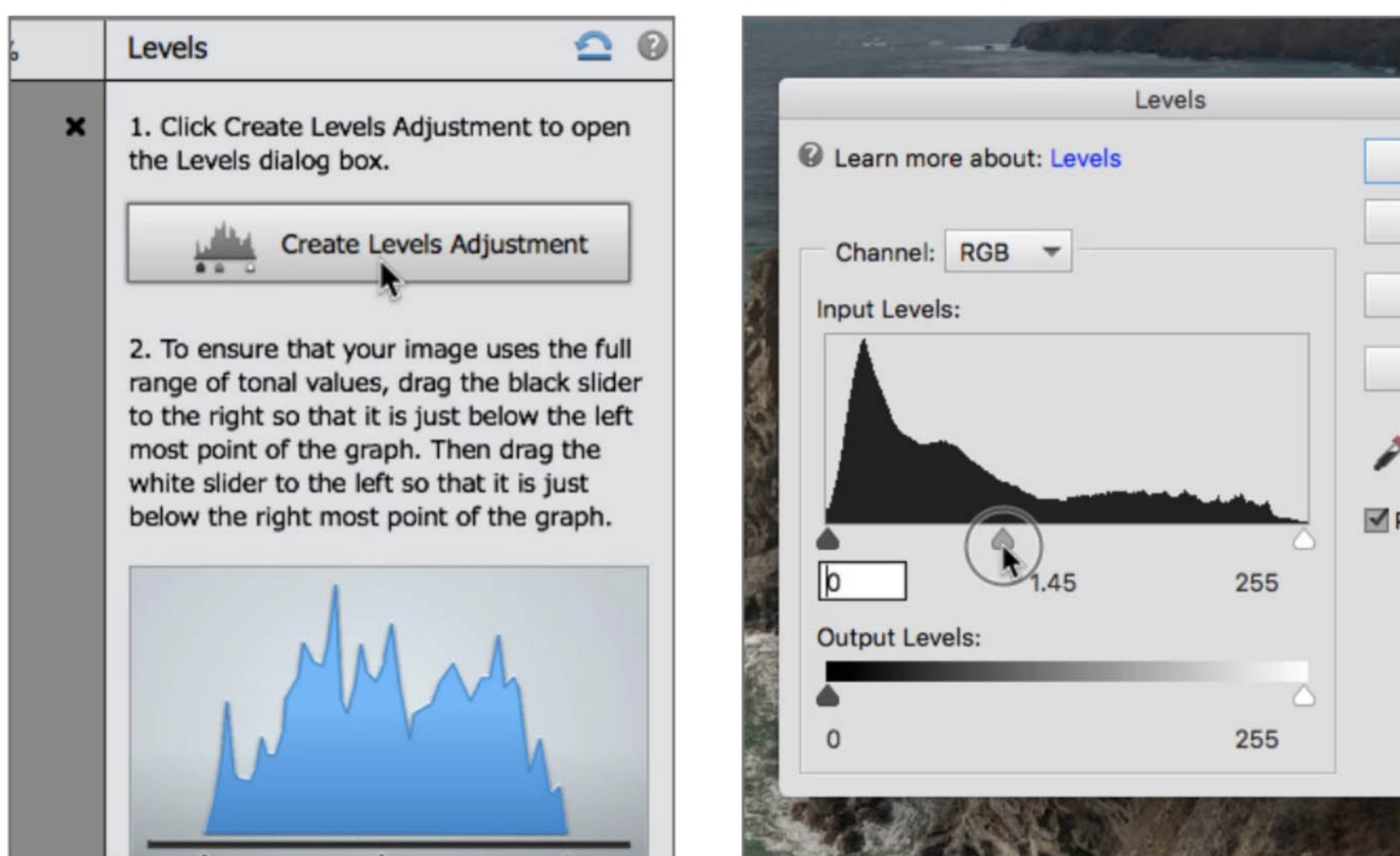
16 Another option, but one that needs a light touch, is the Haze Removal tool. Go to Enhance > Haze Removal (Shift + Cmd + Z). This can be quite a strong effect but there are sliders to adjust the strength of the Haze reduction applied and also the sensitivity of the haze detection.



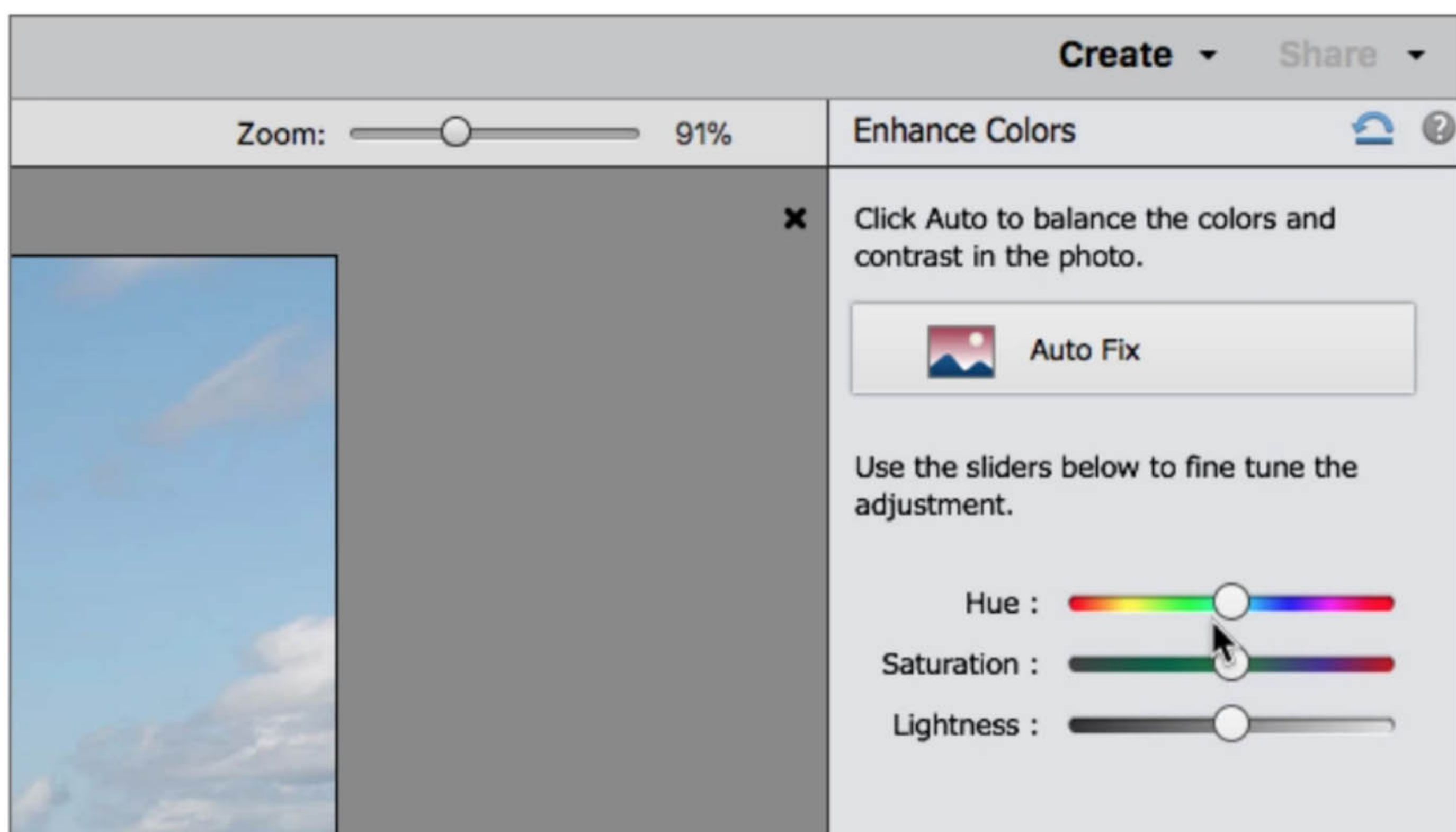
Guided Mode



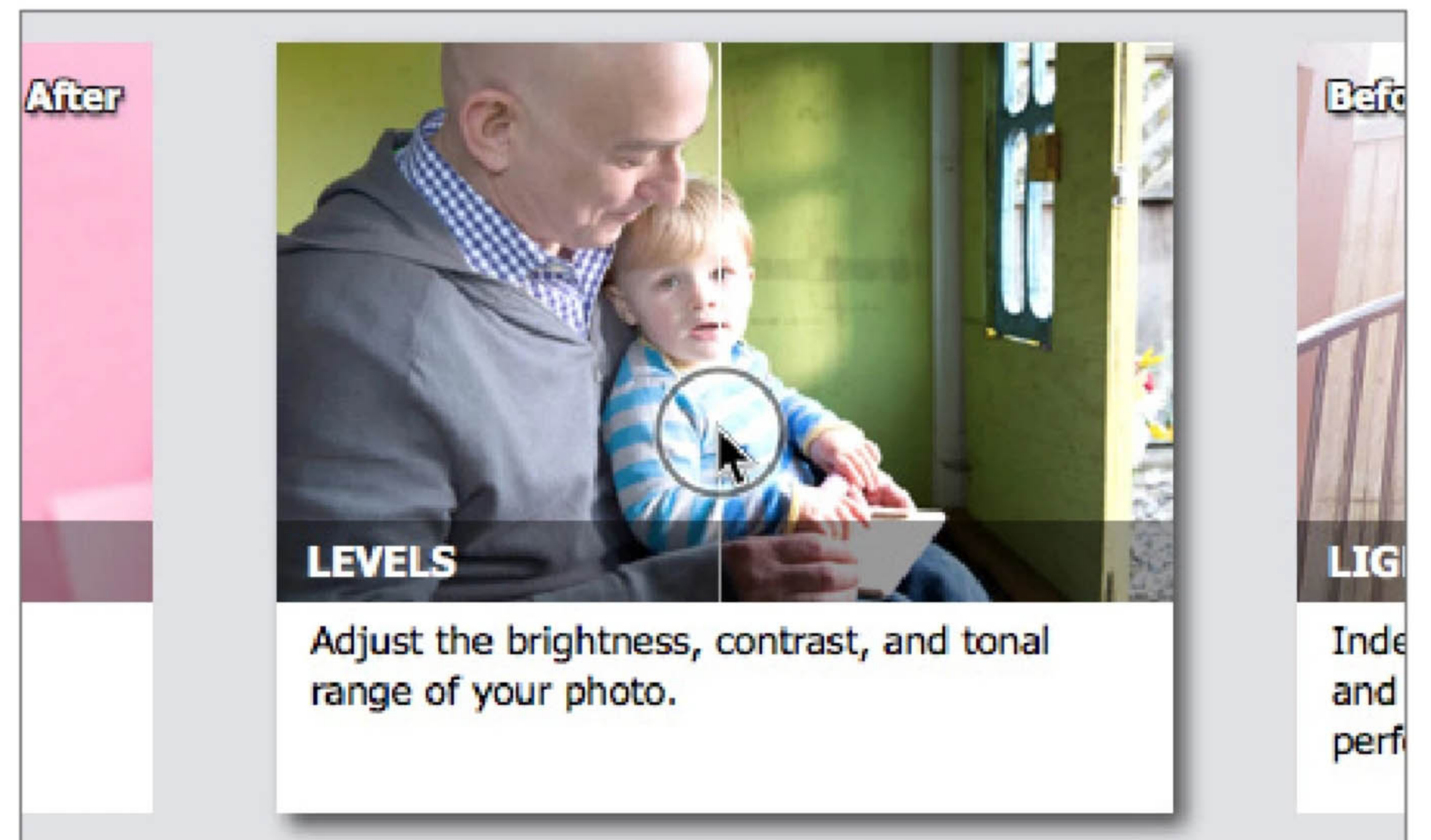
1 Guided Mode is an alternative if you are happy to have less advanced adjustment options available but with more step-by-step guidance to help you on your way to creating the final image. Make sure you have an image open in the Photo Bin ready to work on.



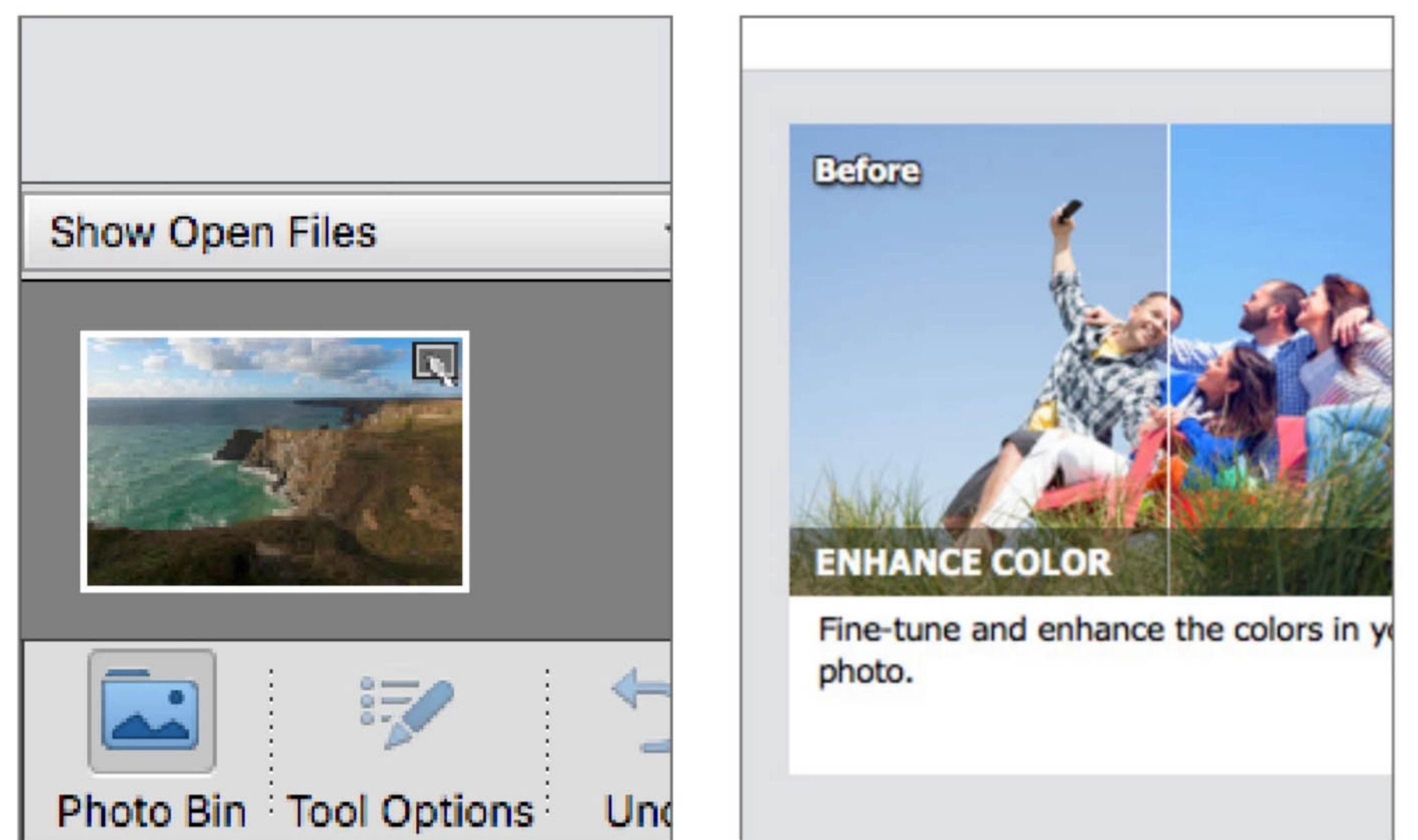
3 You will be asked to create a Levels adjustment and a dialog panel will appear. Click OK. Since the image has a lot of underexposed dark areas in the foreground, sliding the Midtone slider to the left will brighten the photo in those darker areas. You can then click Next and then Done for this part.



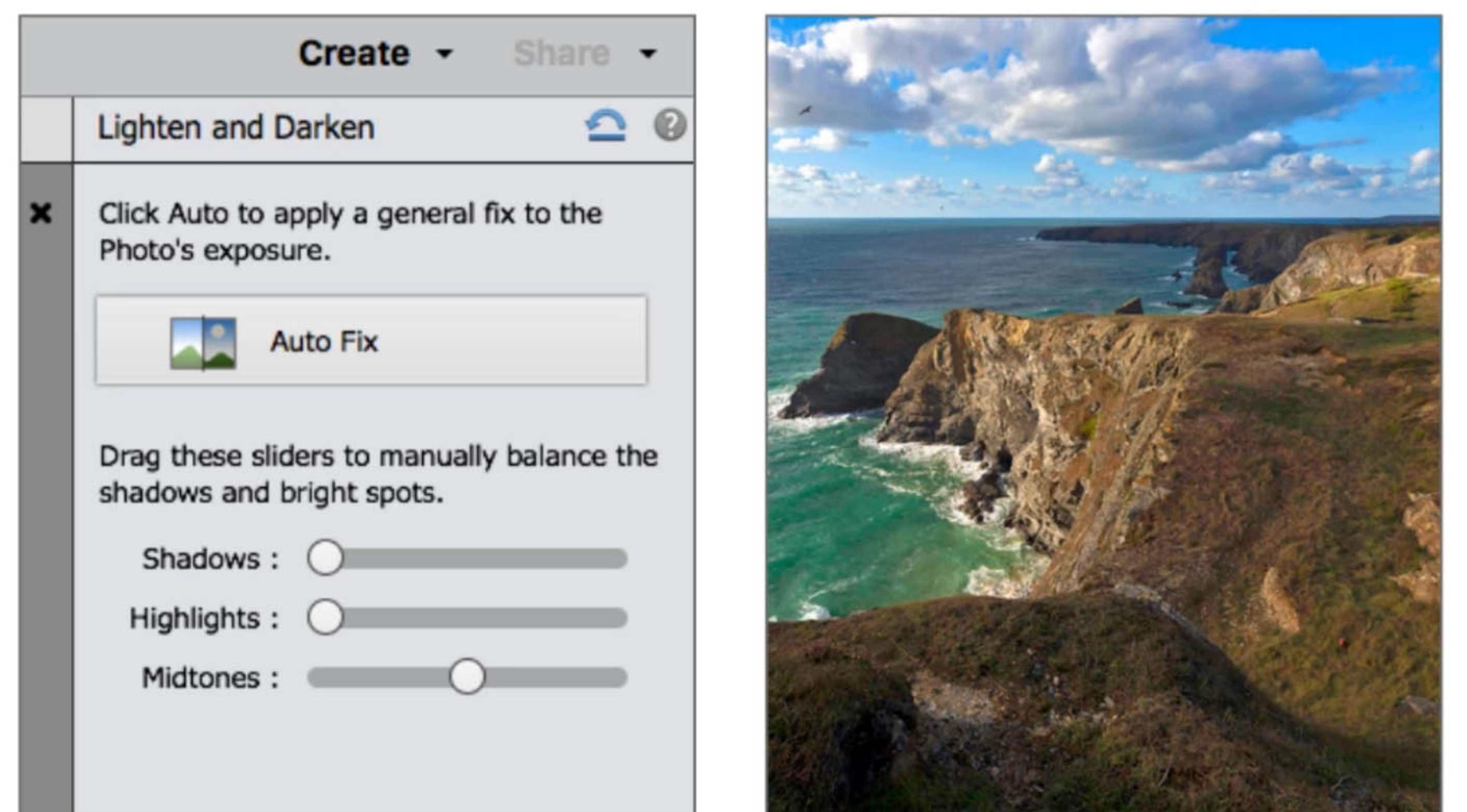
5 You can use the three sliders of Hue, Saturation and Lightness to make the image much more saturated and bring out the colours in the sea, sky and foreground. A boost of Saturation to 45 and Lightness to -2 is enough to bring more life into the photo. You can click Next and Done once more.



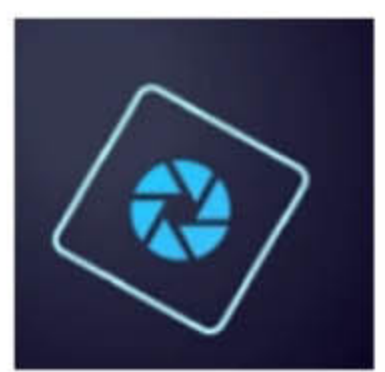
2 The great thing with Guided edits is that you don't have to apply just one edit. We are going to apply several to get the end result we are after. Start with Levels to get the overall brightness of the image dialled in first. Levels can be found in the Basic category.



4 Now, if you look in the Photo Bin, back at the main Guided Home screen, the photo will have a small icon in its top right corner that indicates it has edits applied. Then, you can go to the Colour category and choose Enhance Colours to add more vividness to the photo.

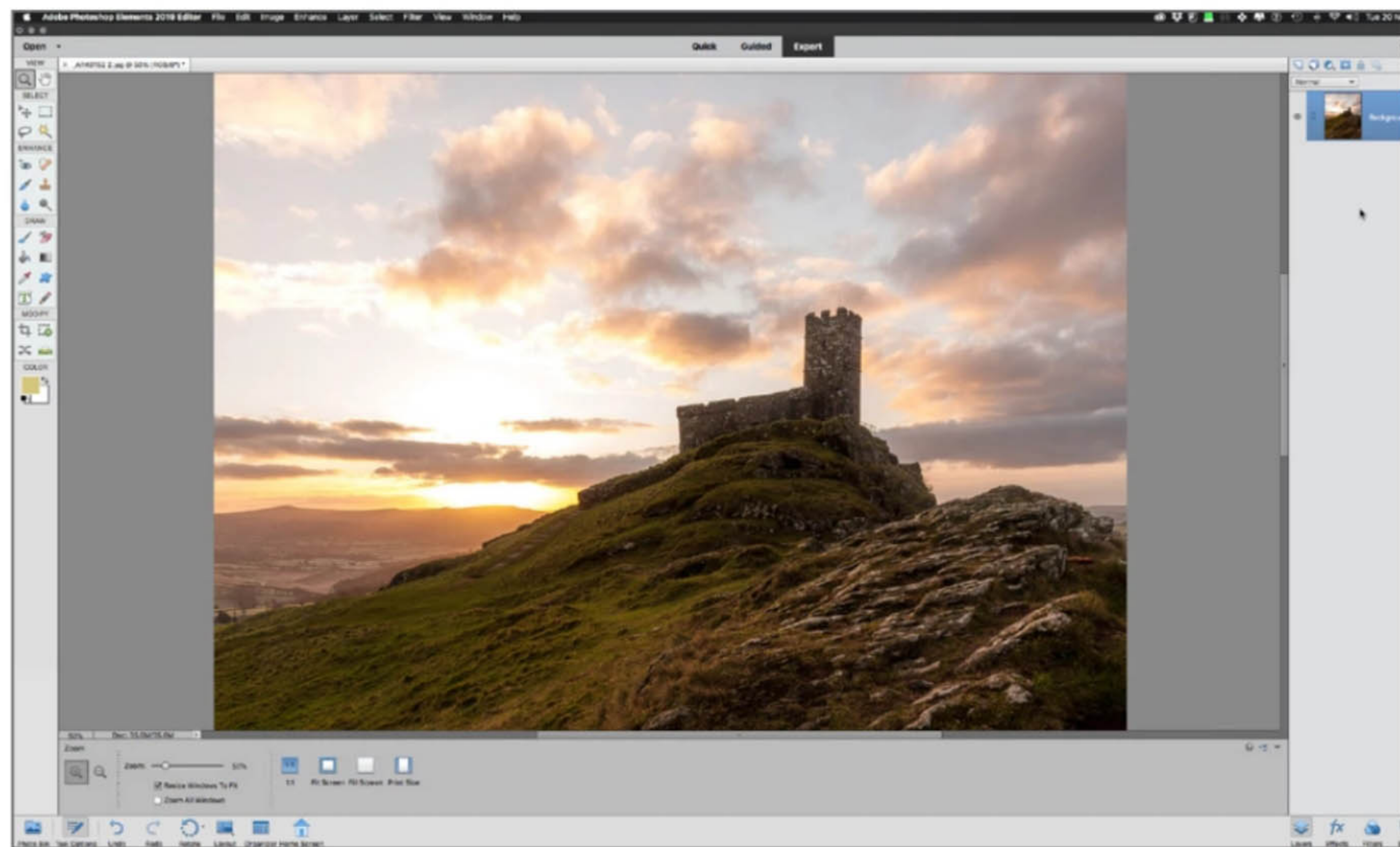


6 Finally, back in the Basics category, click Lighten and Darken and use the three Shadows, Highlights and Midtones sliders to make final tweaks to the image. The Highlights have been reduced to bring more detail back into the brightest areas. At this point you can click Next and then save your image.

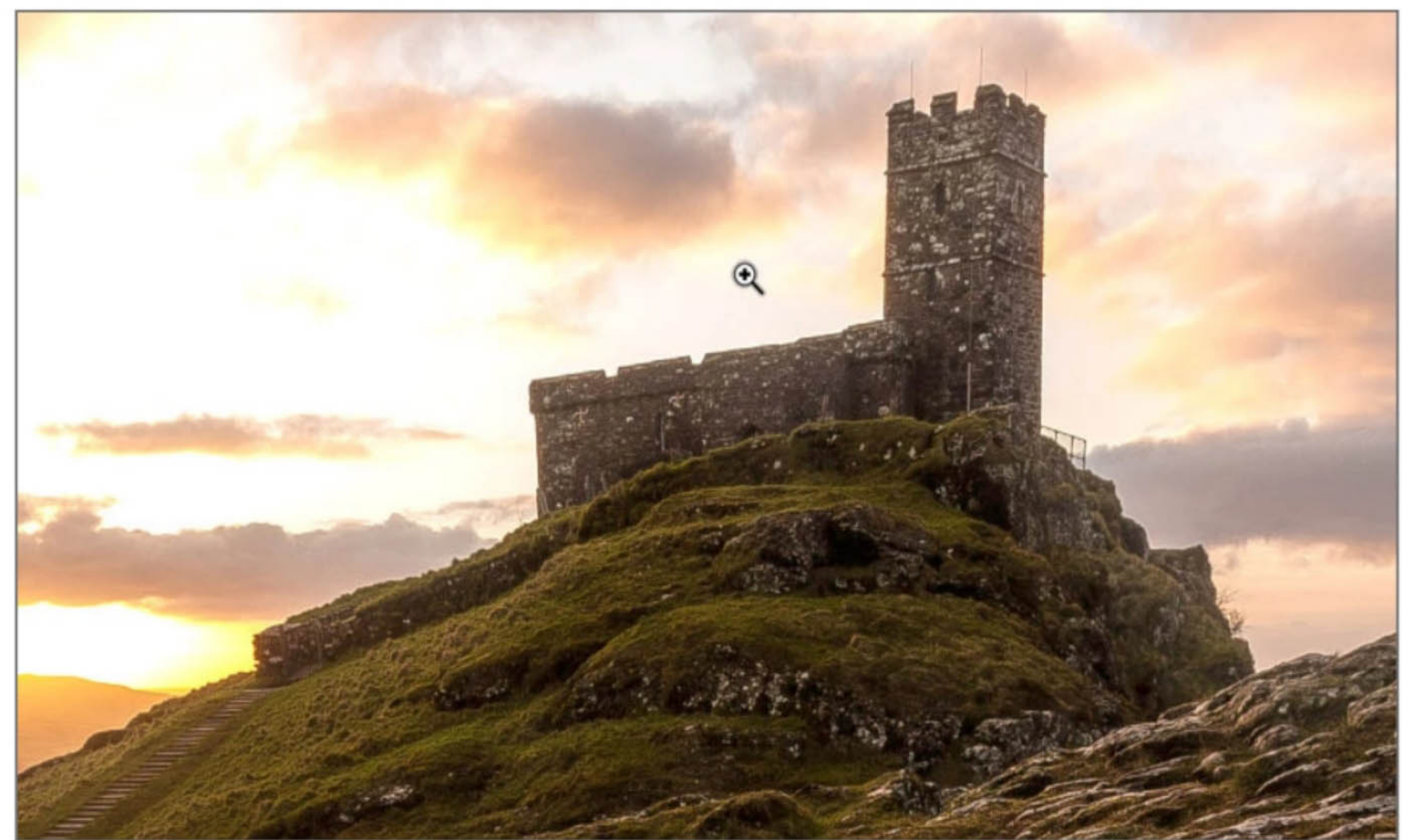


Using the Photo Editor Expert Mode

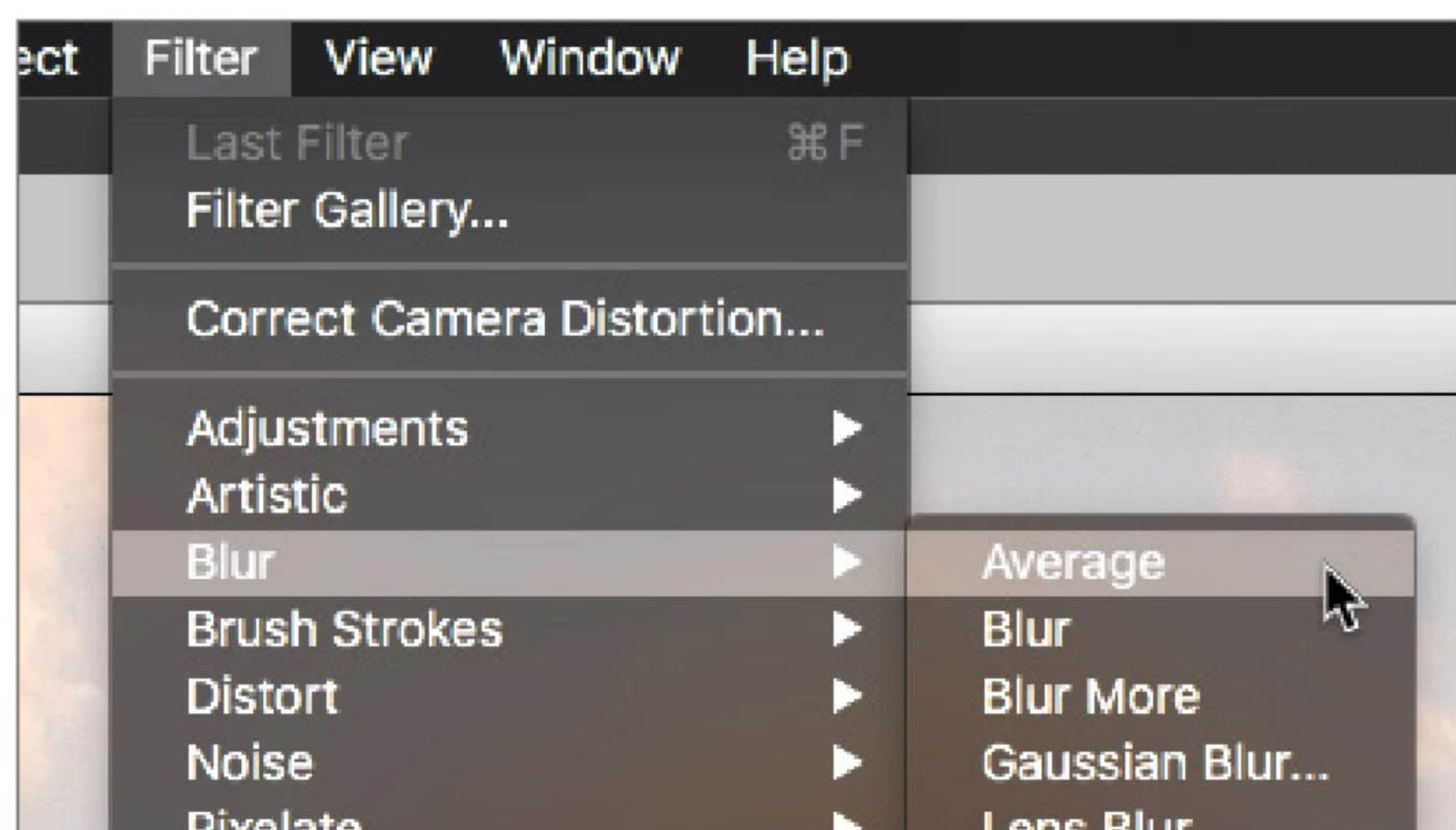
Don't be put off by the title of Expert. In this case, you get more tools to play with and you can actually be more involved in the editing process. You can switch out to another mode, but to truly unlock the power of the program, you will want to try out some image editing in this mode.



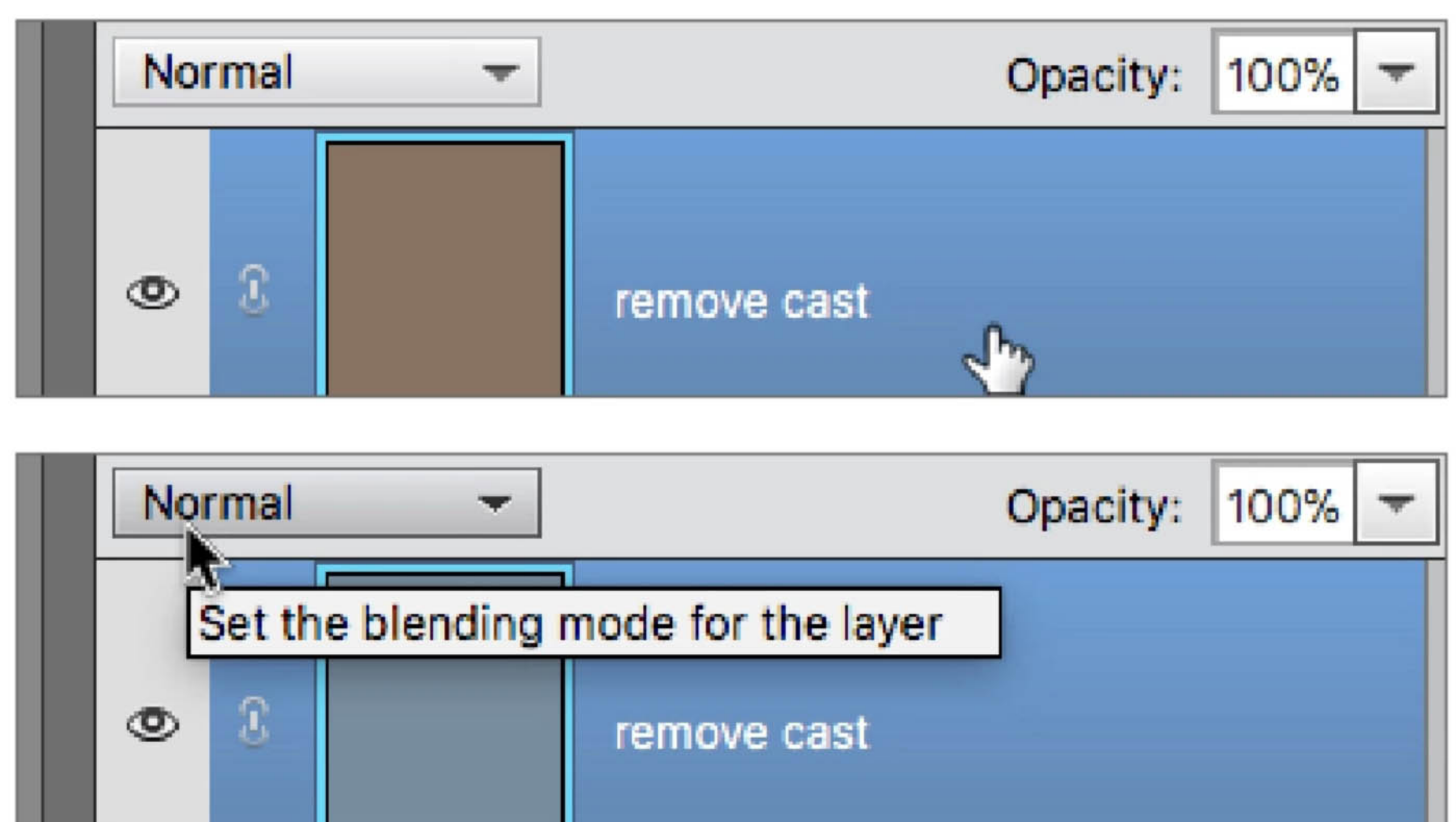
1 We have opened another image that needs some fixing. It is a sunrise on the moors that is a little underexposed and needs some work to bring out the foreground, while keeping the sky relatively untouched, since that is quite well exposed. This is where the use of layers and masks will help us out.



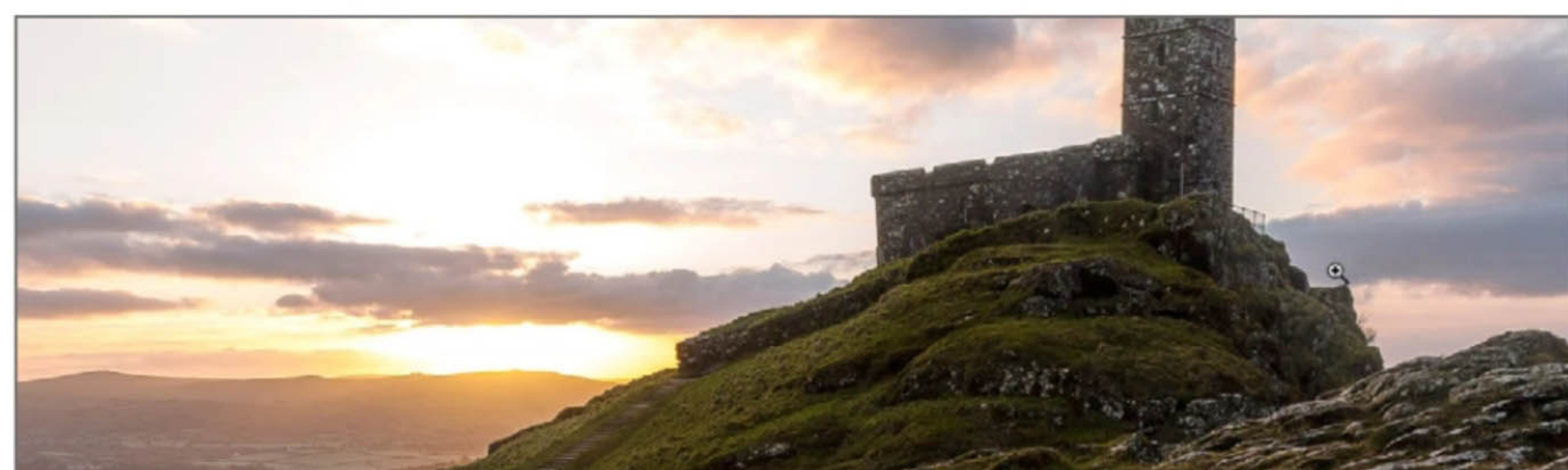
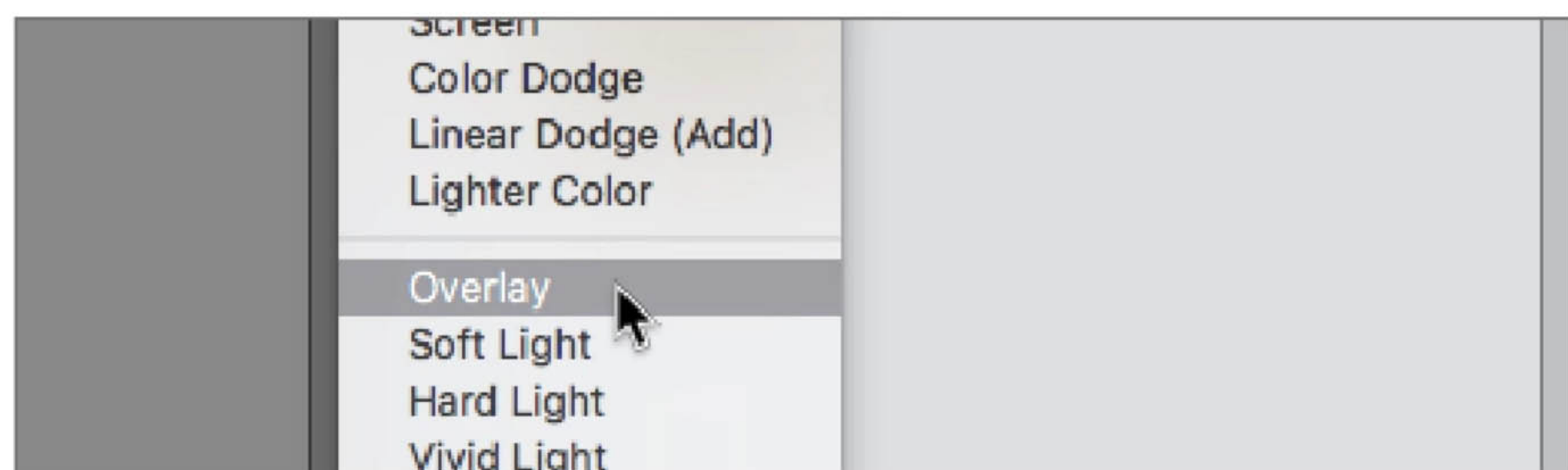
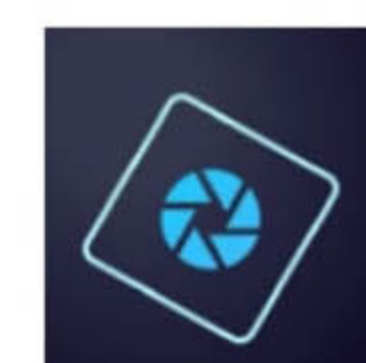
2 First, the colour balance needs to be adjusted. The image is a little too magenta and warm, particularly if you look at the colour of the grass. This can be altered by using a really simple trick that can be really effective and requires the use of layers to do it.



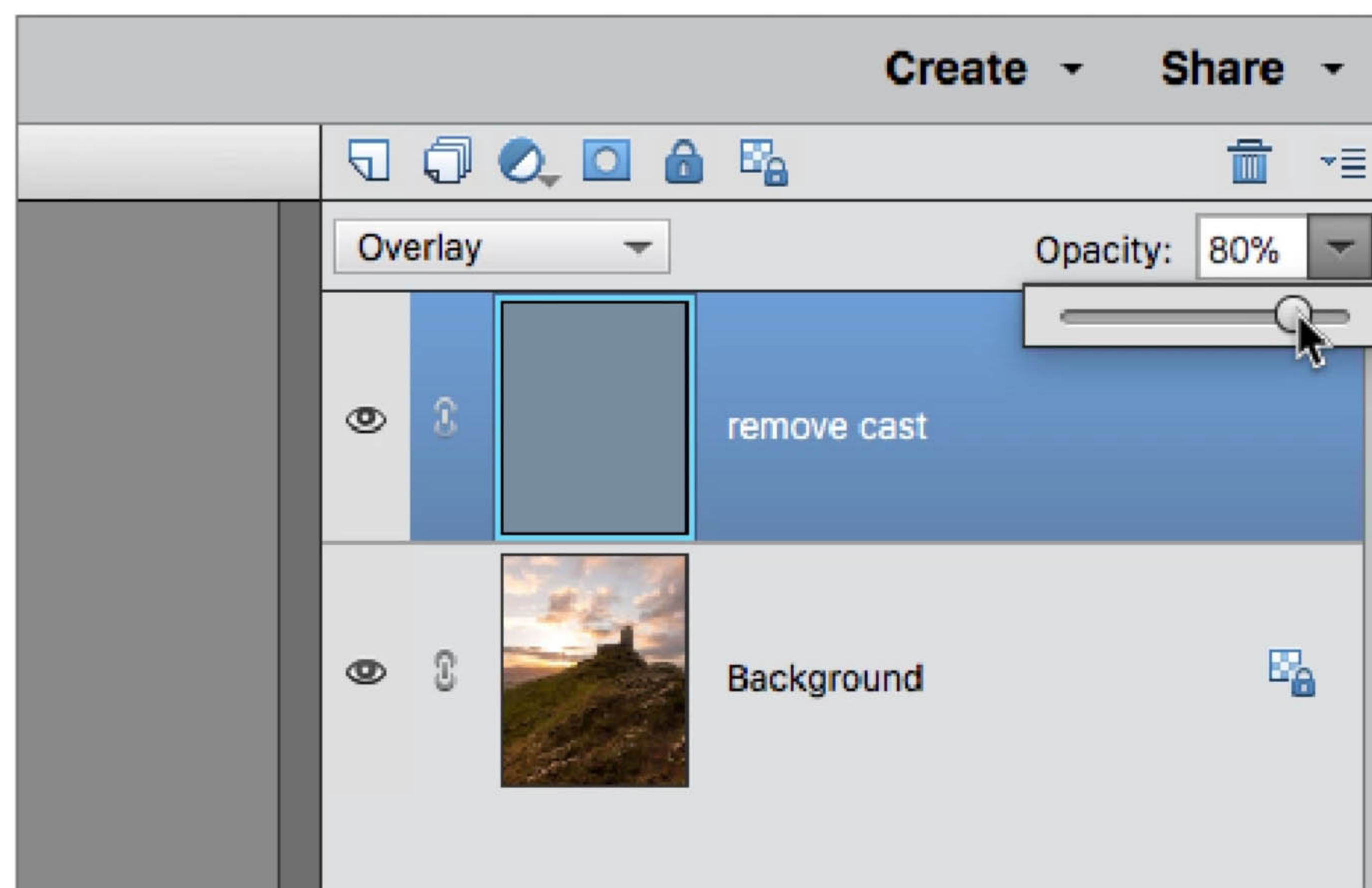
3 Press Cmd + J to copy the Background layer. Name the new layer 'remove cast'. Then go to Filter > Blur > Average. This will blur the duplicate of the scene and average out the colours it contains into one colour. In this case, it turns a muddy brown colour.



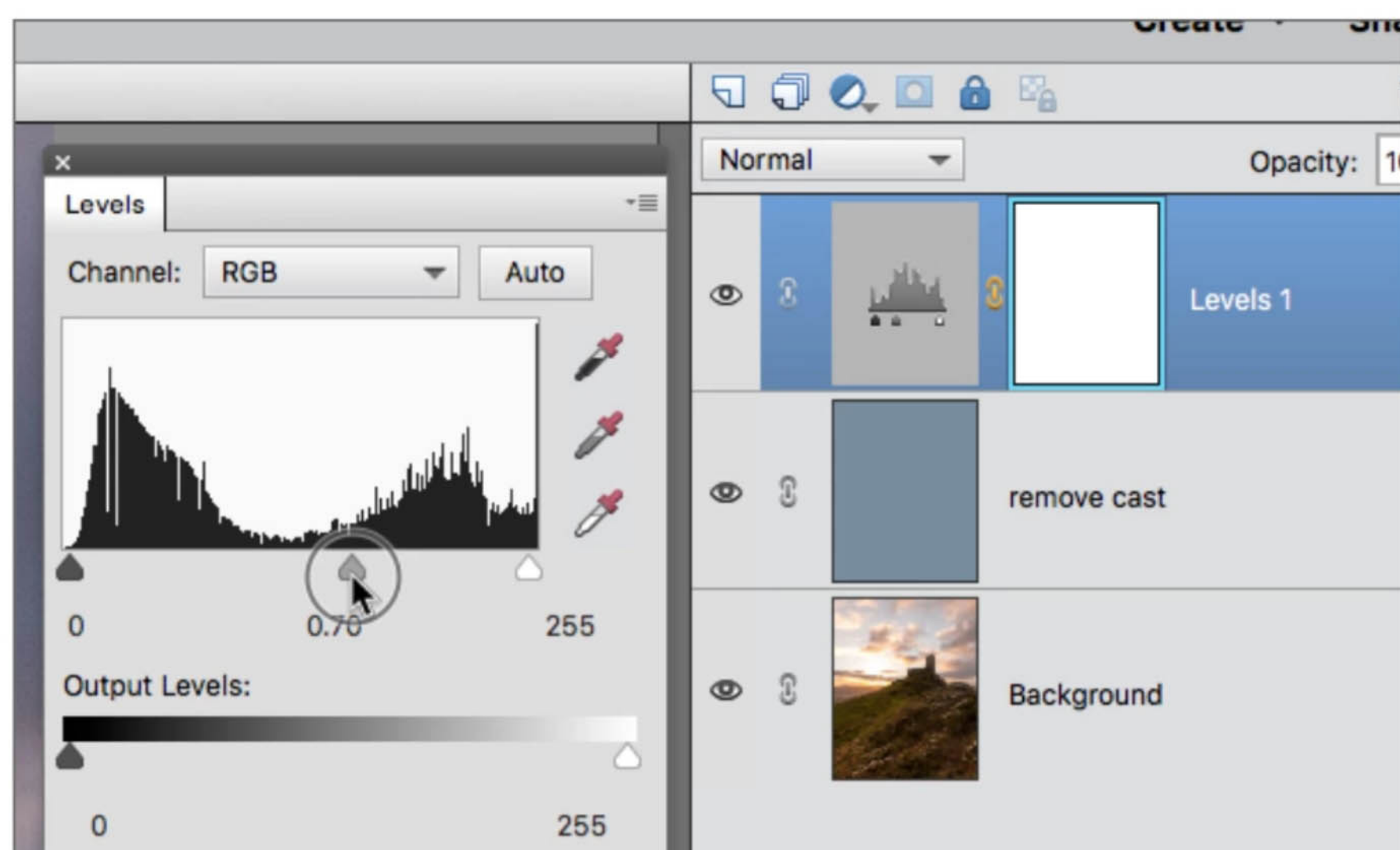
4 Make sure this layer is active then go to Filter > Adjustments > Invert (Cmd + I) to invert the muddy brown colour to a pale green hue instead. This colour, derived from the colour average of the original scene can be used to create a colour correction filter.



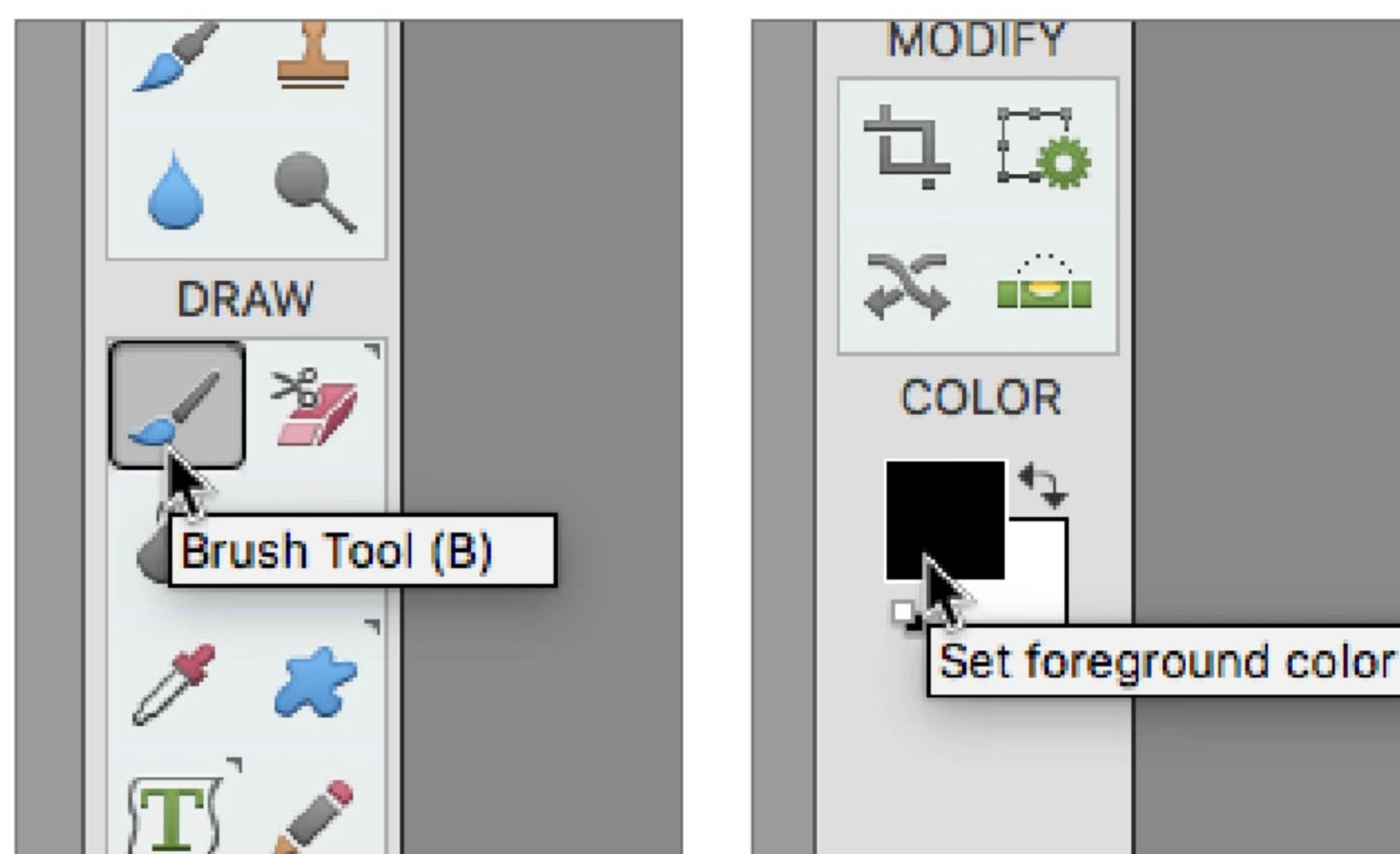
5 Go to the Blend Mode button and from the dropdown menu that appears, choose Overlay as the blend mode for the 'remove cast' layer. This will blend the colour of that layer into the photo of the moors below it. You should see that the snow now looks a lot cleaner and whiter than it did.



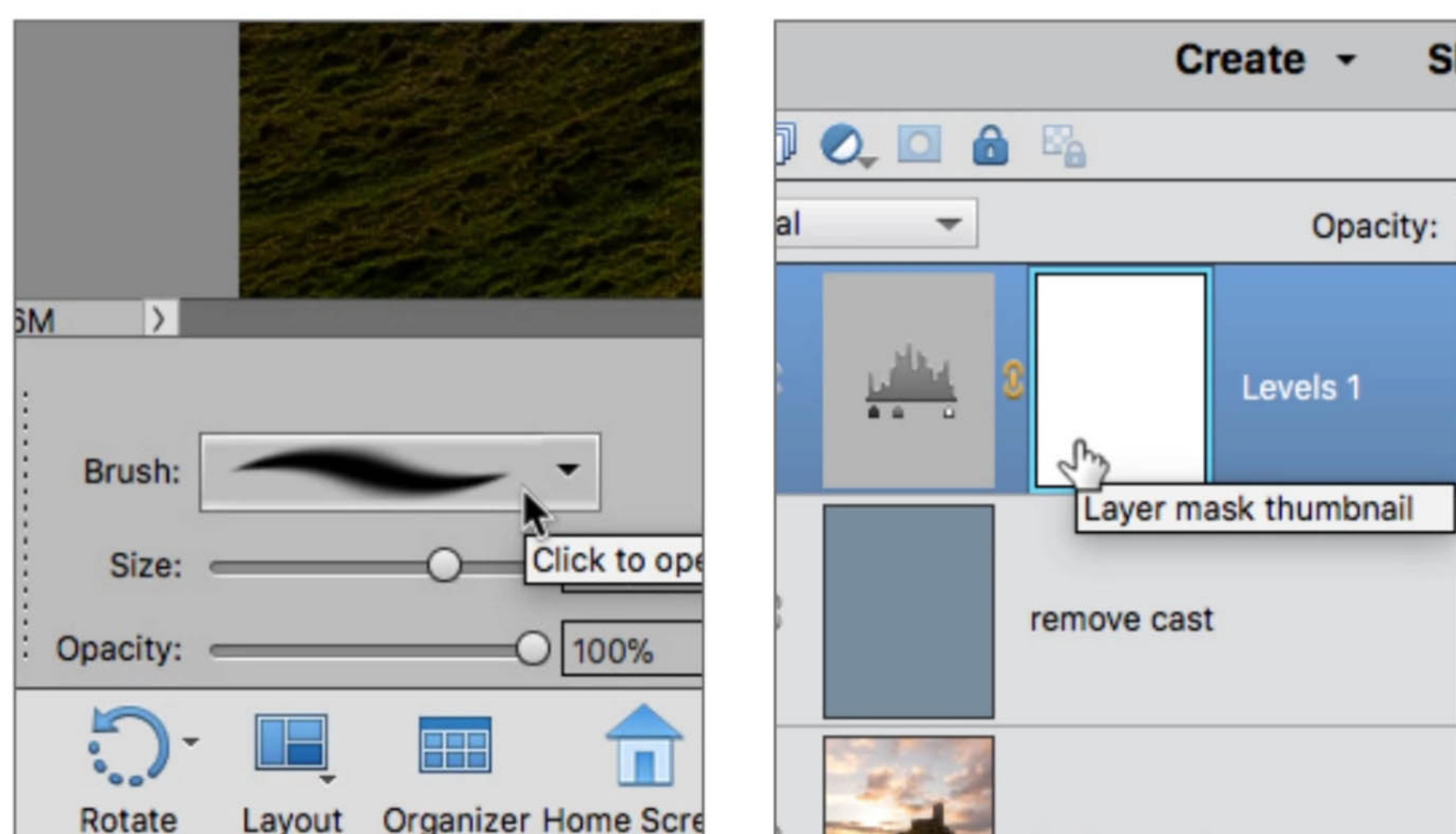
6 Altering colour can be quite subjective and if you feel that the correction is too much, you can always go to the Opacity slider and adjust to about 80% to lessen its effect slightly if you wish. Now you can continue editing the image.



7 Now to make the image punchier, click the Create New Fill or Adjustment Layer button and choose Levels. Make sure 'Levels 1' is at the top of the layer stack. Adjust the Midtone slider so the sky is a bit darker. This will obviously make the entire image too dark but you can fix that next.



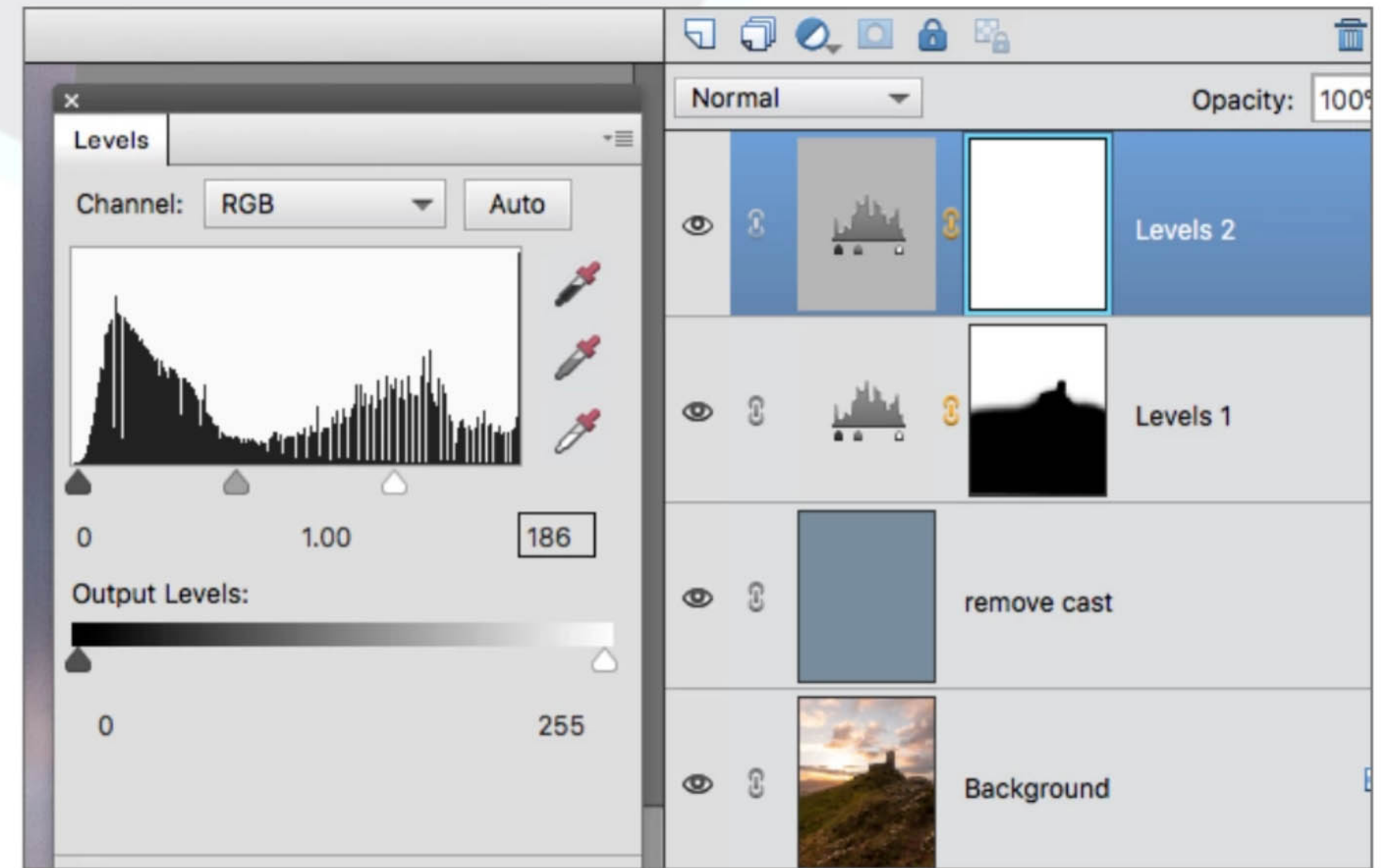
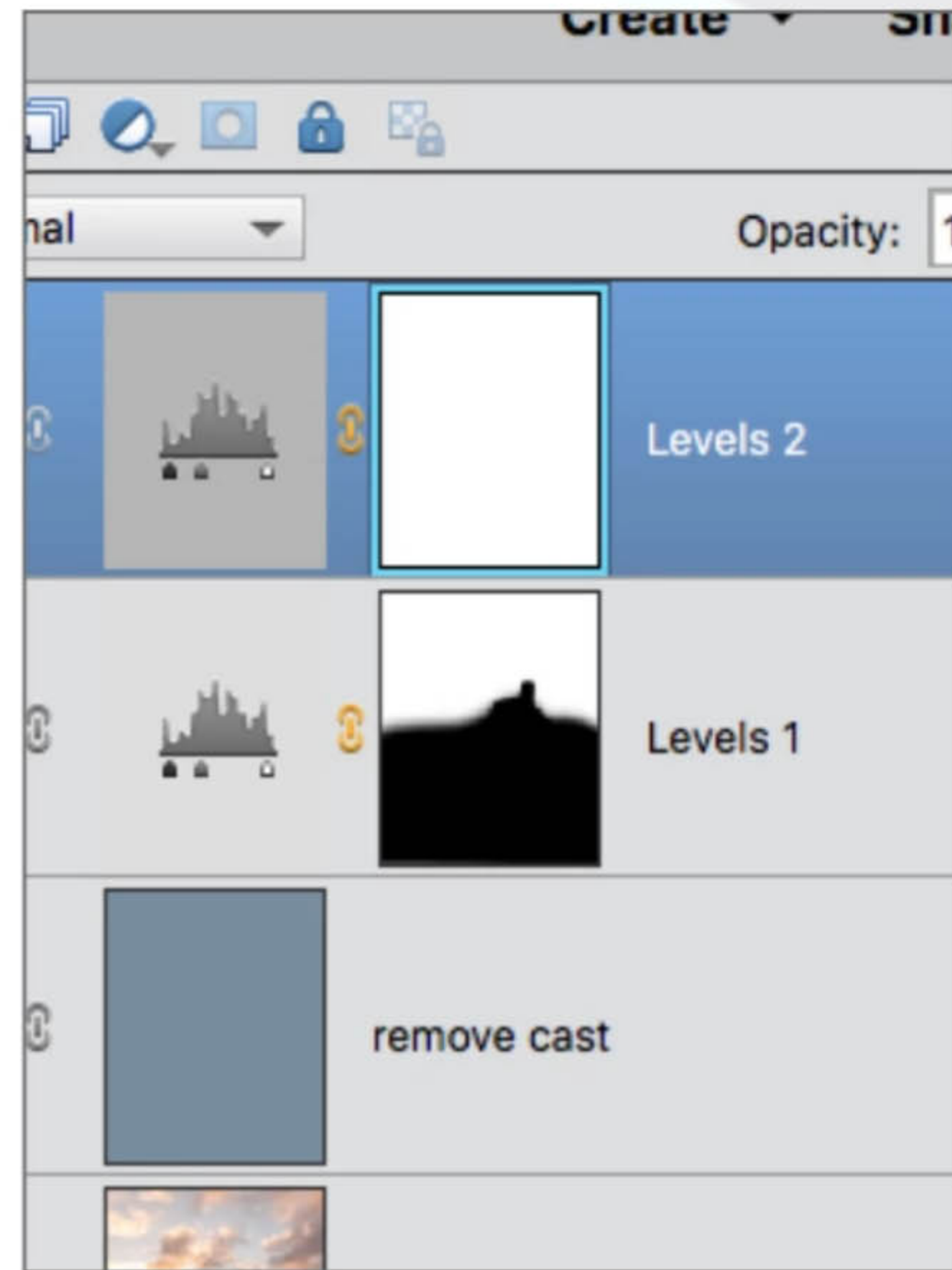
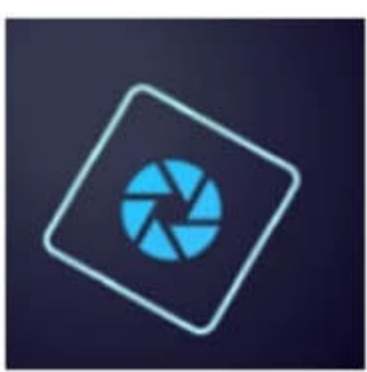
8 Choose the Brush Tool (B) from the toolbar, then set the foreground colour to black. You can press D to default the colours so black is the foreground colour and white the background colour. Pressing X will swap those foreground and background colours over if you require.



9 When you choose the Brush Tool, the Tool Options panel will display parameters for the brushes. We need a large soft brush which can be chosen from the Brush Presets menu. Click on the Soft Round 200 pixels brush to make it active. Make sure the Levels 1 layer mask is active by clicking it.

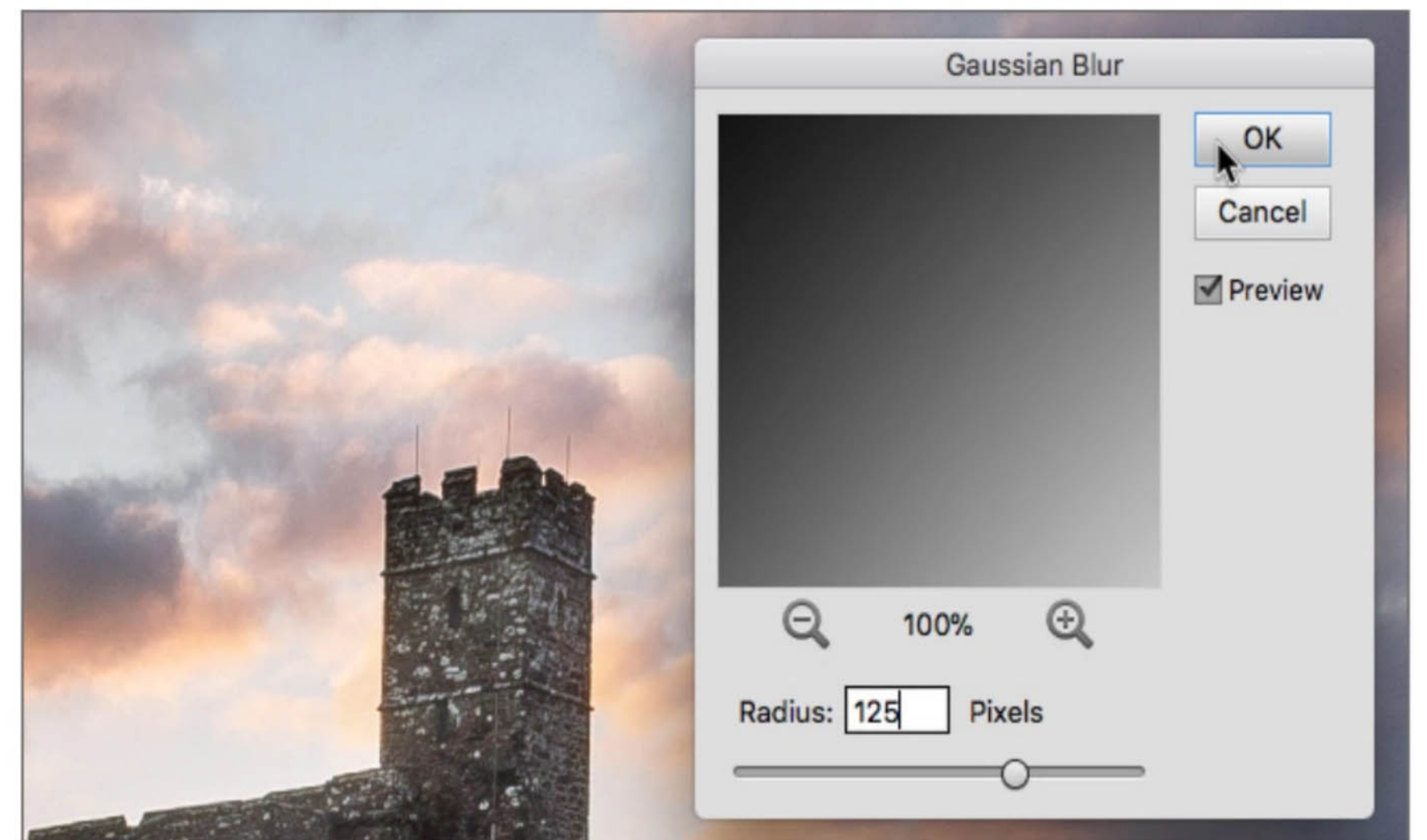
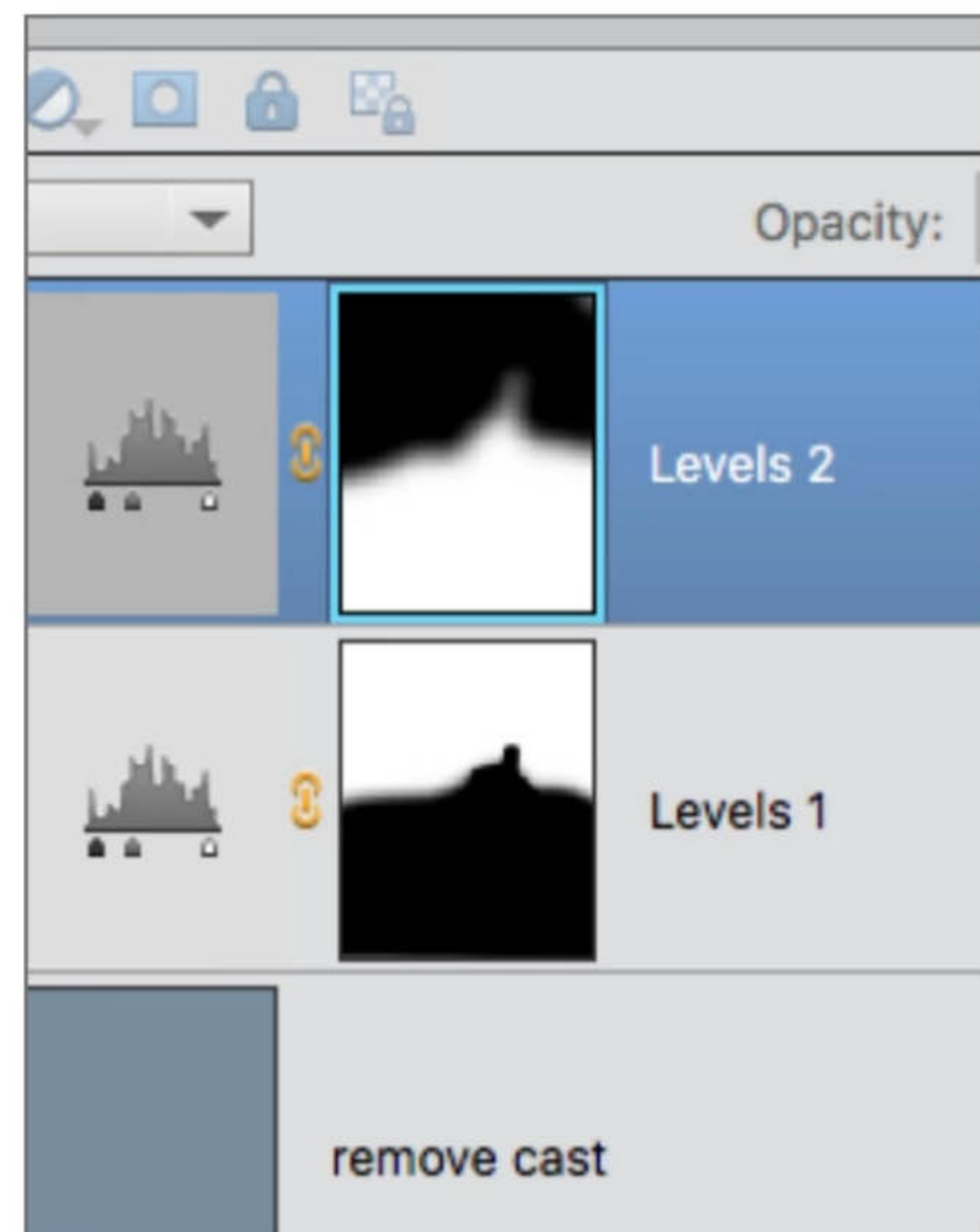
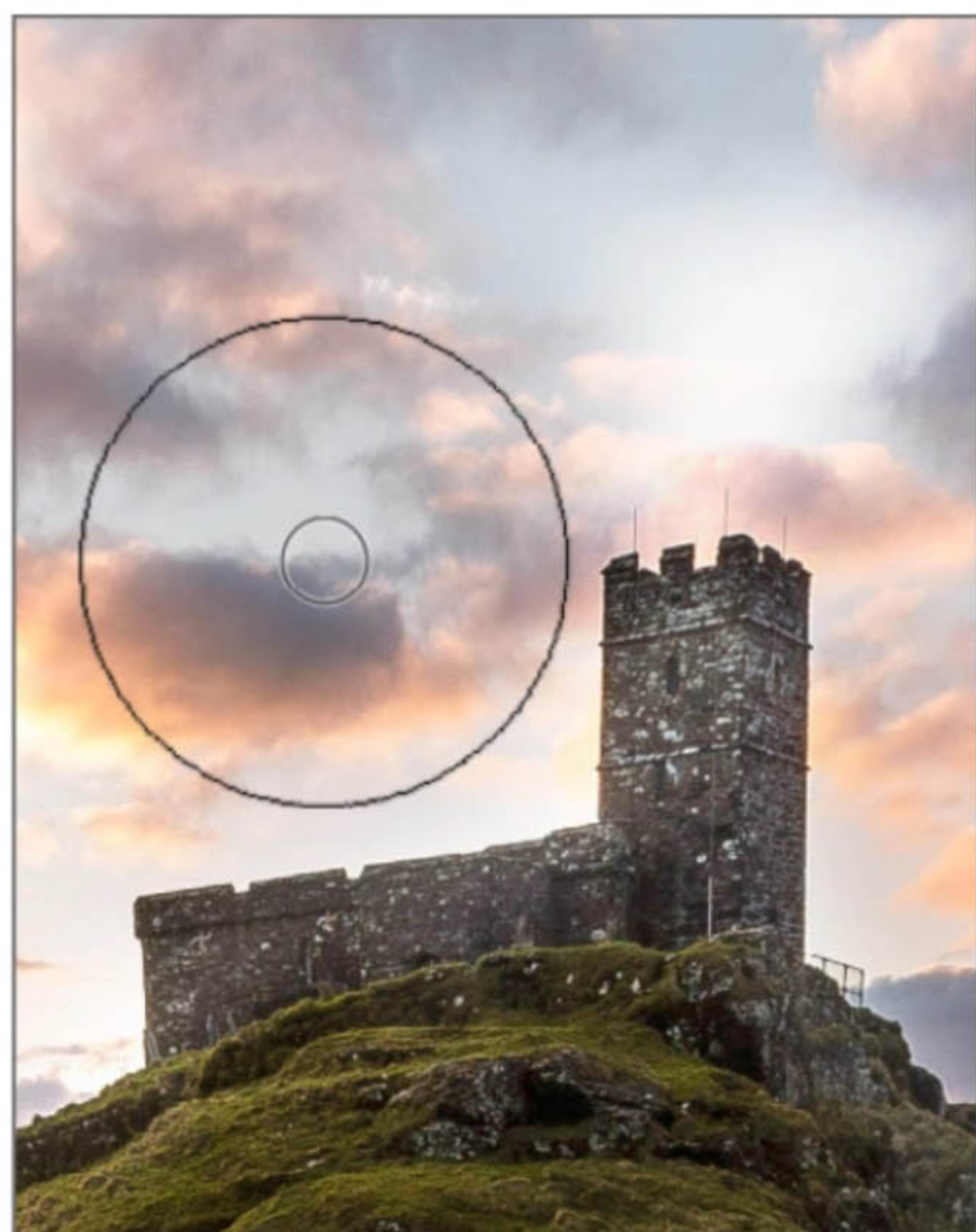


10 You can now use that soft black brush to paint on any areas of the mask where you do not want the adjustment to be visible. In this case, we only wanted the sky to be adjusted so we painted over the rocks and foreground.



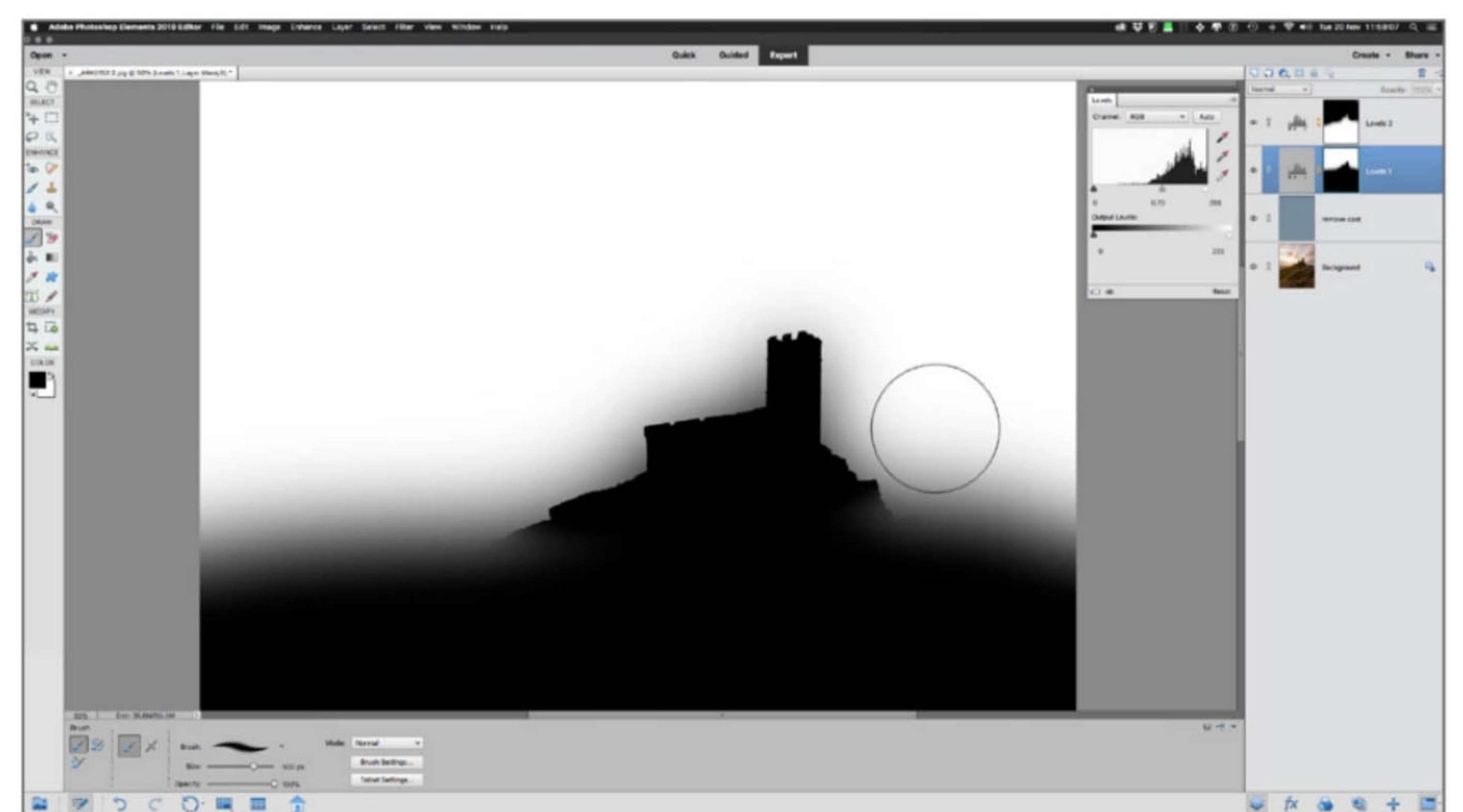
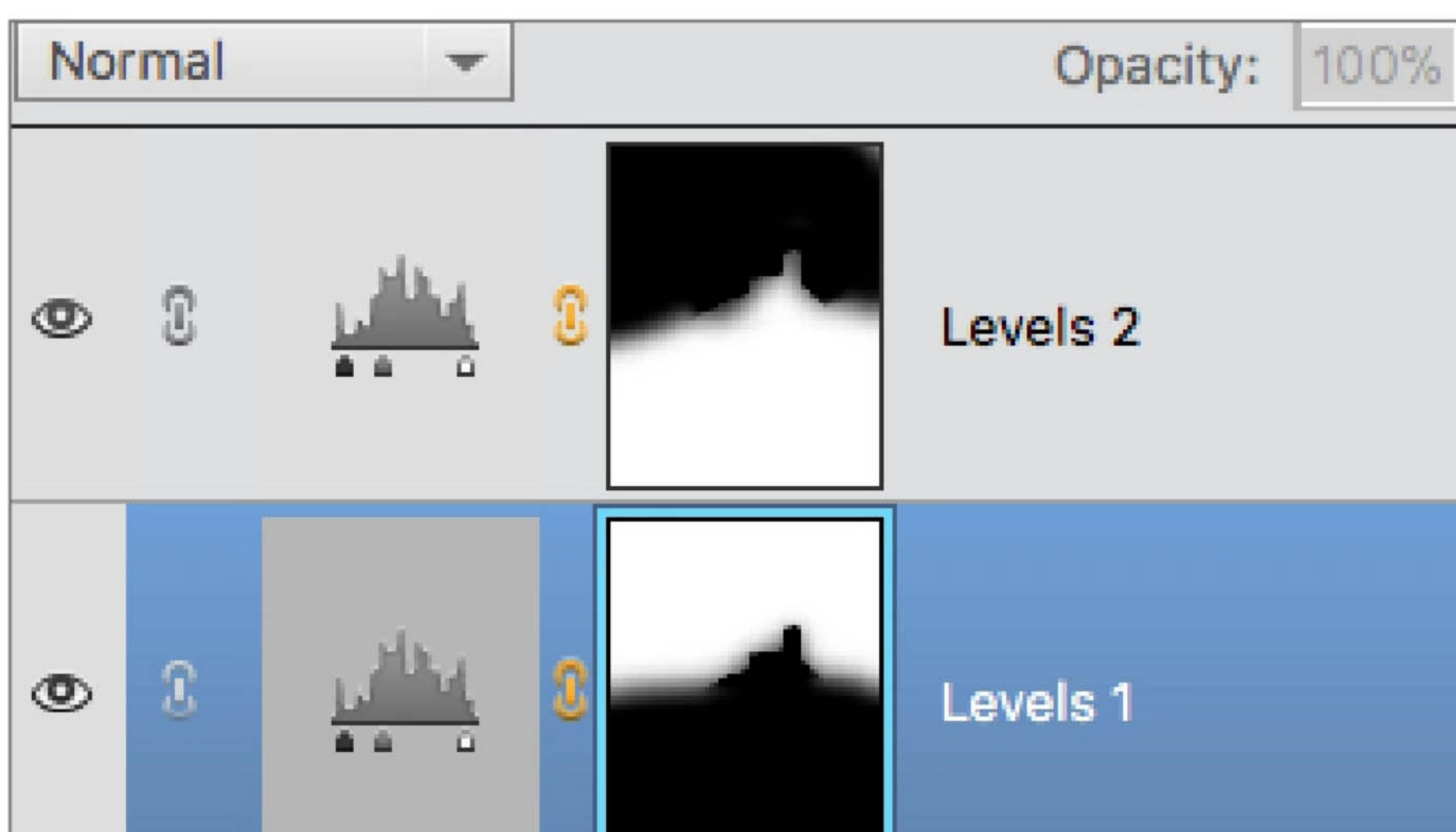
11 When you paint over those areas, you are hiding the adjustment so they become their original brightness again. In fact, it would be nice to make the foreground rocks and snow brighter, so let's get another Levels Adjustment and add it to the layer stack. This will be 'Levels 2'.

12 Push the Highlights and Midtones sliders of the 'levels 2' adjustment to the left; as you do this, you will see the entire image become lighter. Concentrate on the foreground rocks and snow and adjust the sliders until they look nice and bright. The sky might be too bright but not to worry.



13 Just as you did with the 'Levels 1' layer mask, paint with your soft black brush on the 'Levels 2' layer mask over the sky area and horizon. You are now concealing areas of the 'Levels 2' adjustment so the sky goes back to being darker again.

14 If you want, to blend the masks better, you can keep the 'Levels 2' layer mask active and go to Filter > Blur > Gaussian Blur and choose a blur of about 125 pixels to help blend the two adjustments you've made seem more seamless.

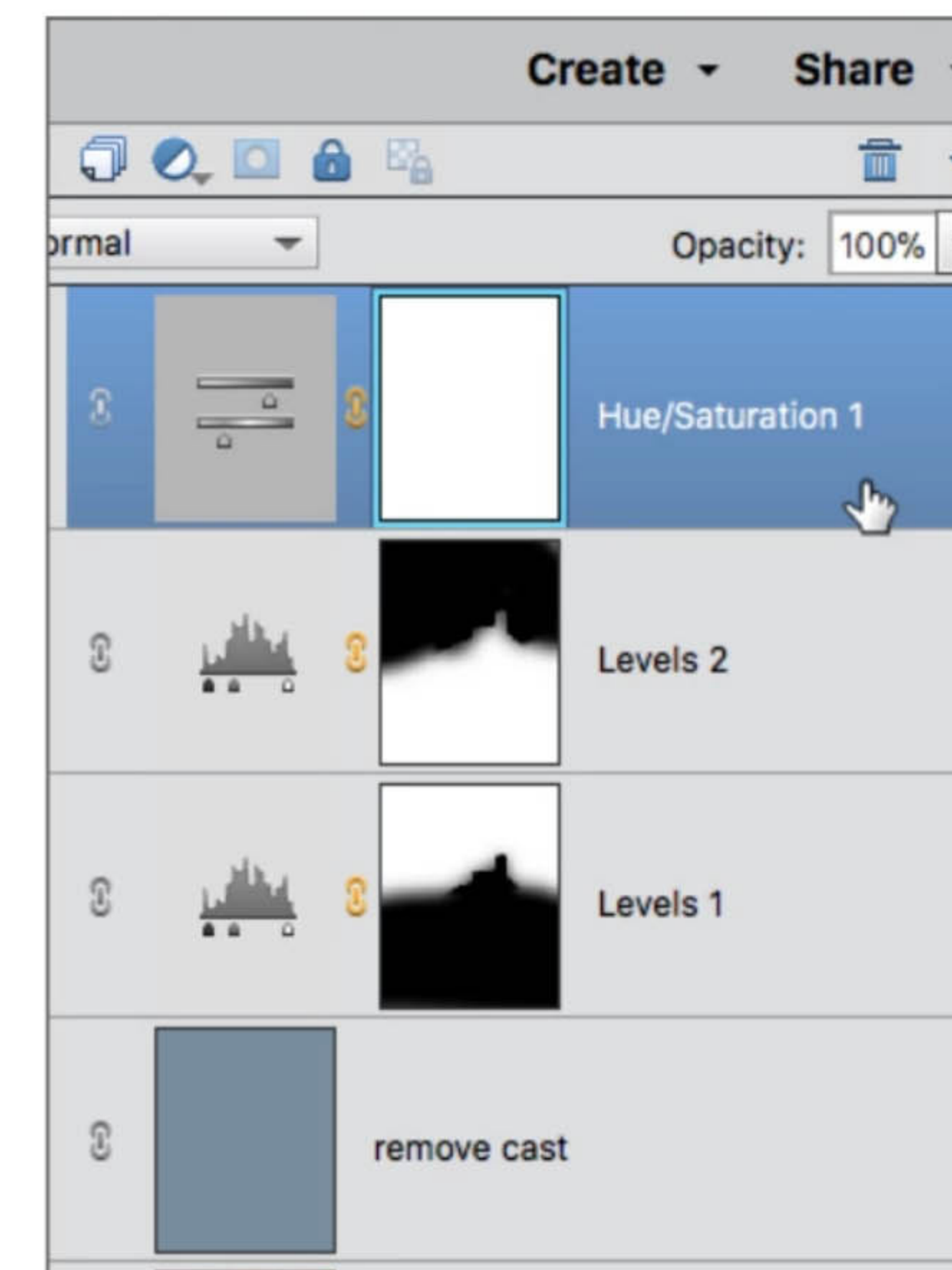
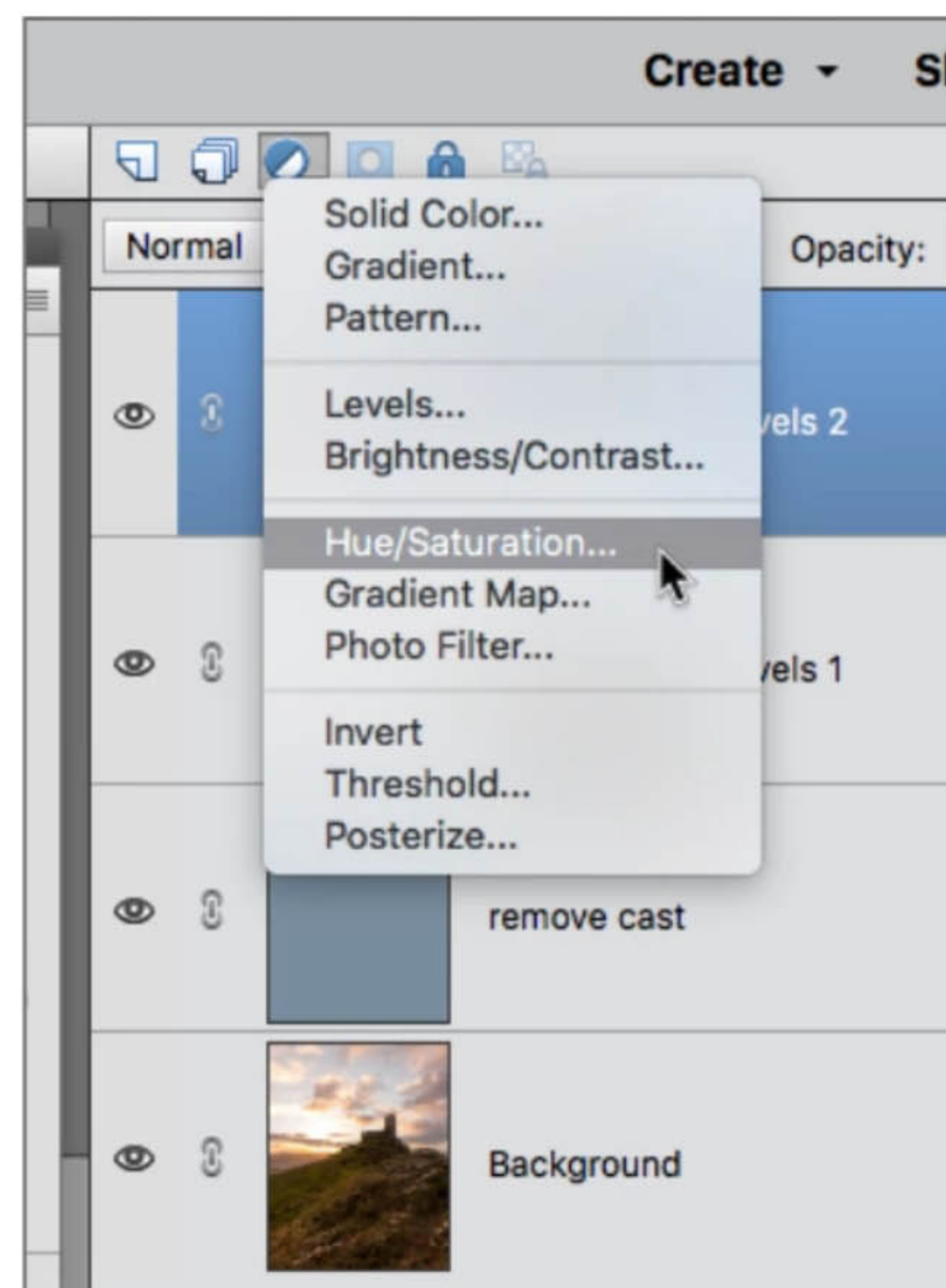


15 There is no reason you can't add the same amount of blur to the 'Levels 1' layer mask as well. The softening of the two masks means there are no obvious joins betraying the fact that various adjustments have been made. Thanks to the use of layers, this has all been non-destructive editing.

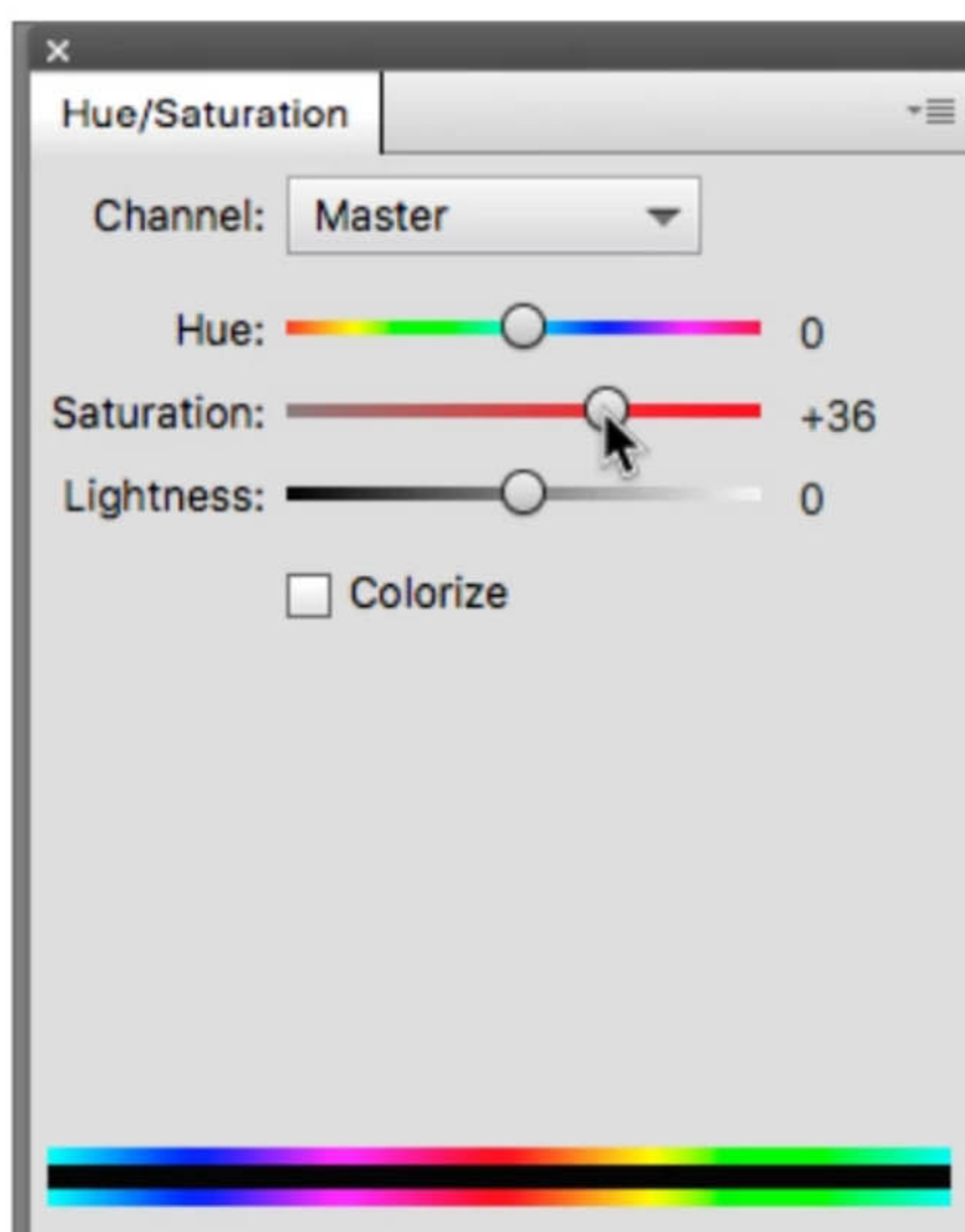
16 Now that you have both the Levels Adjustments in place, you can revisit them at any time and tweak the settings to your heart's content. You can even go back into the layer masks for each and use your brush tools to refine those masks you applied in the first place.



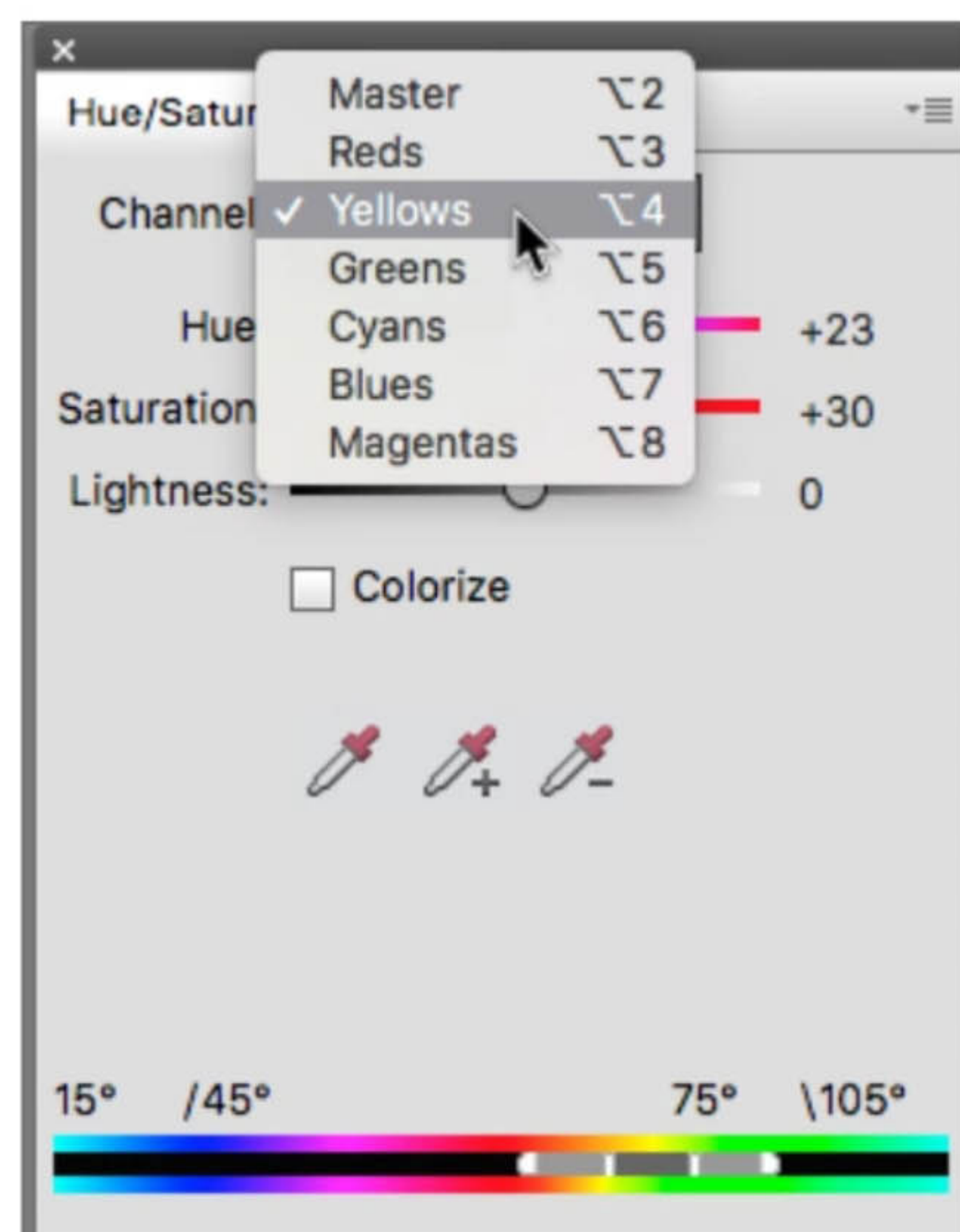
17 The image has now been colour balanced and two sets of adjustments have brought some sparkle to the snow in the foreground and kept the sky dramatic in the background while the rocks now have some nice detail showing in them as well.



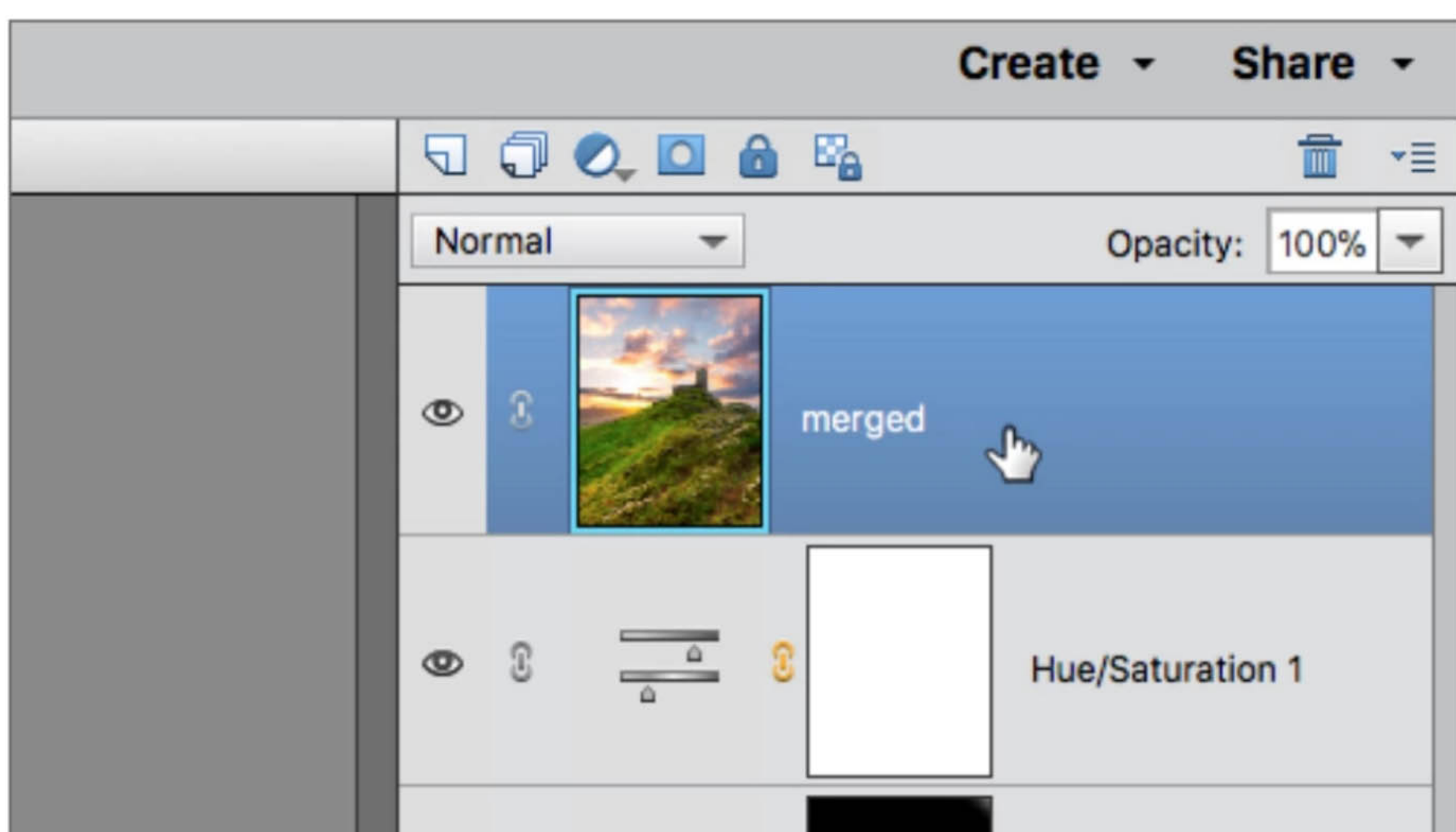
18 Now let's turn up the vividness of the image. Click on the Create New Fill or Adjustment Layer button and choose Hue/Saturation from the list that appears. A 'Hue/Saturation 1' layer will be added to your existing layer stack. Make sure it is the topmost layer.



19 How much Saturation you add is a matter of personal taste but to capture the glorious colours of that sunrise, it's been pushed to +36. You will notice however that the grass could do with a little push to make it more vibrant.



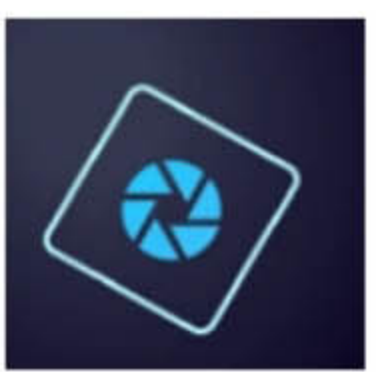
20 Click the Channel button and you will see how you can affect the saturation of the component colours. Select Yellows and dial up the saturation and push the Hue slider to about +23 to really bring out the vibrant green of the grass.



21 At this point, you may want to perform more edits to the image. It is always good housekeeping to create a snapshot of the work done thus far. To do this, press Shift + Alt + Cmd + E. This creates a new layer which is a merged version of all visible layers. Name this layer 'merged'.

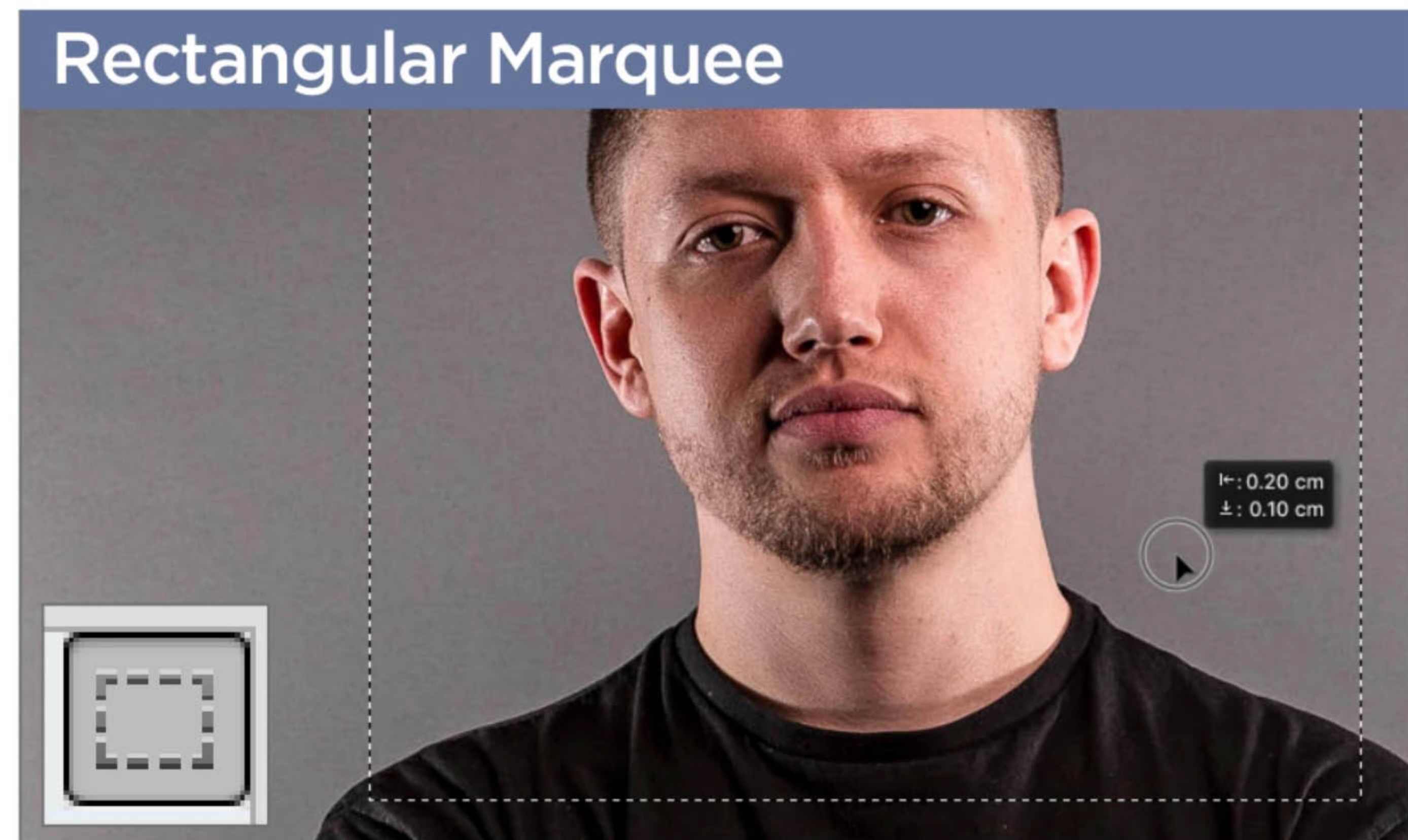


22 You can now perform edits directly to the pixel data of the 'merged' layer, safe in the knowledge that if anything goes wrong, you still have all the original work on the layers below which you can use to create another merged version. You can also save your document as a PSD file when complete.

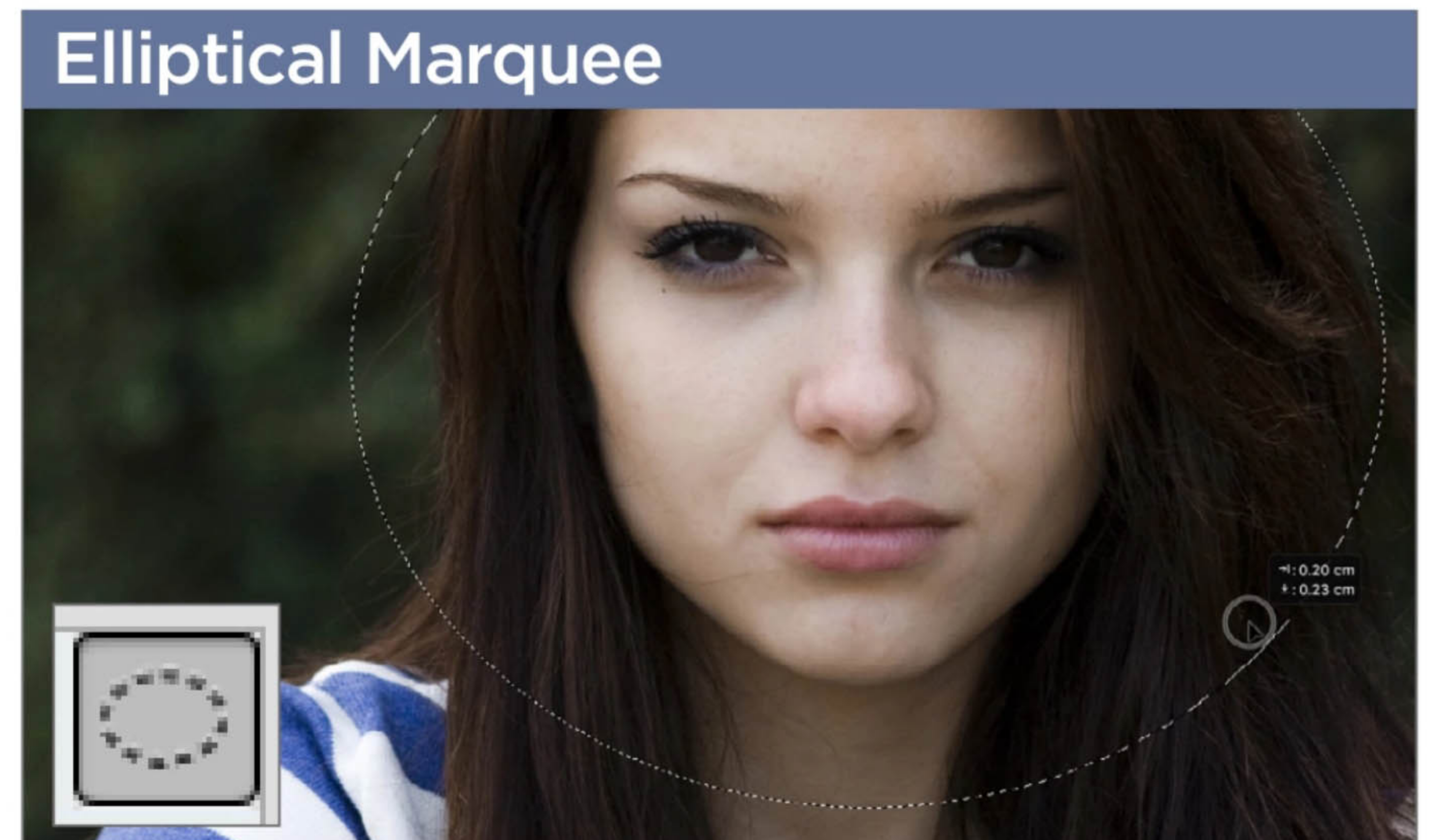


Selection Tools

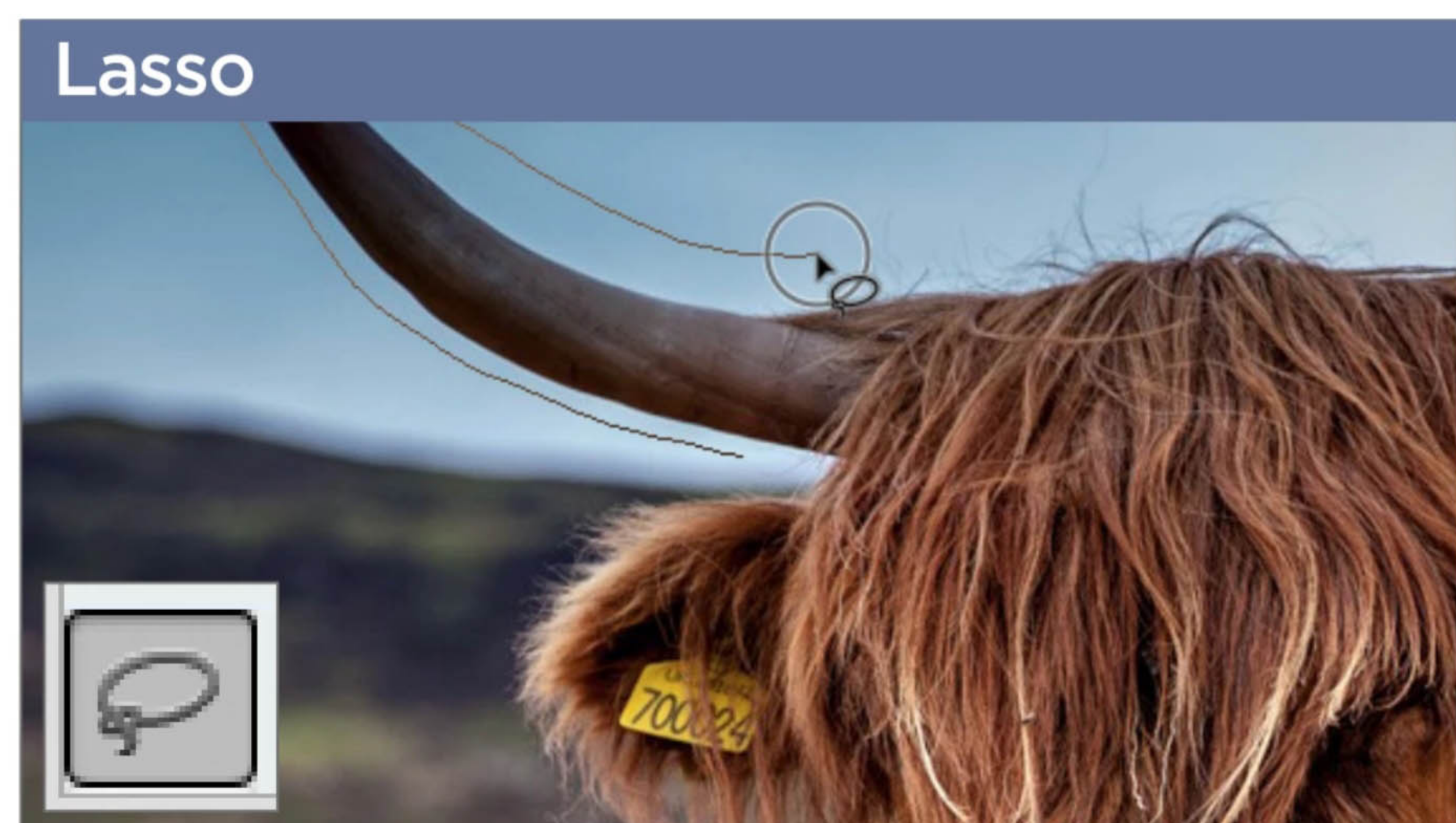
Some aspects of image editing will require you to select certain areas of a photo so you can either place it on another layer or edit it in isolation from the rest of the image. With Elements, you have a number of options for being able to achieve this and we cover them next.



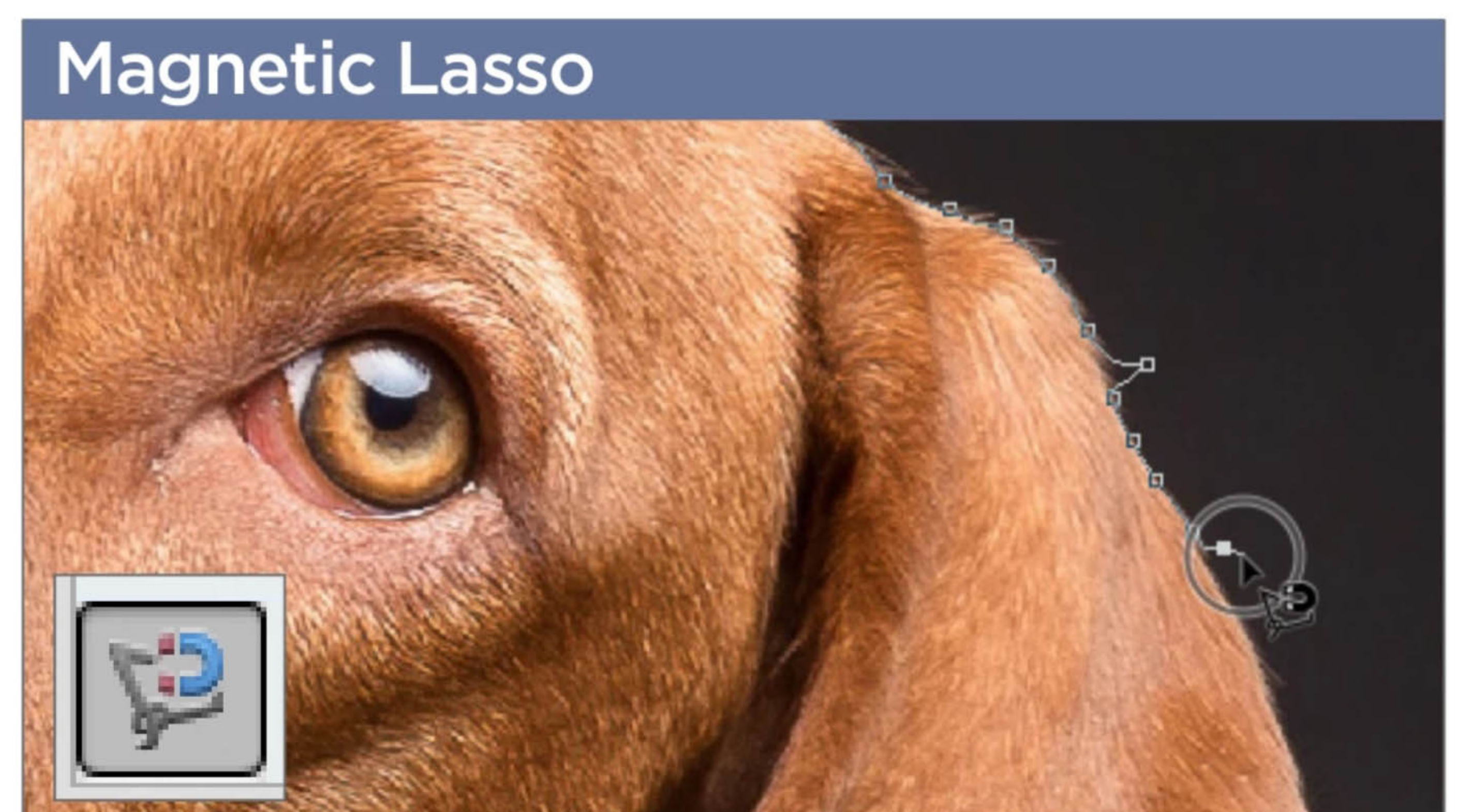
1 This tool lets you make selections of square or rectangular areas of your image. In addition to making the selection, you can add to it, subtract from it and intersect with it. You can make selections of a fixed size, fixed ratio or normal aspects. You can also feather and refine the edge.



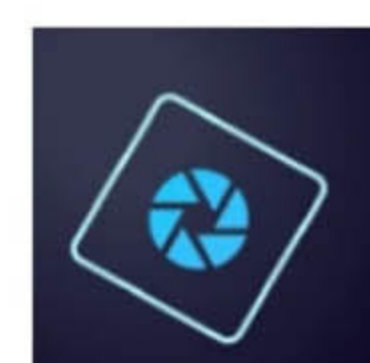
2 The Elliptical Marquee tool behaves in the same way as the Rectangular Marquee tool and has the same tool options available. You can make circular and elliptical selections of any size or proportion. If you hold the Alt key, you can centre your ellipse over the cursor position.



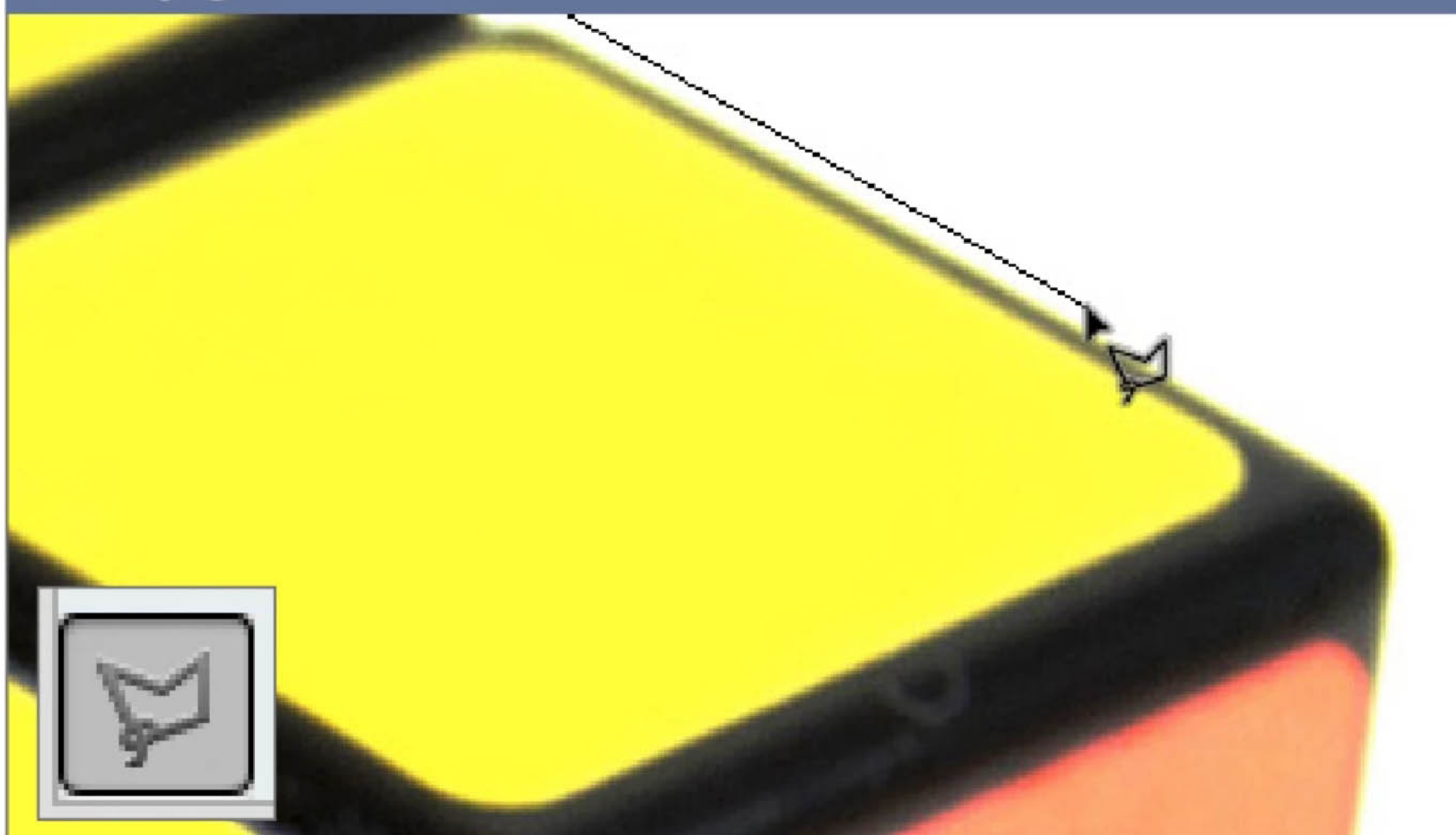
3 The Lasso tool can be used to make area selections from your image or active layer. The shapes you select with the Lasso tool can be completely irregular and hand drawn. When you join the lasso back up to the point where you started, the selection is closed.



4 This tool uses edge detection to adhere to the edge of the subject you are attempting to select in the image. You can alter its parameters for more accurate detection in order to make it snap to the edge of your subject. Areas of high contrast work best with this tool.

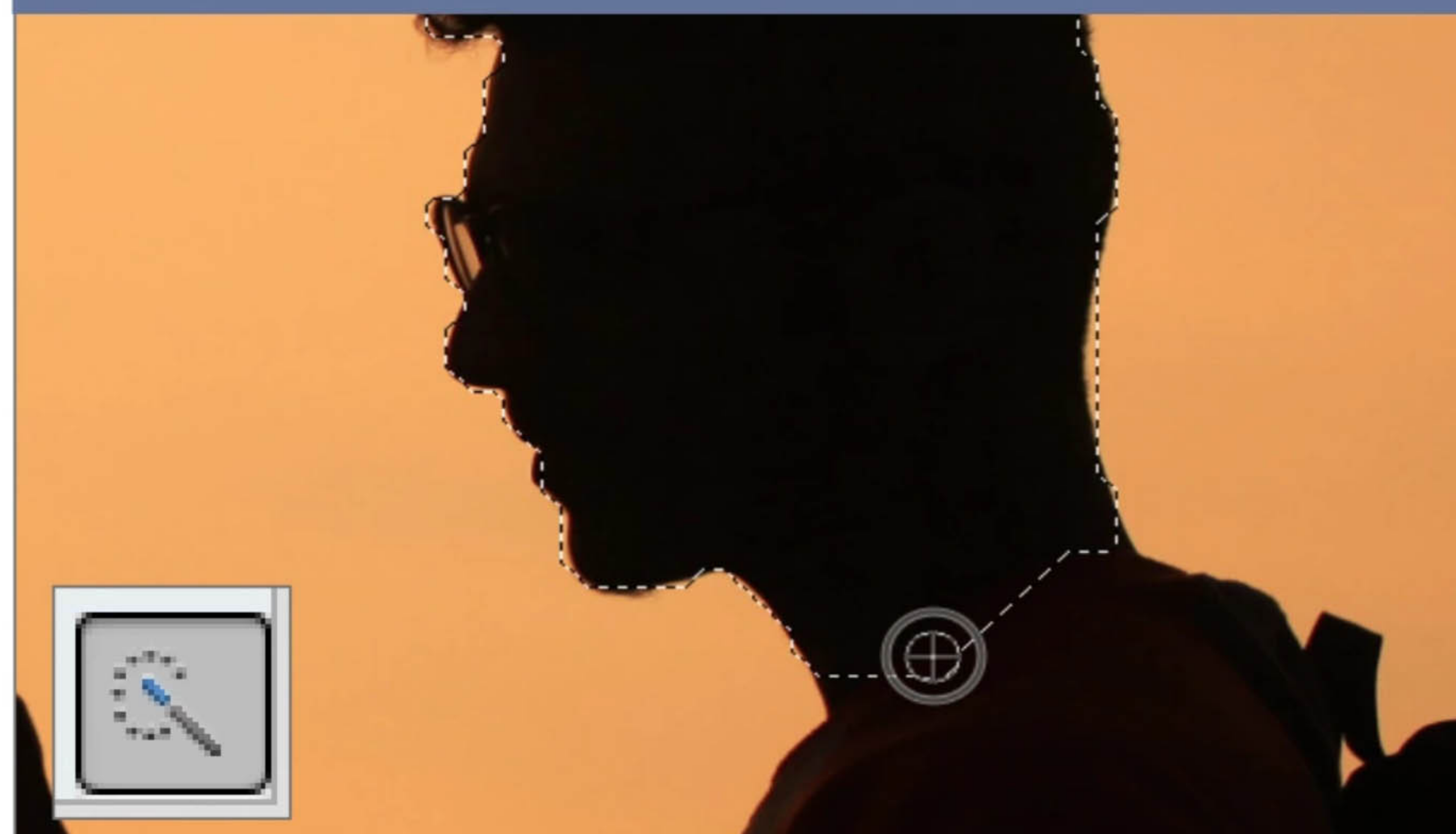


Polygonal Lasso



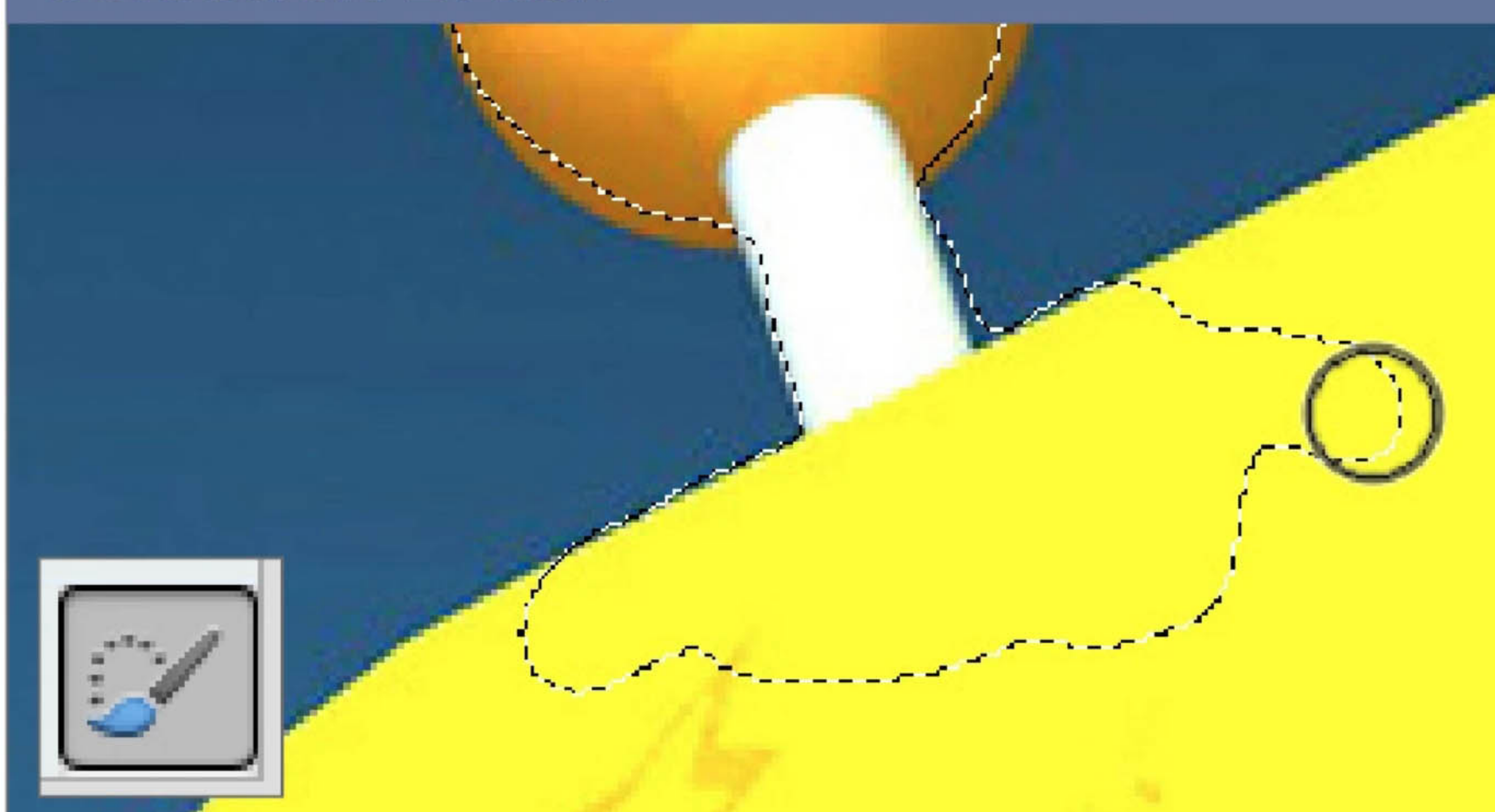
5 The Polygonal Lasso allows you to draw point-to-point straight lines around your subject. This is good for geometric and straight-edged subjects where a perfectly straight line is required. Like the Lasso Tool, when you join back up with your start point, the selection is closed.

Quick Selection



6 The Quick Selection tool lets you paint a selection as if it were a brush. It uses edge detection to attempt to match your selection to the nearest edge in the image. You can alter brush size and settings and it works best on high contrast subjects that are in sharp focus.

Selection Brush



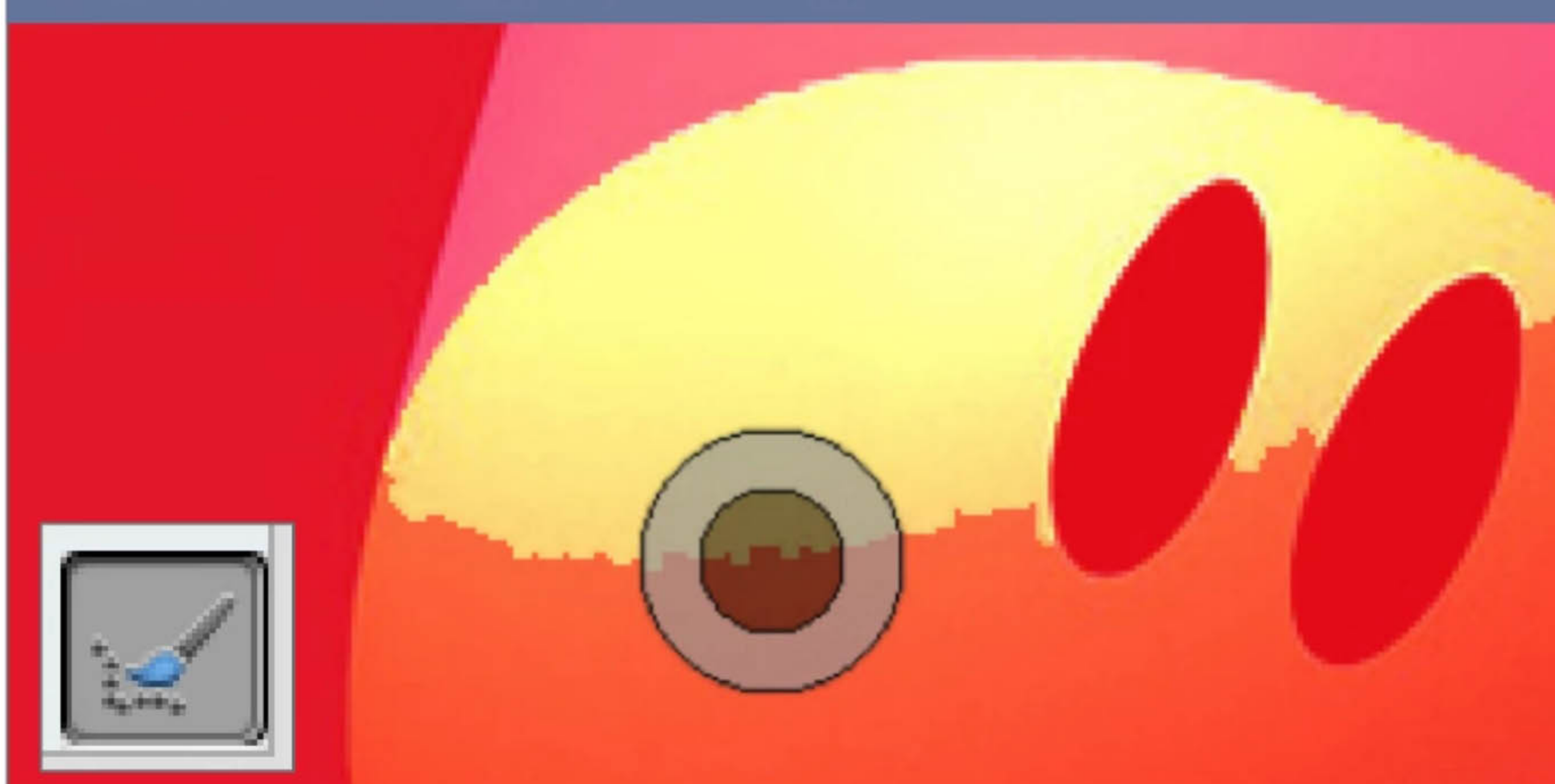
7 The Selection Brush is more of a freeform brush that lets you choose a brush type of certain size and hardness and paint a selection around your chosen subject. You can also choose to make it a mask instead. You can add or subtract from your selections in the usual fashion.

Magic Wand



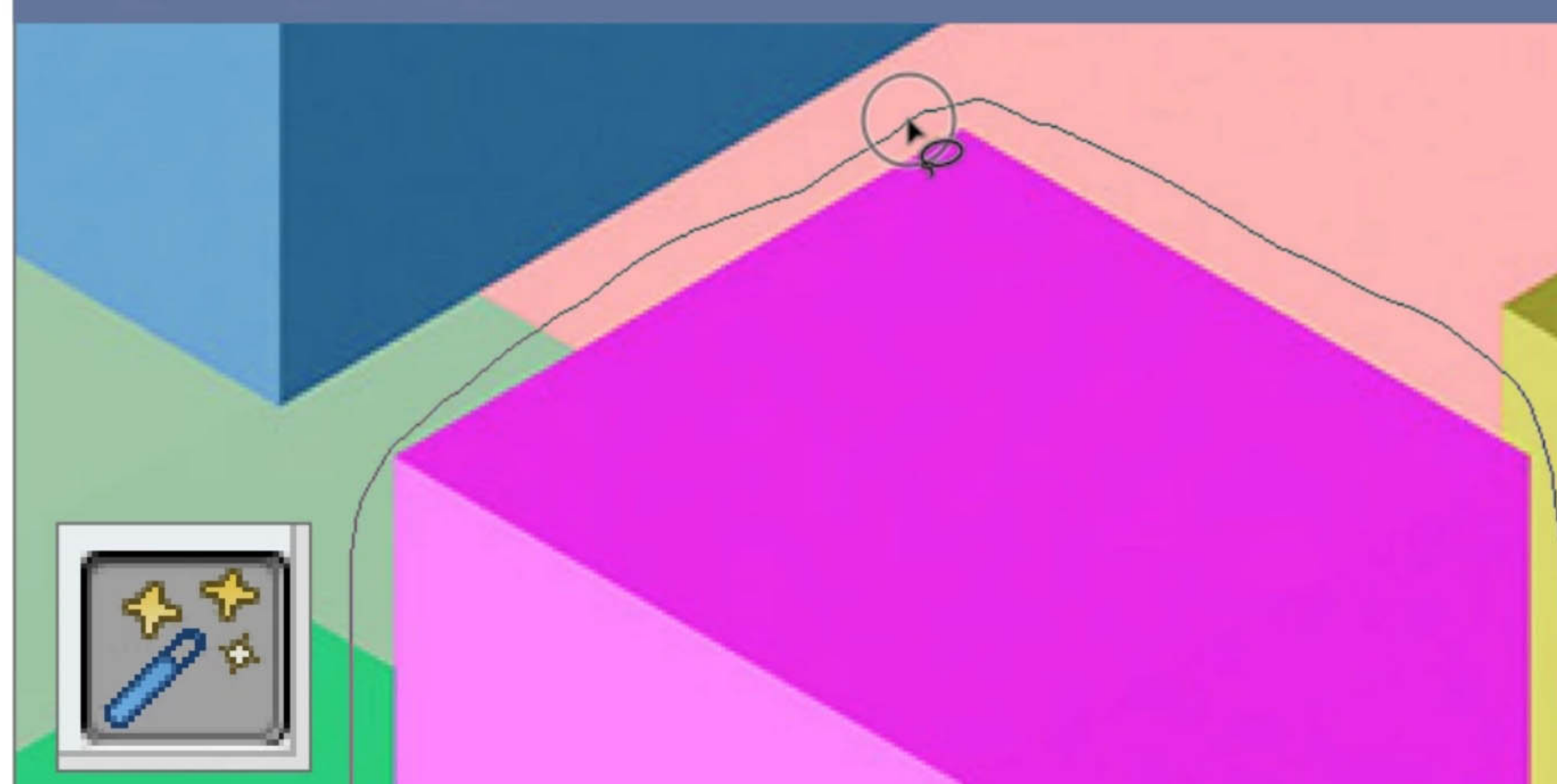
8 This tool is useful for the selection of image areas that are the same colour and brightness. You can adjust its sensitivity, refine its edge and also choose whether it will globally select all areas of a chosen colour or just its nearest neighbours.

Refine Selection Brush

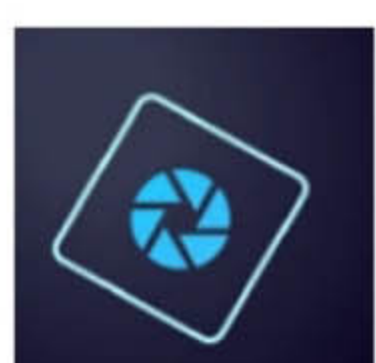


9 The Refine Selection Brush lets you make targeted adjustments to an existing active selection. In addition to adding or subtracting from the selection you can actually push the selection edge and smooth it by applying the refinement brush.

Auto Selection



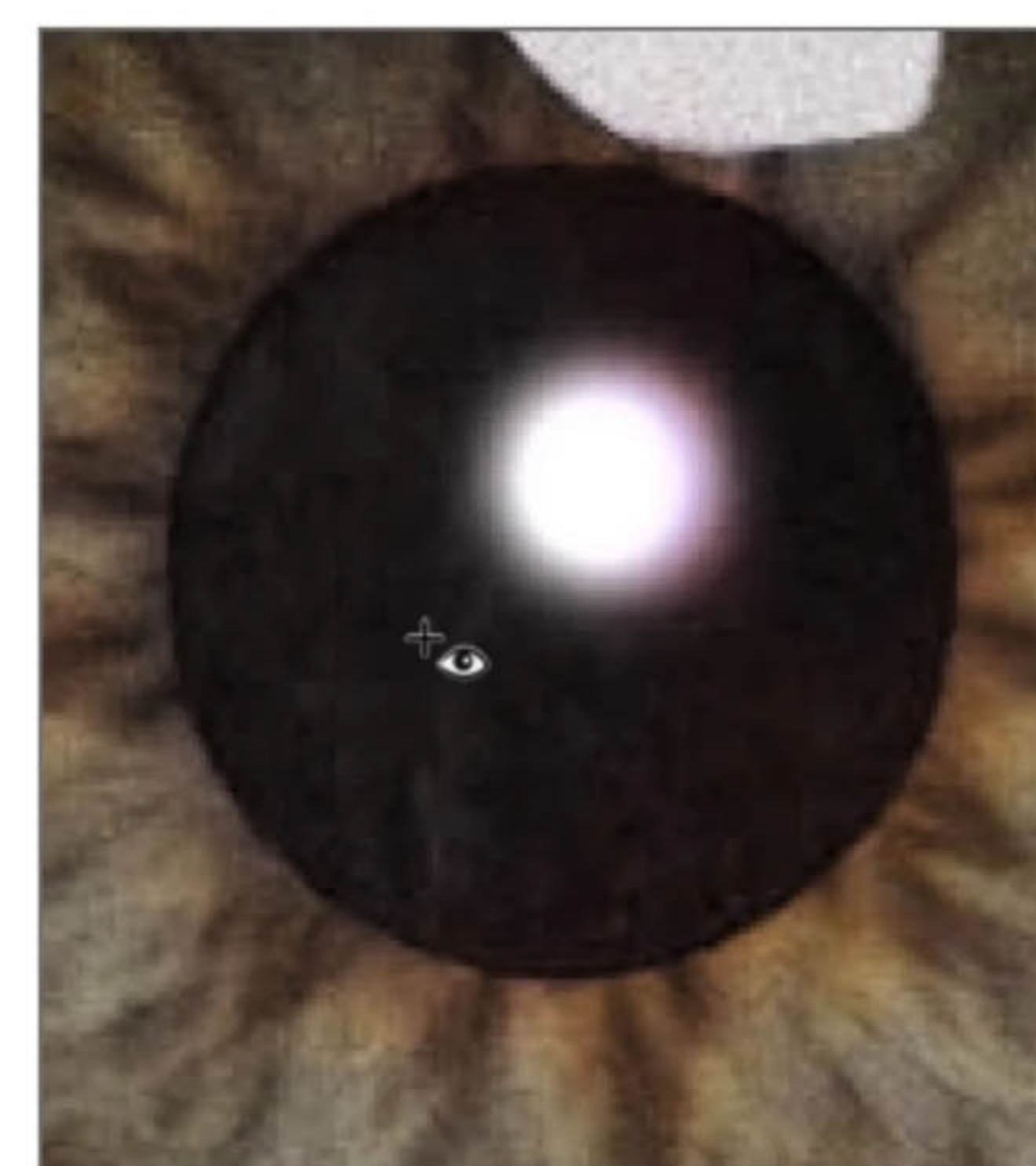
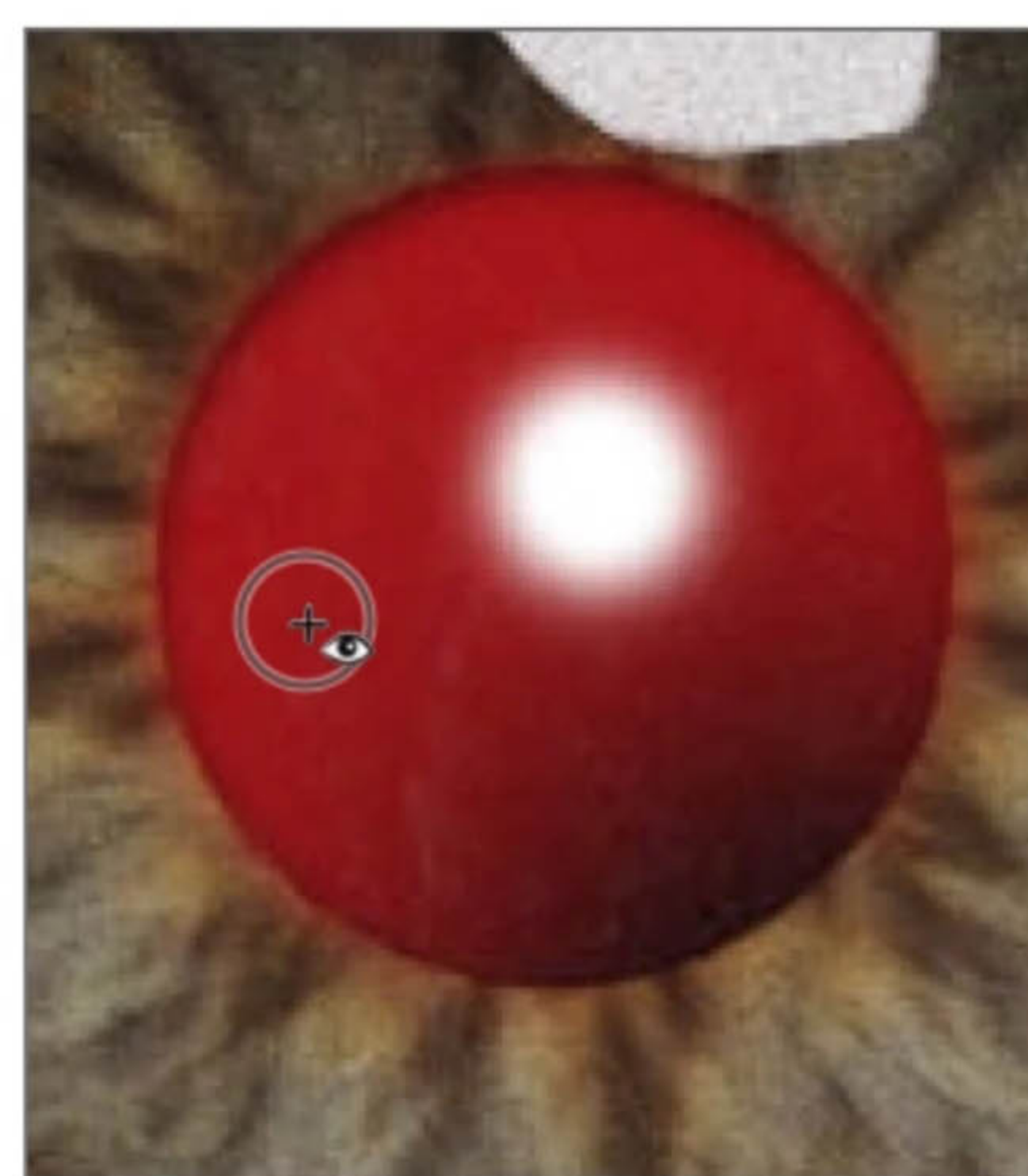
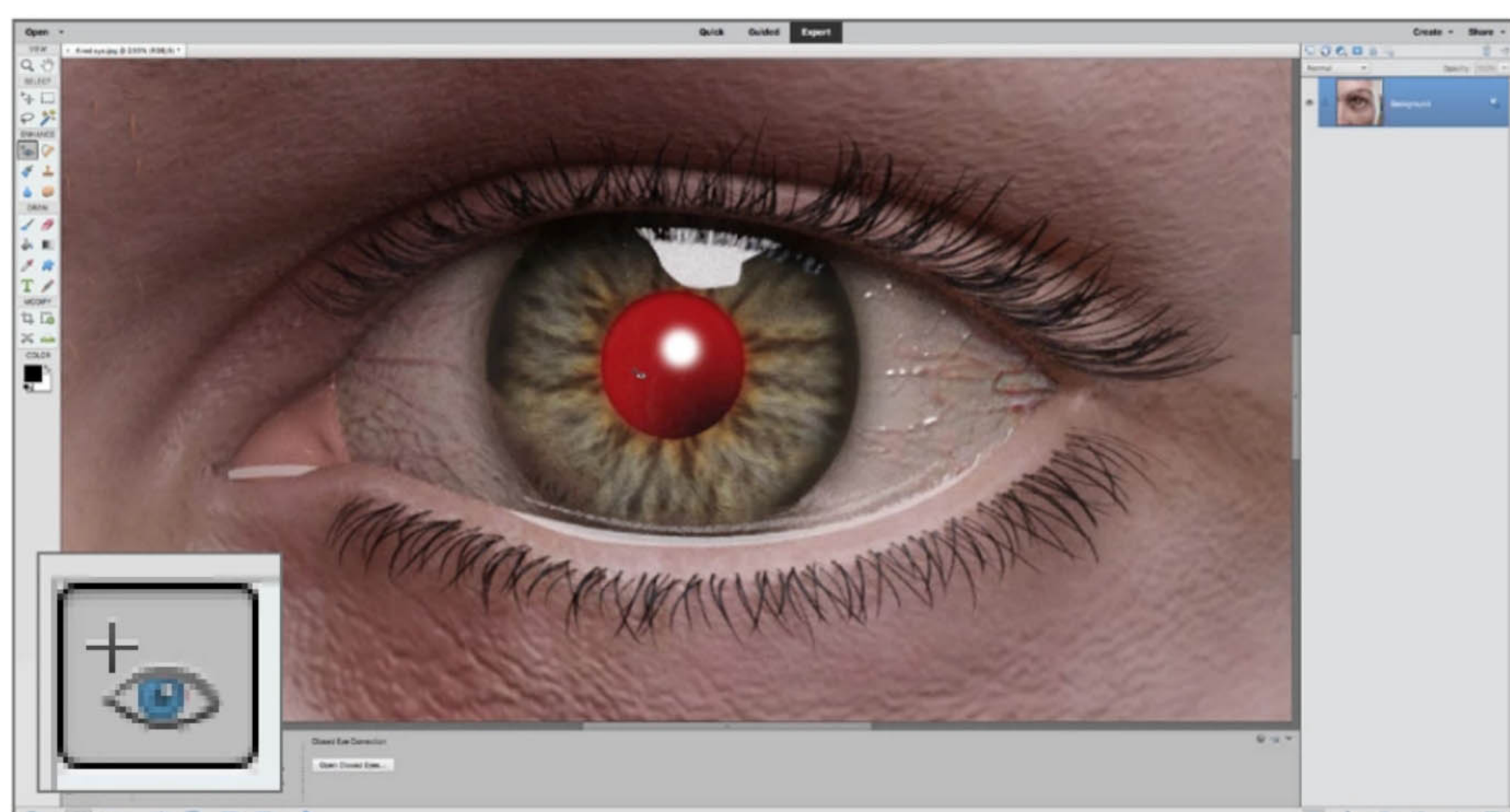
10 This works in a similar way to Quick Selection except that you use Rectangular and Elliptical Marquees and the Lasso and Polygonal shapes to enclose an area for edge detection to work within. It works best with well-defined shapes that have good contrast.



Cloning, Healing and Enhancing

Even with modern digital cameras, a lot of photos may have imperfections in them; for instance with dust contamination. This will be displayed as a black smudge on the final photo. Removing these blemishes is quite easy. The technology can also do much more.

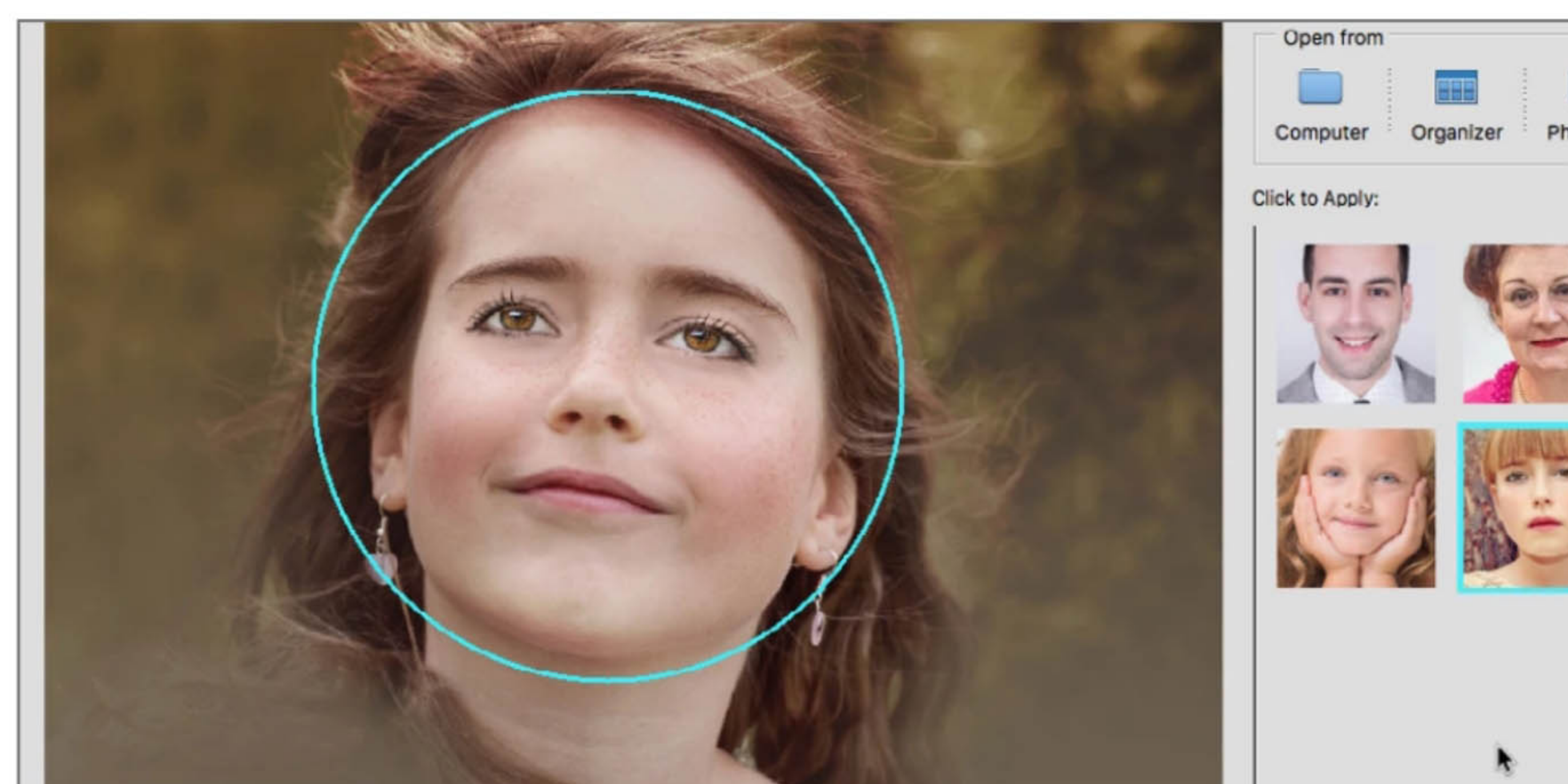
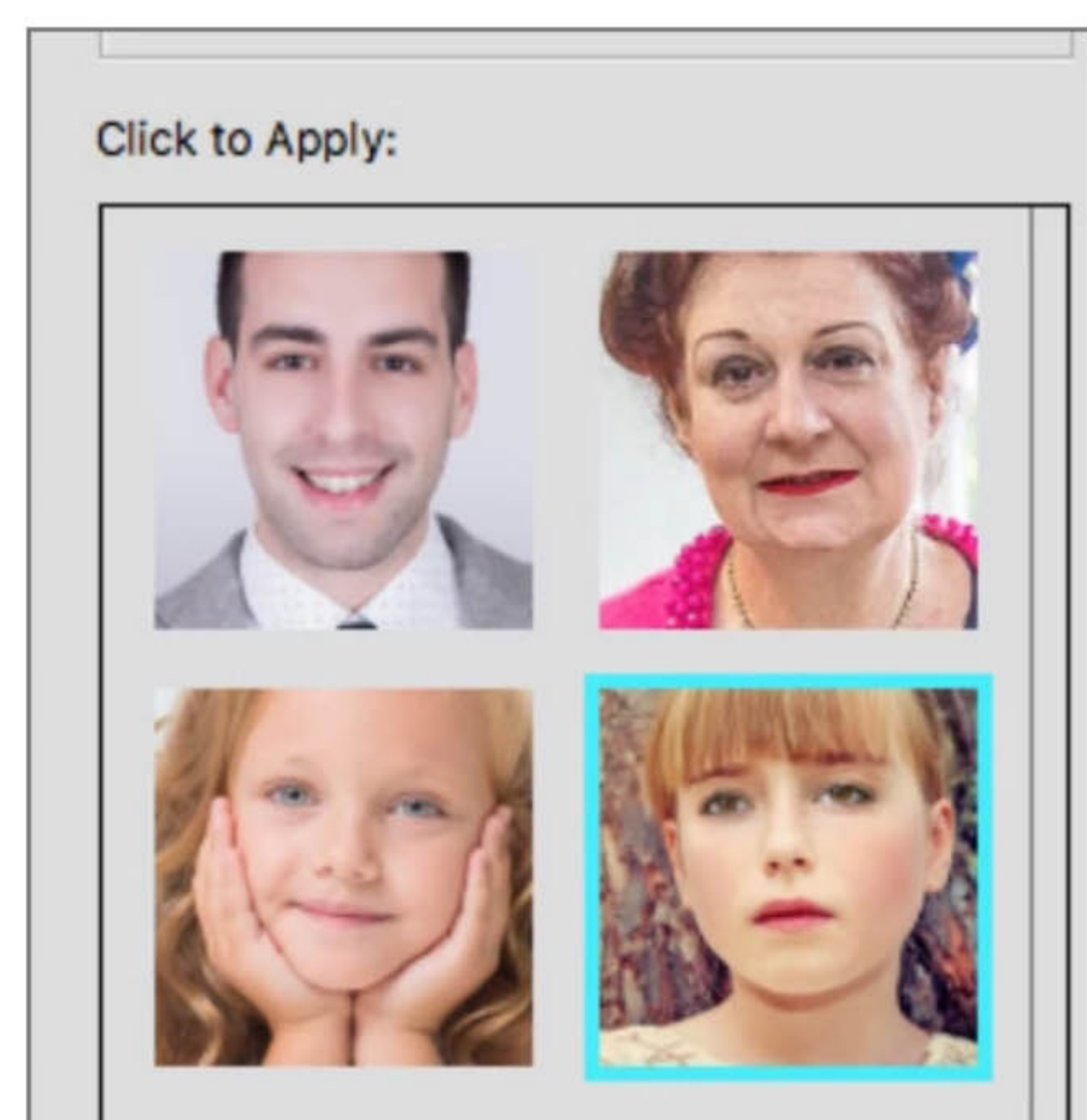
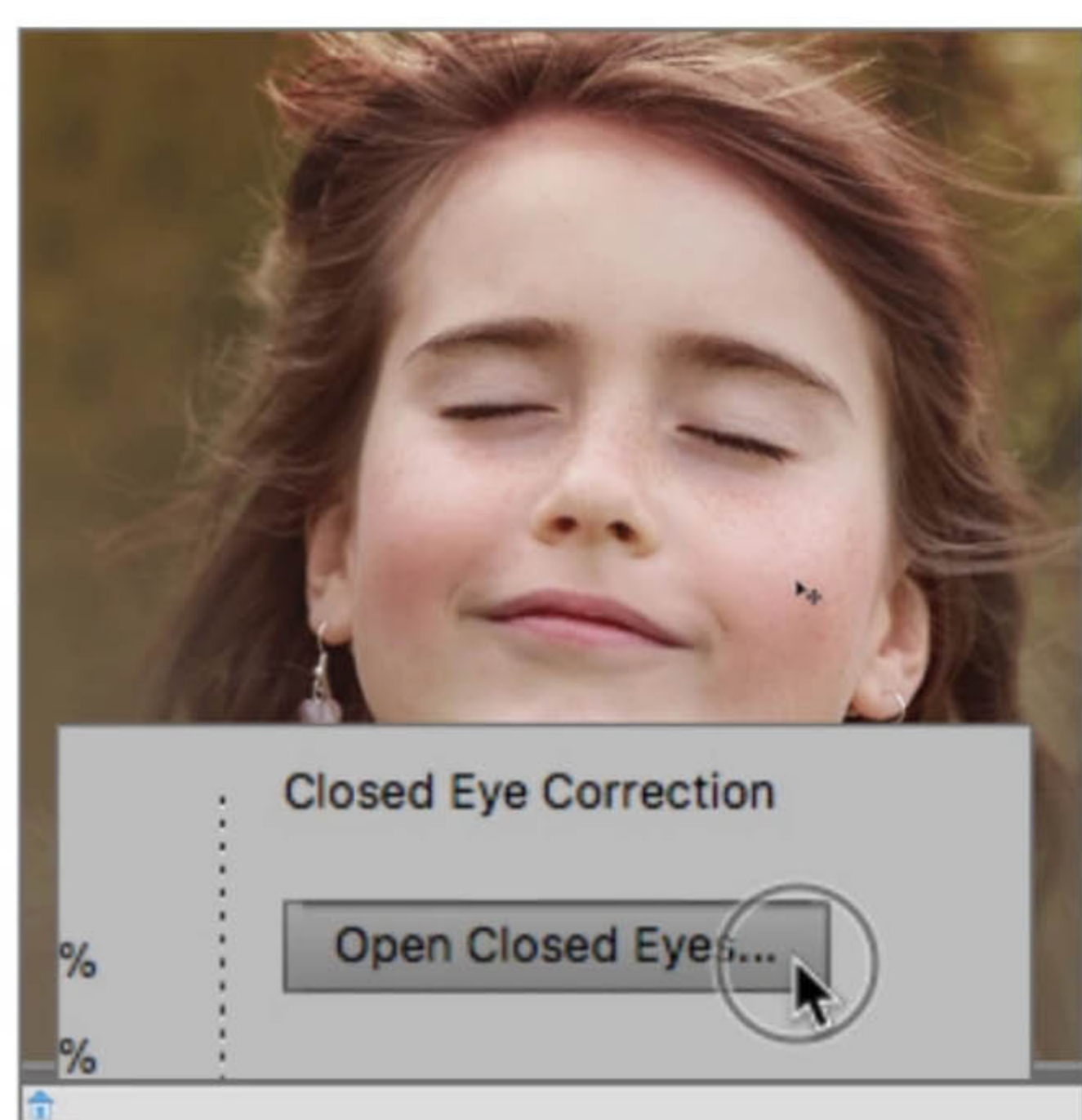
Eye Tool



1 Red-eye is caused by light from the flash of a camera reflecting off the blood vessels at the back of the eye when the pupil is wide open. If you happen to find a favourite photo where your subject has red-eye, then it is a simple process to remove it.

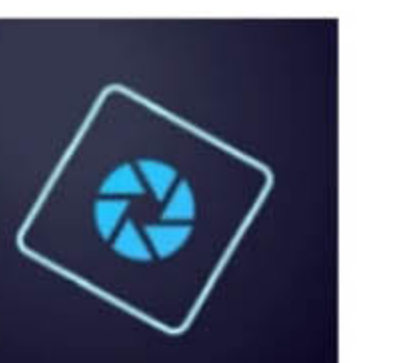
2 Click the Eye Tool (Y) and simply click your cursor over the offending redness in the eyes of your subject. The tool will remove the redness and you can alter Pupil Radius and Darken values to make sure the red has been completely removed. It can also be set for Pet Eye as well.

Closed Eye Correction

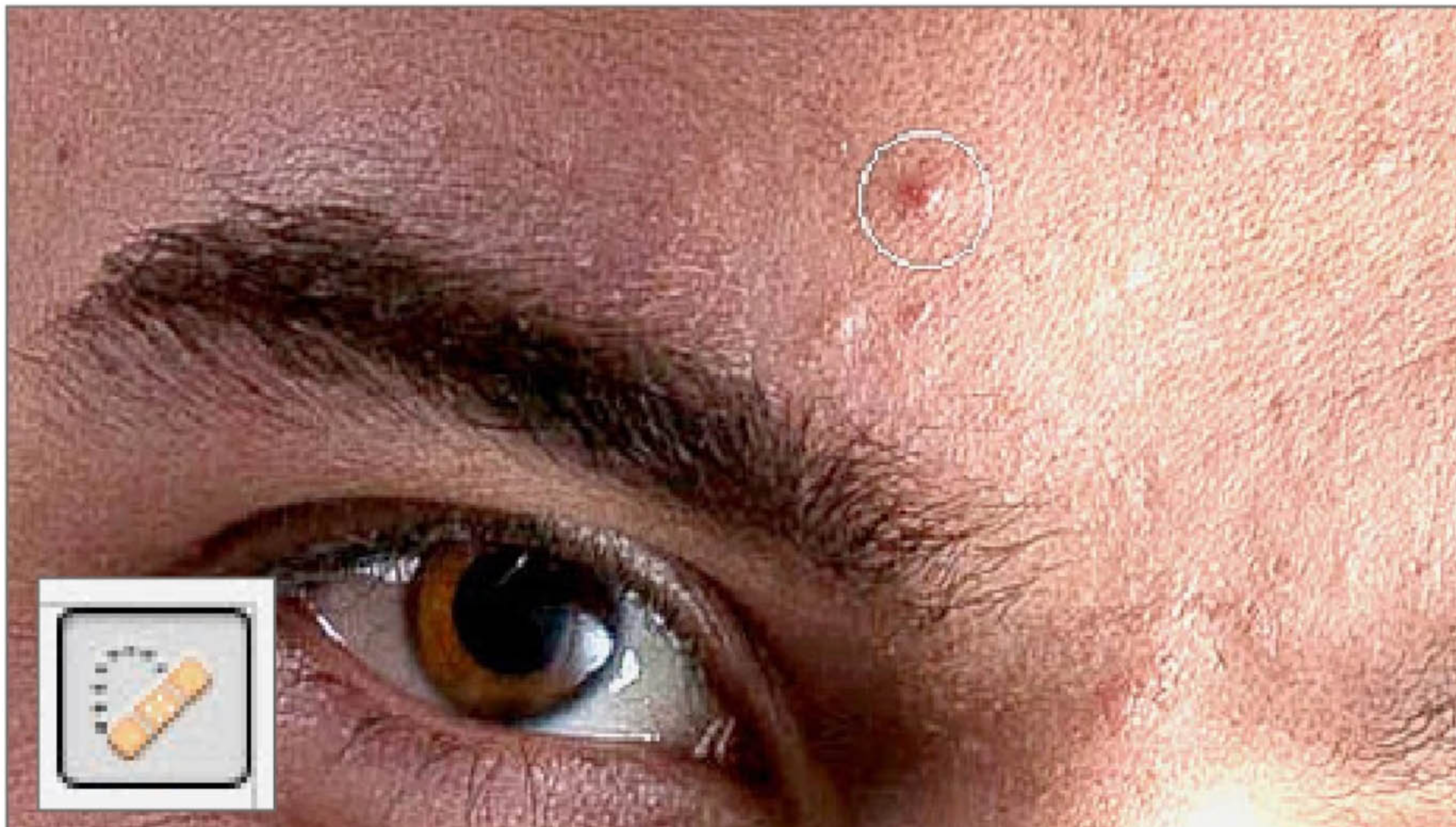


1 Another great function available in the options panel is the function to open closed eyes. Click the Open Closed Eyes button to activate the dialog. The image will scan for closed eyes and circle possible candidates. Choose the one you want. You can then choose a set of open eyes to merge into the shot.

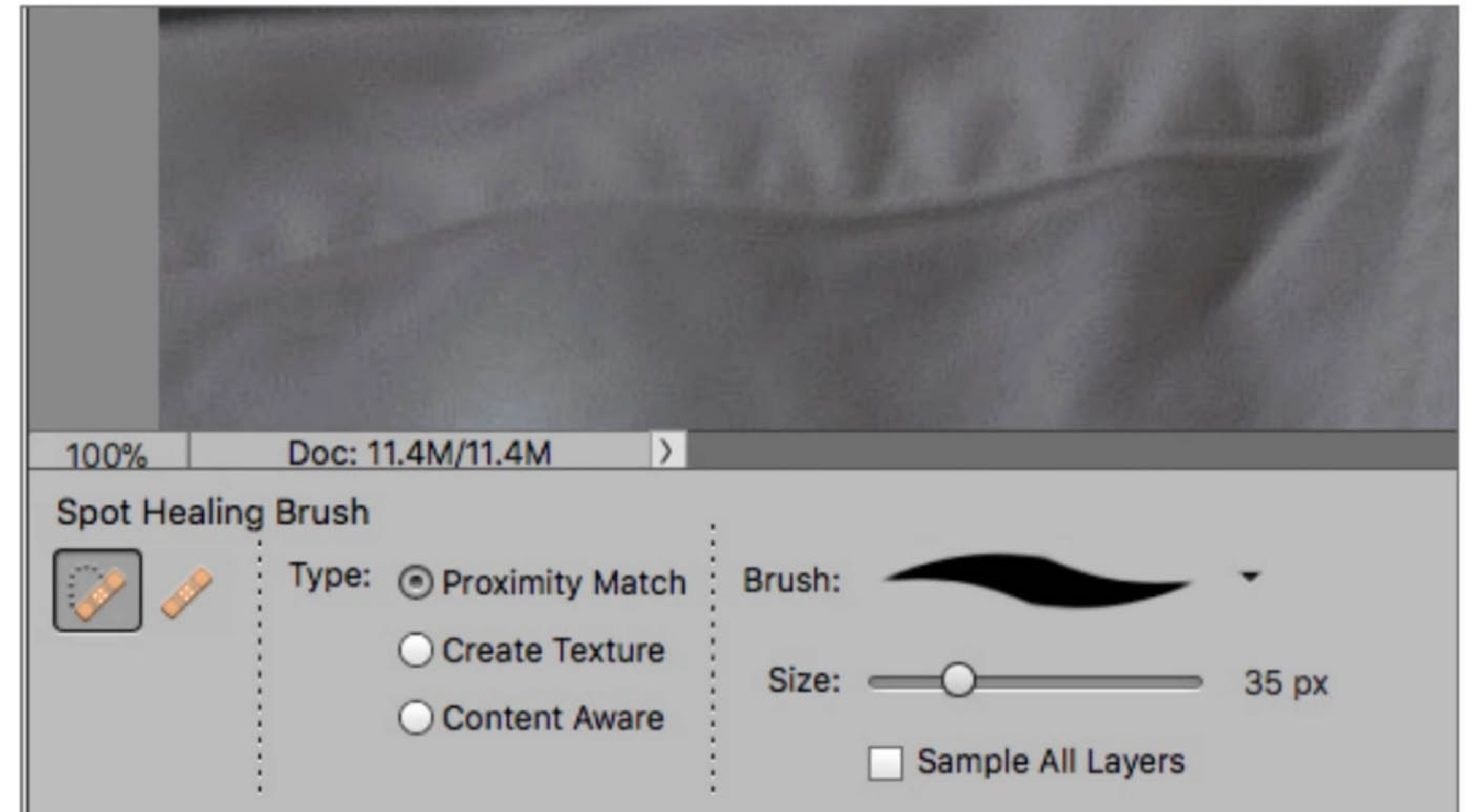
2 Eyes that closely resemble your subject will work best or if you have another image where the eyes are open, you can load that and the program will automatically apply those open eyes to your current image.



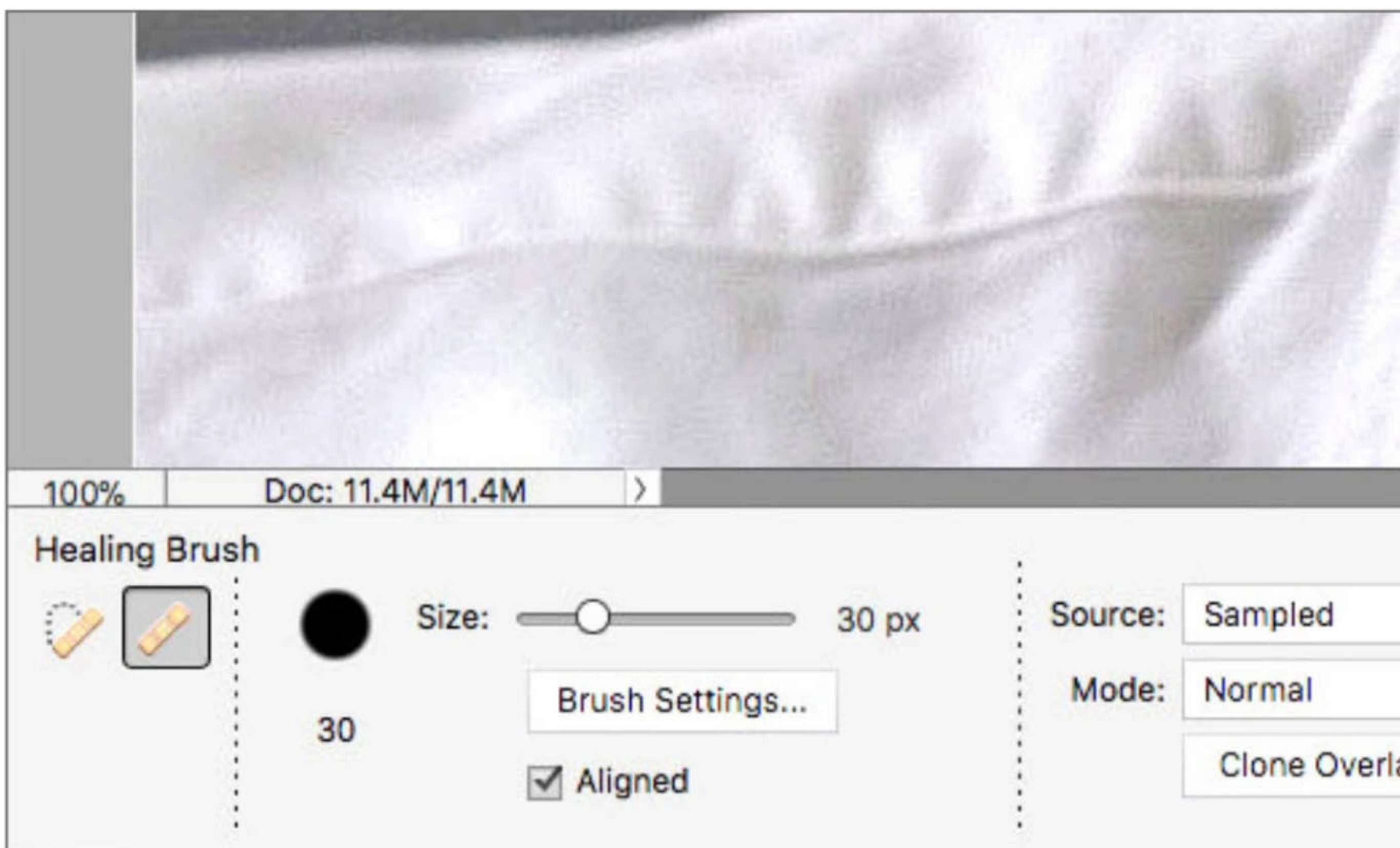
Spot Healing Brush Tool



1 The Spot Healing Brush is great at removing dust spots from photos and is also great for removing spots from humans too. If you have a portrait and the subject has some unwanted blemishes, you can use the Spot Healing Brush to click on the spot and it will use nearby pixels to fill the area.



2 You can choose between Proximity match, Create Texture and Content Aware. For most of your subjects, you may find that you are switching between Proximity Match and Content Aware. You can adjust the brush size for smaller spots. With care, most blemishes and wrinkles can be removed easily.

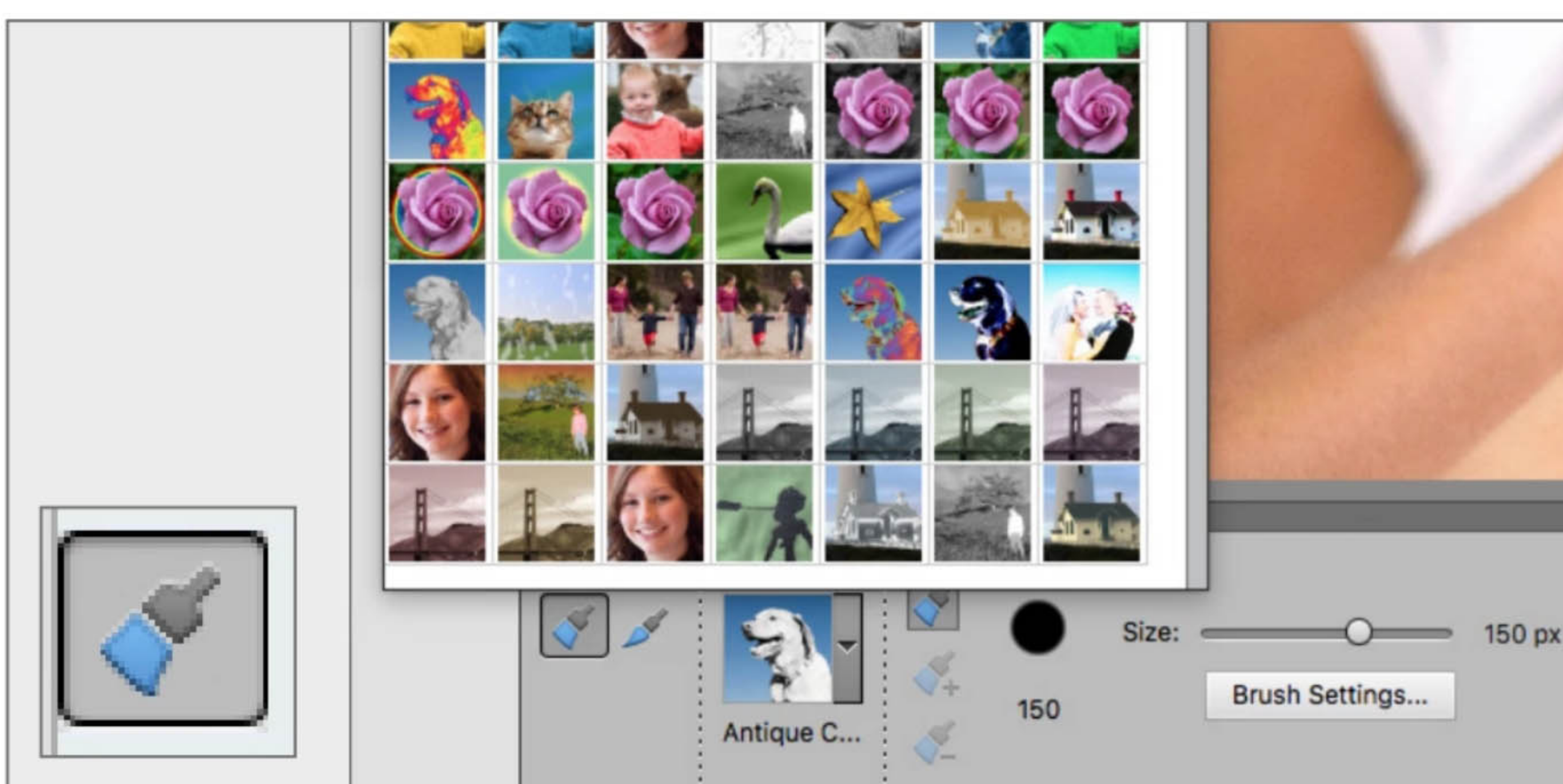


3 The Healing Brush is an older version of the Spot Healing Brush. It requires you to specify a sample point of a similar clean texture which is then cloned over your chosen area much like a Clone stamp when you click on the target blemish or wrinkle you wish to remove.

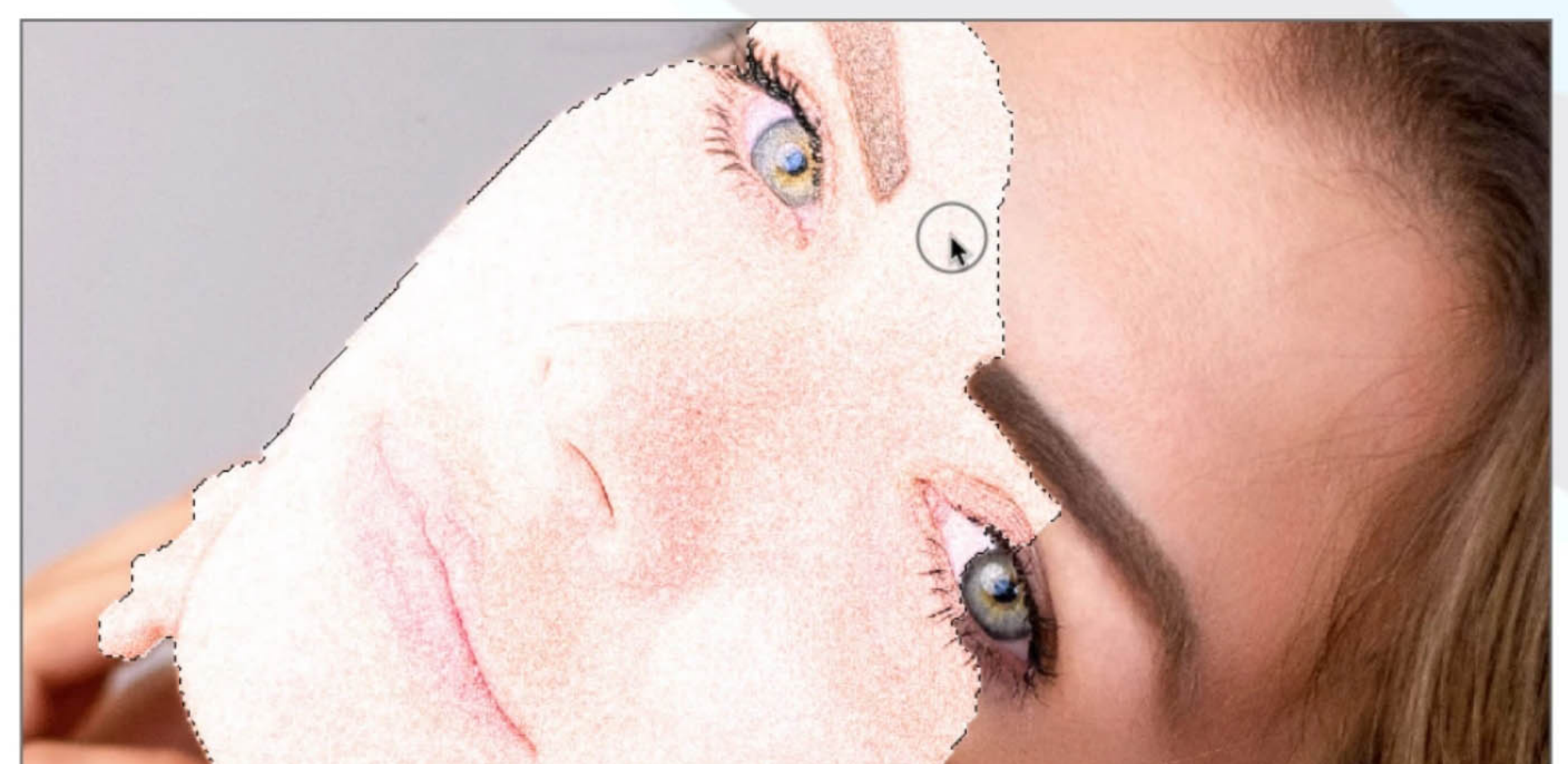


4 When it comes to Healing Brush techniques, you will find that subtlety is the key. Spot Healing is not perfect and may require several attempts to get it right. Avoiding too many repeat patterns is important to avoid creating a texture that doesn't look like it has been cloned.

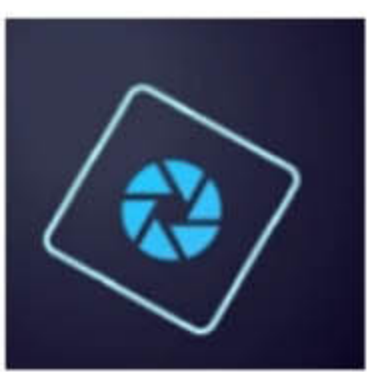
Smart Brush



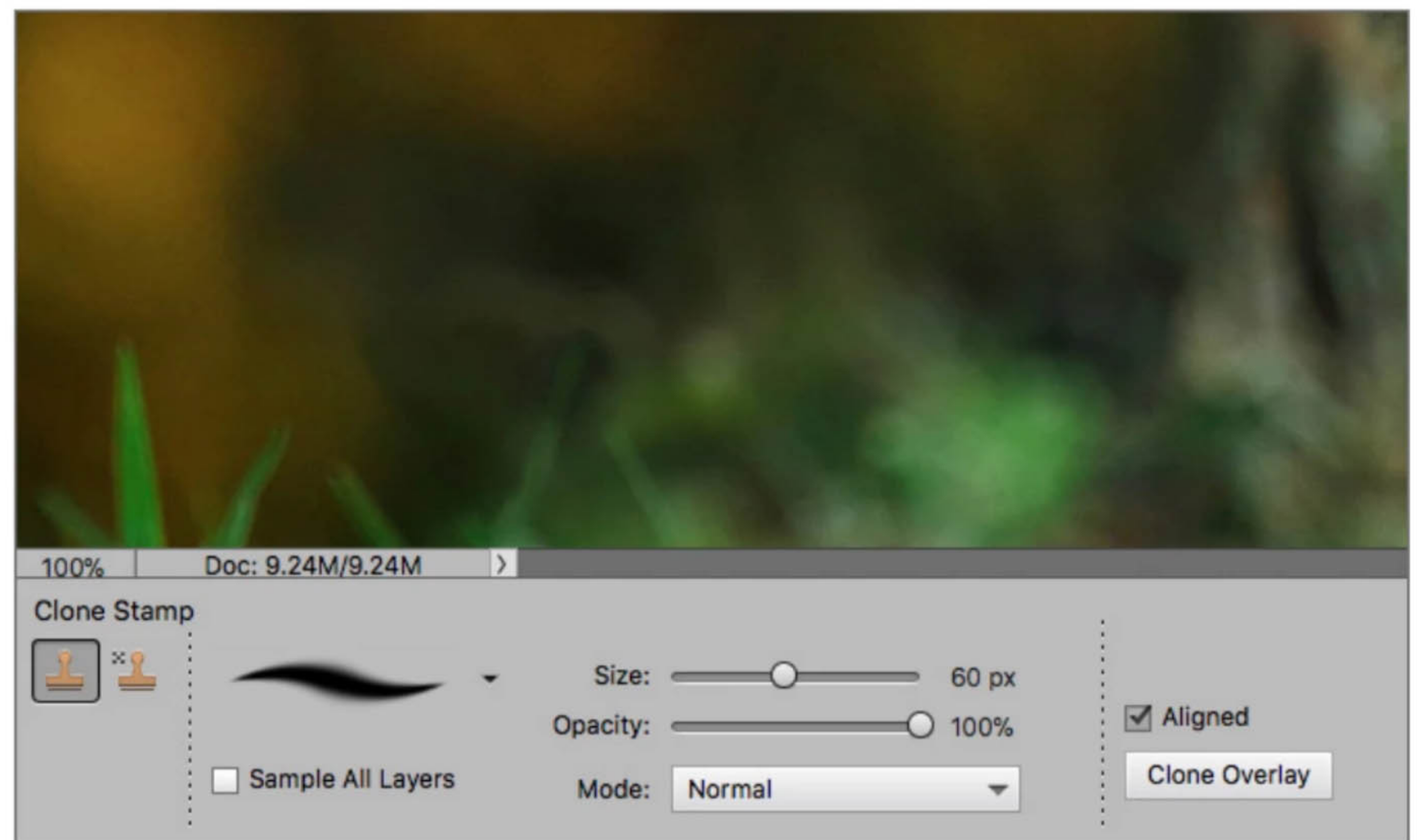
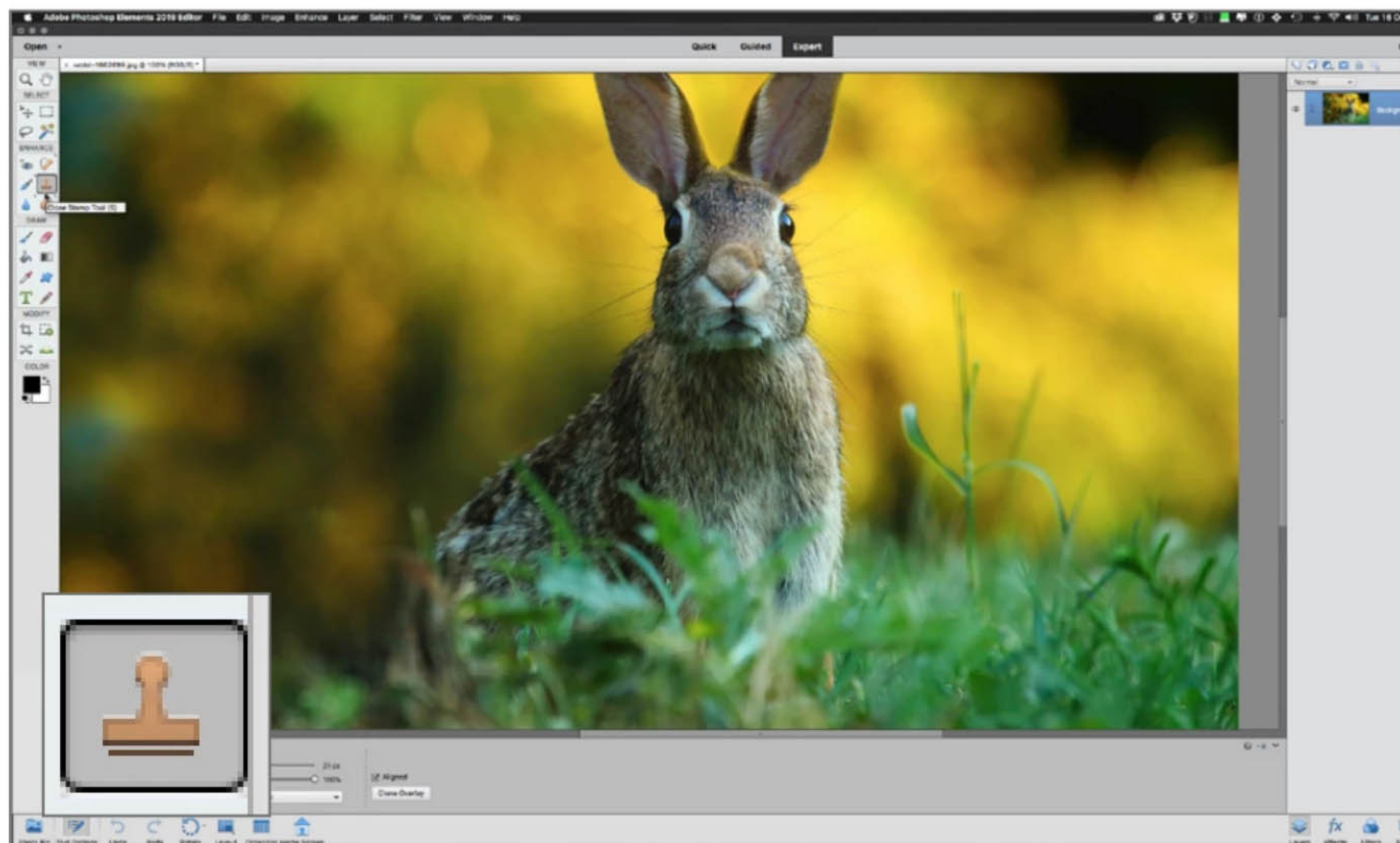
1 The Smart Brush uses edge-detection to allow you to brush areas of your photo and apply different effects to those areas. When you select the Smart Brush Tool (F) the options panel has an effects picker to let you choose which effect you want to apply to your photo.



2 Choose an effect such as a pencil sketch effect and begin to drag your brush over the image, where you want the effect to be seen. You can change brush size and settings such as hardness and roundness and subtract from the current selection. Choose the Detail Smart Brush for more refined selections.

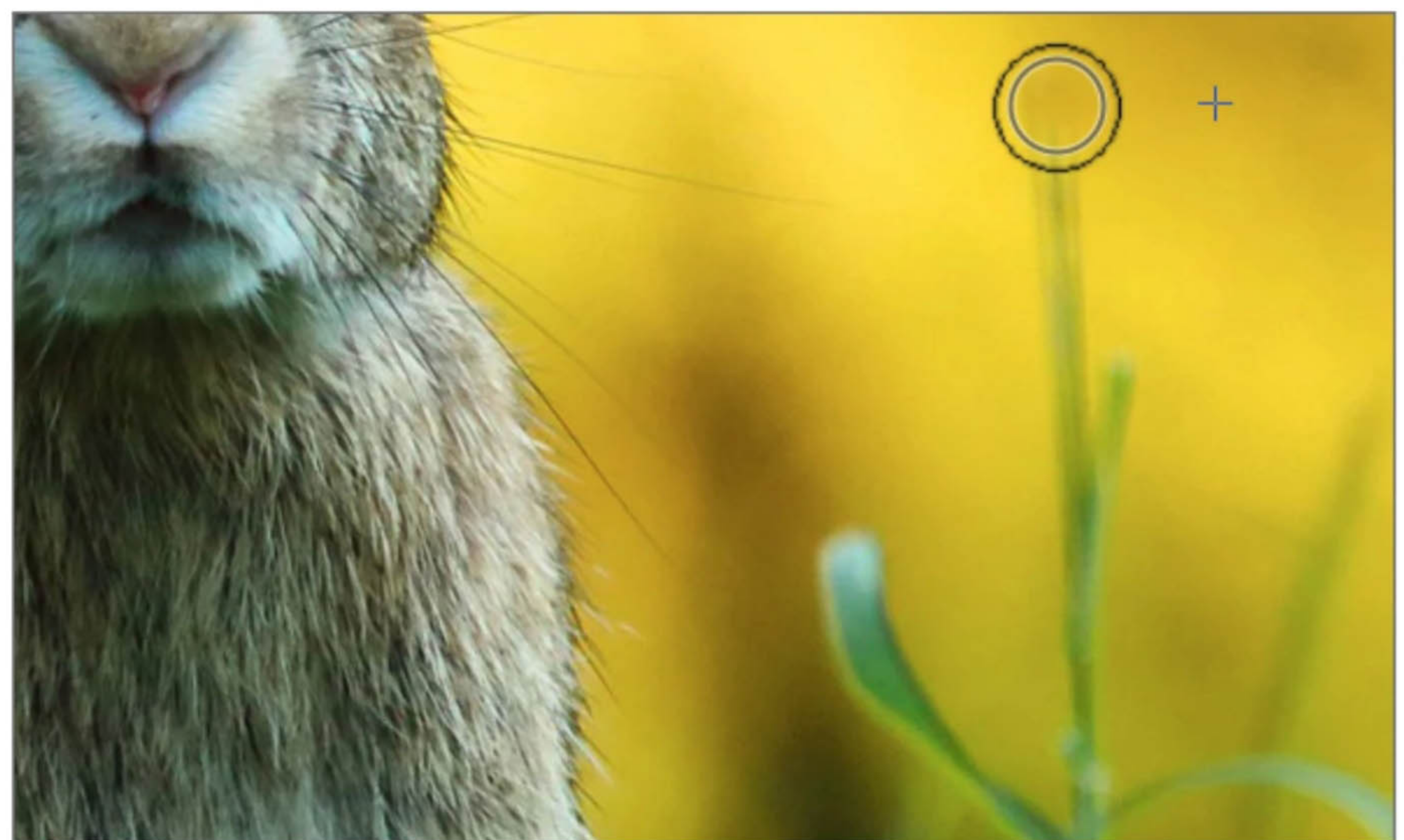
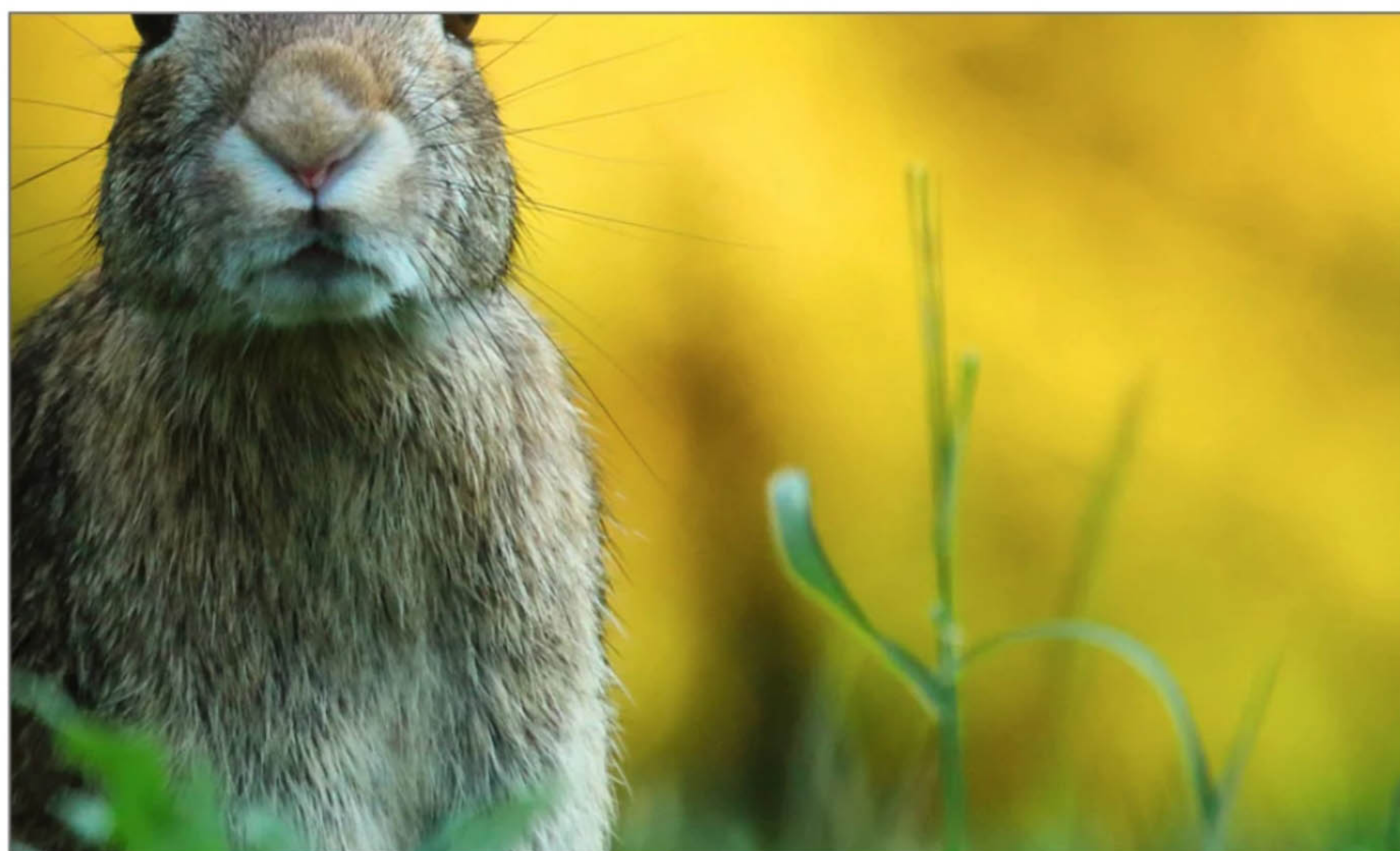


Clone Stamp Tool



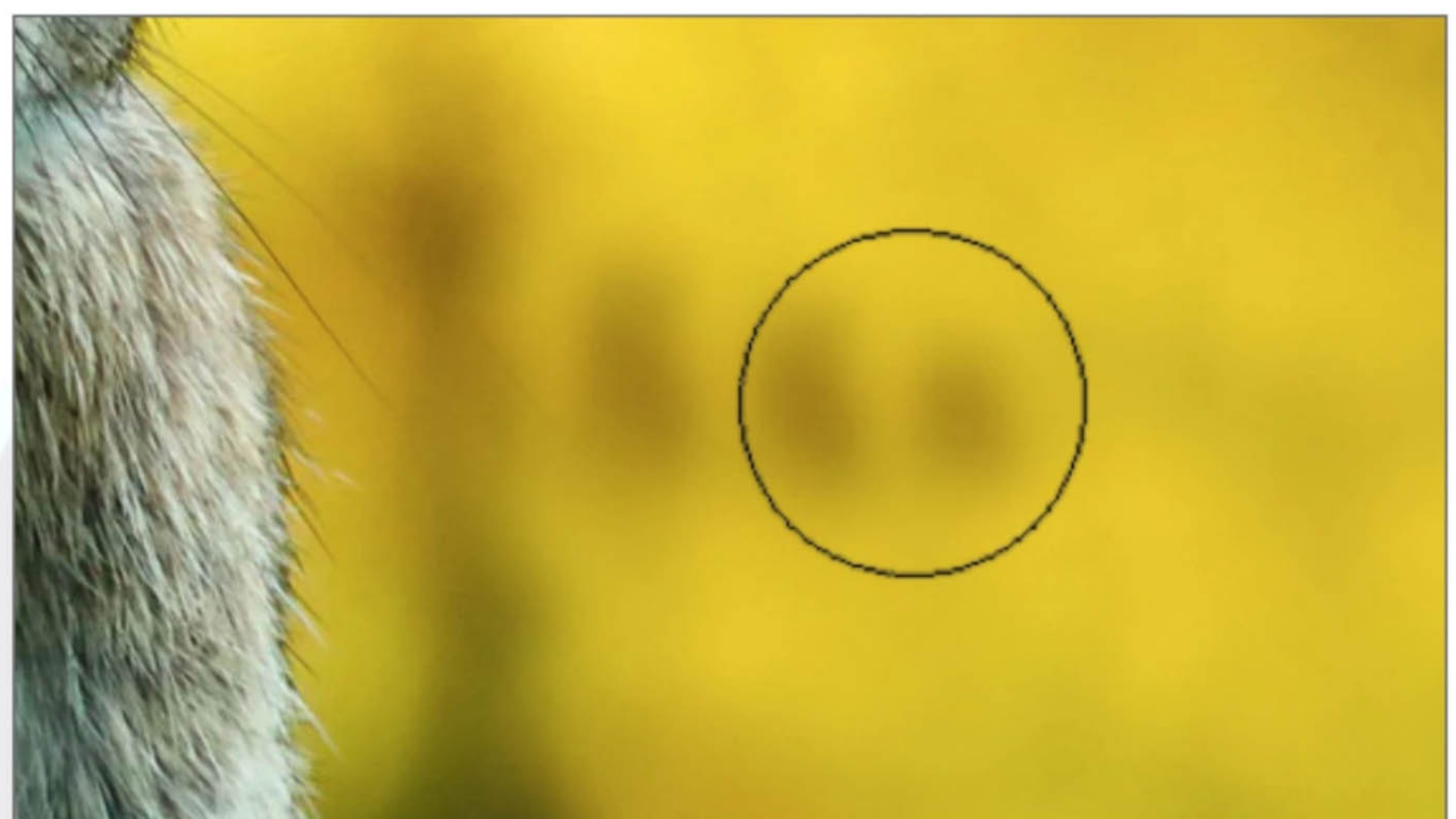
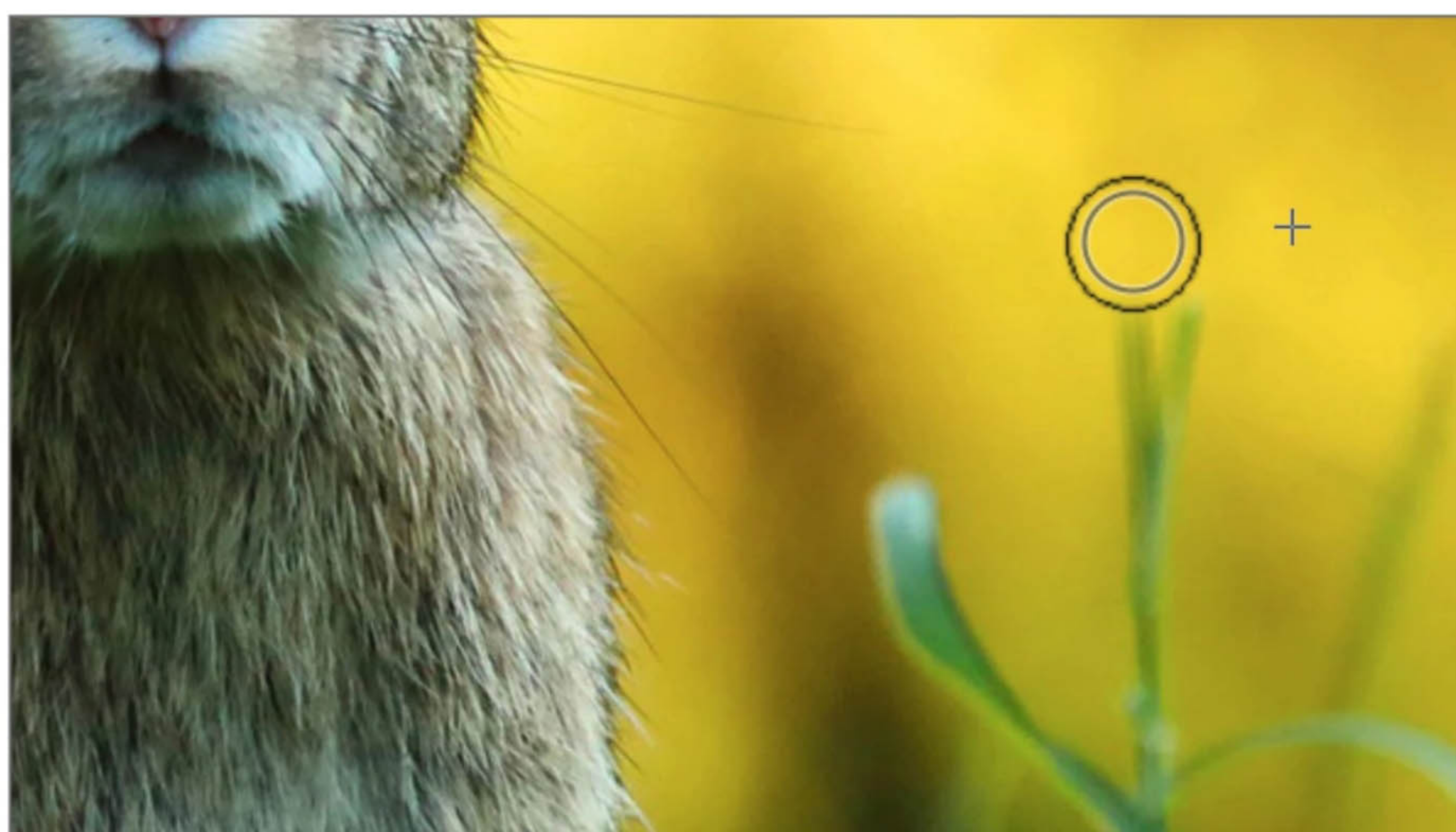
1 After the Healing Brush Tool, the Clone Stamp Tool (S) will seem quite familiar. It copies pixels from one area onto another to remove things from your photos. Despite recent advances with the Content Aware and Spot Healing Tools, it remains one of the best ways to remove things from a photo.

2 Select the Clone Stamp Tool (S). In the options panel, you will have a number of parameters to choose from such as Size, Opacity and Blend Mode. The Aligned button, when ticked, links to and moves your source point as you move your cursor. Unticked, it uses the same source point each time.



3 Here is a wildlife photo from which we want to remove the distracting blades of grass that are sticking up to the right of the rabbit. This is a good example of how cloning can quickly remove elements from your photos with minimal effort.

4 Press the Alt key and select an area right next to the tip of the grass as the source of your cloned pixels. Now you can clone that area over the blades of grass. If the colours don't match, you can reselect an area that more closely matches and doesn't stand out as cloned.



5 Work your way down the grass stem, you can change the size of the brush at any point by pressing the left and right bracket keys on your keyboard. Take your time and don't be afraid to keep selecting new clone source points so the colours match the background when you clone out more of the grass.

6 One thing that really gives cloning away is a repeating pattern. If you see a pattern building up, you can press undo (Cmd + Z) to step backward through your last performed actions and change your clone source again to avoid the repetition of that pattern.

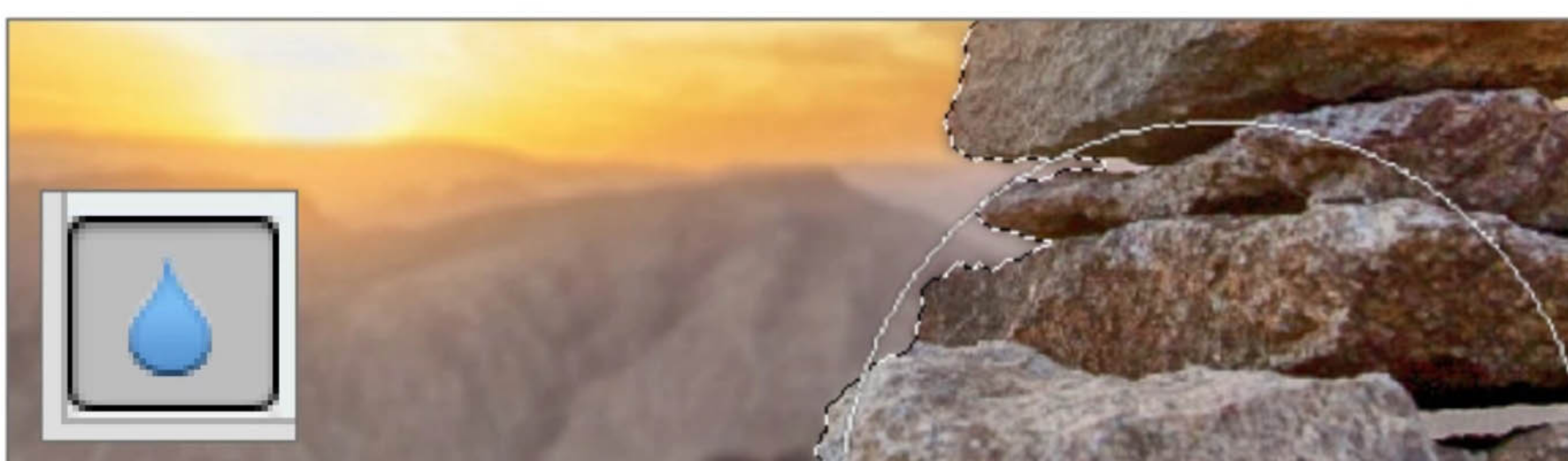
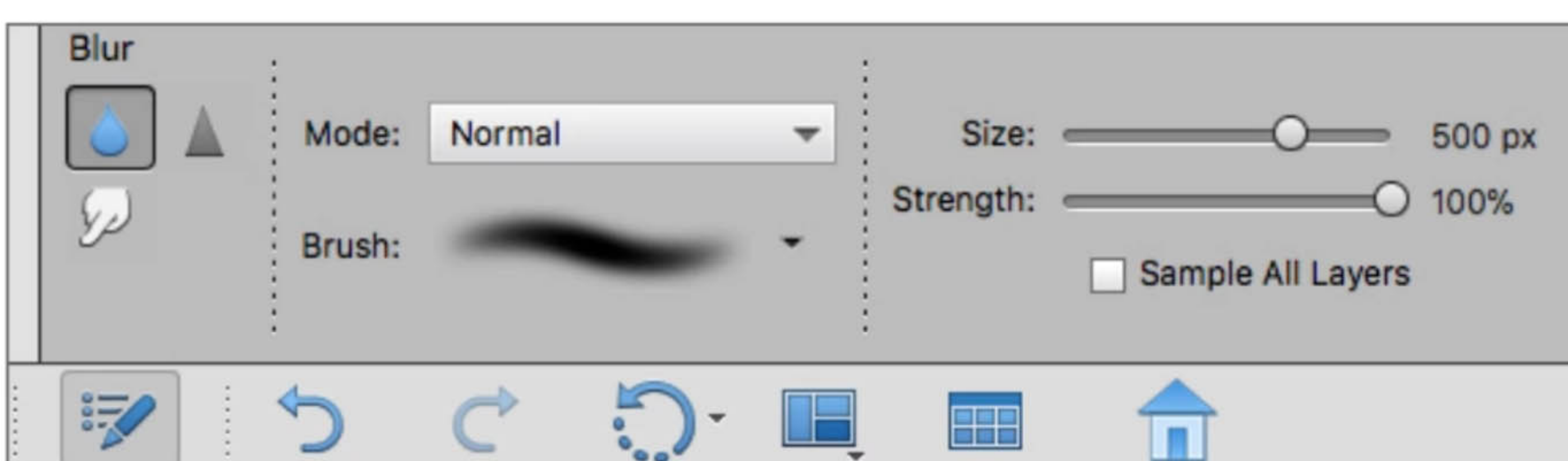


7 In the options panel, you also have the Pattern Stamp available. As the name suggests, you can use this tool to apply a preset pattern to your image. Click on the pattern picker and choose the pattern you want to apply to your photo.

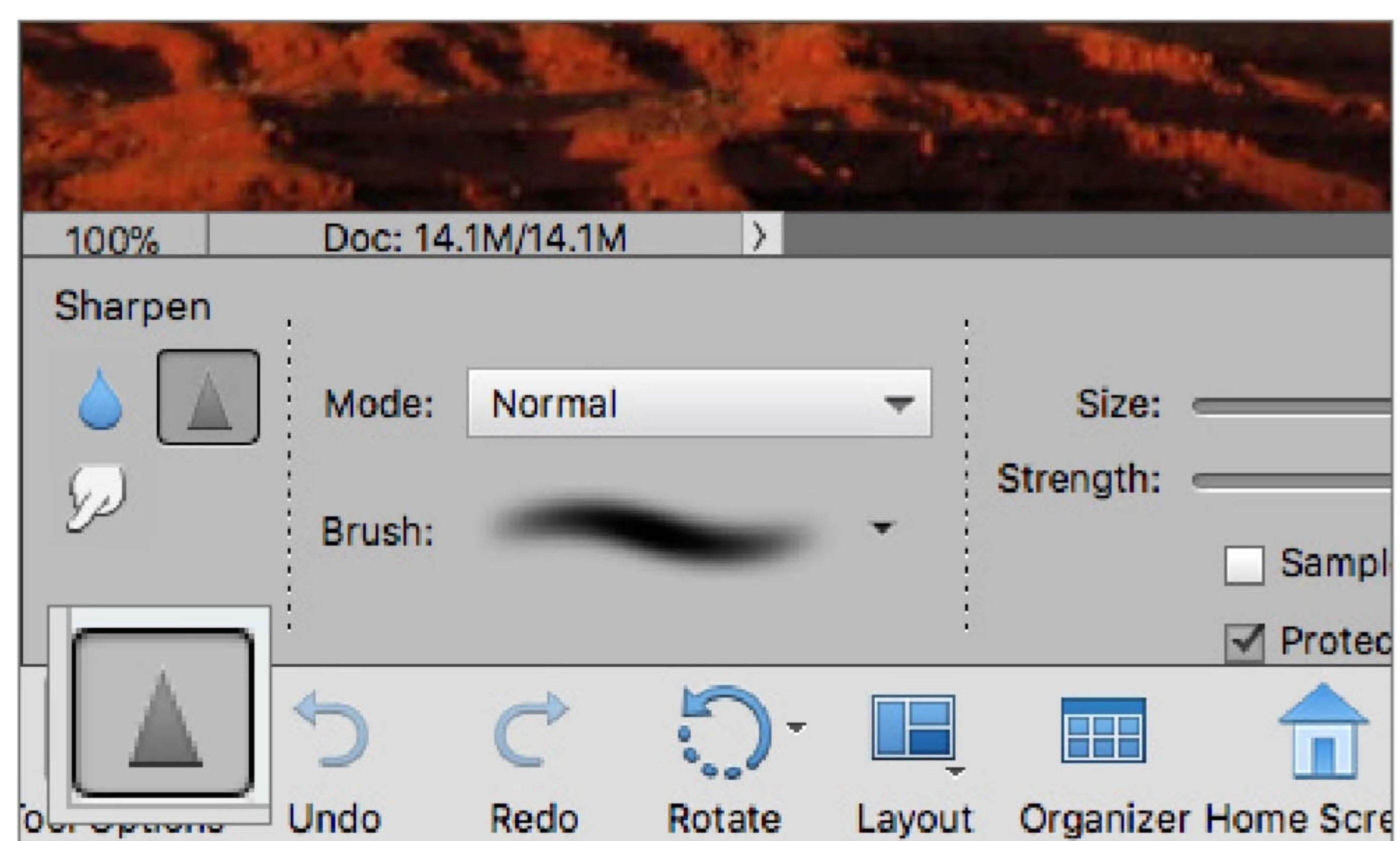


8 You can change the Pattern Stamp's Size and Opacity as well as the Blend Mode. Choosing Soft Light, for instance, allows a softer blend of the pattern into the image. Click Impressionist to turn the patterns into paint dabs for a more artistic effect.

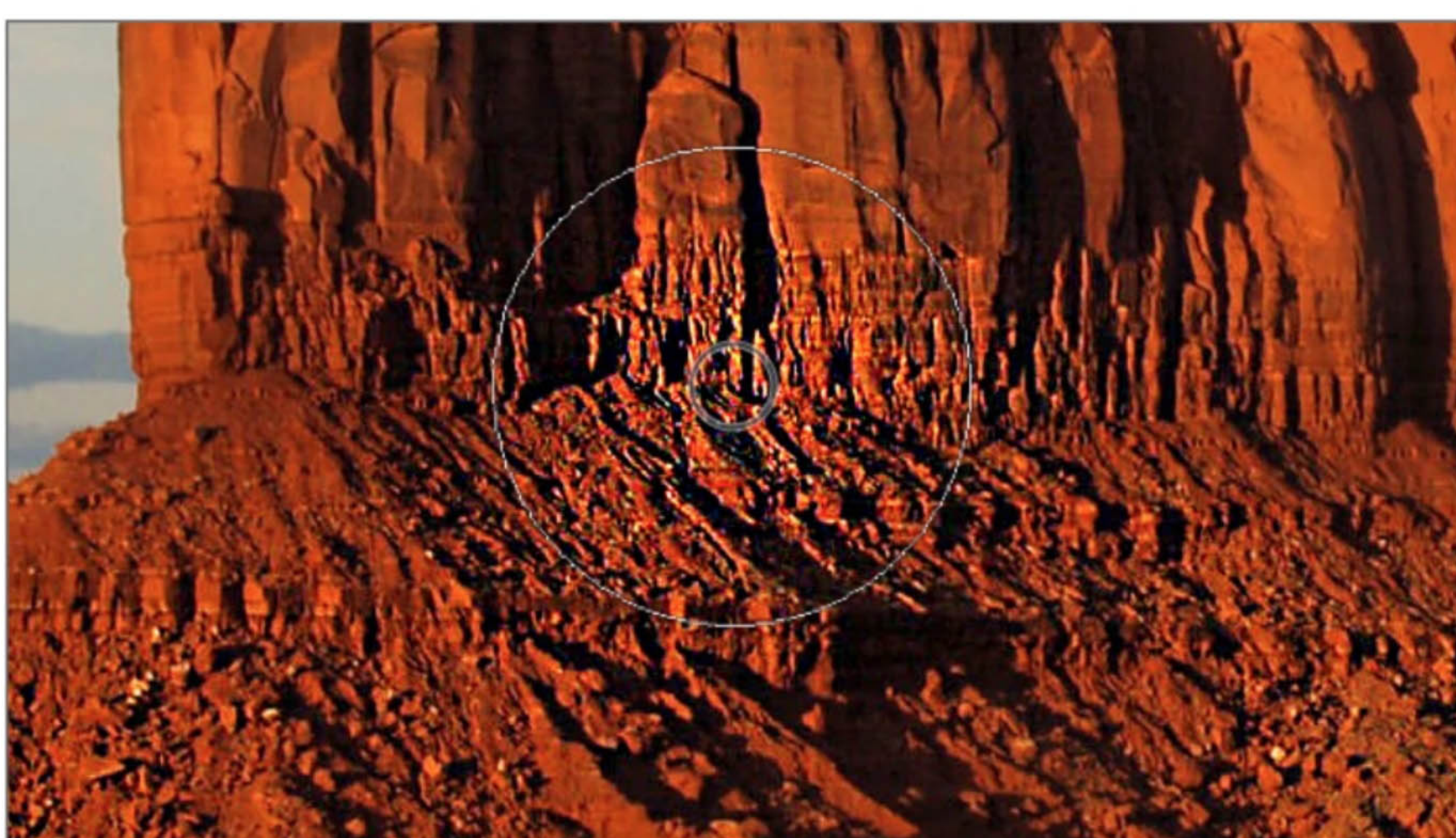
Blur, Sharpen and Smudge



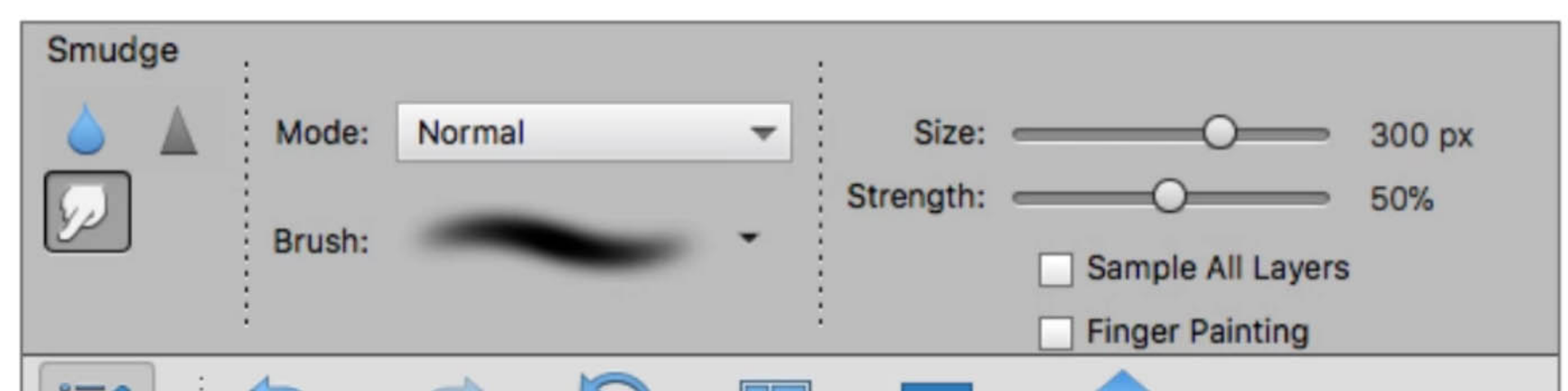
1 The Blur Tool (R) is a fairly self-explanatory tool for adding blur to specific areas of a photo. You can choose a brush type and alter its Size and Strength values for a subtle or intense blurring of your subject.



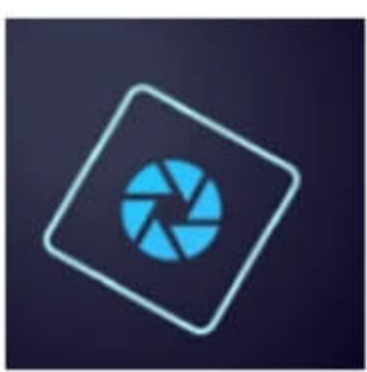
2 The Sharpen Tool (R) uses a brush tool to apply sharpening to your image. Like the Blur Tool, it is a more targeted method of adding sharpness to a photo. Choose your brush type and alter the Size and Strength values to get the desired effect.



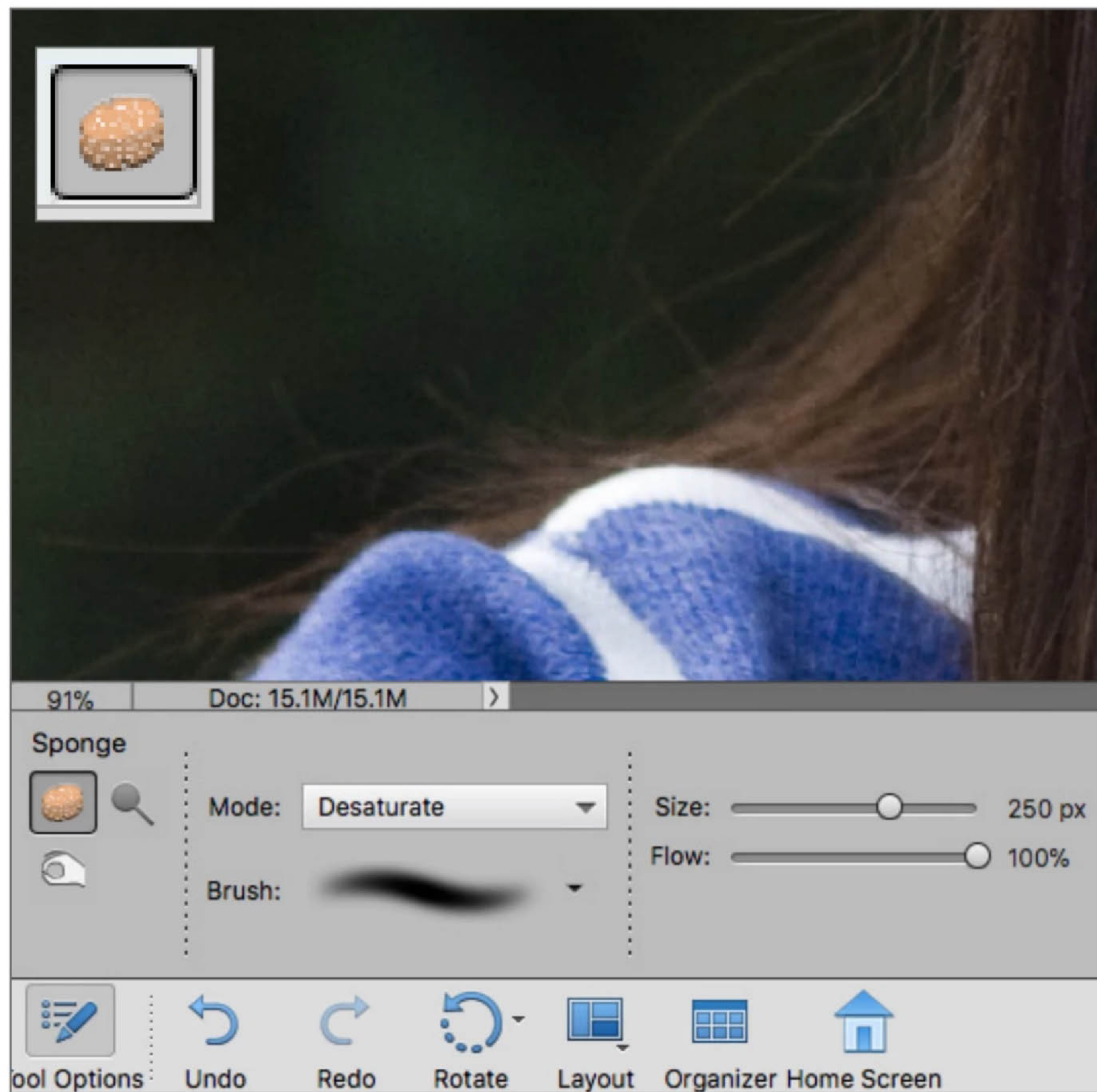
3 Approach sharpening with caution since it is very easy to overdo it and ruin an image with over sharpening. Make sure the Protect Detail button is ticked and begin to apply the sharpening effect.



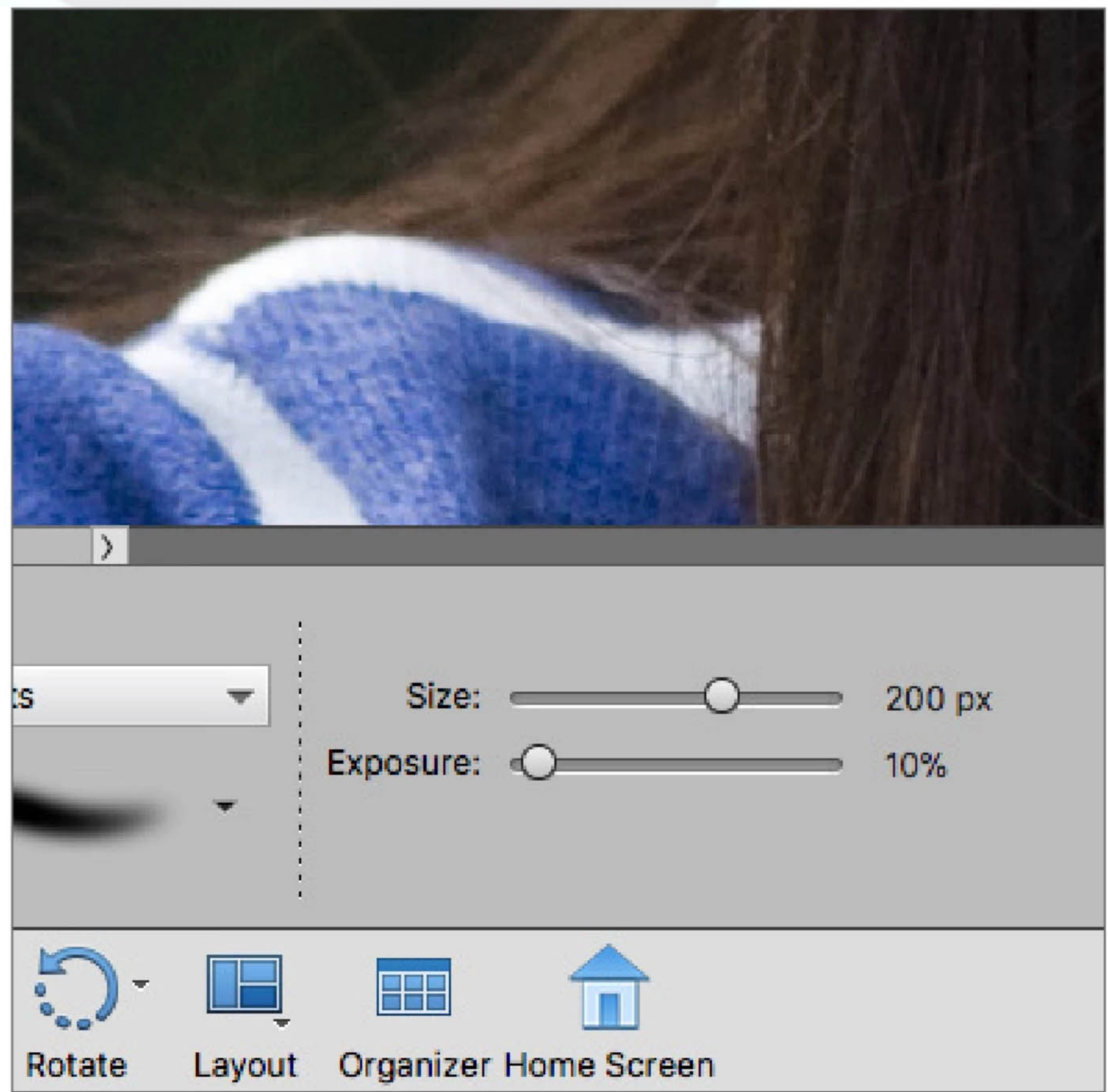
4 The Smudge Tool (R) can be used to smear the pixels of your photo across the screen for a creative effect. Just like Sharpen and Blur, you can alter the brush type and set the Size and Strength of the effect. The Finger Painting button adds colour to the smudged pixels.



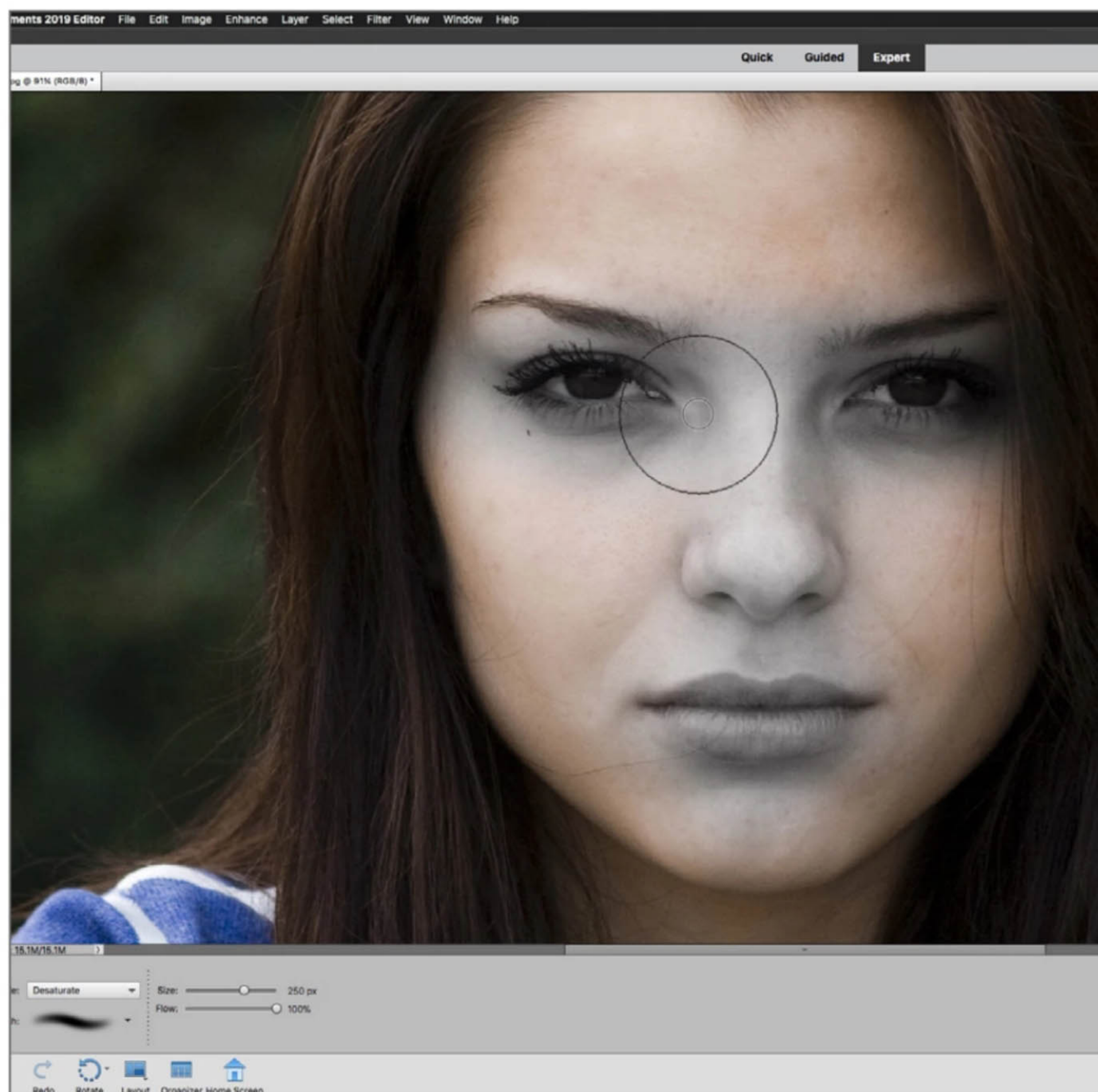
Sponge, Dodge and Burn



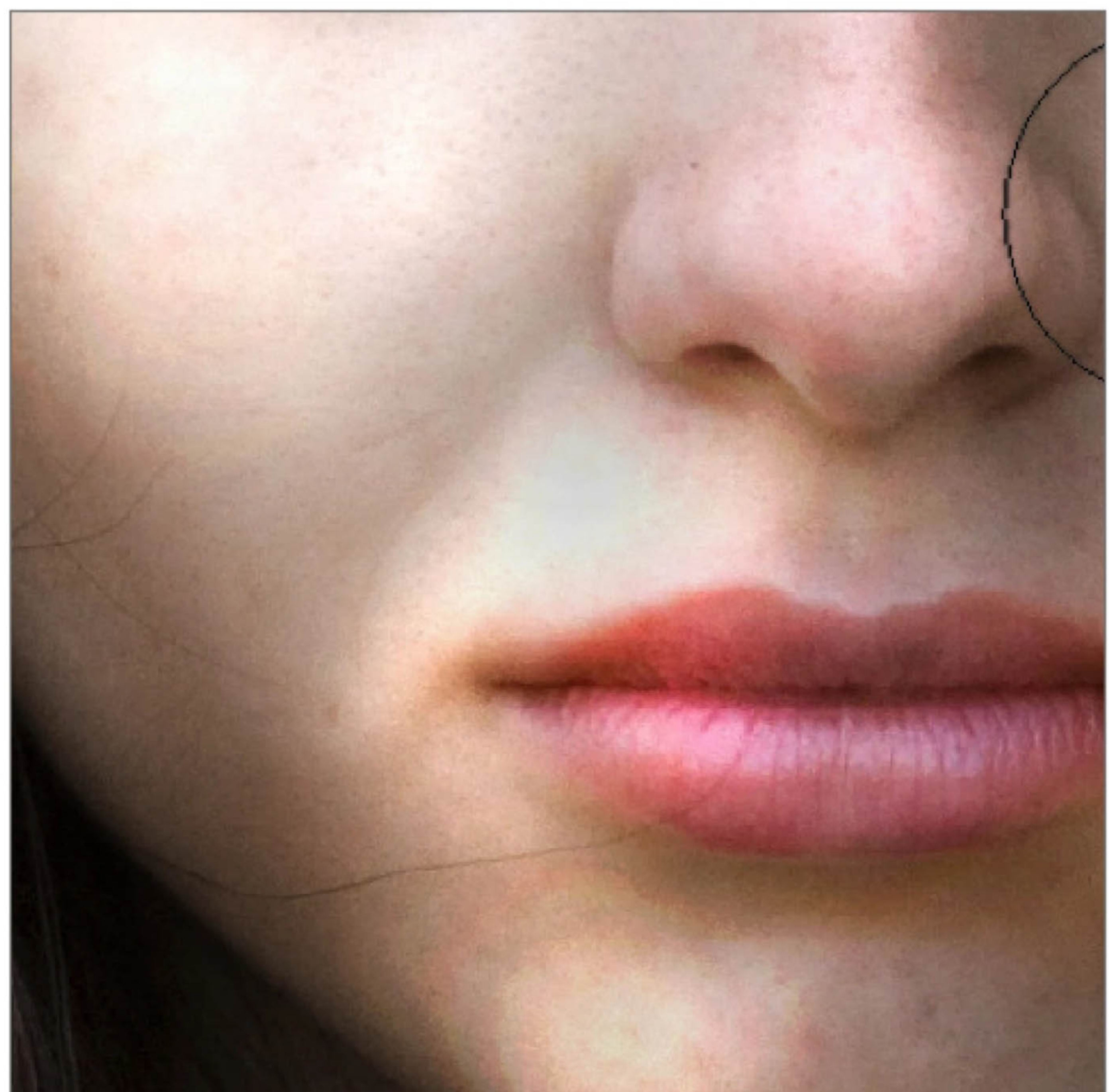
1 The Sponge Tool (O) has two Mode settings of Saturate and Desaturate. You can control the Size settings as well as the Flow of the effect you are adding to your image. You can also set the type of brush you want to use to apply the effect.



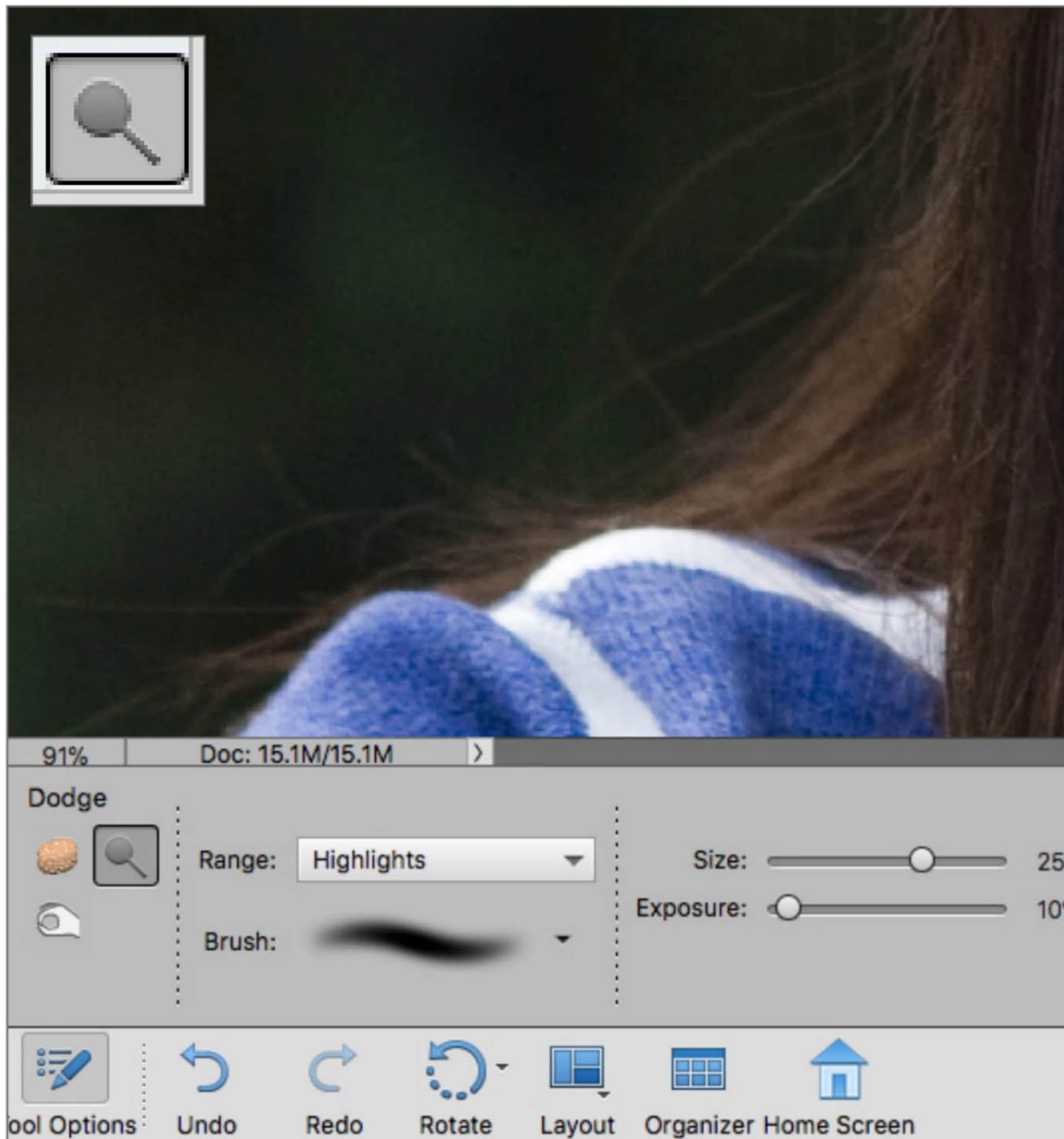
2 It's a simple tool for adding targeted saturation or desaturation to the photo. It is recommended to set the Flow of these brushes to about 10%. Then gradually build up the application of colour saturation, the removal of colour entirely or just lessen the vibrance of areas in the photo.



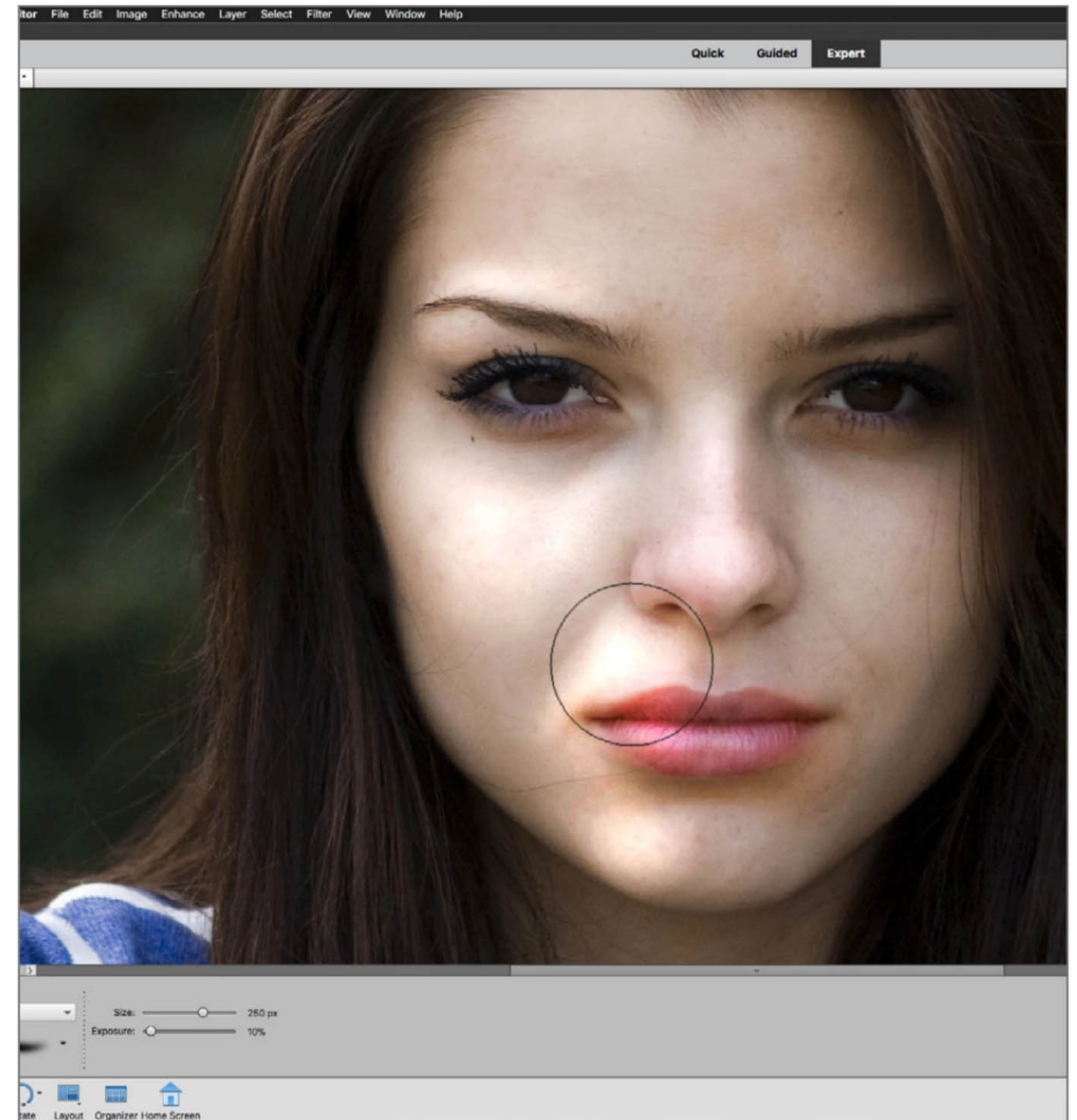
3 Click and drag the Sponge Tool over the areas you selectively wish to Saturate or Desaturate. Continue to brush the areas to increase the amount of the effect you are applying. In this example, brushing using the Desaturate option eventually turns the affected areas to grey.



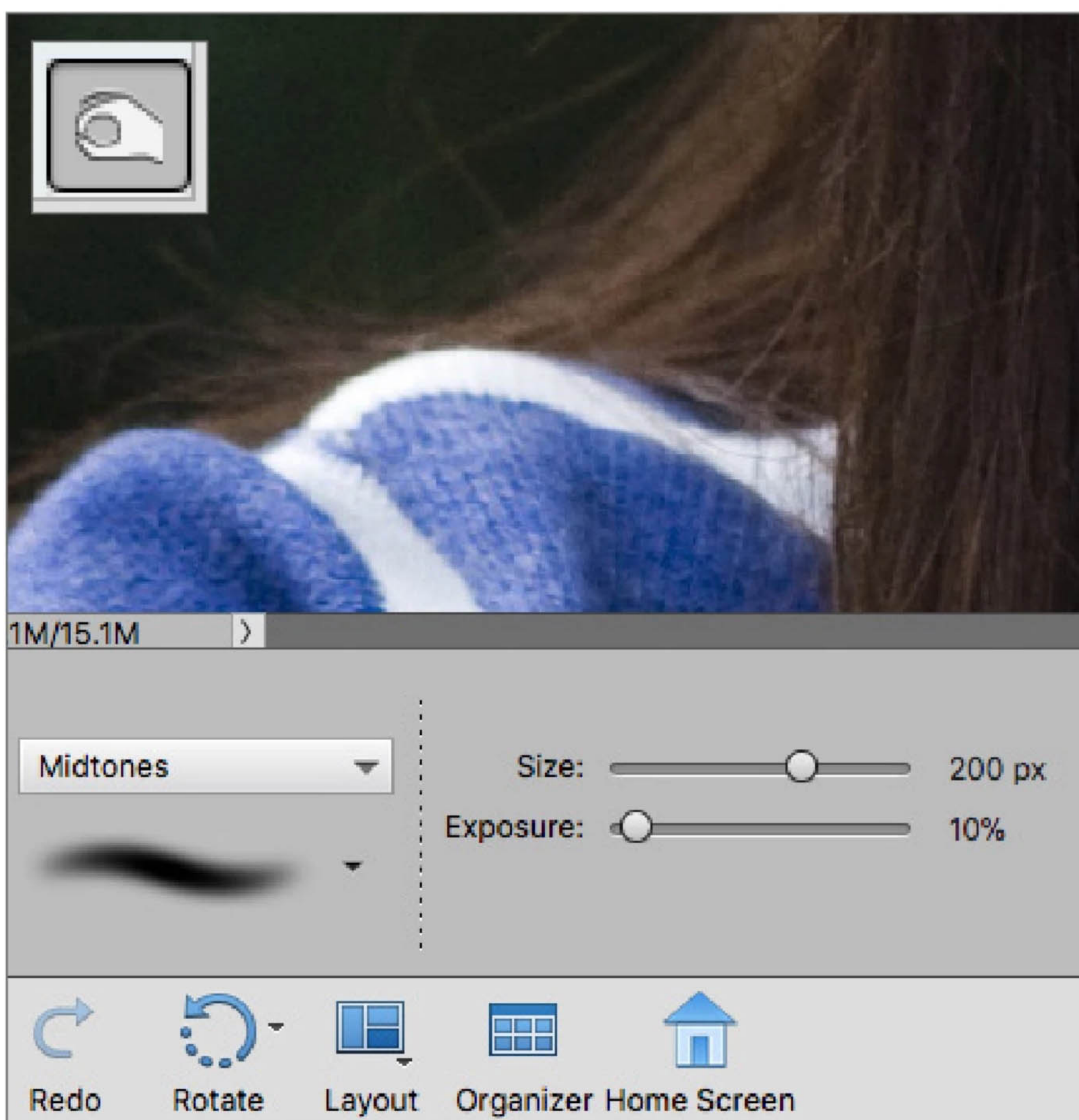
4 The Dodge and Burn Tools are named after the techniques that were originally used in traditional film processing darkrooms. Dodging refers to selectively making areas lighter in an image and Burning is the opposite effect of making images darker.



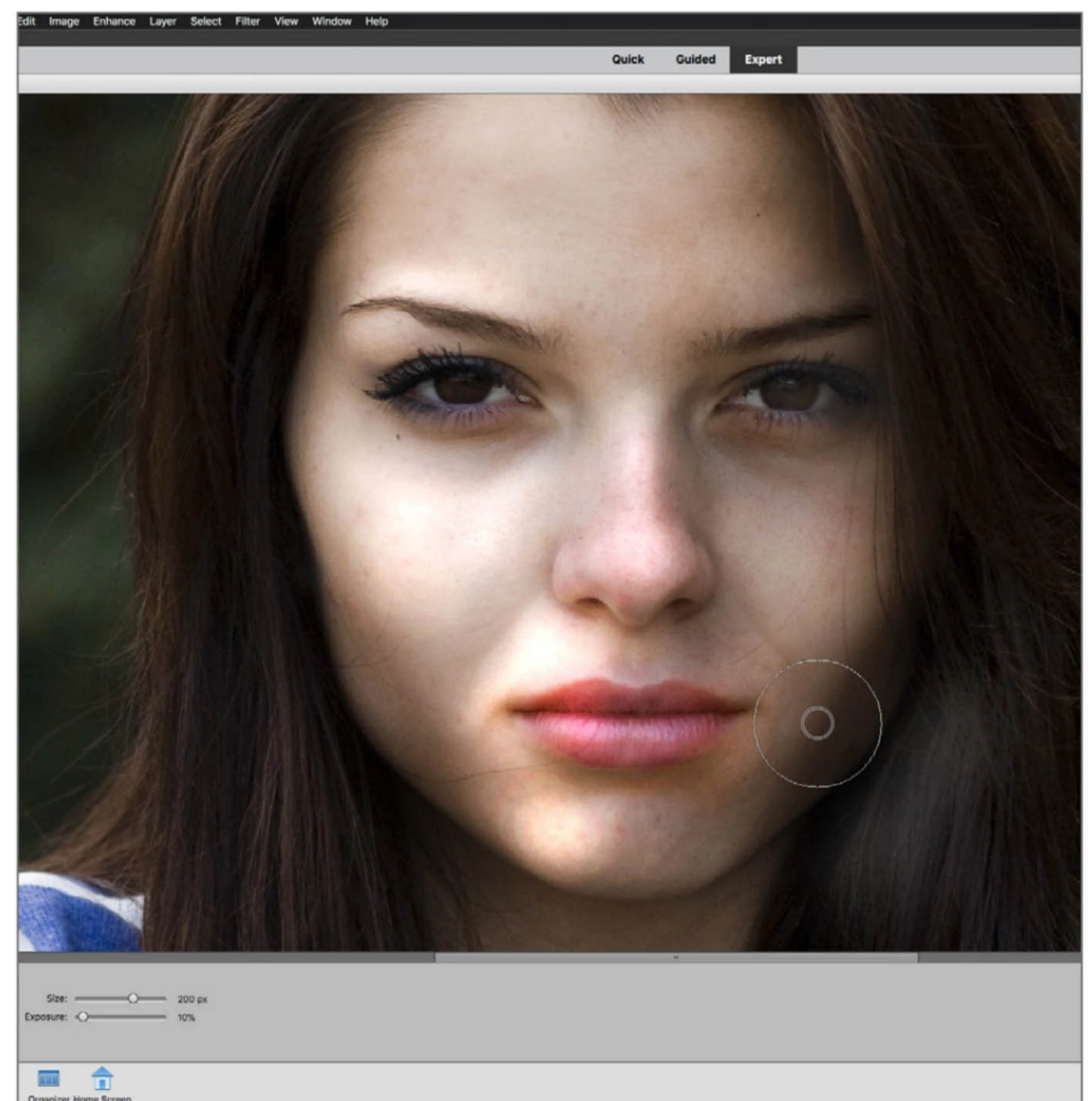
5 The Dodge Tool can be used to lighten images. Use the Range button to determine if you are affecting just the Highlights, Midtones or Shadows in your photo for greater control of the final result. Again, using very low Exposure settings around 10% is recommended.



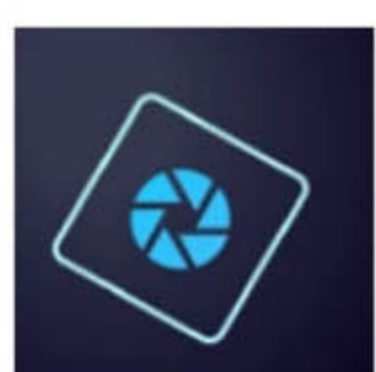
6 You can selectively brighten areas of the image that you want to make lighter. These tools work better for images that start with lower amounts of contrast to begin with. High contrast images will have less need for these kinds of adjustments.



7 The Burn Tool will selectively make parts of your photo darker. You can darken the Highlights, Midtones and Shadows by clicking the Range button again and adjusting the Size and Exposure settings of the brush. Subtlety is key to making it work, so Exposure settings of 10% are a good start.



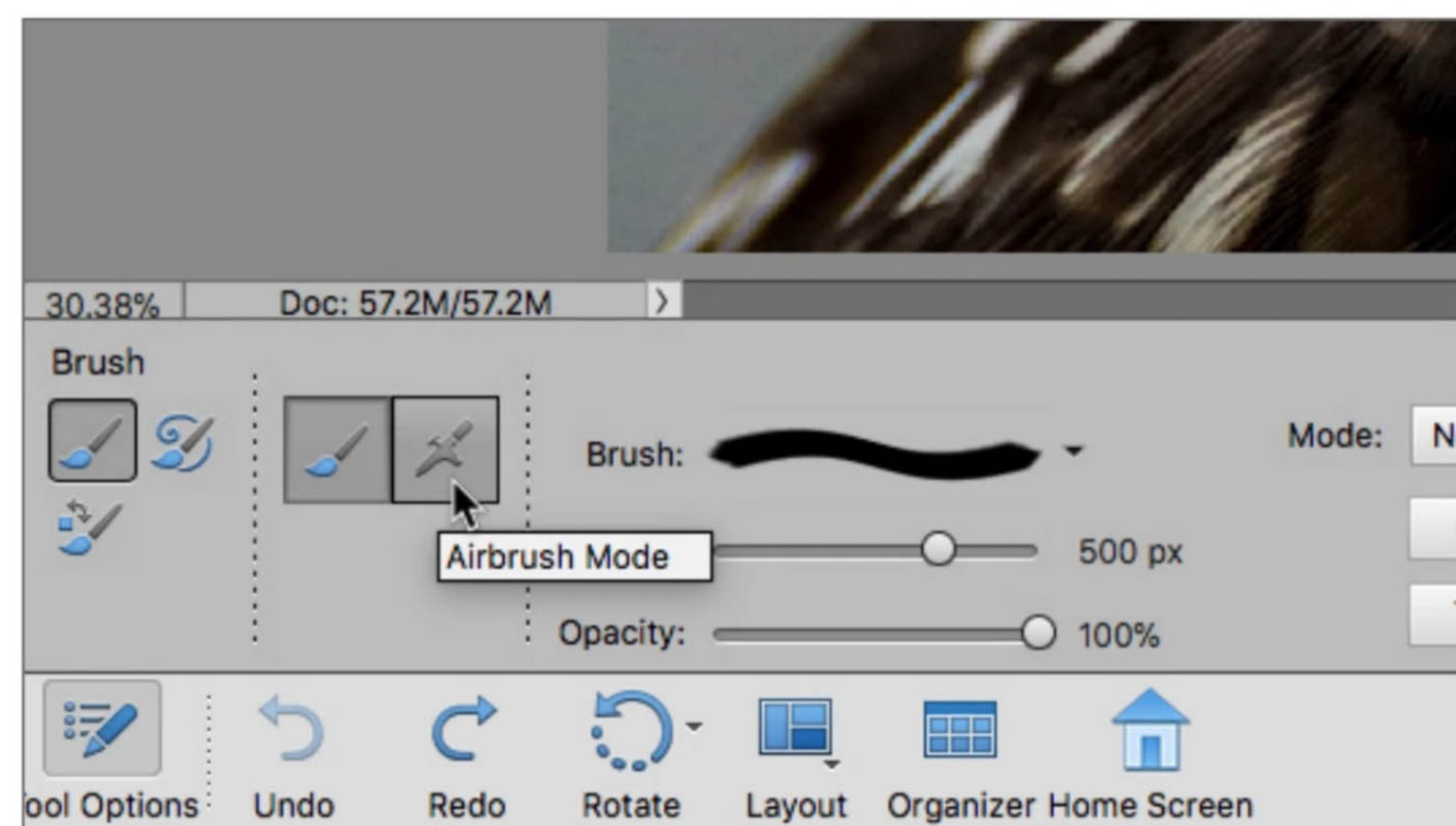
8 Now you can brush over areas that you want to be darker and create more contrast. Since this particular method is a destructive one, in that you are altering pixels, duplicating the base layer and working on a copy is a good way to avoid losing the original.



Draw, Fill, Shapes and Text

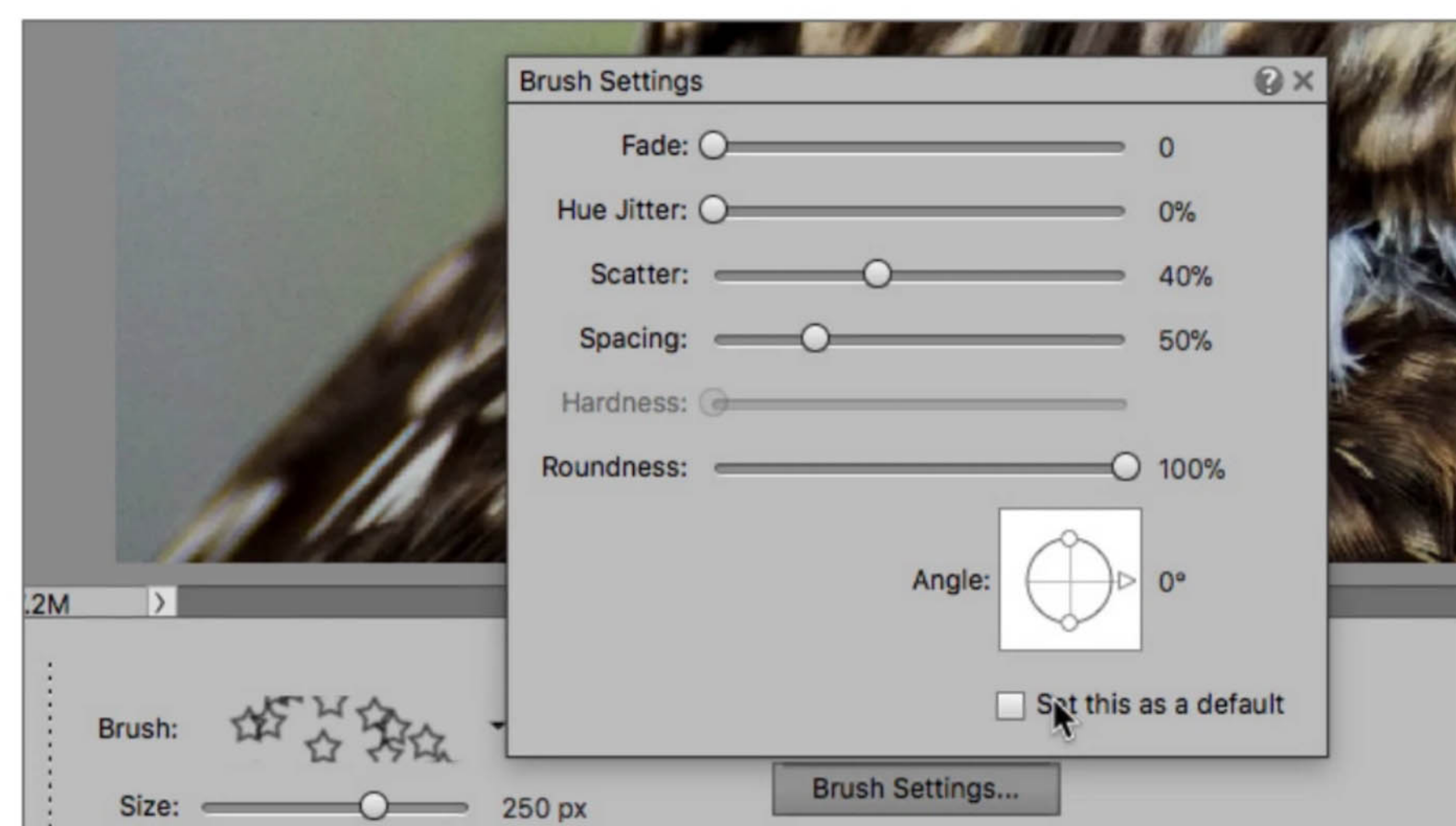
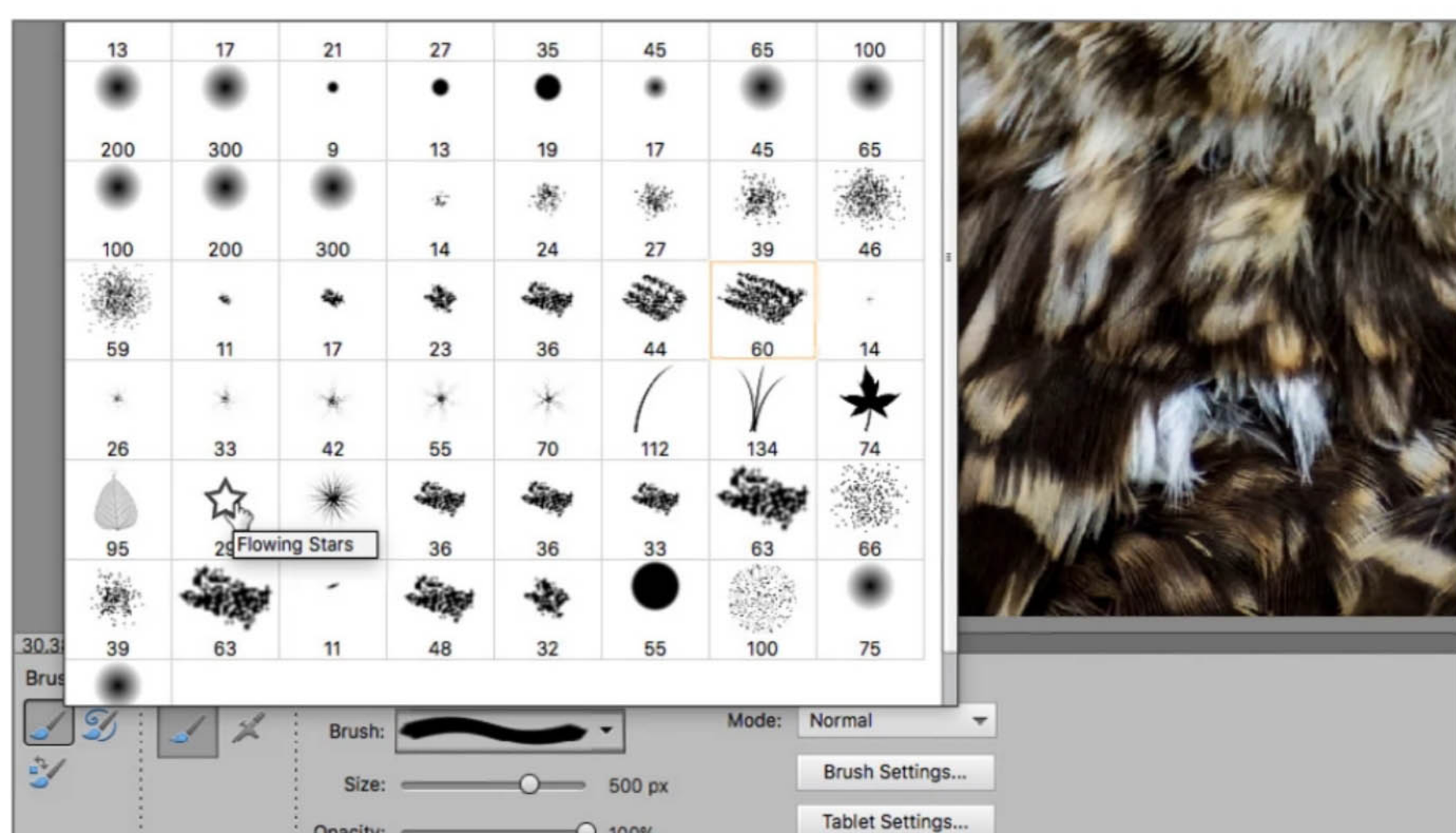
The Draw section of the toolbar contains various elements to let you paint, draw, erase and sample colours in your images. There are also a number of text options available for adding text effects to your photos and making masks in the shape of any text that you type.

Brush Tool



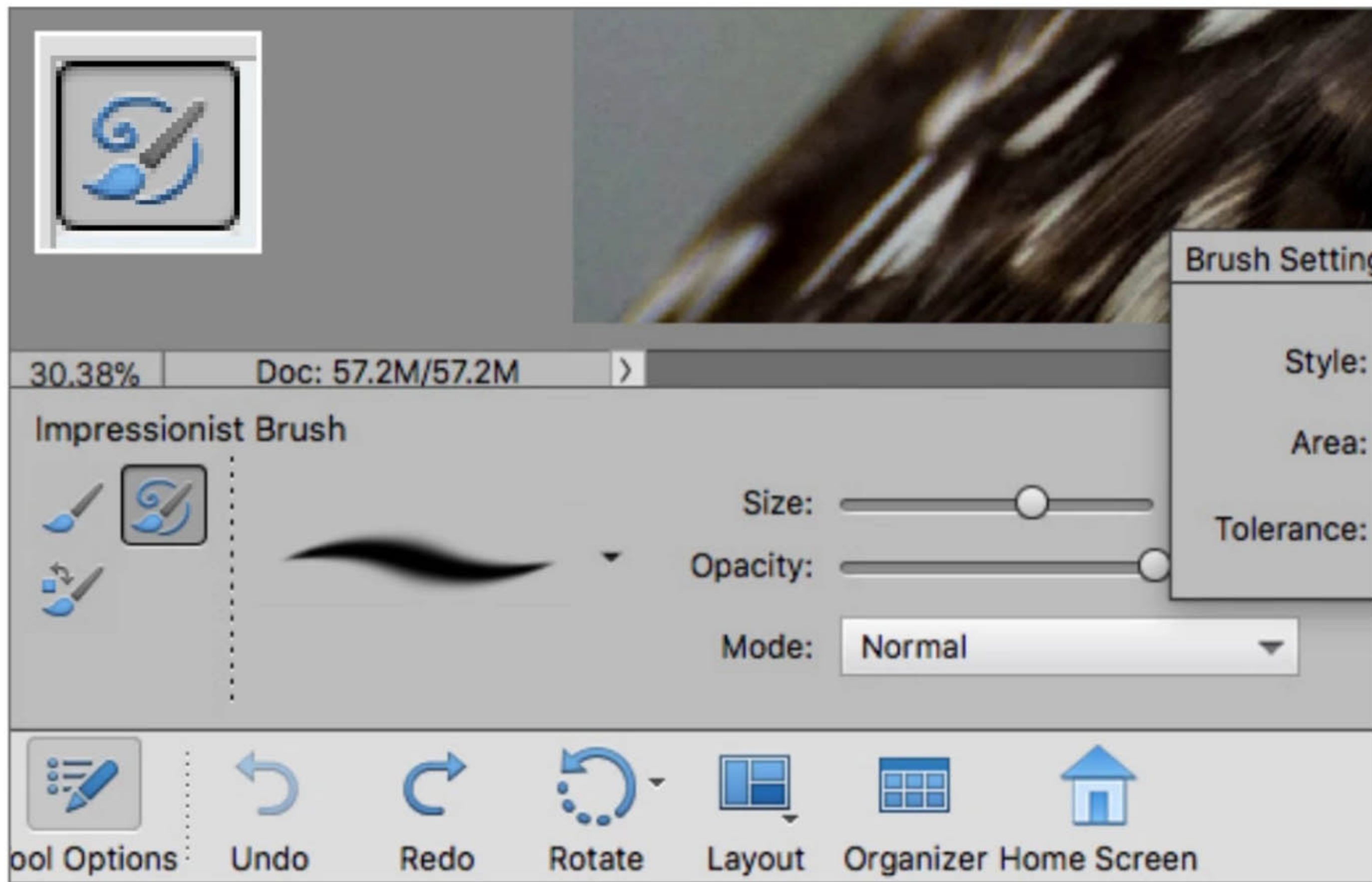
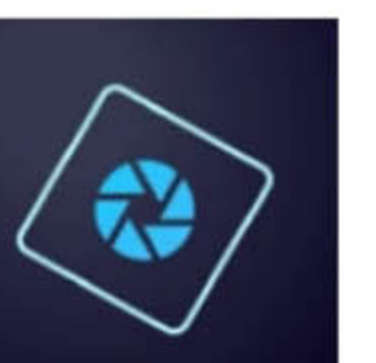
1 The Brush Tool (B) is one of the most often used tools in the photo editor's arsenal. Whether you are painting directly over a photo, or adding brush strokes to a layer, the Brush Tool is designed to behave like its real world counterpart but with more powerful features built in.

2 When you click on the Brush Tool, the options available are quite varied. You can control brushes with your mouse or if you use a tablet, you can control it as if it were an airbrush with pressure sensitive effects for more artistic flair.



3 You can choose any number of brush types from the brush picker and alter the Size and Opacity values. You can also load new brushes that can be purchased and downloaded from a large number of vendors specialising in photo editing tools.

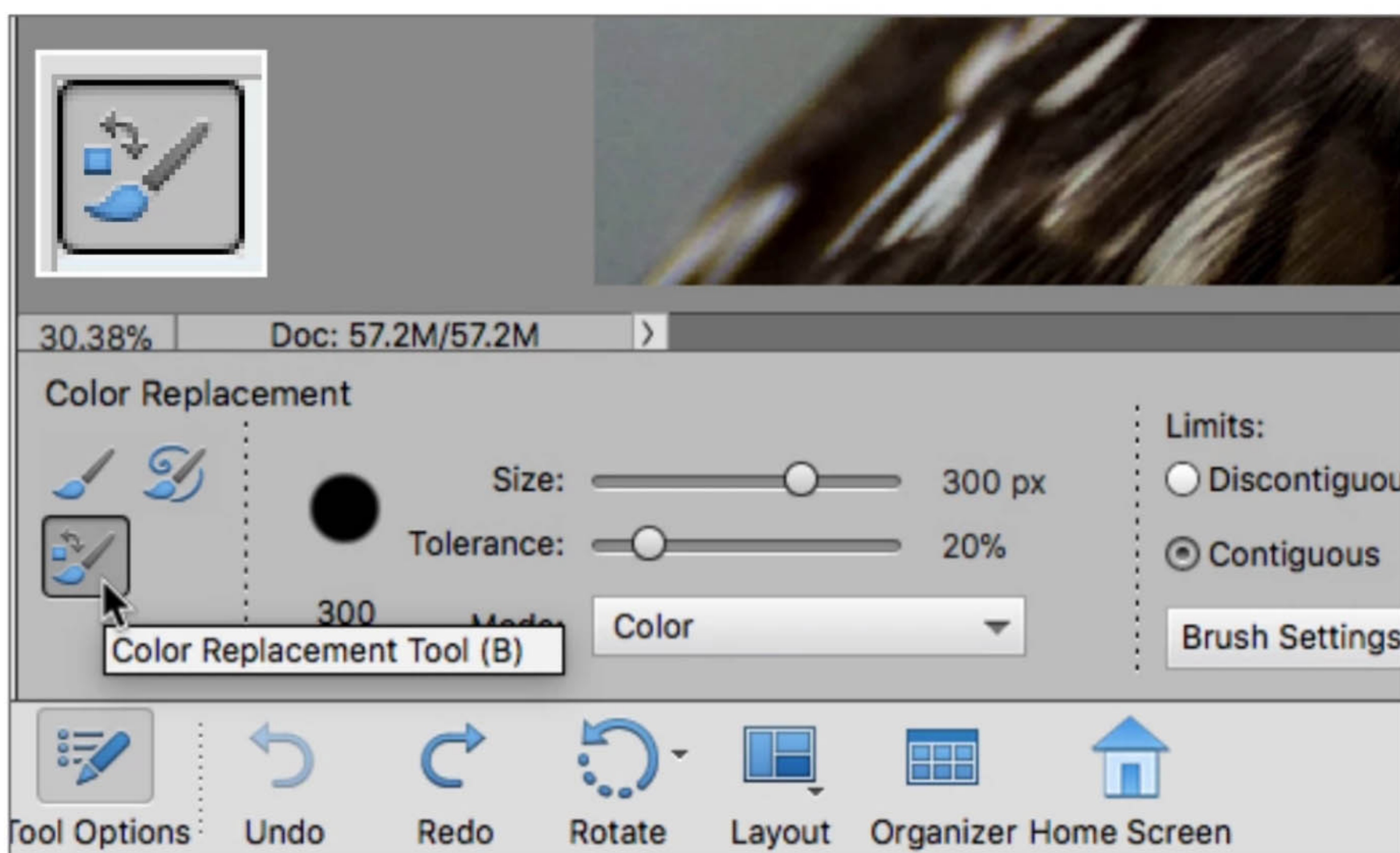
4 You can choose the colours you brush with and also use the Brush Settings sliders to change how much the colours fade and alter with each brush stroke. You can also tell the brush how much Scatter or Spacing to use with each brush stroke you apply. Tablet settings are also available.



5 Next to the standard brush is the Impressionist Brush Tool (B). Using its various Brush Settings you can turn your photo into a painting much in the style of the old impressionist painters whose works were rendered as a series of dots, strokes and swirls.



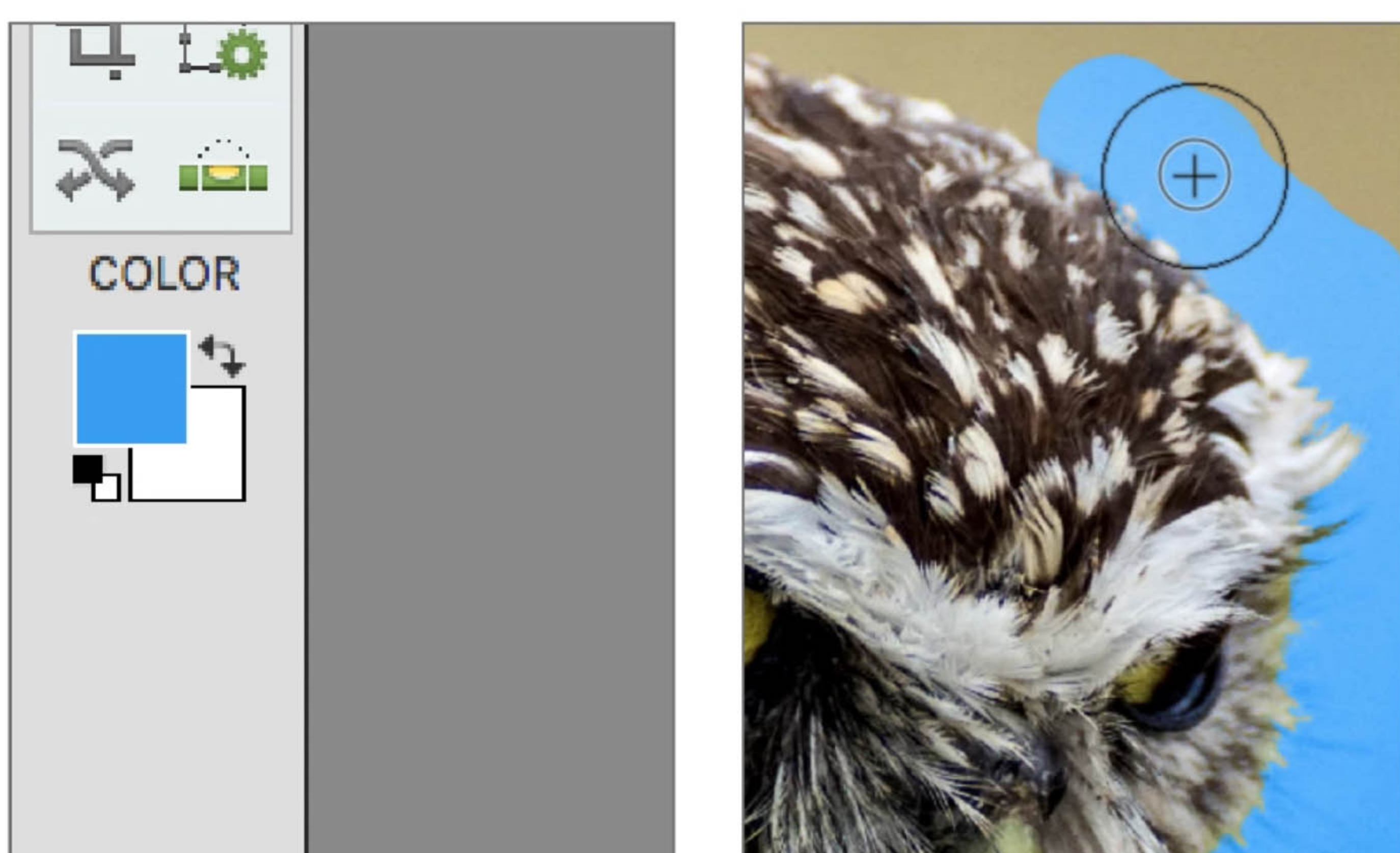
6 When you paint with this brush, the image beneath the cursor is turned into a series of loose curls, swirls and daubs. The larger the brush size you use, the more abstract the image becomes. Using a brush that is too large will render the photo unrecognisable.



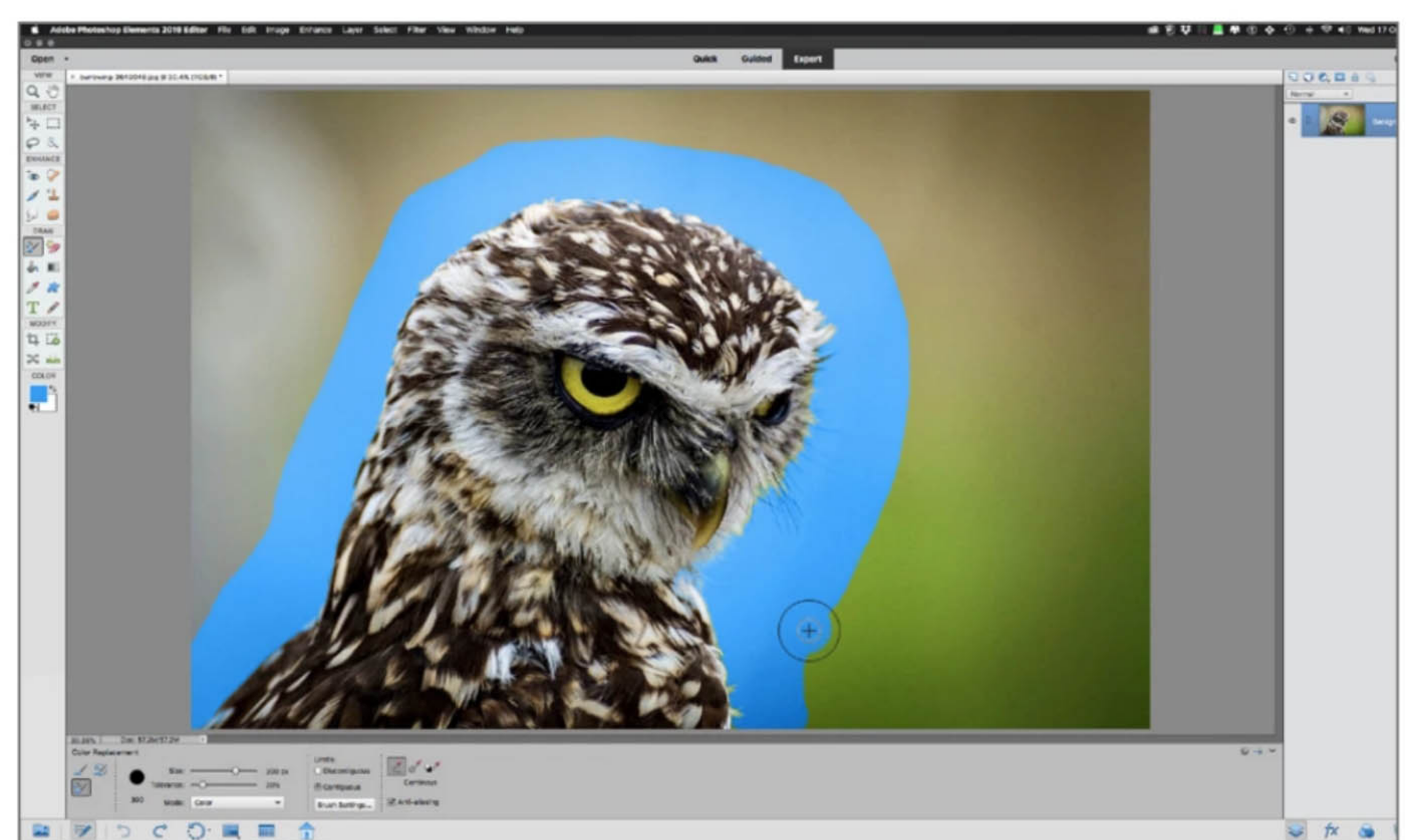
7 The next brush is the Colour Replacement Tool (B). Select a foreground colour in the toolbar to use as the replacement colour. Once again, you have a number of tool options available including Size, Tolerance and Limits.



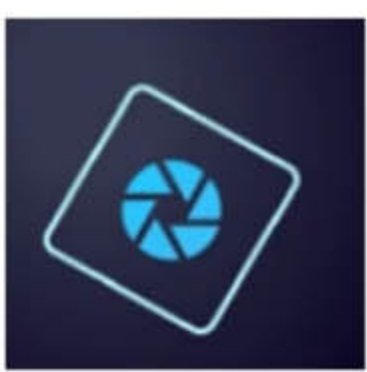
8 Our example picture is of an owl set against a green background. The colour of the background can be replaced fairly easily since the owl itself contains no strong green colours that match the background too closely.



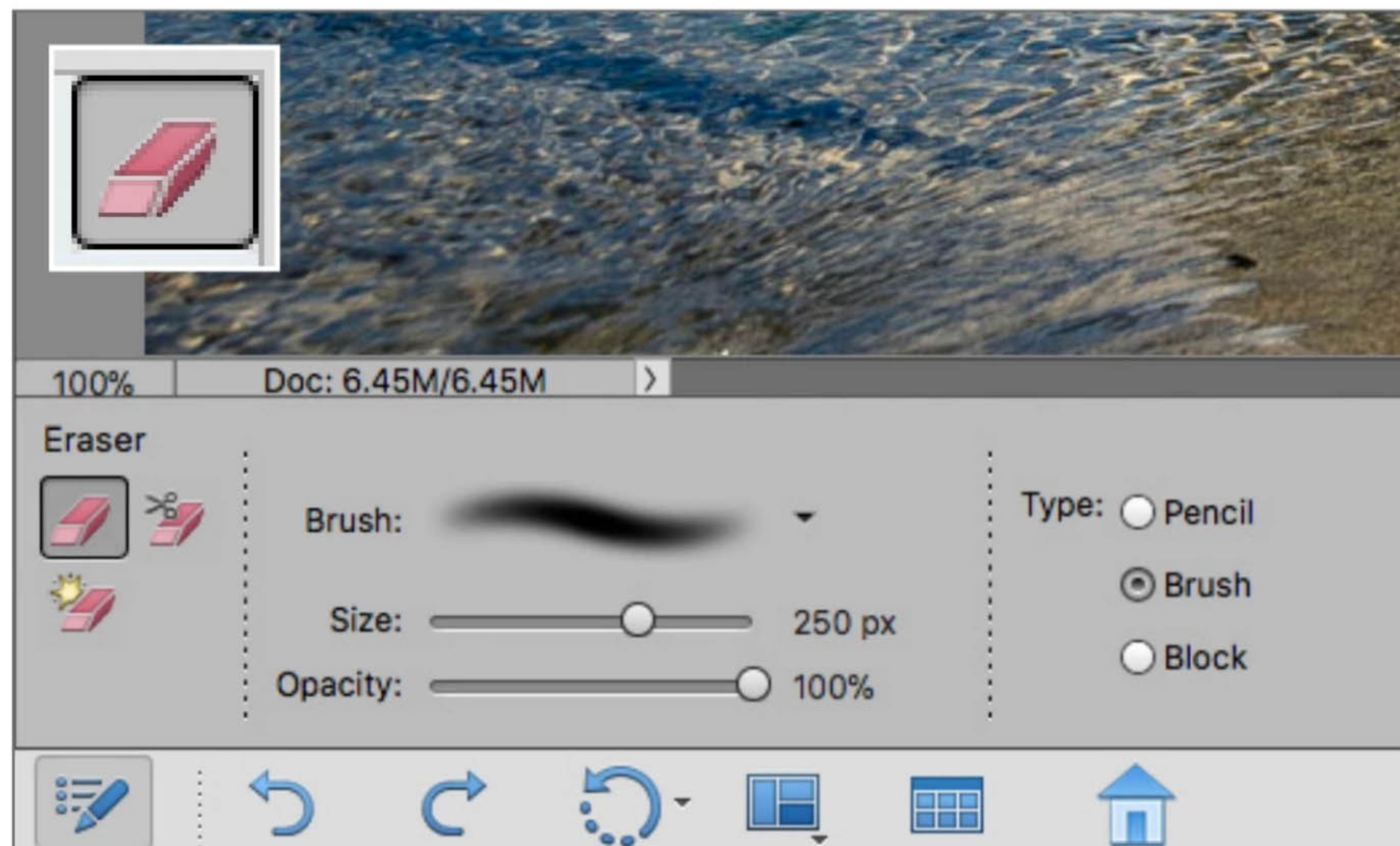
9 The Colour Replacement Tool works by continuously sampling the colour directly under the cursor position. The colour beneath the cursor will then be replaced with whatever you have chosen as the foreground colour. You can select the Blend Mode used to effect how the replacement colour is applied.



10 In the case of the owl image, dragging the Colour Replacement Tool over the green areas next to the owl replaces that colour; but the owl remains untouched since it is not the same colour as the colour beneath the crosshair of the tool.



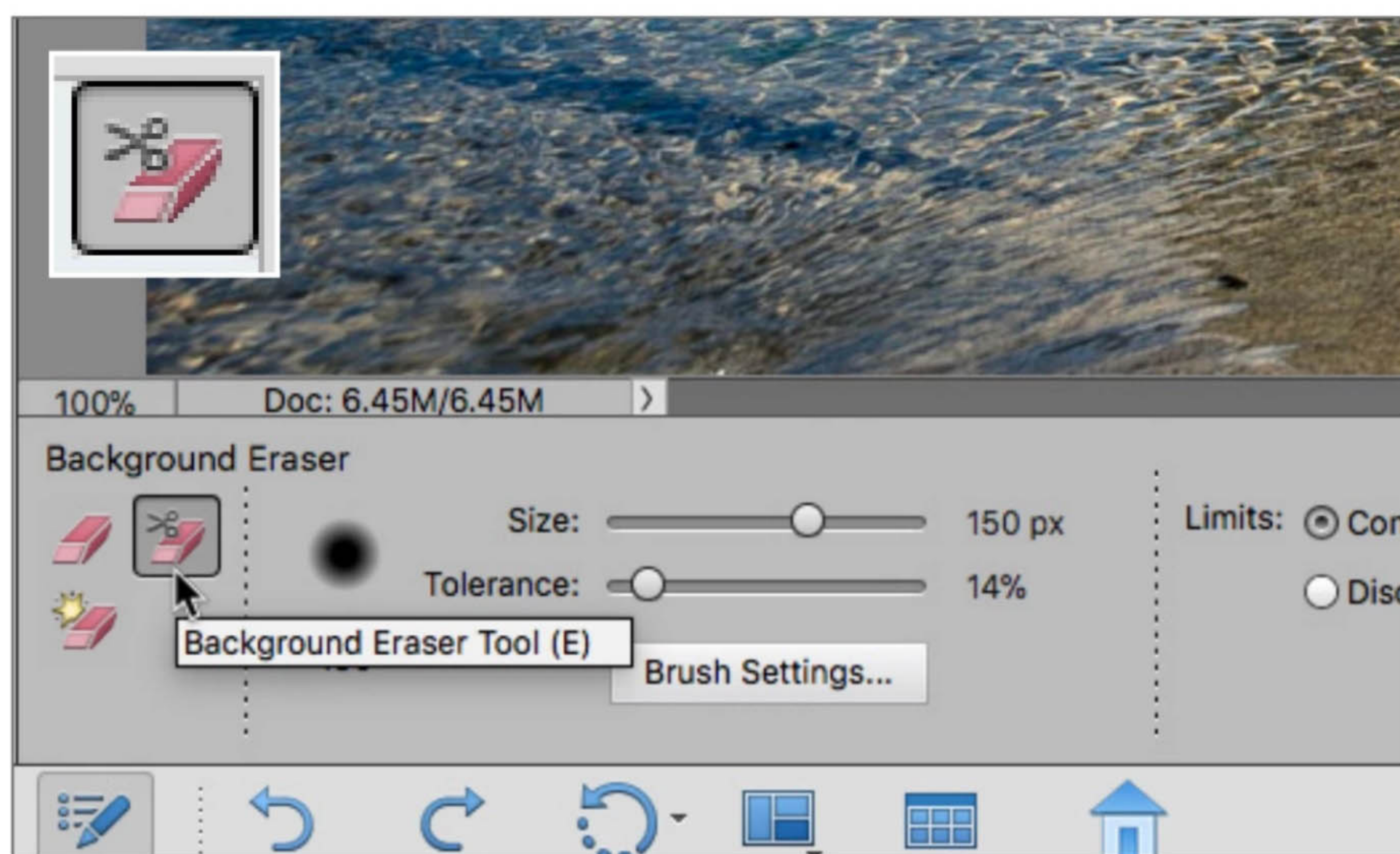
Eraser Tool



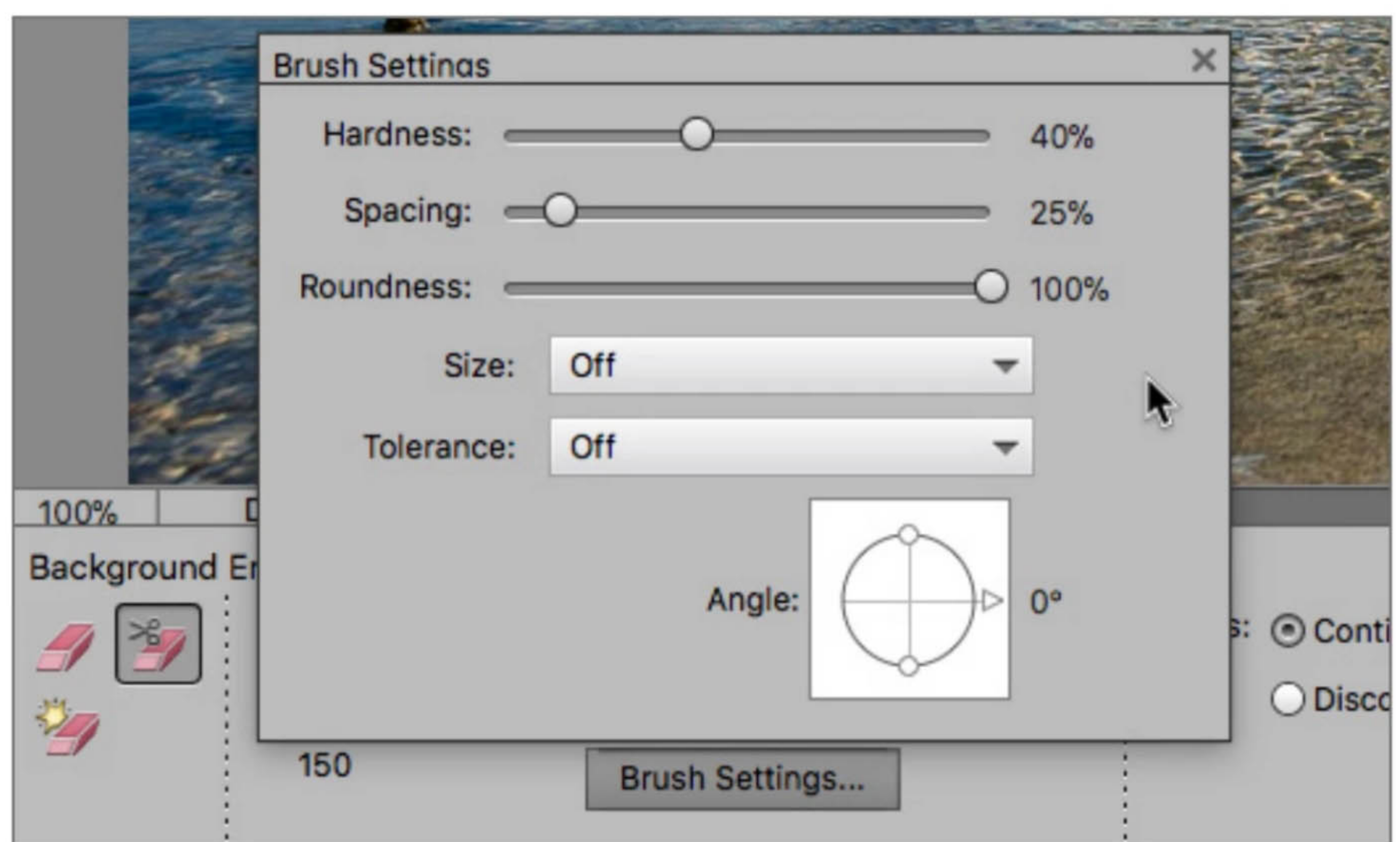
1 Much like its real world counterpart, the Eraser Tool (E) removes pixels from your image. Whatever colour you have chosen as the background will be used to erase pixel data from the photo as if it were a solid coloured brush. You can also set the Size and Opacity of the eraser.



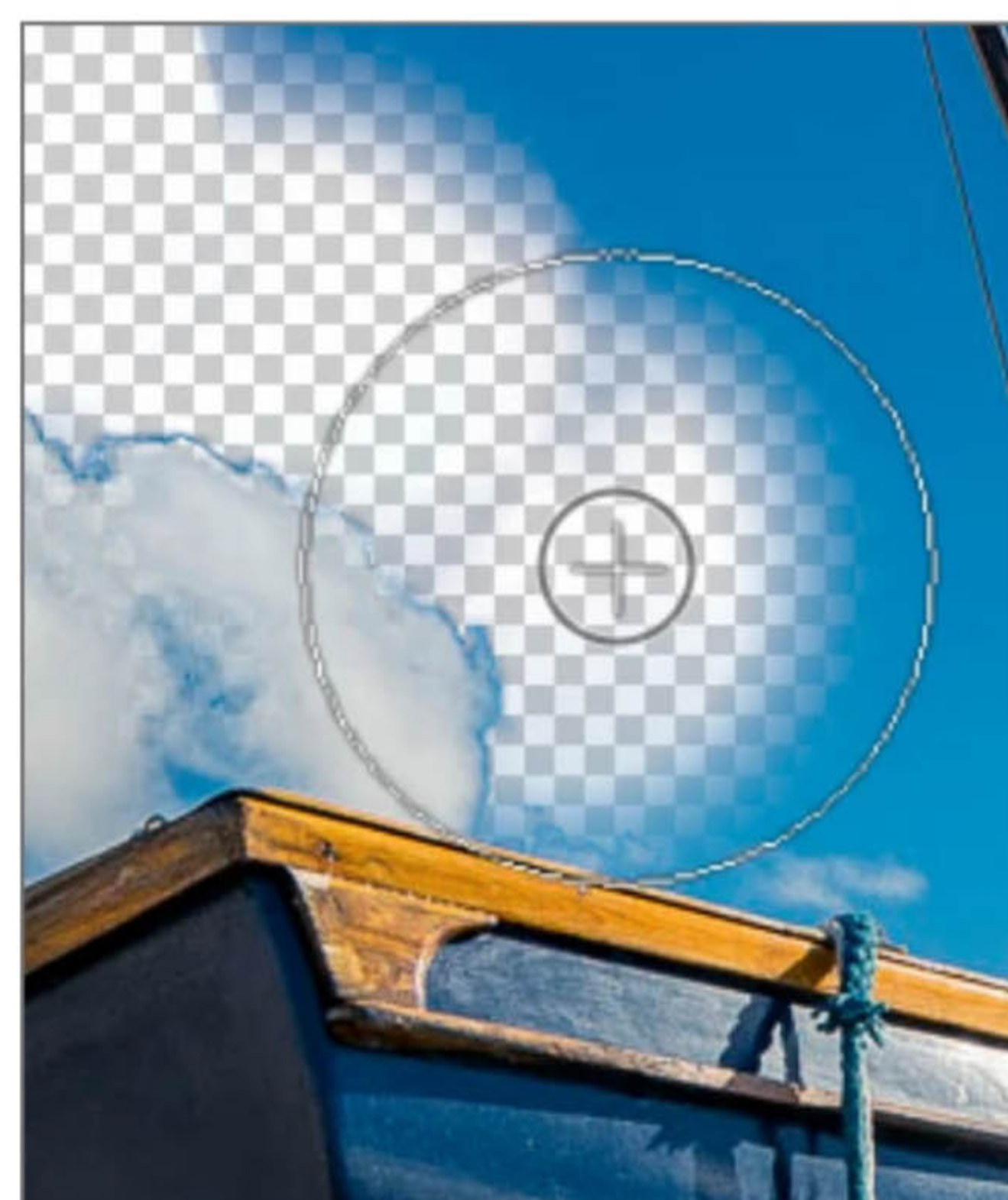
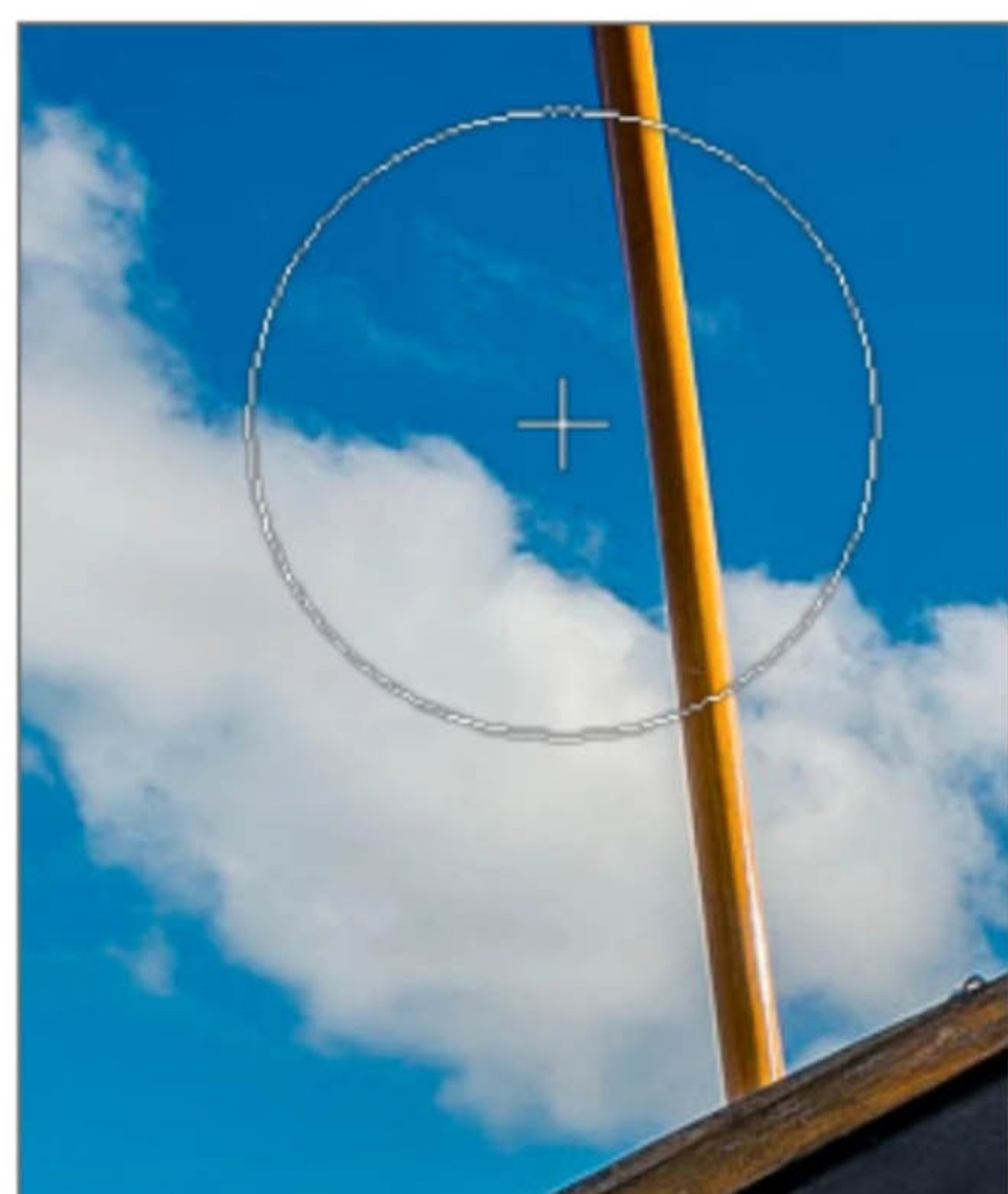
2 If the photo is on a layer, then erasing pixels will reveal transparent areas instead. Again, if you alter the Size and Opacity of the Eraser Tool, those transparent areas can either be fully transparent or partially transparent, depending on brush opacity settings.



3 The Background Eraser Tool (E) is a useful one for targeted removal of certain parts of an image. It behaves a little like the Colour Replacement Tool but in this case, any pixel colour beneath the cursor is erased, leaving the area transparent when it's on a layer.



4 You can alter the Size and Tolerance of the brush, as well as the softness and spacing of the brush you use. Tolerance is key to setting the sensitivity of the brush to changes in colour. High Tolerance will mean more varied colours are removed under the cursor position.



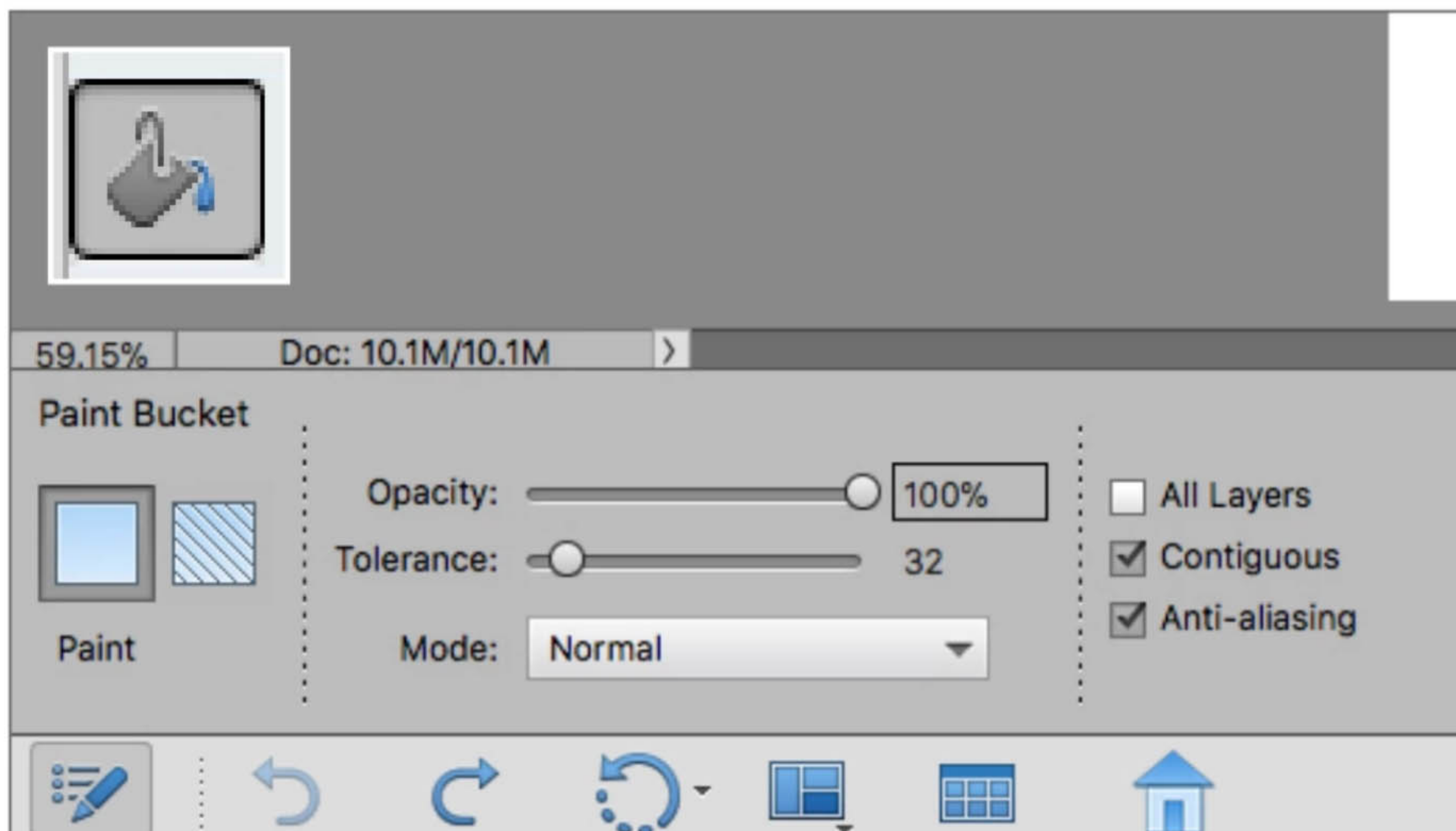
5 In our example, the blue can be removed sky from the photo by placing the cursor over the blue areas to be removed. As you click and drag the mouse, any blue that falls under the cursor position will be removed, but the white clouds remain untouched since they are not blue.



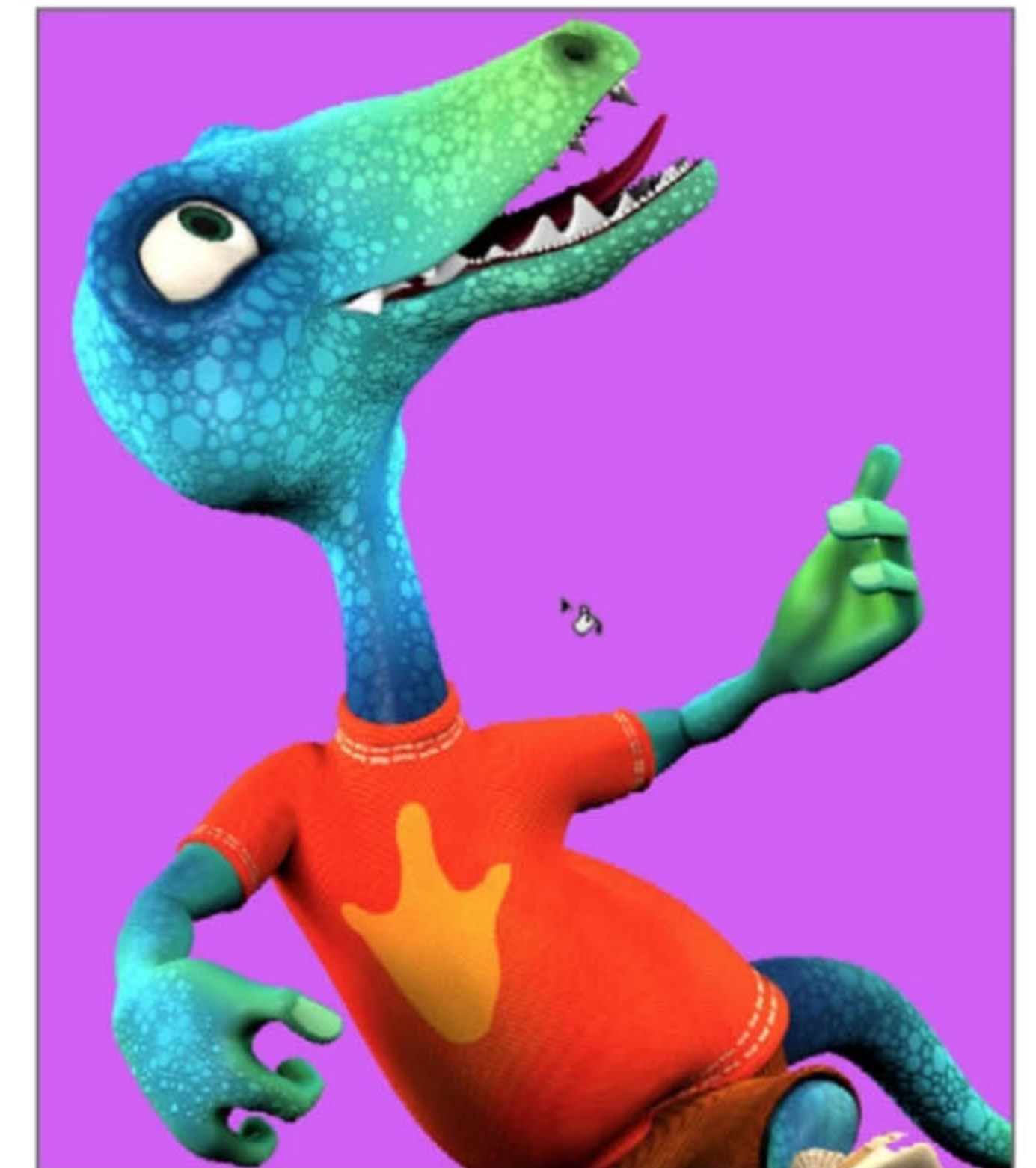
6 The Magic Eraser (E) is a more global erasing tool. Set your Tolerance higher for more colours to be included or lower to pick out less shades of the target colour at the cursor position. When you click on the blue sky, large swathes of that colour will be removed with each click of the mouse.



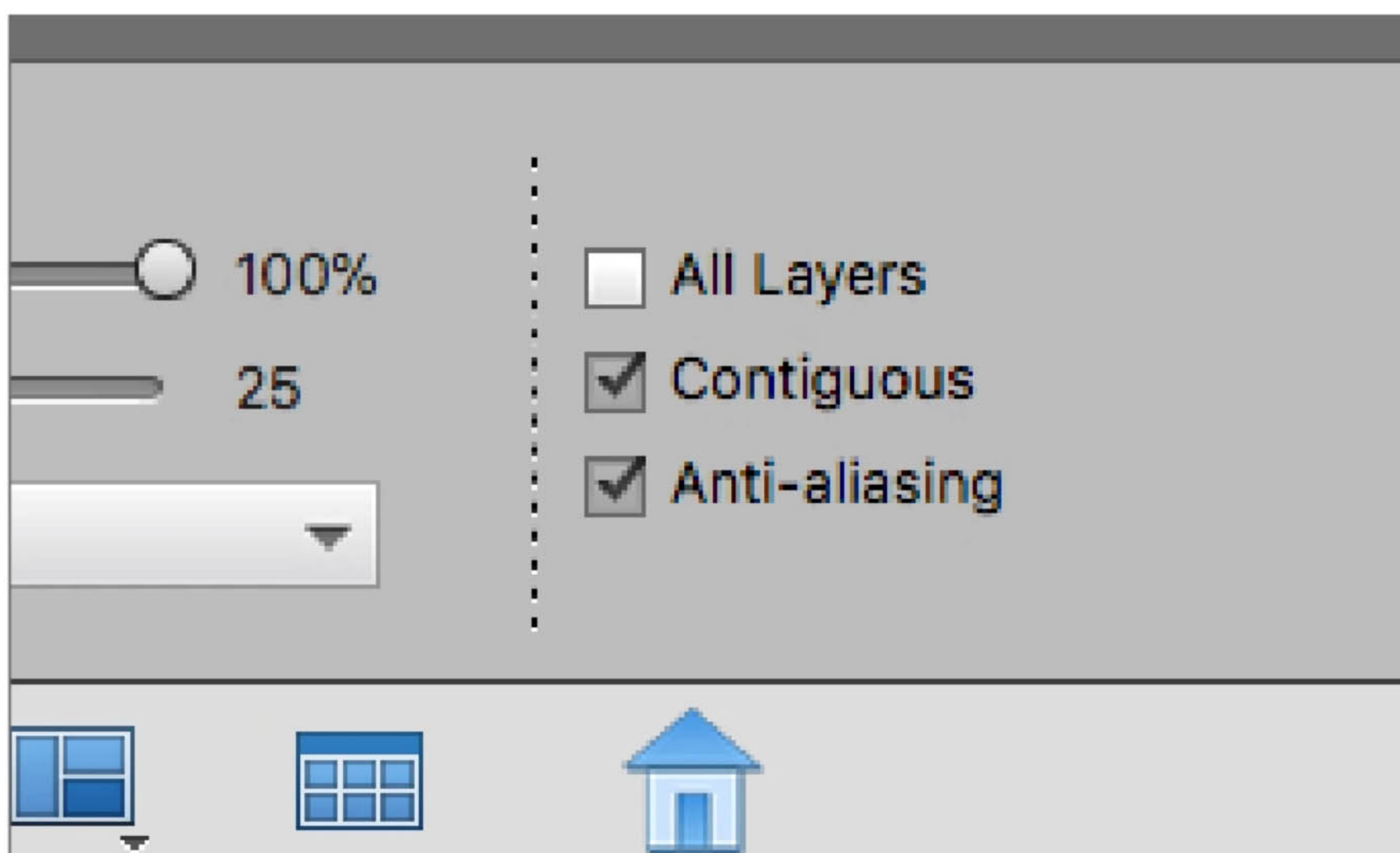
Paint Bucket Tool



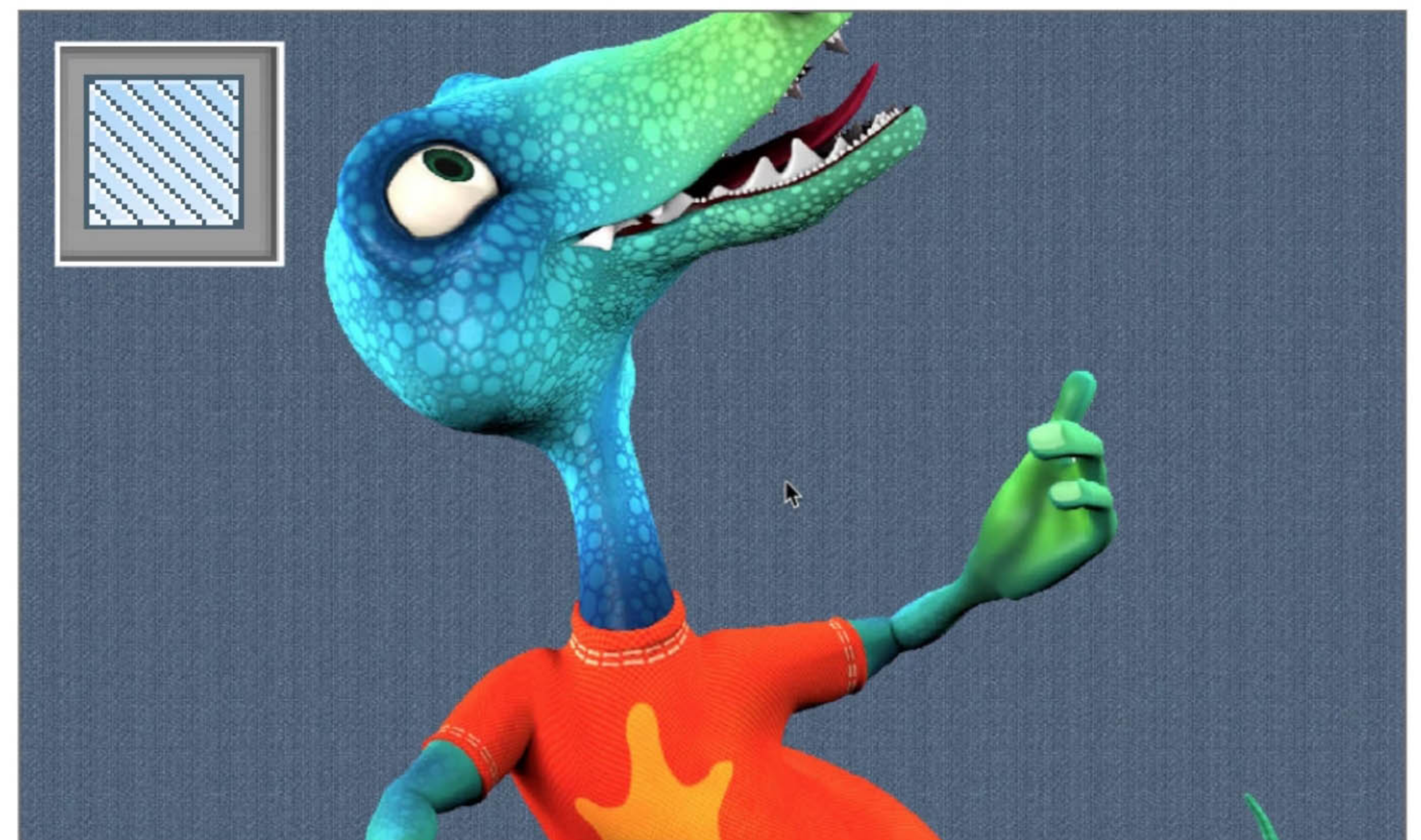
1 The Paint Bucket Tool (K) allows you to fill areas with solid colours. You can set Opacity, Tolerance and Blend Mode. High or low Tolerance settings mean it will use edge detection to decide which areas can be filled or ignored.



2 You can fill an entire layer, or it can be used to fill specific areas based on what edges it encounters. Our example has a cartoon character on a white background. His outline is quite well-defined so clicking with the paint bucket means the background can easily be filled with a colour.

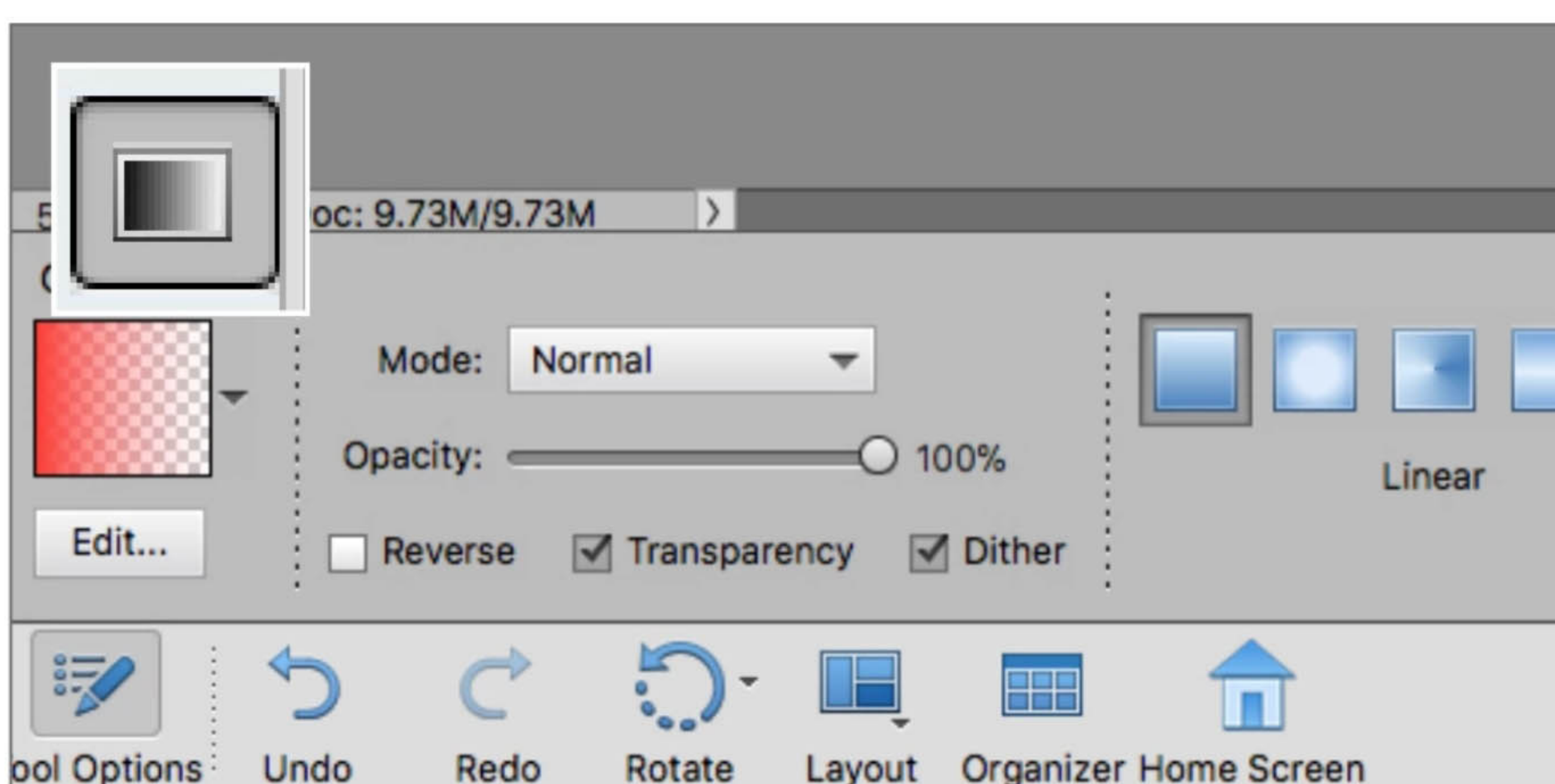


3 You will notice there is an option for Contiguous fill. If it is ticked, only the nearest neighbouring colours will be filled. If the Contiguous button is unchecked, then all matching colours in the image will be filled, no matter where they are in the photo.

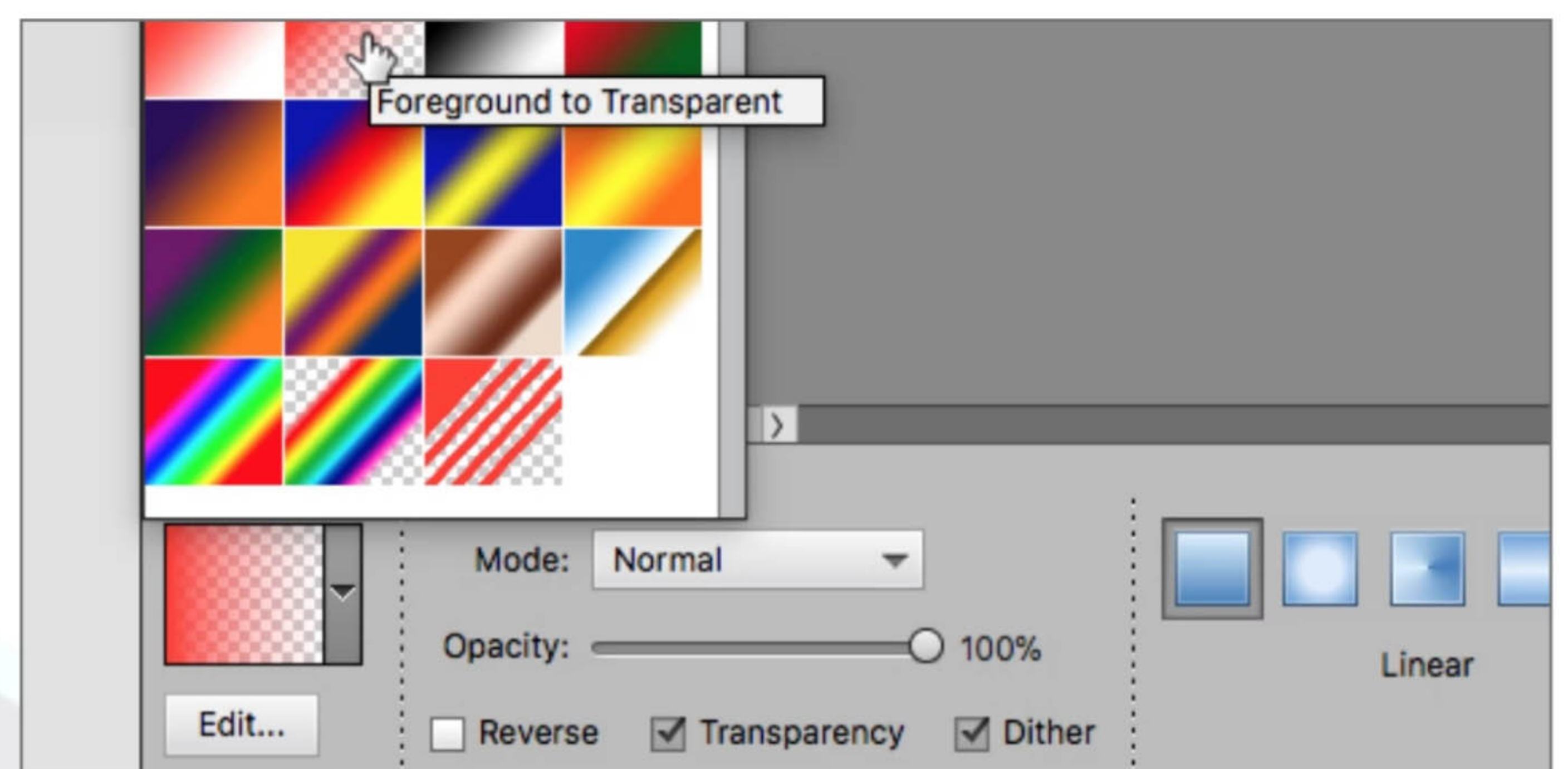


4 In addition to the Paint Bucket, you also have the Pattern Fill option. Once again you have Tolerance settings and Opacity values to alter. Choose a pattern and use that to fill an entire layer or in the case of our cartoon, the blank background can be filled with texture.

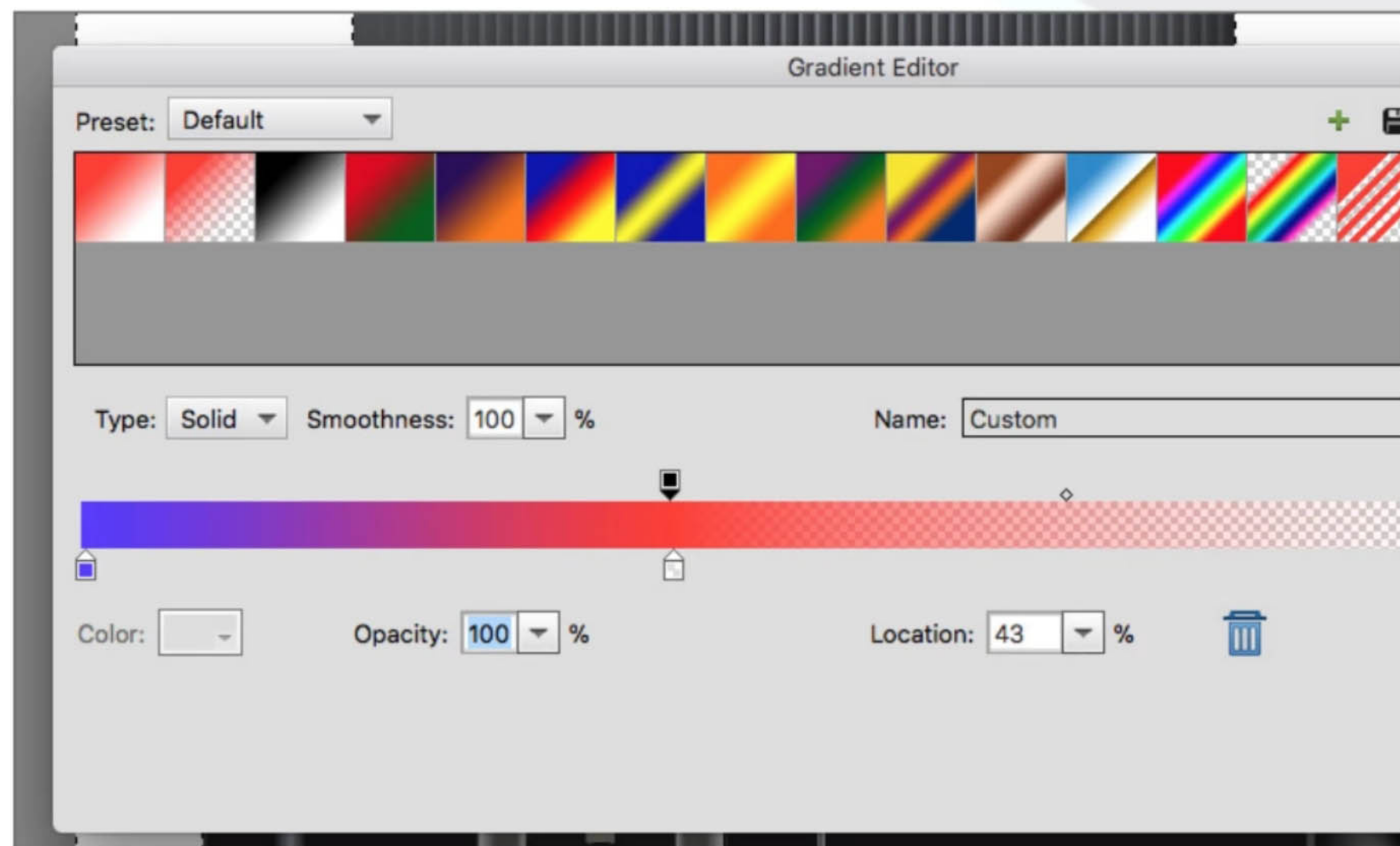
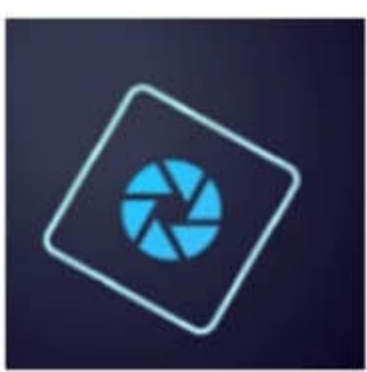
Gradient Tool



1 The Gradient Tool (G) lets you fill areas of your image or entire layers with colours that fade from one to another or can fade from one colour to transparent. The Gradient Tool does not use edge detection. If you need a filled shape, it needs to be defined by a selection.



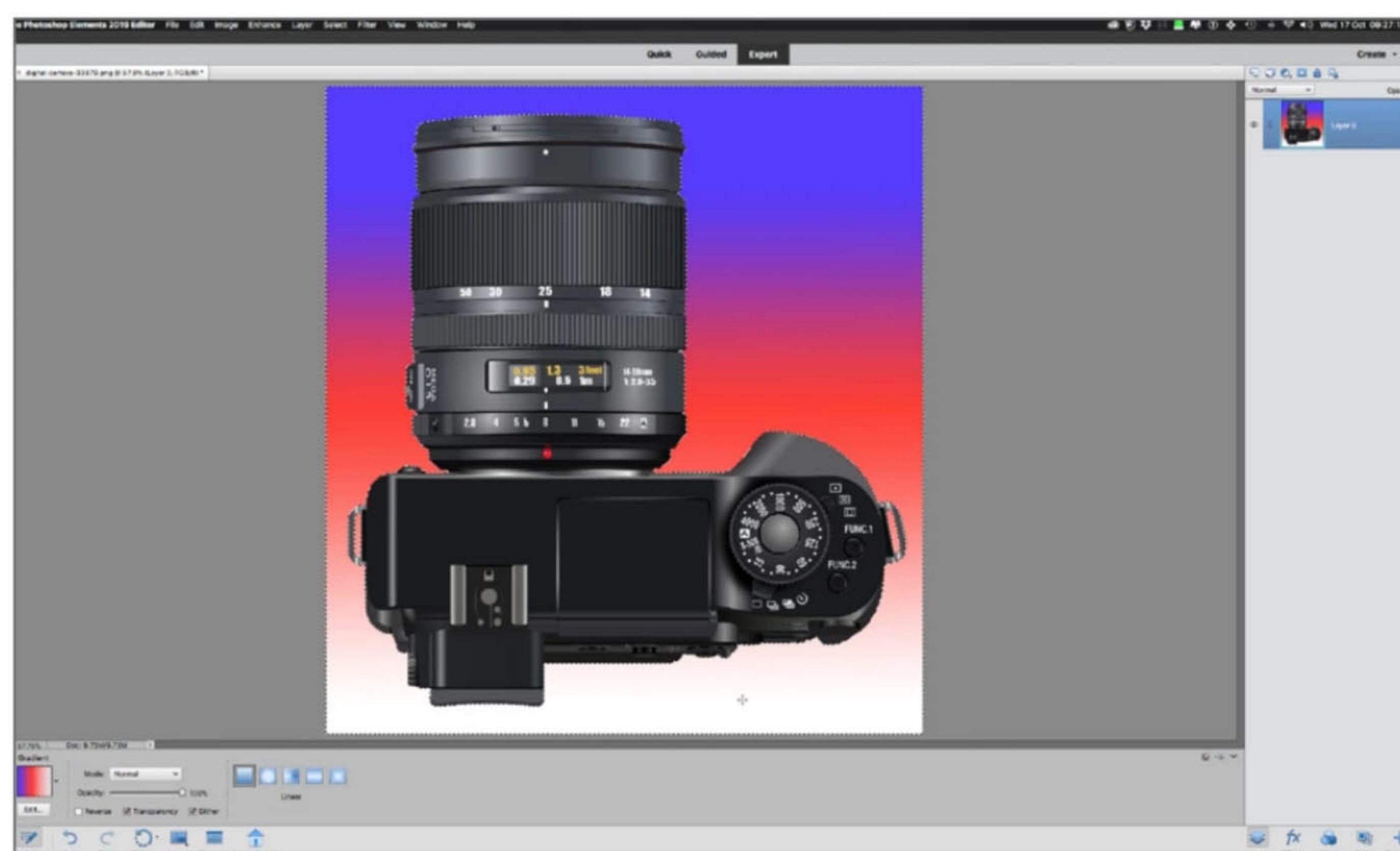
2 You can pick the kind of gradient you want to use by clicking on the Gradient Picker and choosing a preset from the list. They range from Foreground to Transparent to multiple colour gradients all at the click of a button.



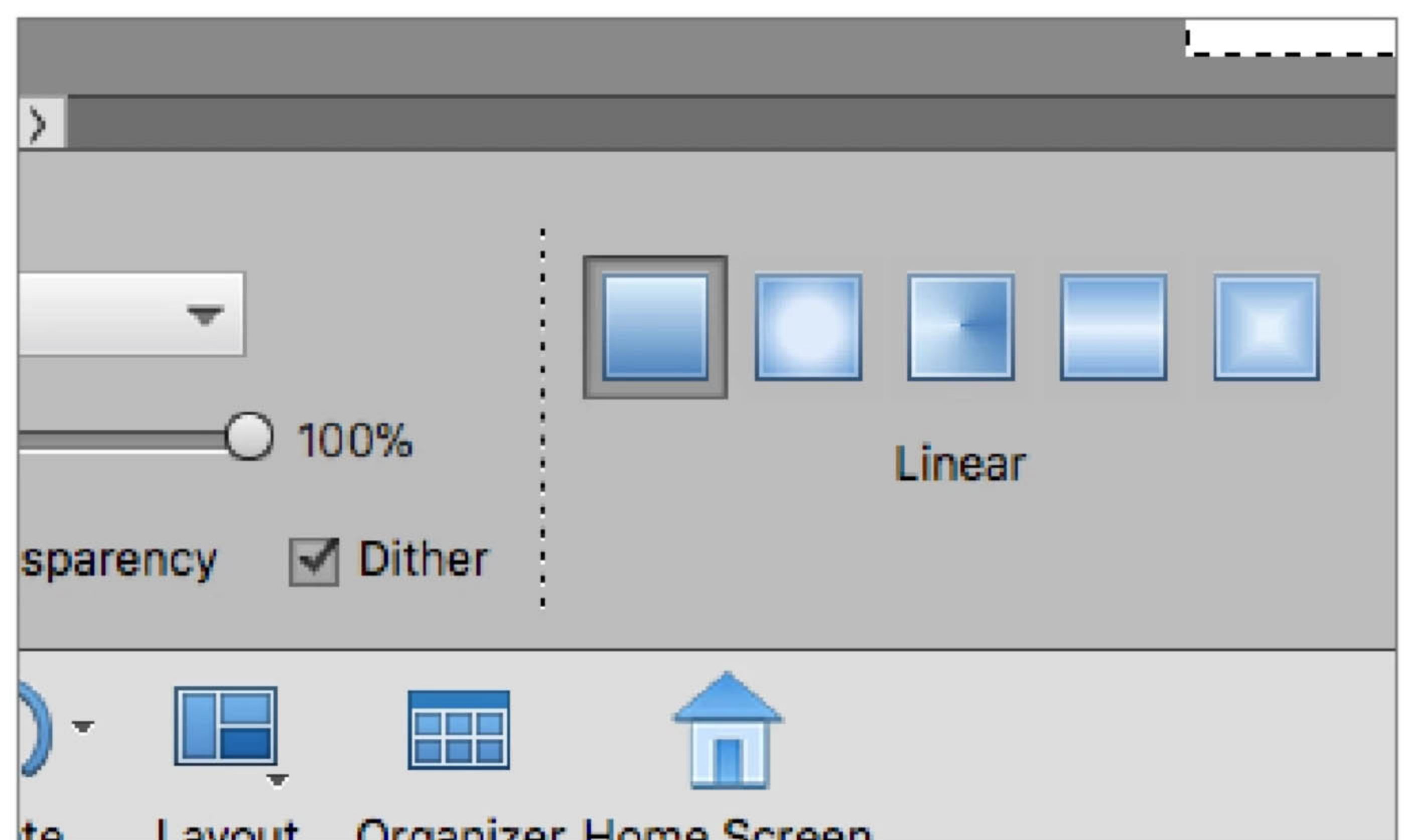
3 If you want to make your own gradient, you can click on the Gradient Editor and add what are known as Colour Stops to a basic gradient, change their colour and define if they are solid or transparent. Any custom made gradients can be saved as a preset.



4 Our example of a camera on a white background could use some colour. The background has an active selection around it to enclose the gradient when it is added. You can click and drag your cursor to draw out a start point and an end point for the gradient to follow.

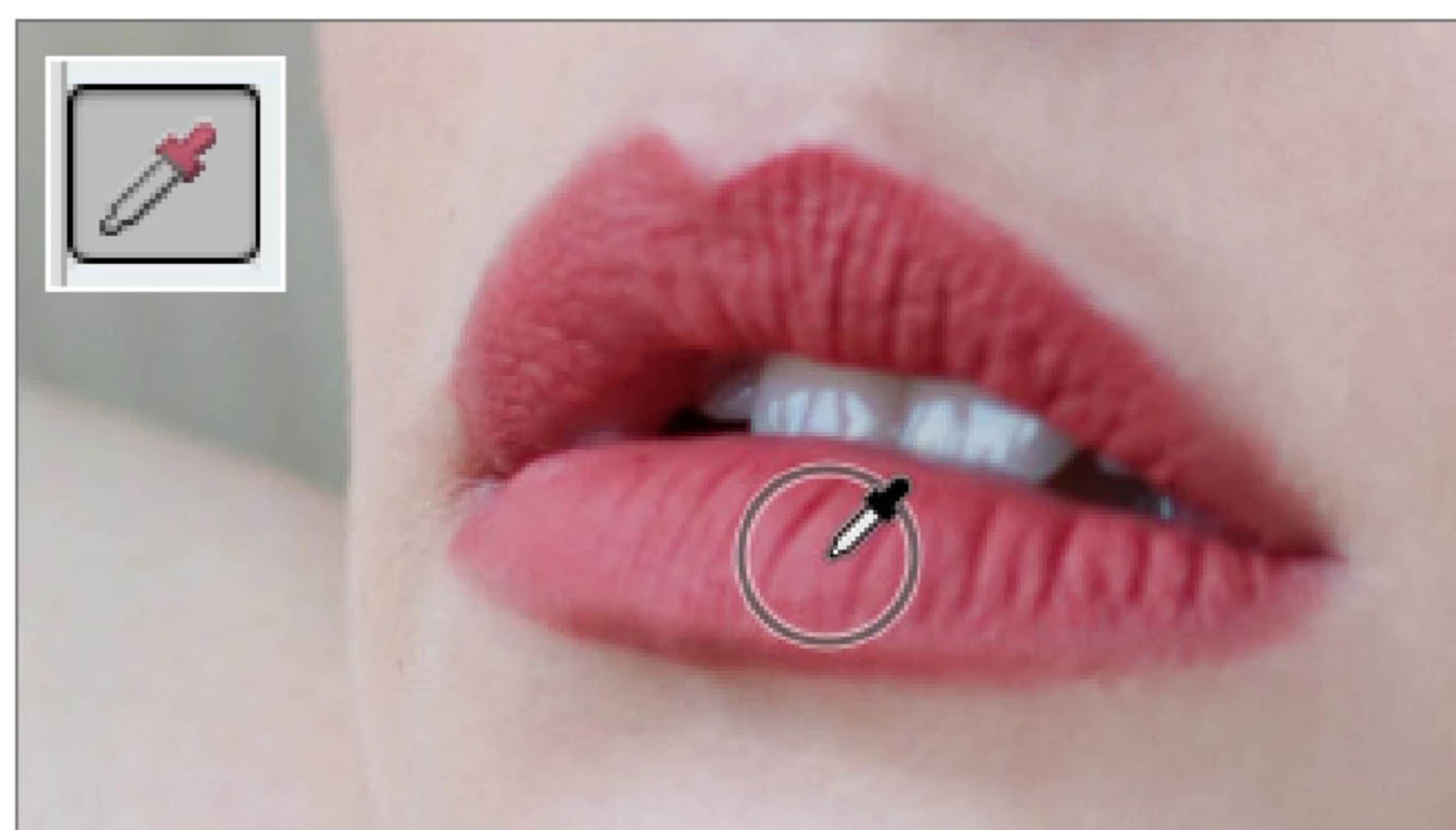


5 When you let go of your mouse, the current gradient will be applied and fills the active selection around the camera. The default Gradient Type is linear, meaning that the gradient travels in a straight path from start colour to end colour.

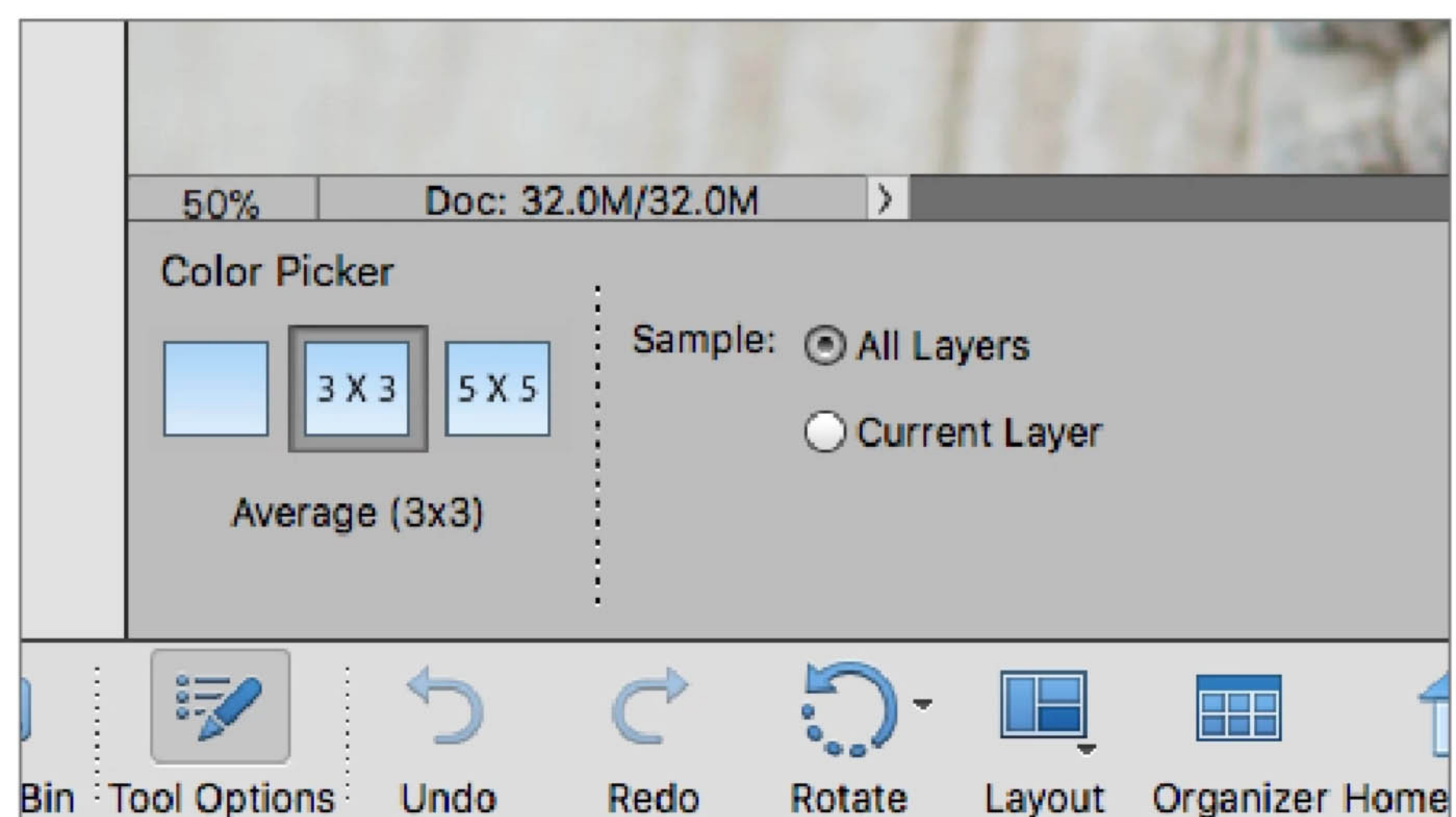


6 If required, you can change the type of gradient you are using from its default. You can also use Radial gradients, Angle, Reflected and Diamond gradients. They can all have their Blend Mode altered as well as Opacity. They can be reversed and Transparency and Dither turned off.

Colour Picker



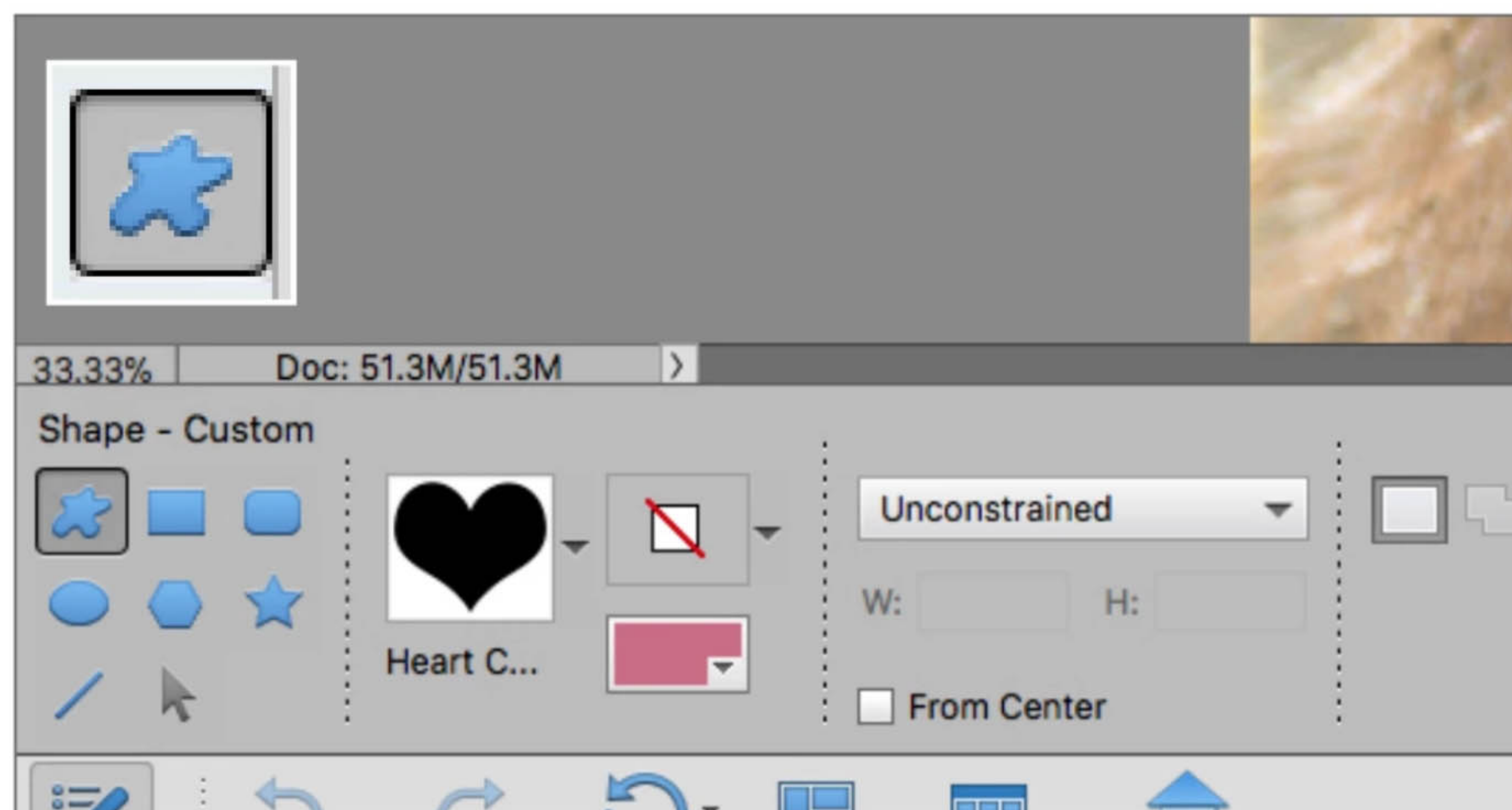
1 The Colour Picker (I) does as the name suggests. When you choose this tool, it gives you a small eyedropper cursor that when clicked on a photo, picks the colour beneath the cursor position and makes it the active foreground colour.



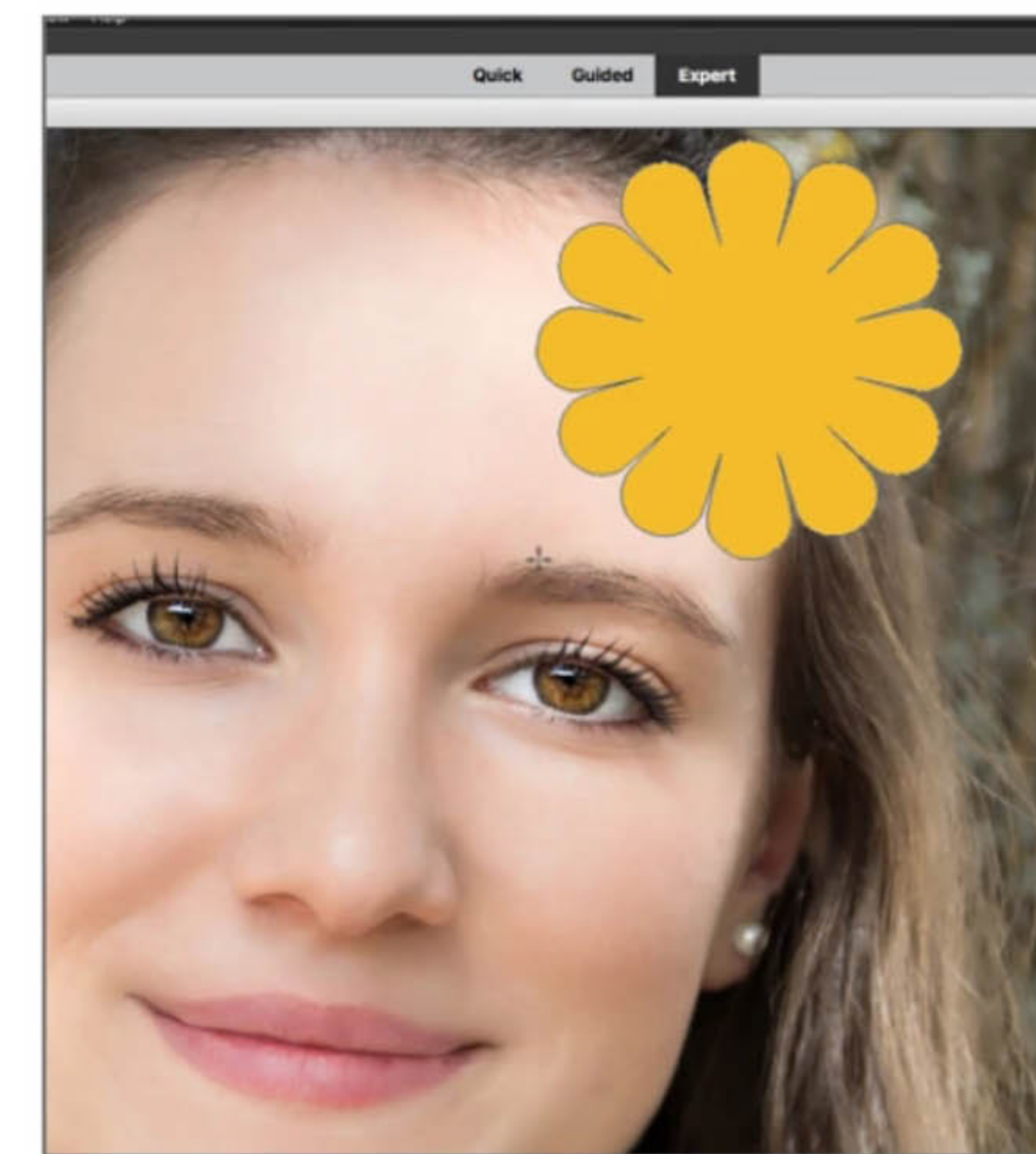
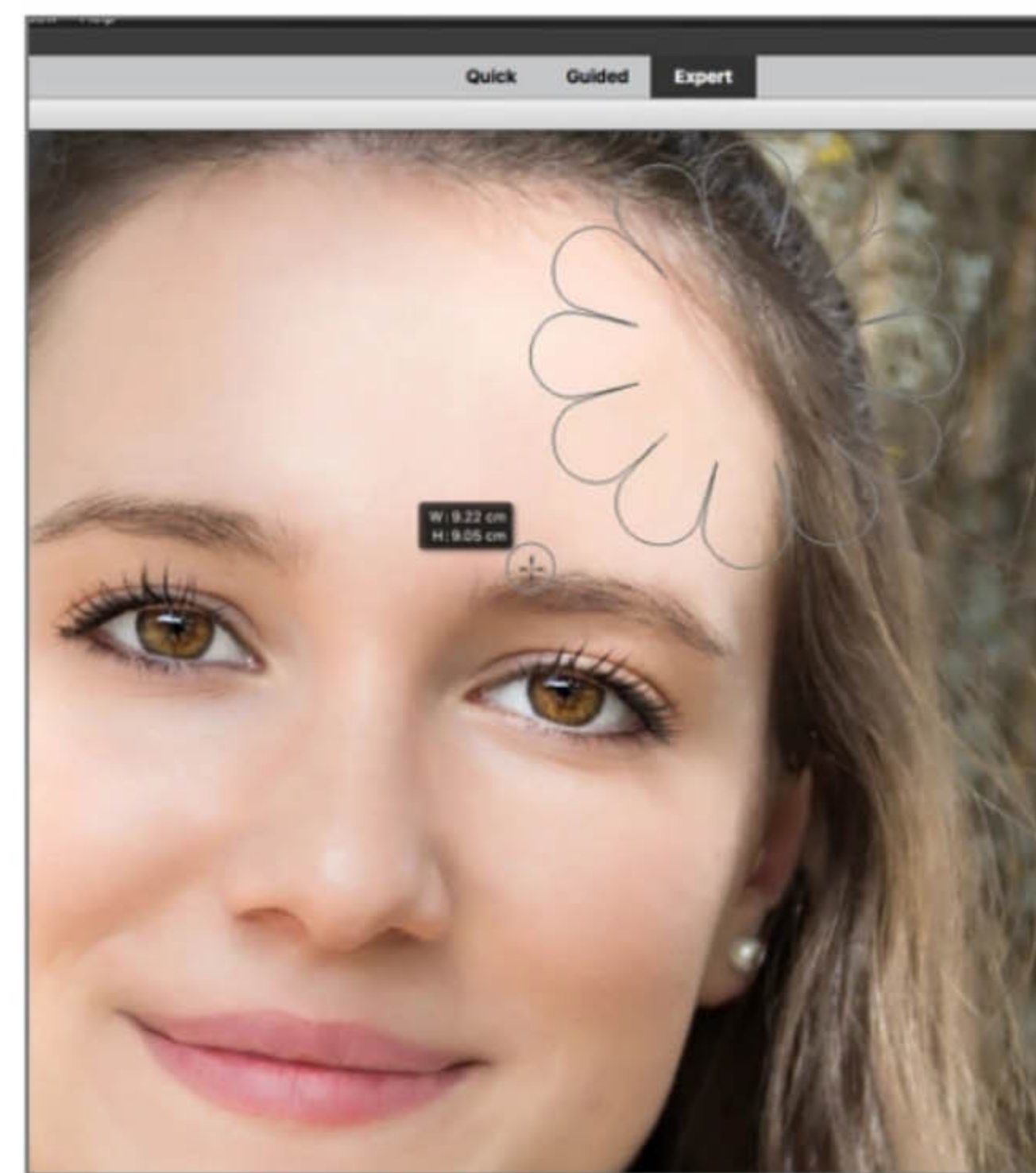
2 You can choose whether it samples a single pixel or a 3 x 3 average or a 5 x 5 pixel area to create an average. The colour it samples can be across all layers or a single layer.



Custom Shape Tool

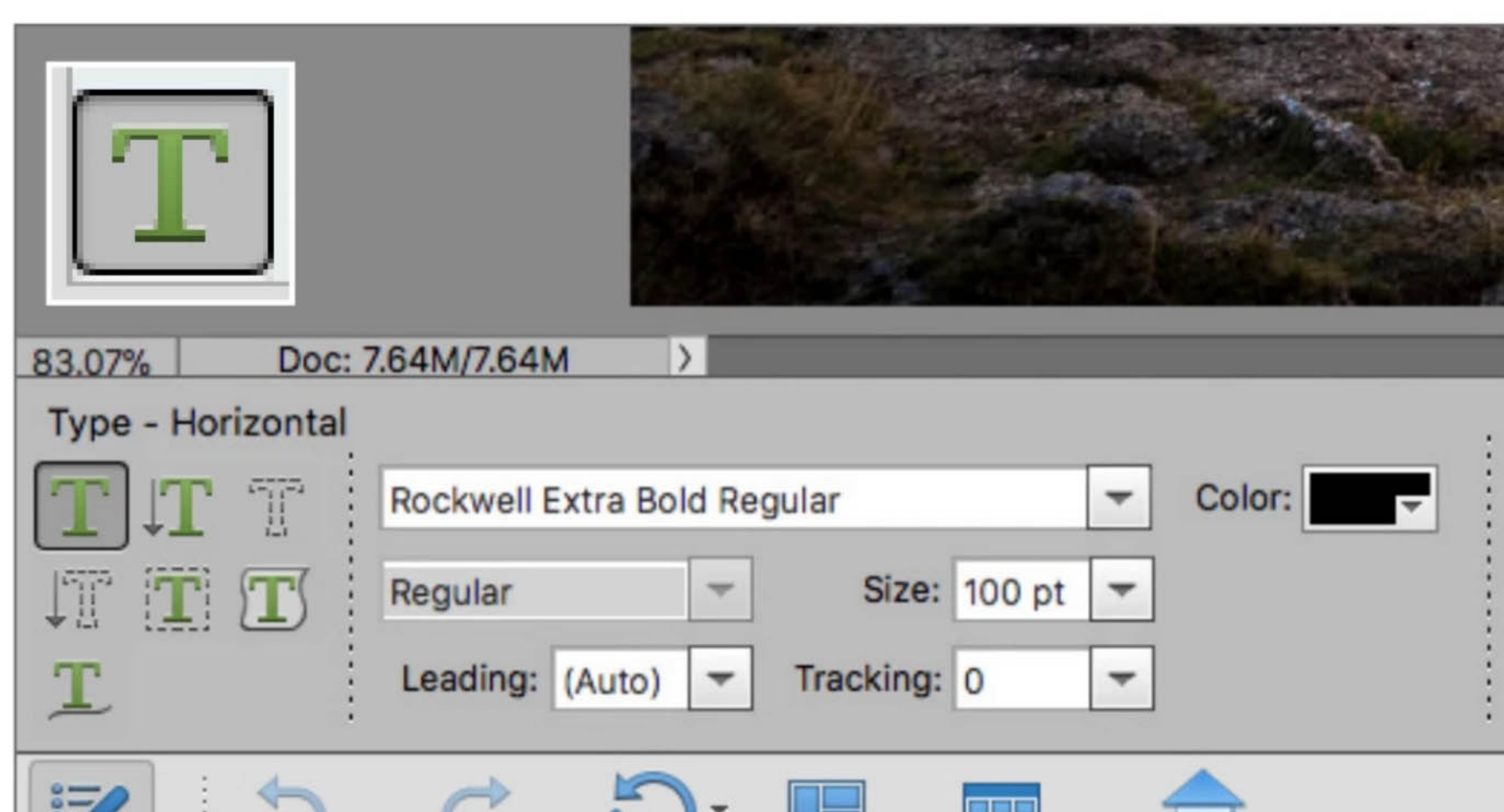


1 Choose from a number of predefined shapes and add them as vector shapes on a new layer. Choose their colour and Layer Style from the Style picker. You can also choose whether they are of fixed size or unconstrained and if you add to a shape or subtract from it.

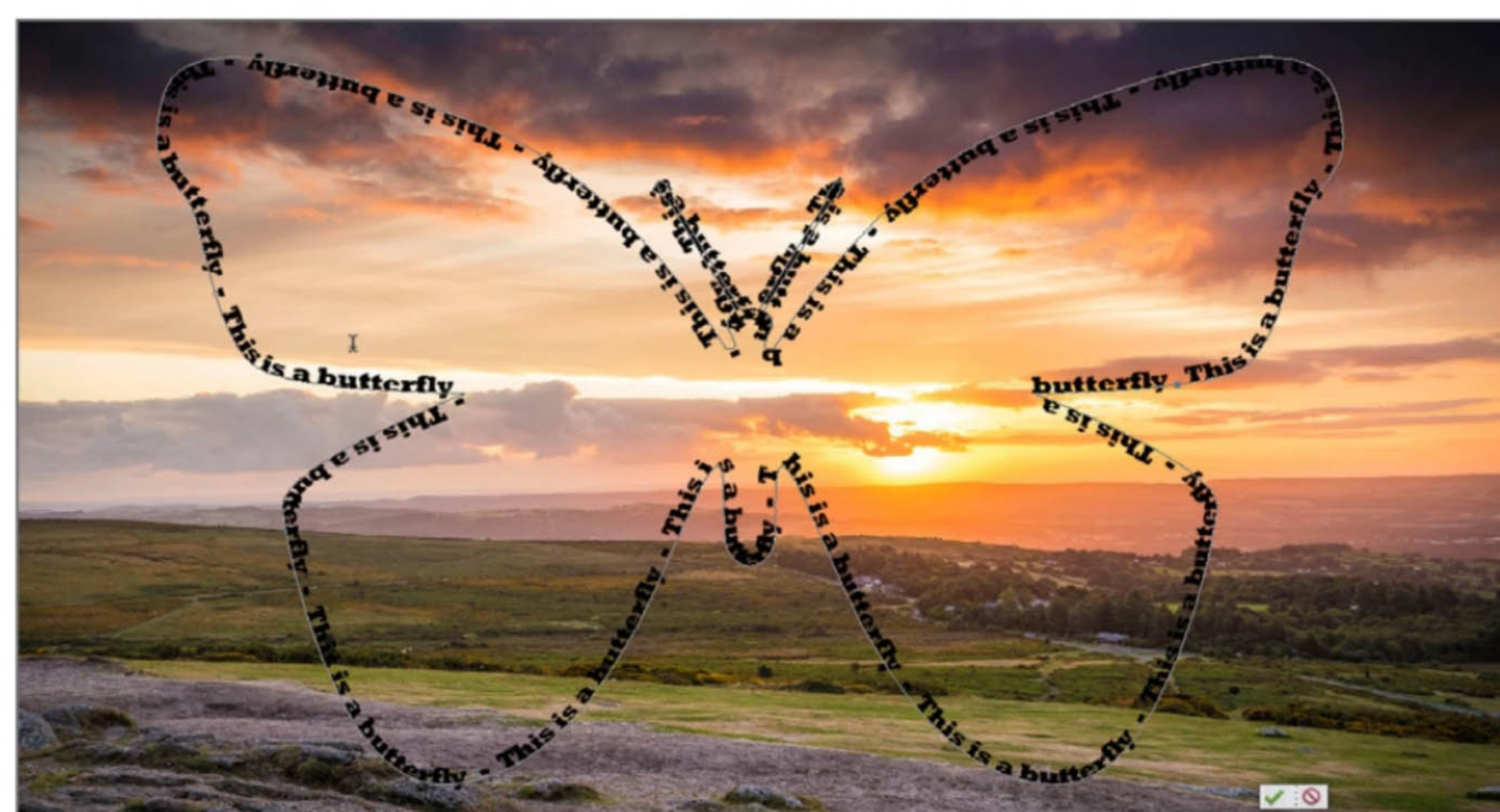


2 Once you have chosen your settings, you can draw out the shape on your photo. You can click and drag from the corner outwards or choose From Centre to draw the shape out from the cursor position. The shape will fill with your chosen colour when you let the mouse button go.

Horizontal Type Tool

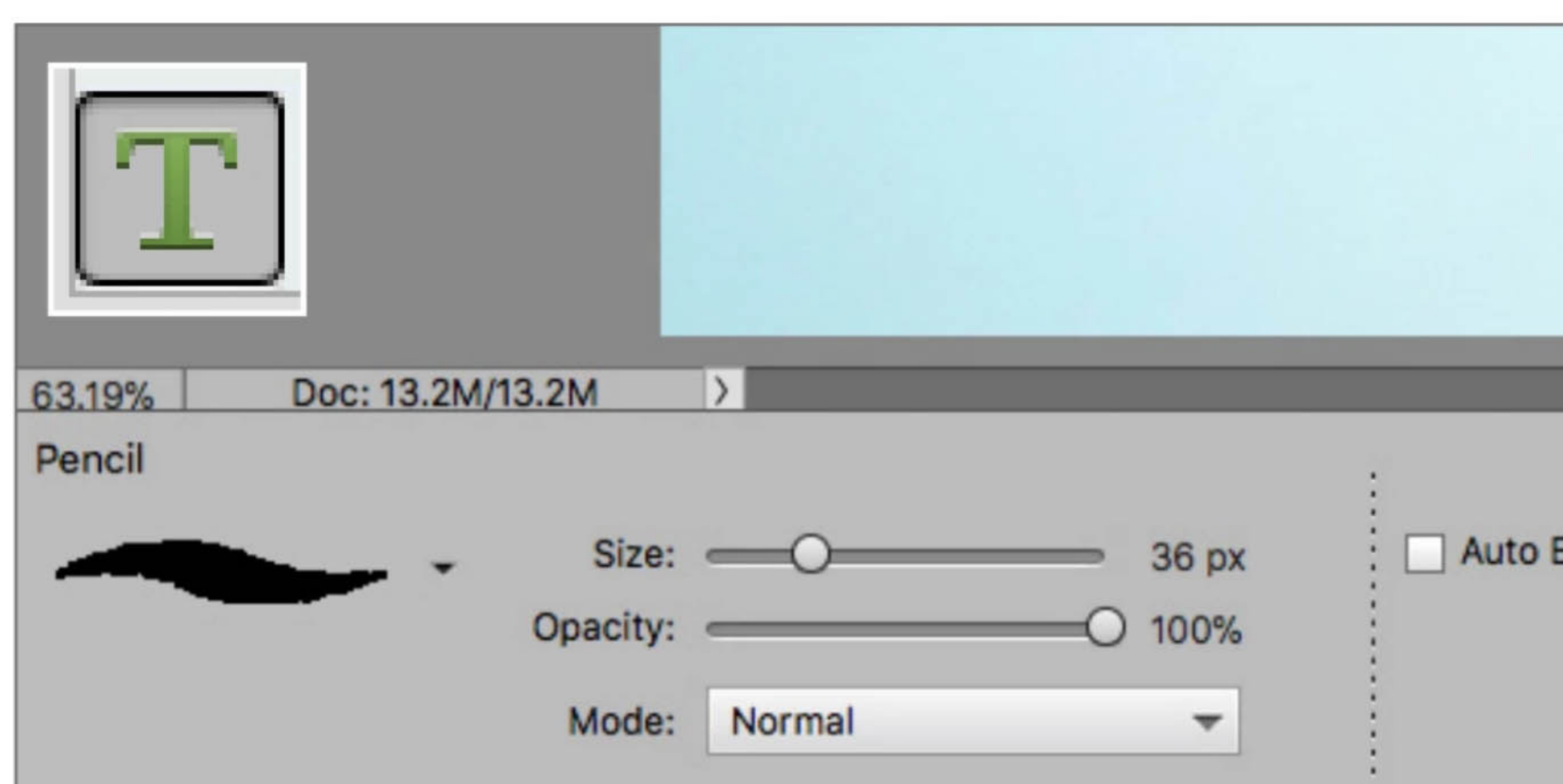


3 The Horizontal Type Tool (T) gives you a multitude of text options. Choose your font, its colour and size. You can then type on your document and a new text layer will be added above your photo. The text can be manipulated and bent into a curve or other shapes for creative effects.



4 You also have vertical text options, text for masking and the ability to fit typed text to a shape or path. Our example shows a butterfly's outline with sample text following the outline of that shape.

Pencil Tool



1 The Pencil Tool (N) is designed to act like a real world pencil and is a hard-edged tool that has a number of preset pencil tip shapes to draw with. You can choose the Size, Opacity and Blend Mode for your pencil strokes along with its colour.



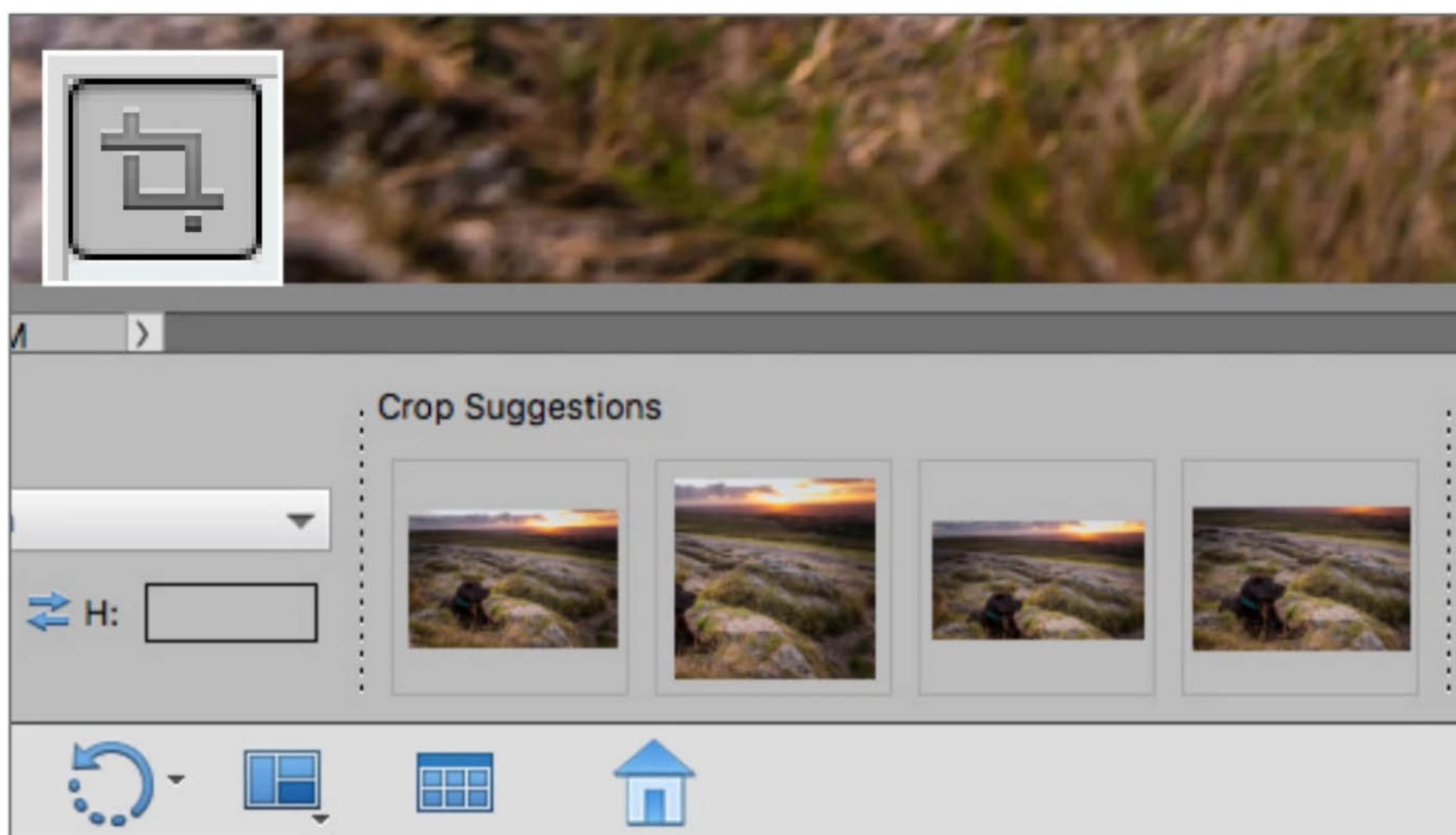
2 You are then free to use your mouse or tablet, to sketch and draw with your pencil as you see fit. You can draw directly over your existing image or create a new layer and draw on that so as to preserve your original image.



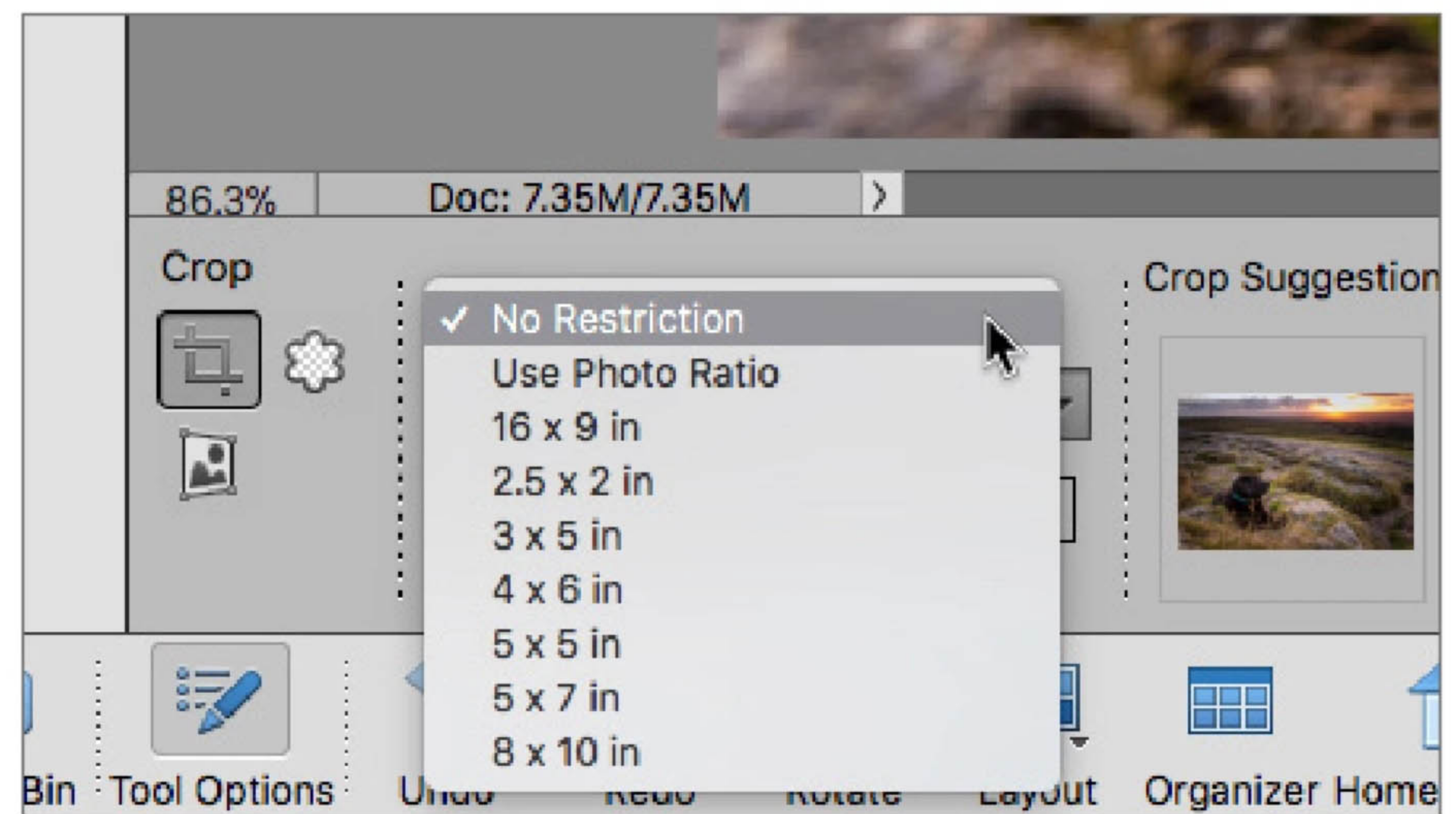
Modify, Crop, Move and Recompose

The Modify section of the toolbar contains a set of tools that give you the ability to crop in a number of ways and to scale your images but protect certain parts from being affected during the scale. You can also move the subject of your photo from one part of the scene to another.

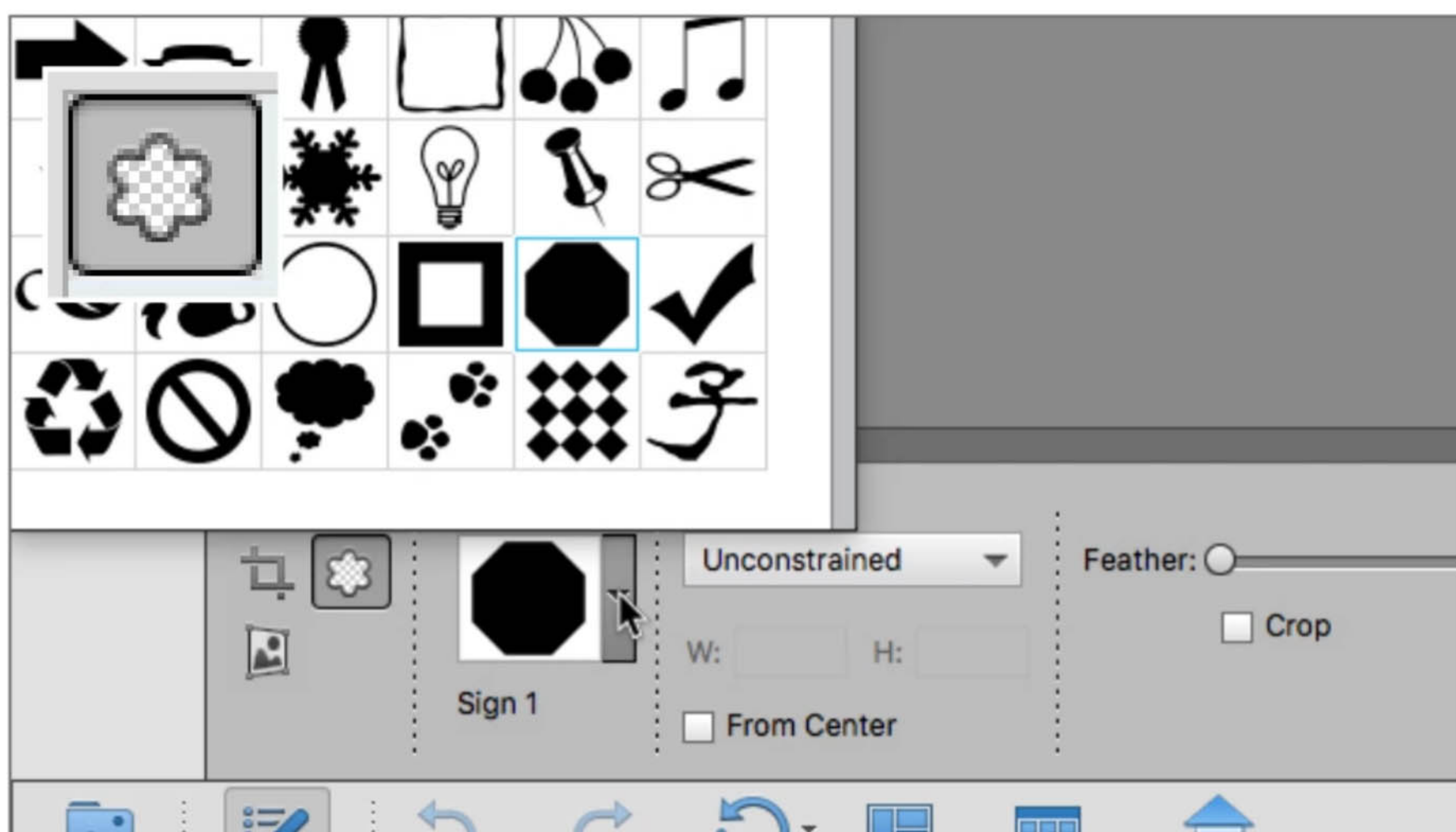
Crop Tool



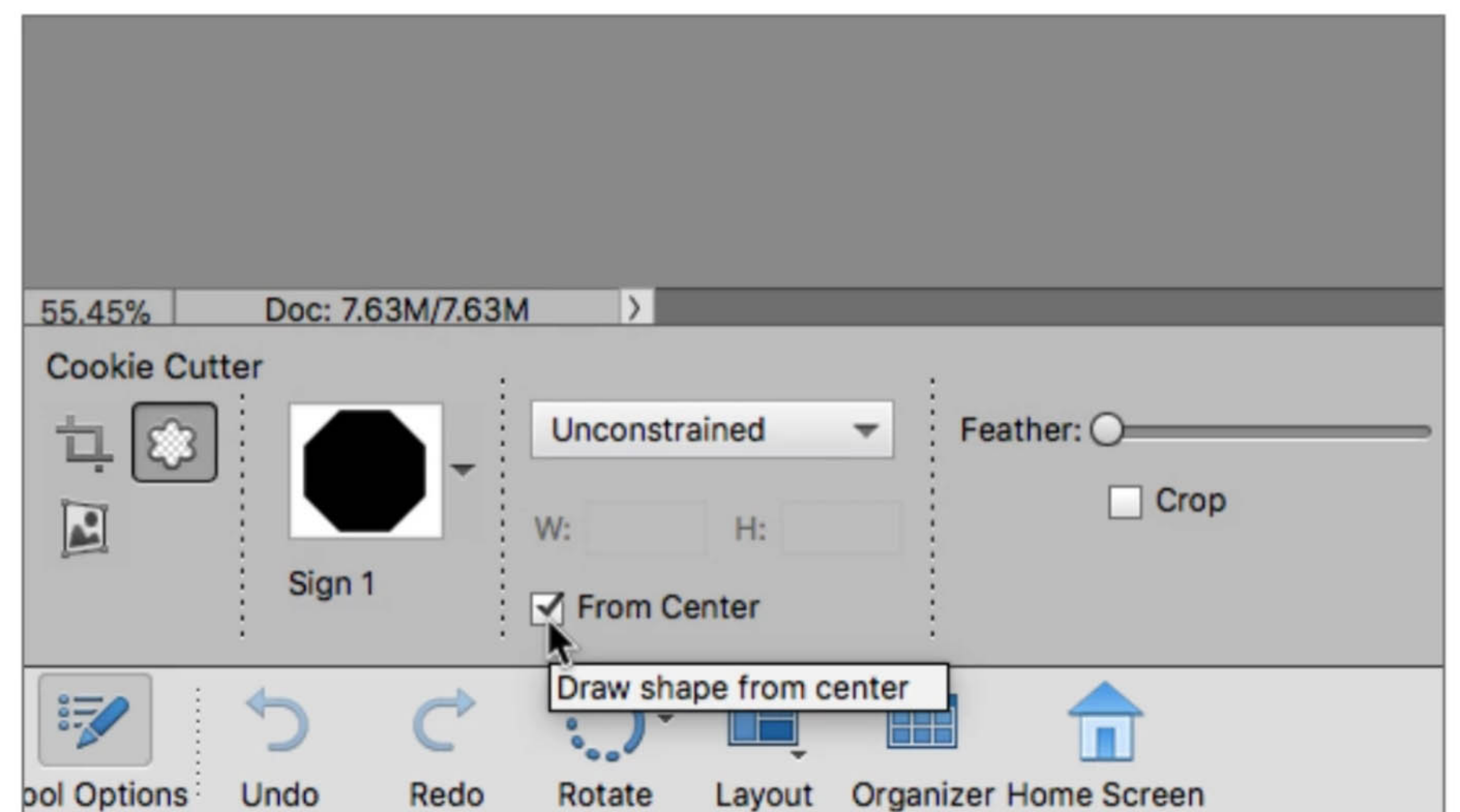
1 The Crop Tool (C) is the most common method of cutting areas of your photo off in order to change the composition and proportions. When you click the tool, the options panel will display some suggestions for you as to how it thinks the image can be cropped. You can use those or make your own crop.



2 You can use set proportions to crop or you can go it alone with no restrictions and make your own crop. Simply click and drag your mouse across the area of the scene that you want to be cropped and a gridded box will show you the current crop. You can click the green commit arrow to proceed.



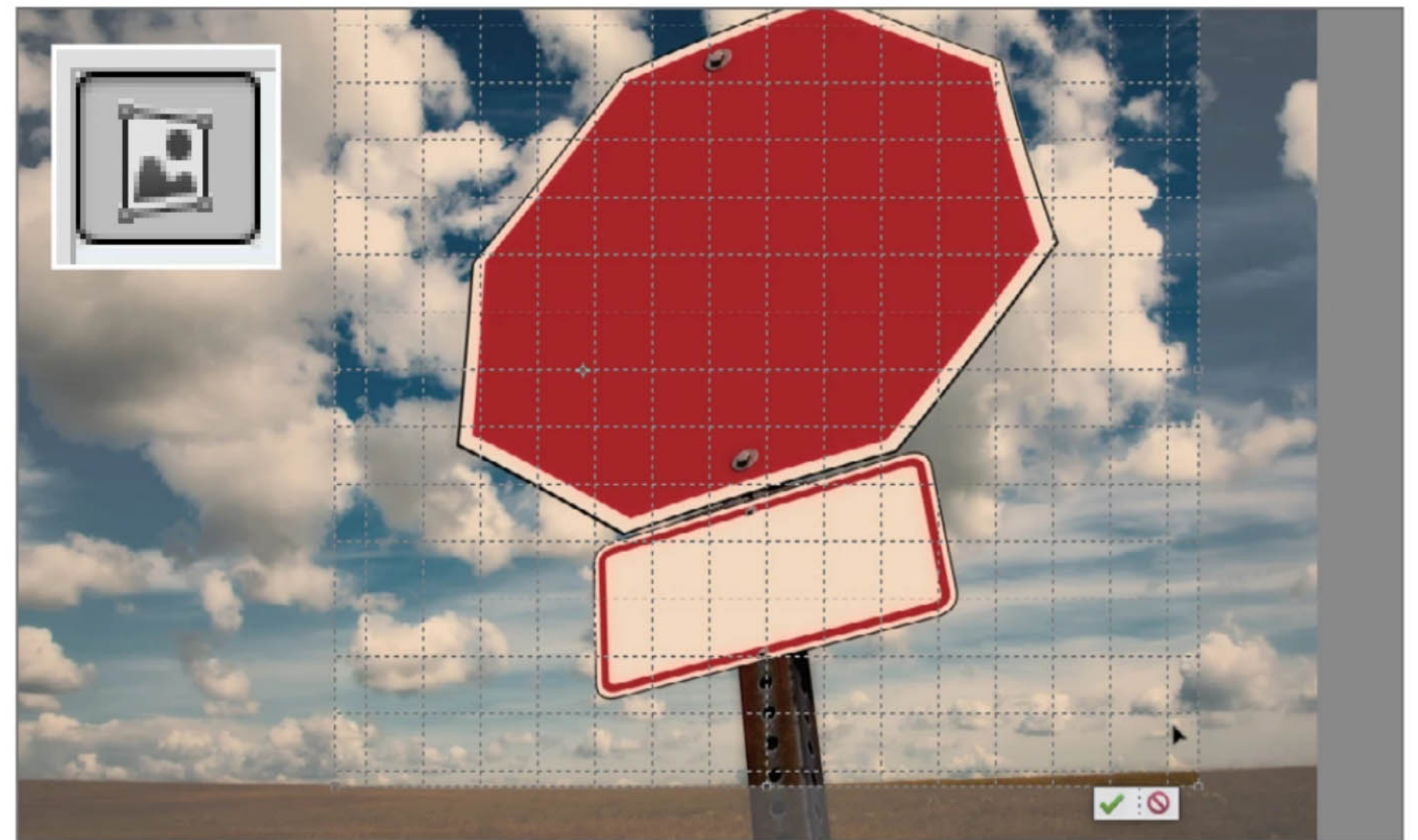
3 Within the crop tool options you also have the Cookie Cutter Tool (C), which lets you cut out images using a number of preset shapes. You can choose from all the available shapes such as butterflies, snowflakes, graphic symbols and much more.



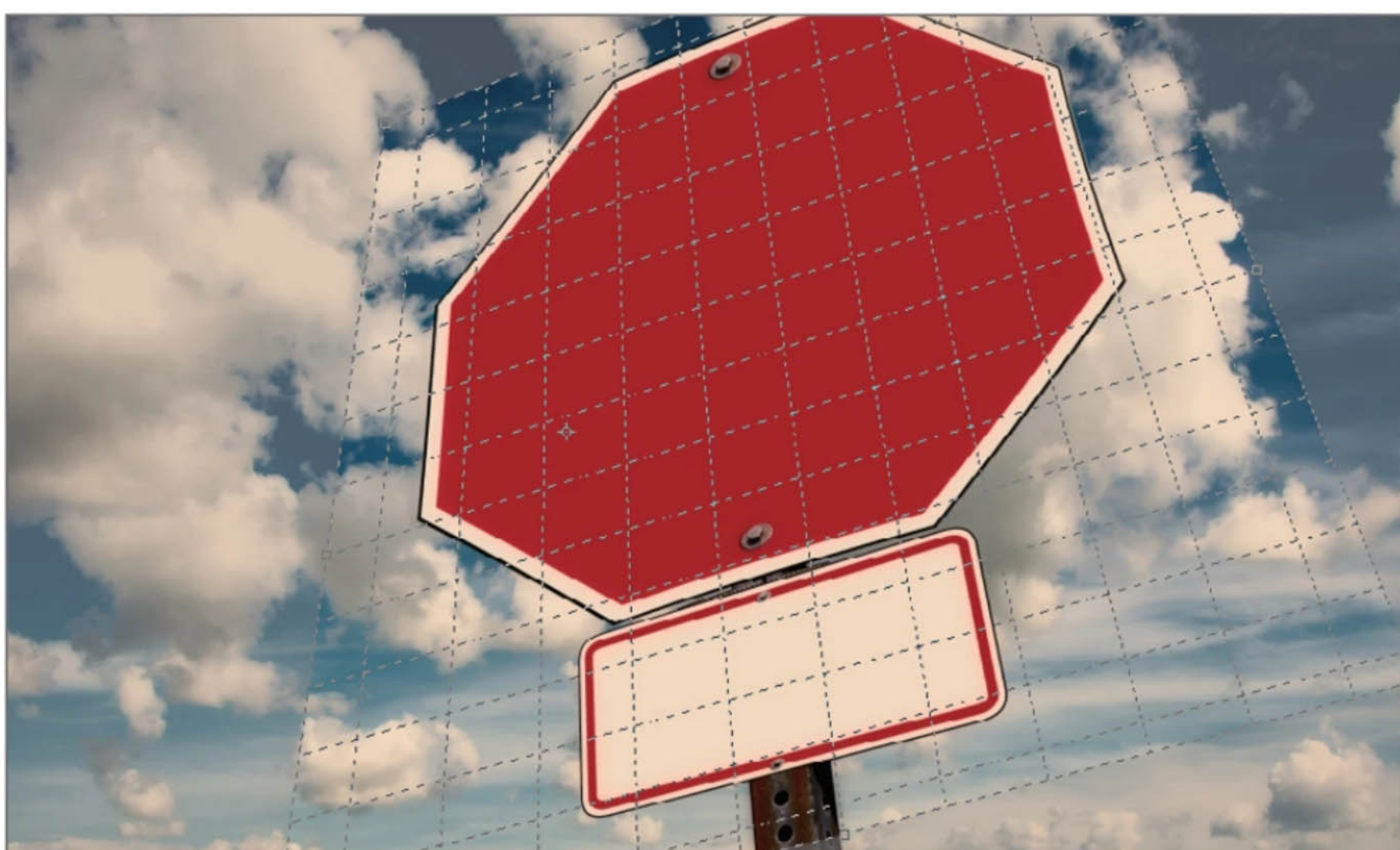
4 With your shape chosen, you can drag it over your image and scale it to cover the area of the photo you want to crop. If you tick the From Centre button in the optional panel, the shape will be drawn outward from your cursor position. You have the option to feather the crop if you want.



5 If you hold the Shift key as you drag, you can keep the shape's proportions locked. When you let go of the mouse, the image will be cropped in your chosen shape. You then have options available that let you Rotate, Scale and Skew the shape until you have it how you want it.



6 The Perspective Crop Tool (C) lets you draw a crop box around a specific part of your photo that is distorted and gives you a chance to crop and remove the distortion at the same time. You start by drawing a crop box around the area you want to crop.

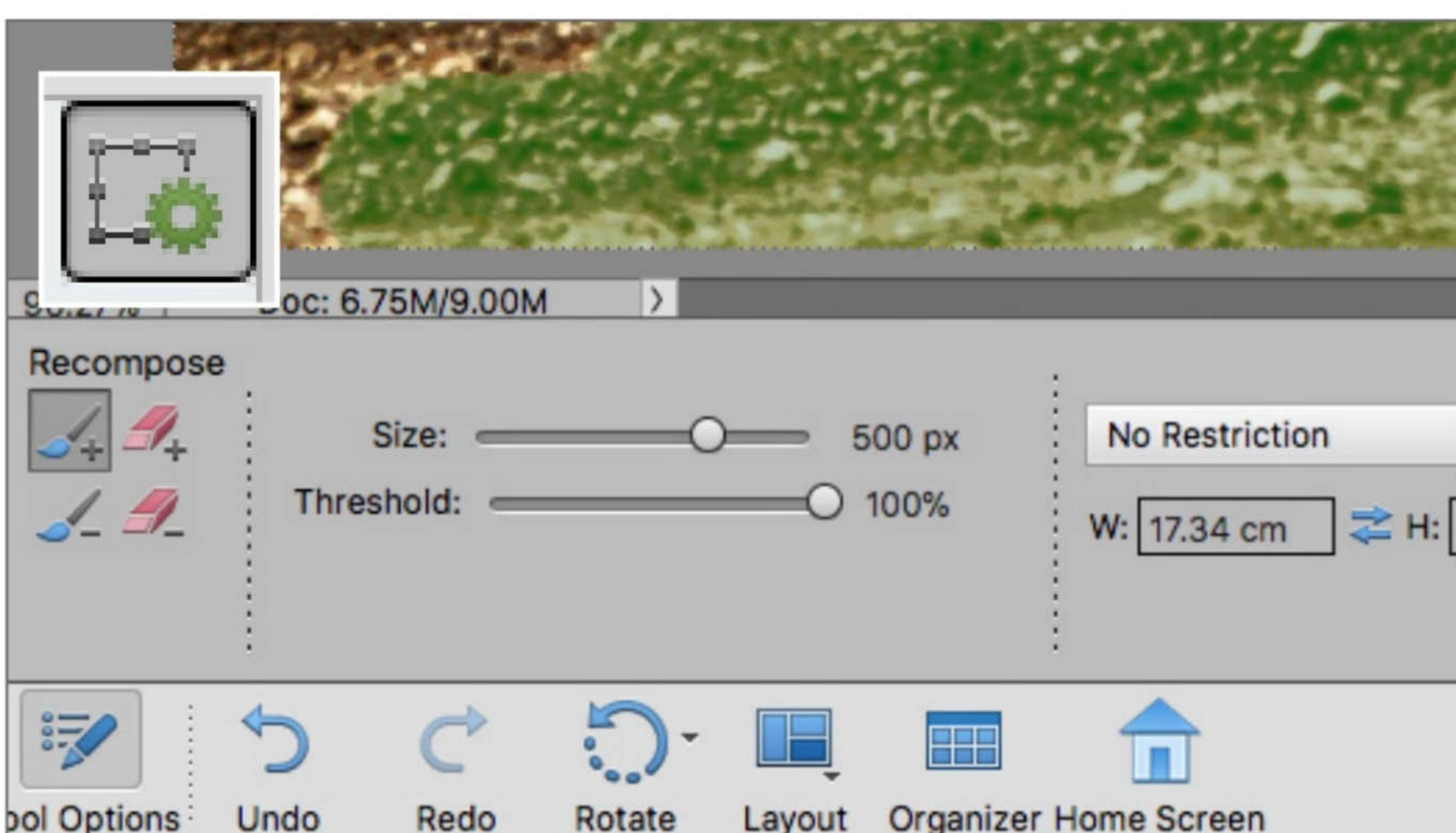


7 You can then begin to manipulate the crop box to match the perspective of the object you are cropping. Use the control points around the crop box to drag the box out to match the subject. In our example, the road sign gives us some helpful straight lines to match the perspective.



8 When you click on the green commit button shaped like a tick, the Perspective Crop Tool will crop and stretch out the image, removing the distortion. It may take a couple of attempts but it can help you rescue some tricky, distorted images.

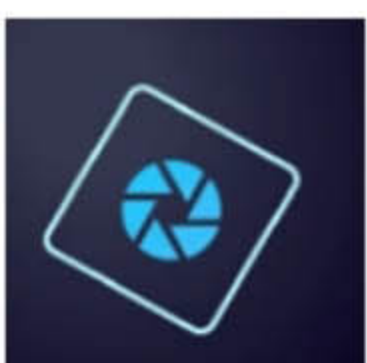
Recompose Tool



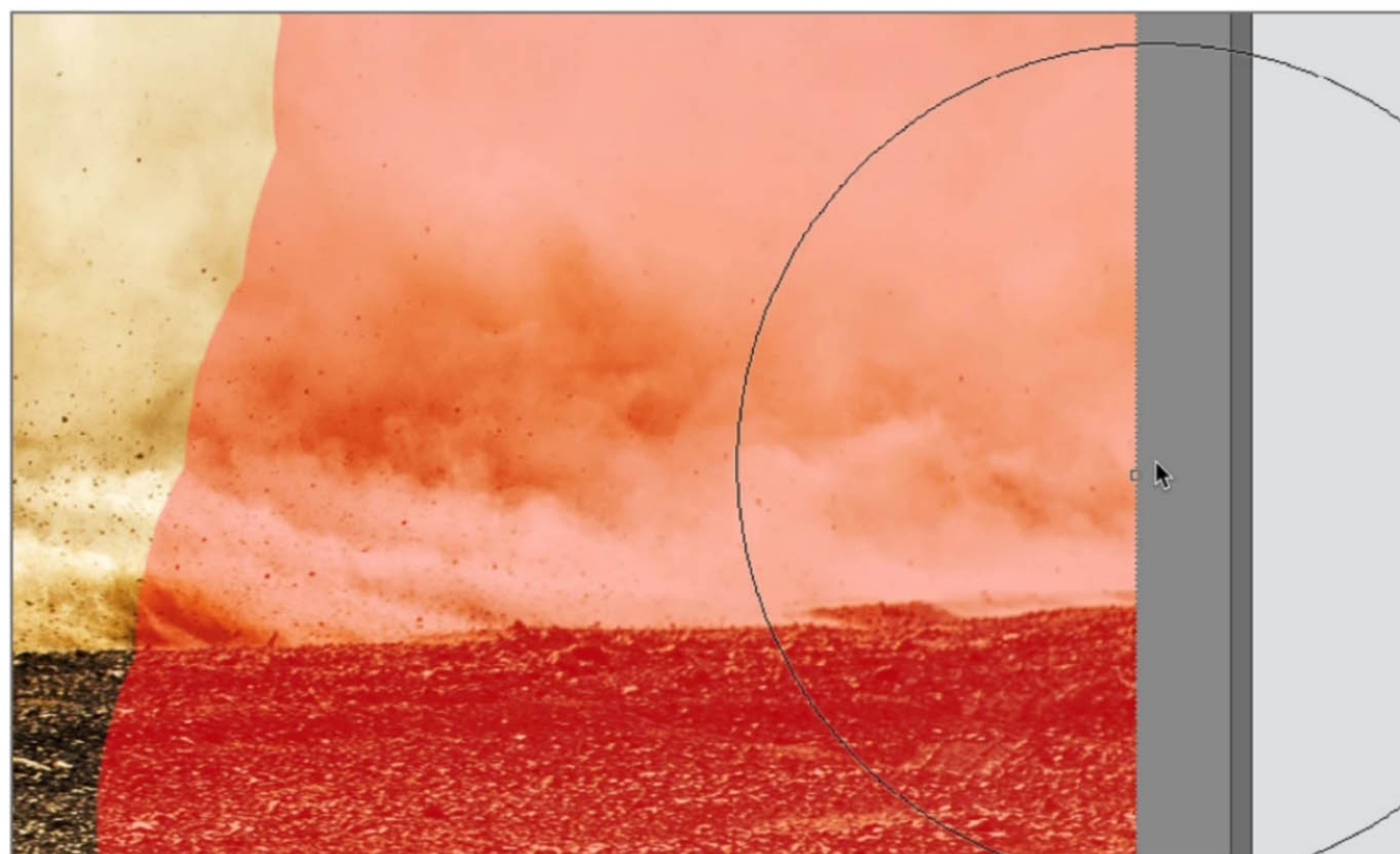
1 The Recompose Tool (W) uses content aware scaling technology to let you scale images to a different proportion, but only scale areas with no detail. You can also select areas to remain untouched by the scaling process for a much better final result.



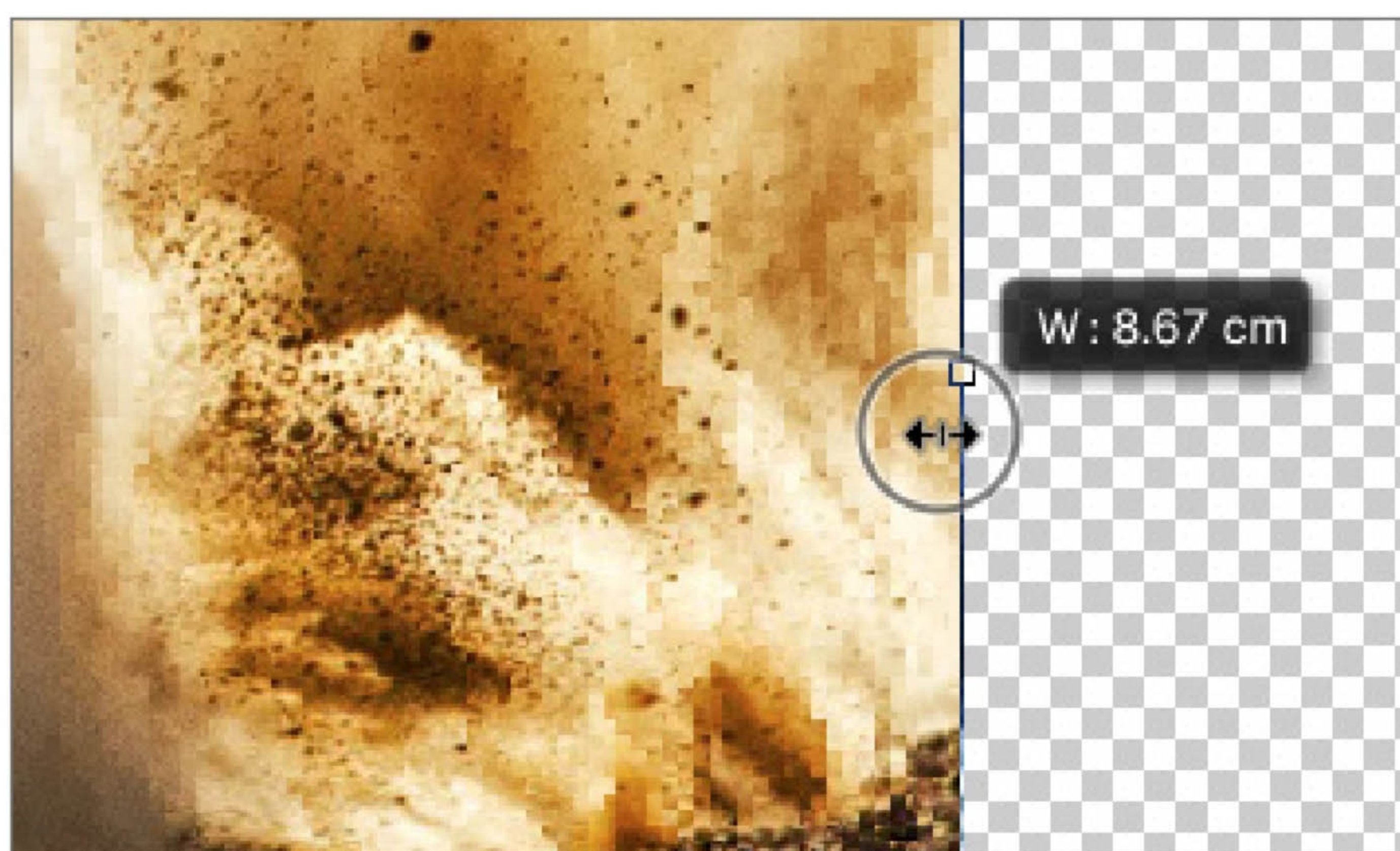
2 Here is an example of a rally car with a lot of empty space to the right. It could be cropped but this image provides a good excuse to try the Recompose Tool. The options panel displays a number of tools to help you with the scaling process.



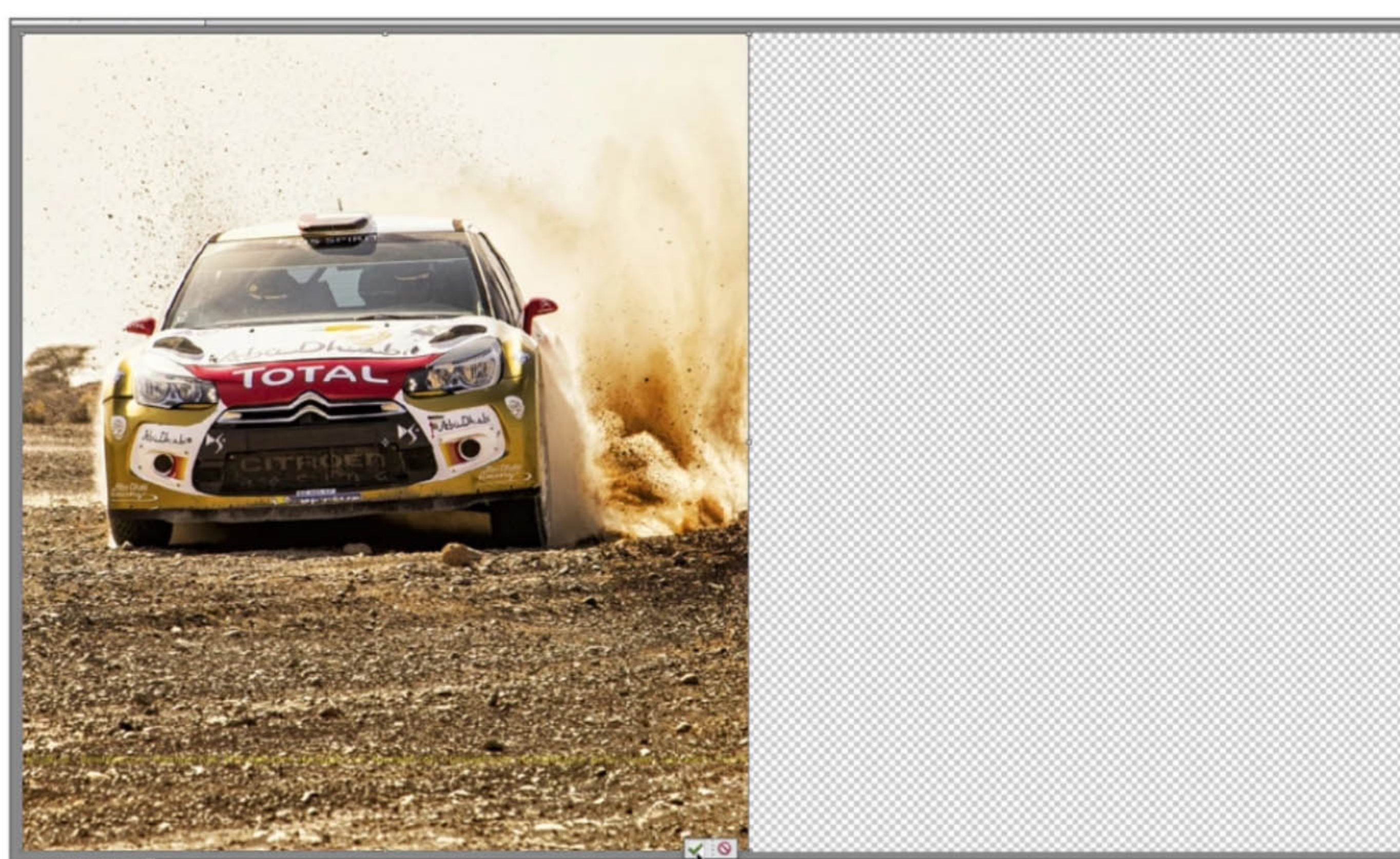
3 You can use the Mark For Protection brush to highlight areas that you want kept intact and untouched during the scaling process. Similarly, you can also make areas that you want removed. You can adjust brush Size and Threshold and any scaling restrictions you wish to apply.



4 Once you have marked out your image and have either selected areas to protect and areas to remove, you can click and drag on the control points around the perimeter of the image. In this case, we are going to drag the right middle control point inwards.

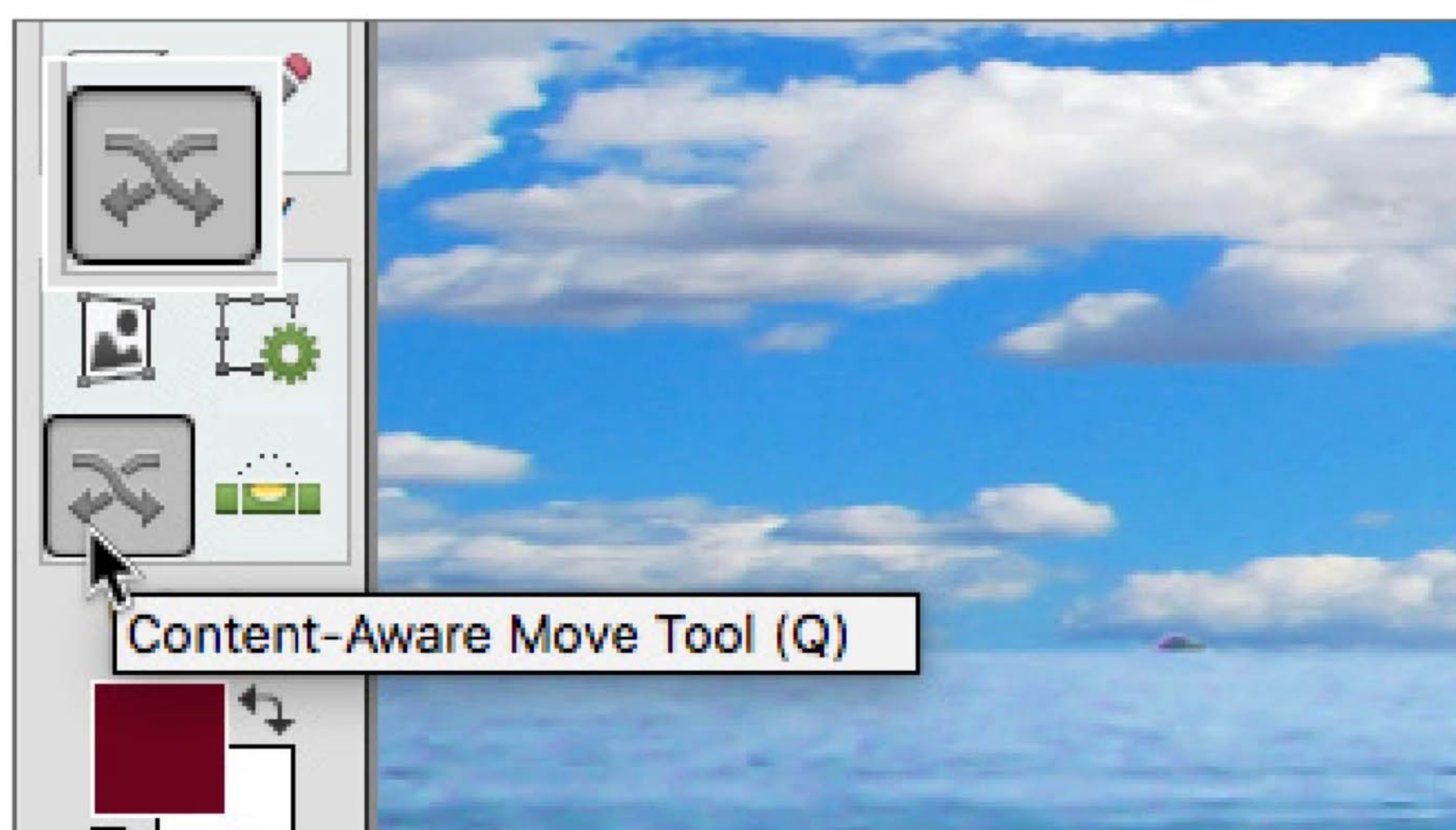


5 You can begin to drag the control point inwards and as you do, all the areas that are unprotected will concertina together and the program will attempt to blend that pixel data together. The areas that are selected to be protected will not be crushed together.

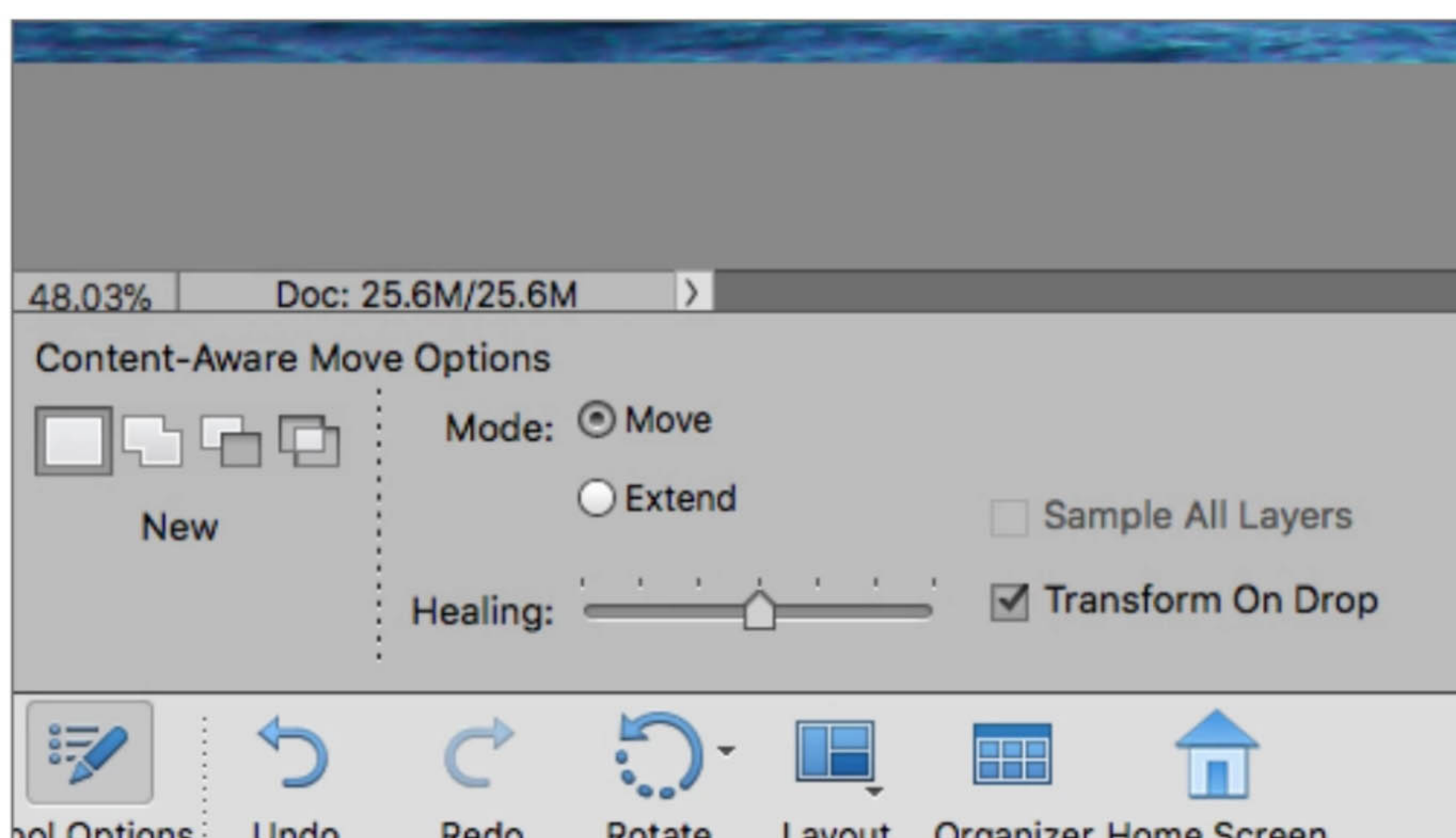


6 The control point can be dragged all the way across the image. All the dirt and dust on the right of the image has been merged into the space that remains now the image is half the width it was originally, but the car is unchanged.

Content Aware Move Tool



1 The Content Aware Move Tool (Q) uses similar technology to the Recompose Tool but in this case it lets you move an object in your photo and place it elsewhere in the shot and blends it back in and fills the original gap left by the subject.



2 The options panel gives you some simple tool parameters. You will need to draw a selection around the object in the photo you wish to move. You can add or subtract from the selection you've made by using the New, Add, Subtract and Intersect options provided.



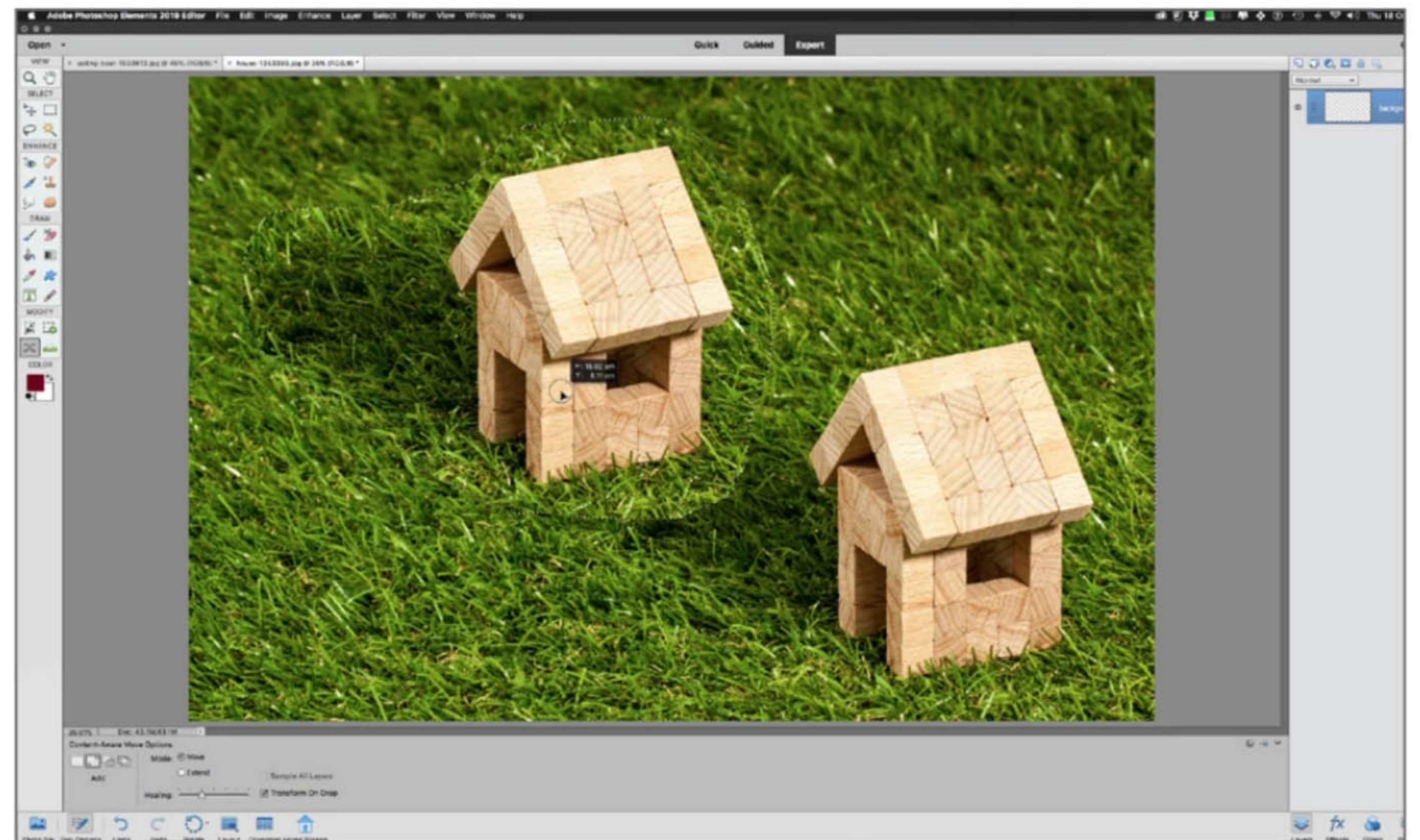
3 With the tool active, you can draw around the subject that is going to be moved. Be aware that areas with complex content can be a challenge and the area you move your subject to needs to be of a similar texture and colour for it to work properly.



4 Enclose your subject in a selection and then drag it to its new location. The Healing slider controls how aggressively it tries to blend the image into the new location and also fill the gap it leaves behind. The Mode can be altered from Move to Extend to stretch your selection if required.

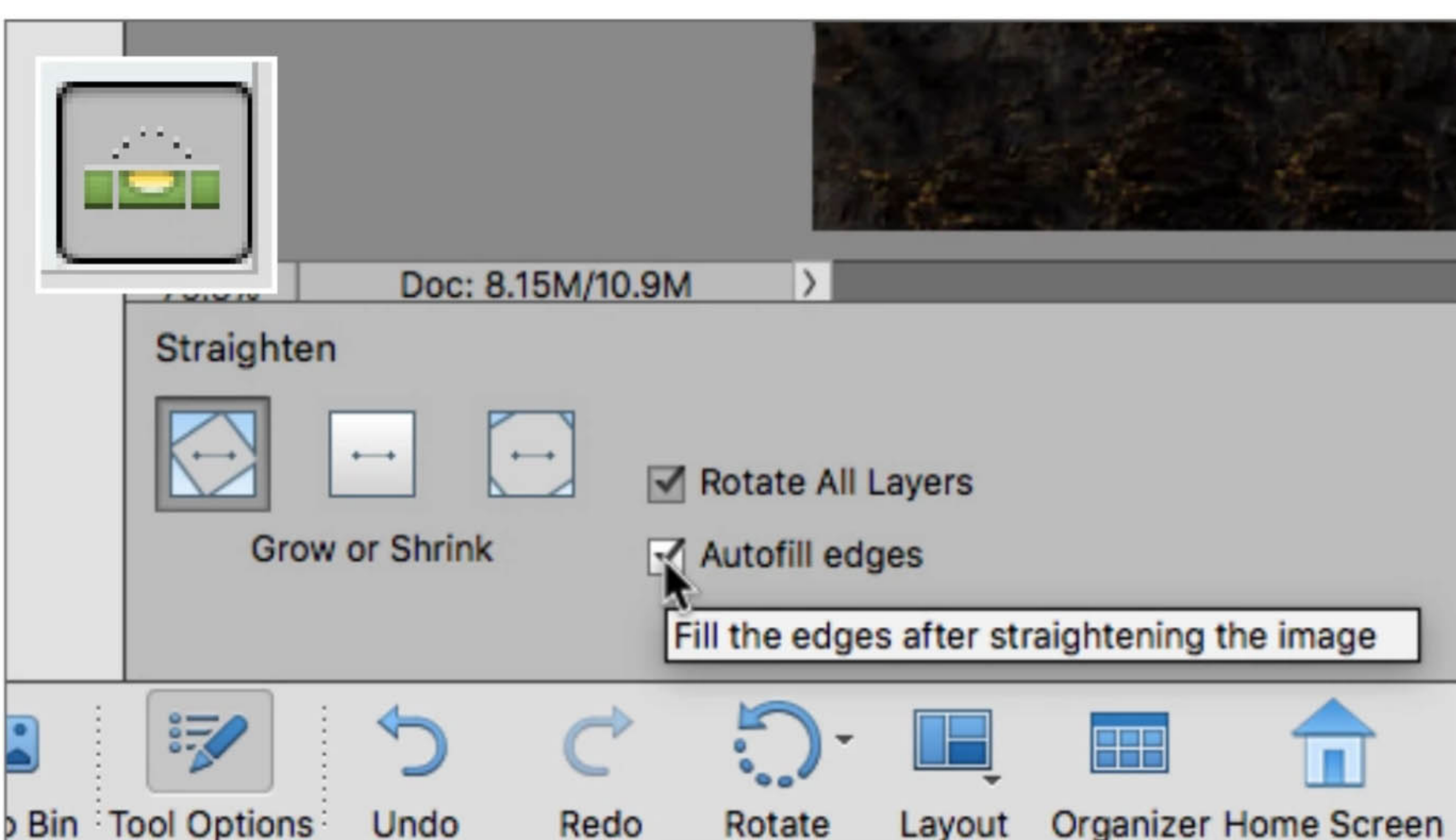


5 The Content Aware Move Tool will blend the image together. It can be a hit and miss process and may require the settings to be tweaked. You can also try selecting more of the area around your subject for more blend data to be used.

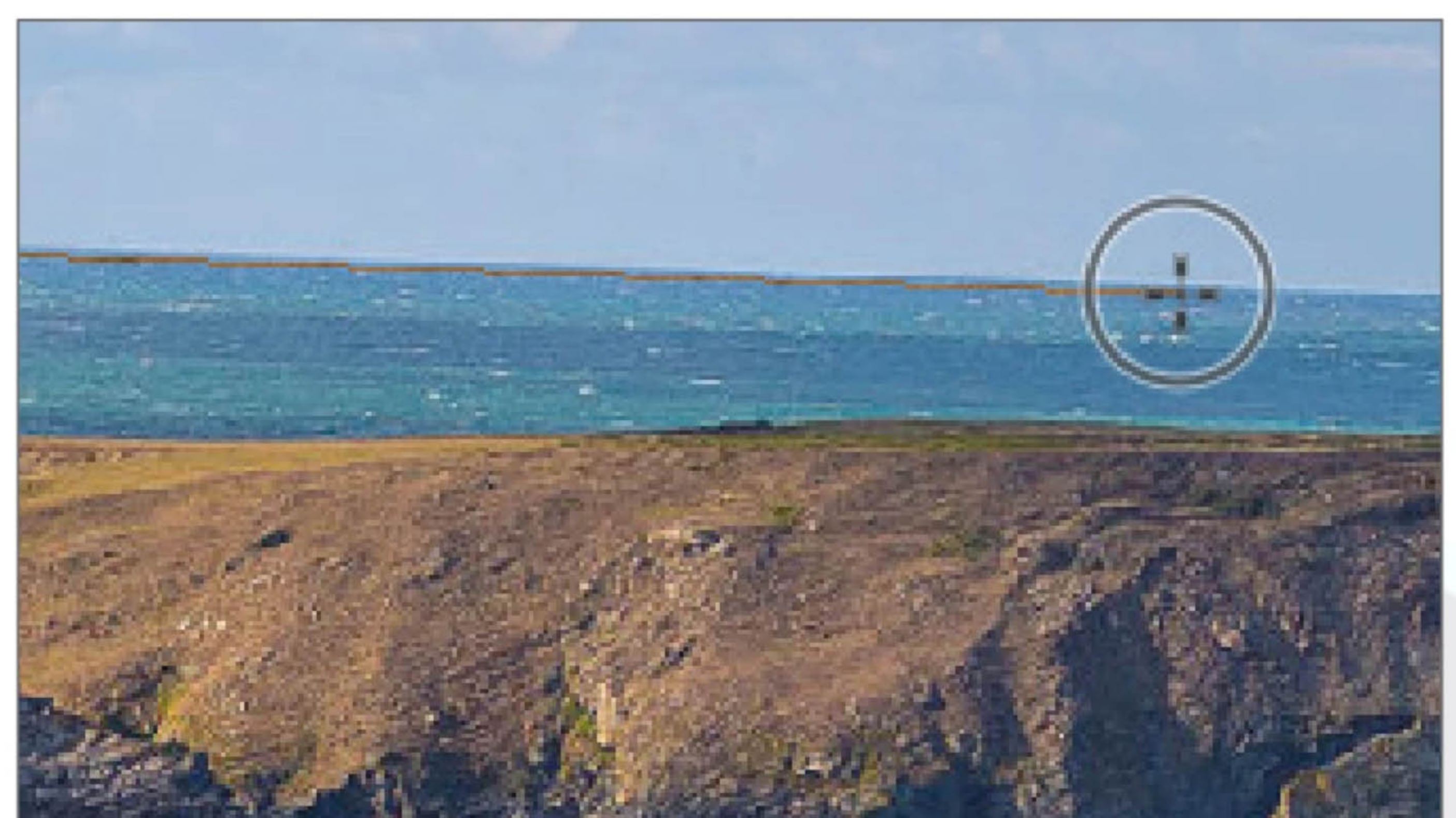


6 We tried the sailboat image and also a simple object on grass. The grass image yielded better results after a few attempts but it still needed some cleaning up with the Clone Stamp Tool to remove some obvious artefacts and blend in some untouched grass.

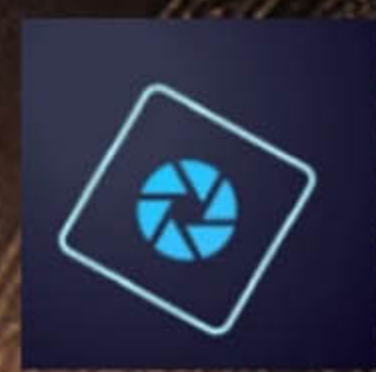
Straighten Tool



1 The Straighten Tool (P) will easily take care of wonky landscape photos and get them level again. You have a number of options as to how the image is handled once straightened. The canvas can grow as required when rotated, stay the same size or be cropped to remove the background.



2 Simply click and draw along a slanted horizon line that needs to be level. When you let go of the button the horizon will be levelled. There is an option to Autofill Edges. When the image is rotated, any blank areas will be filled with nearby similar textures.



TAKE YOUR SKILLS FURTHER





Take Your Skills Further

Now that you've experienced what Elements has to offer and how the major tools work, it's time to try out some more involved projects to help you hone your skills. The Quick and Guided workspaces are all well and good but if you really want to understand more about digital manipulation, then it's time to fire up the Expert workspace and dive in. There's an old saying: 'the best way to learn, is to do'. With that in mind, let's do it!



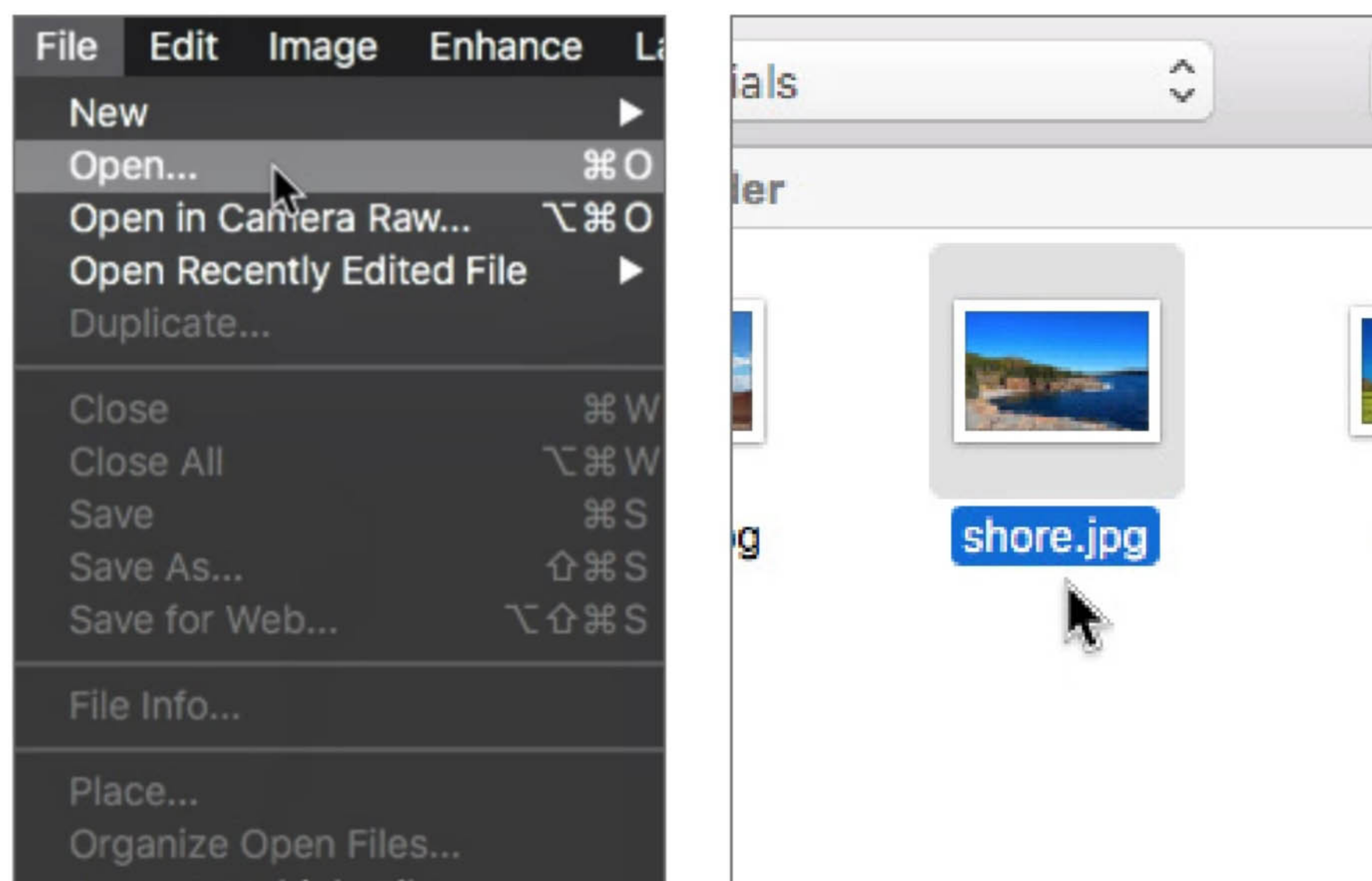
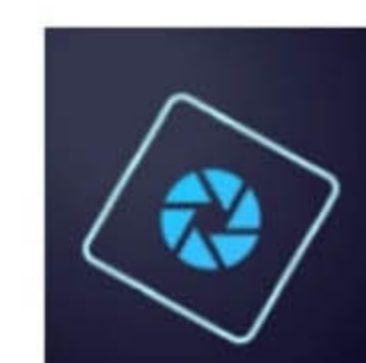
Sky Replacement



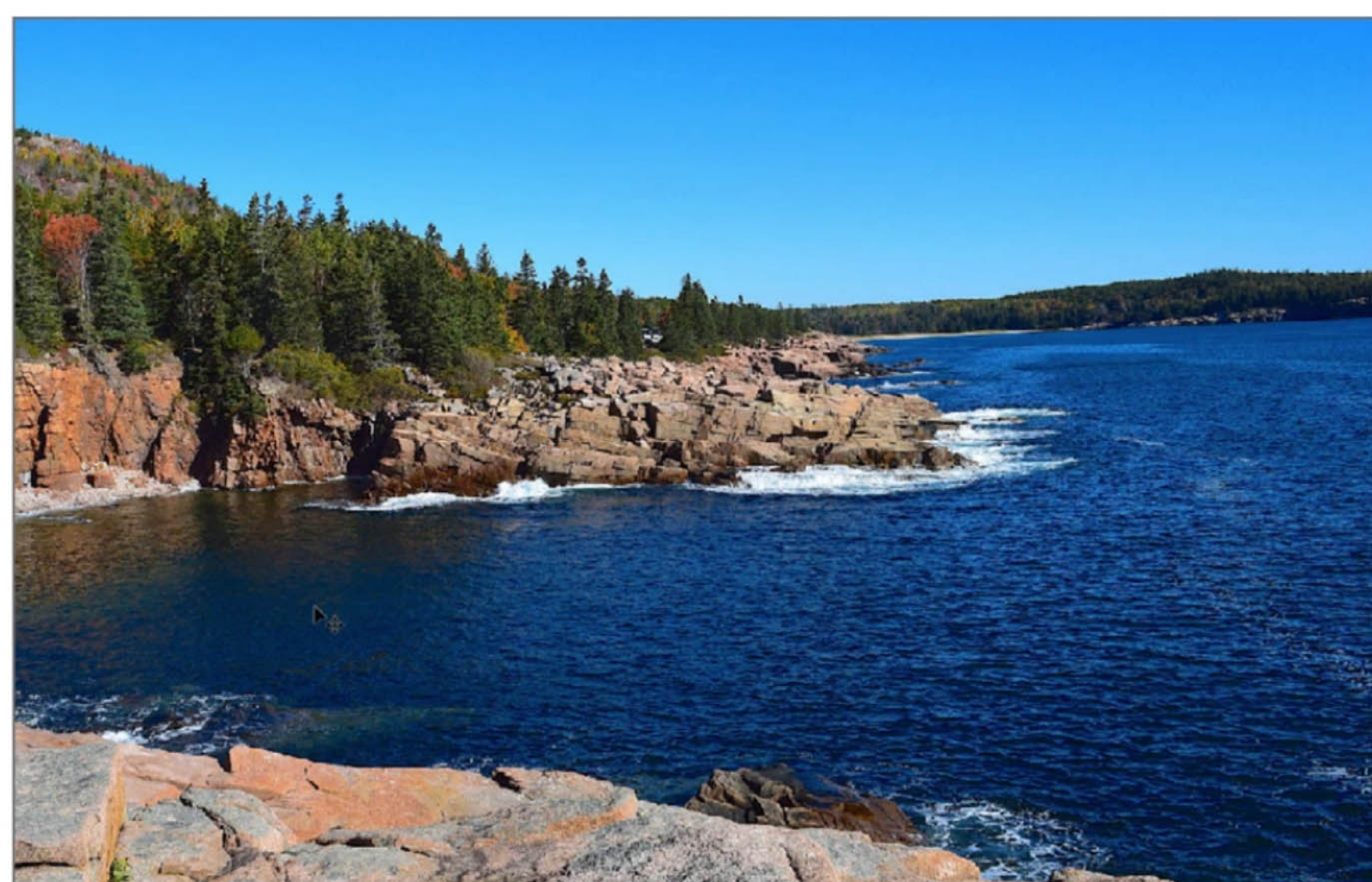
BEFORE

AFTER

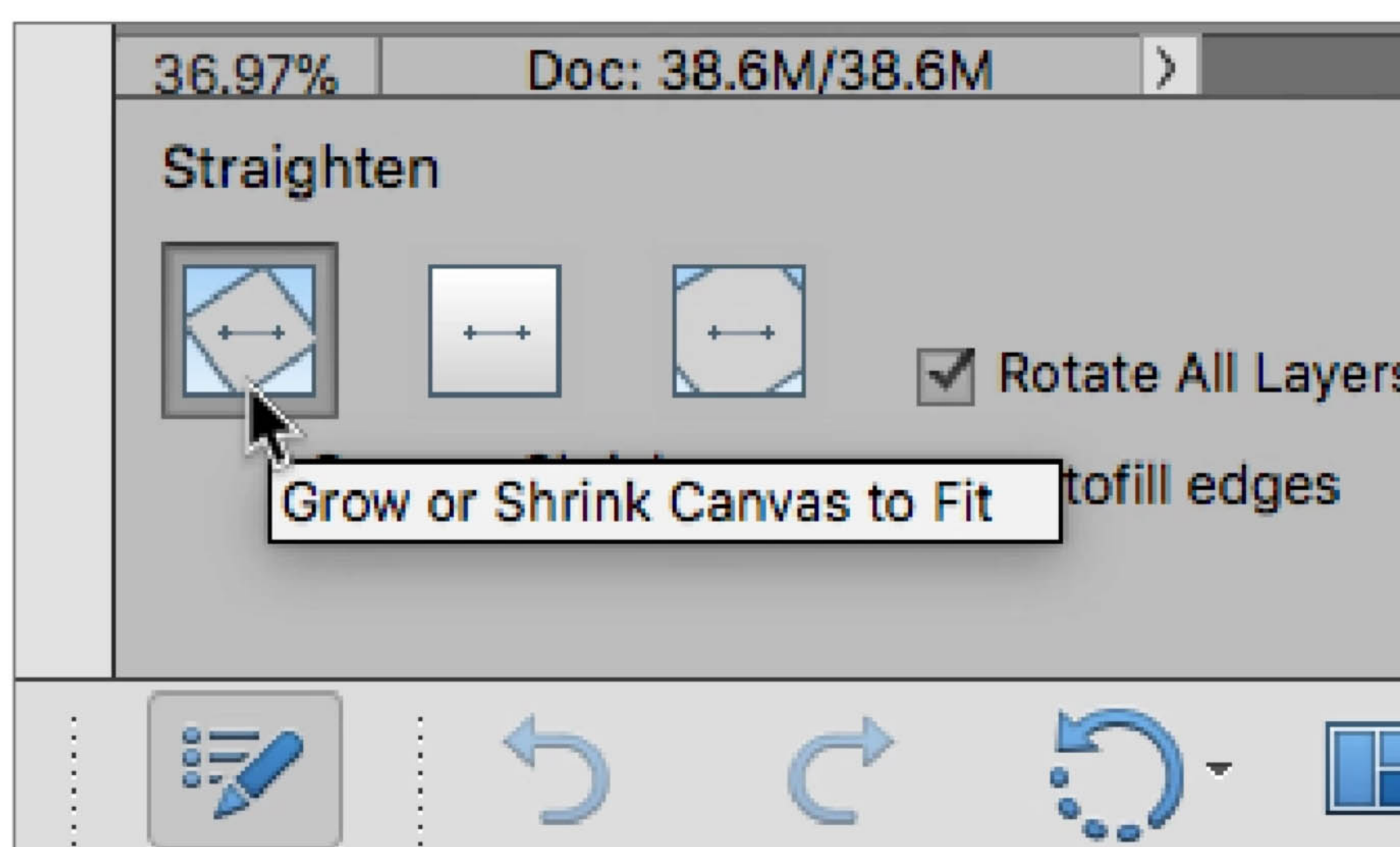
Blue skies are wonderful. They mean we are having a lovely sunny day. This is particularly meaningful if you live in the UK, which is often the butt of jokes about its horrible weather. No better time then to get out and take some photographs. The only problem you may find if you're anything like us, is that landscapes shot on days like this can look a little dull. The light is great, but the sky is lacking in any drama and it's just a big, blue, empty canvas. Sometimes the sky is lovely but it's in the wrong part of the image in relation to the landscape you were trying to shoot. Well, there is an answer to your woes with sky swapping. It requires your primary photo and a photo of a cloudy sky.



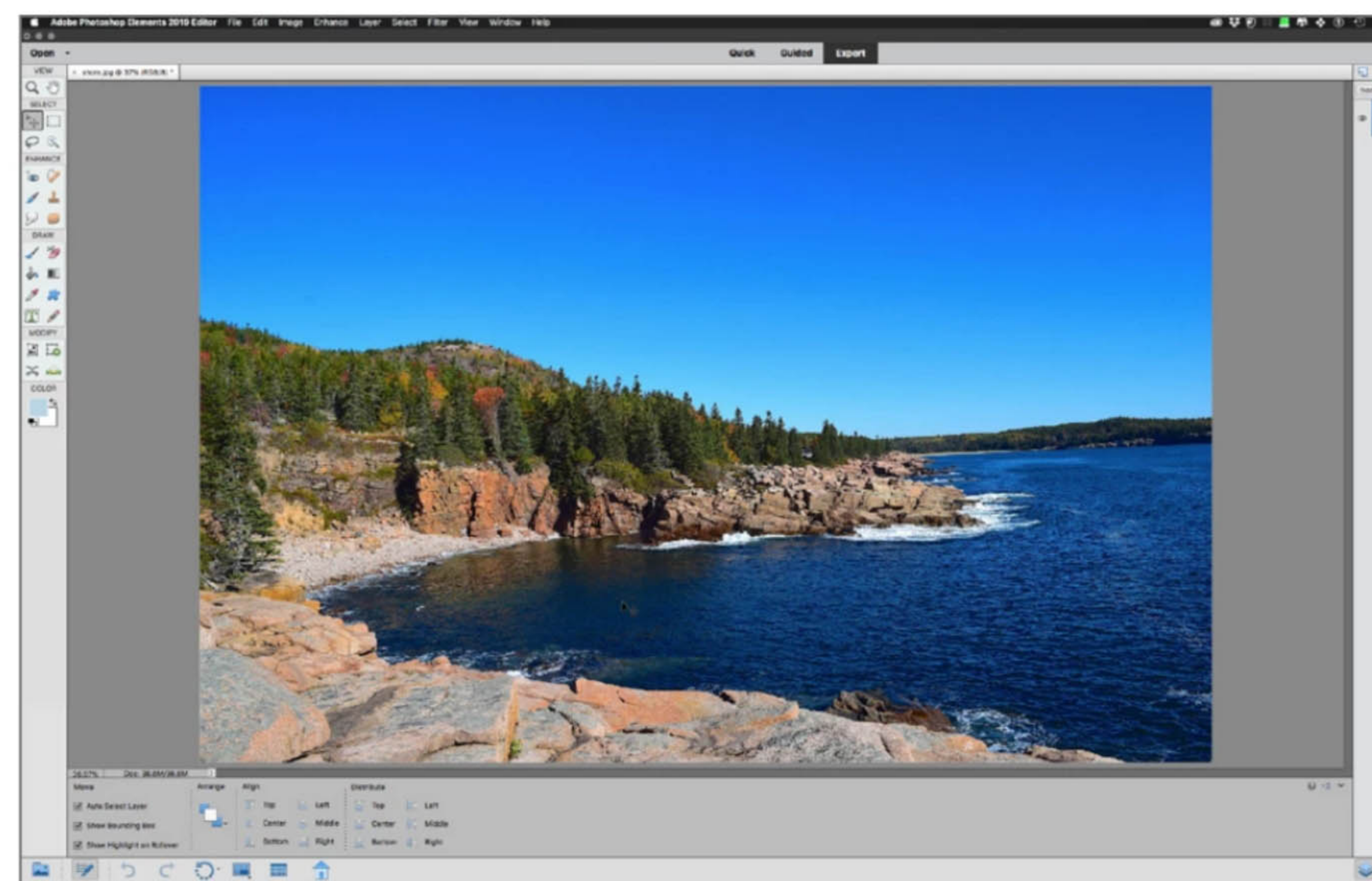
1 To begin you will need your primary photograph. Go to File > Open (Cmd + O) and use the file browser to navigate to the location your photo is stored. You can double-click the image to open it or highlight it and then click on the Open button in the lower right of the browser window.



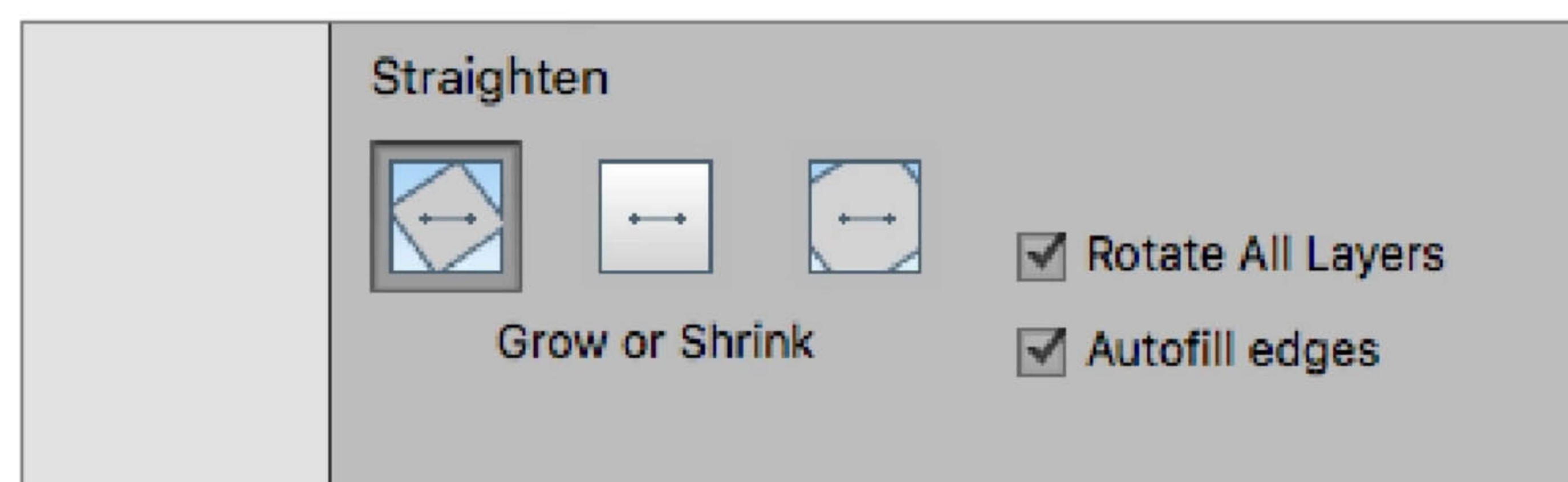
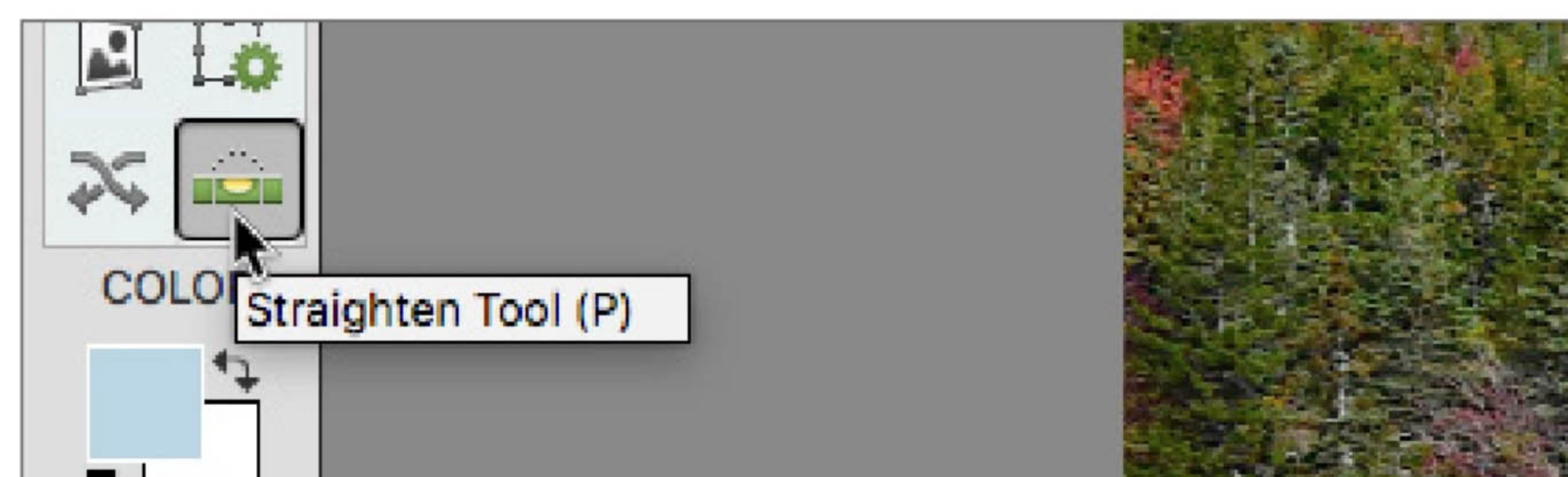
3 The first thing that will need your attention though is the horizon. In the case of this shot, the camera was tilted slightly and it means the horizon is not on the level. Luckily, there is a tool that can help us sort this out with just a few clicks.



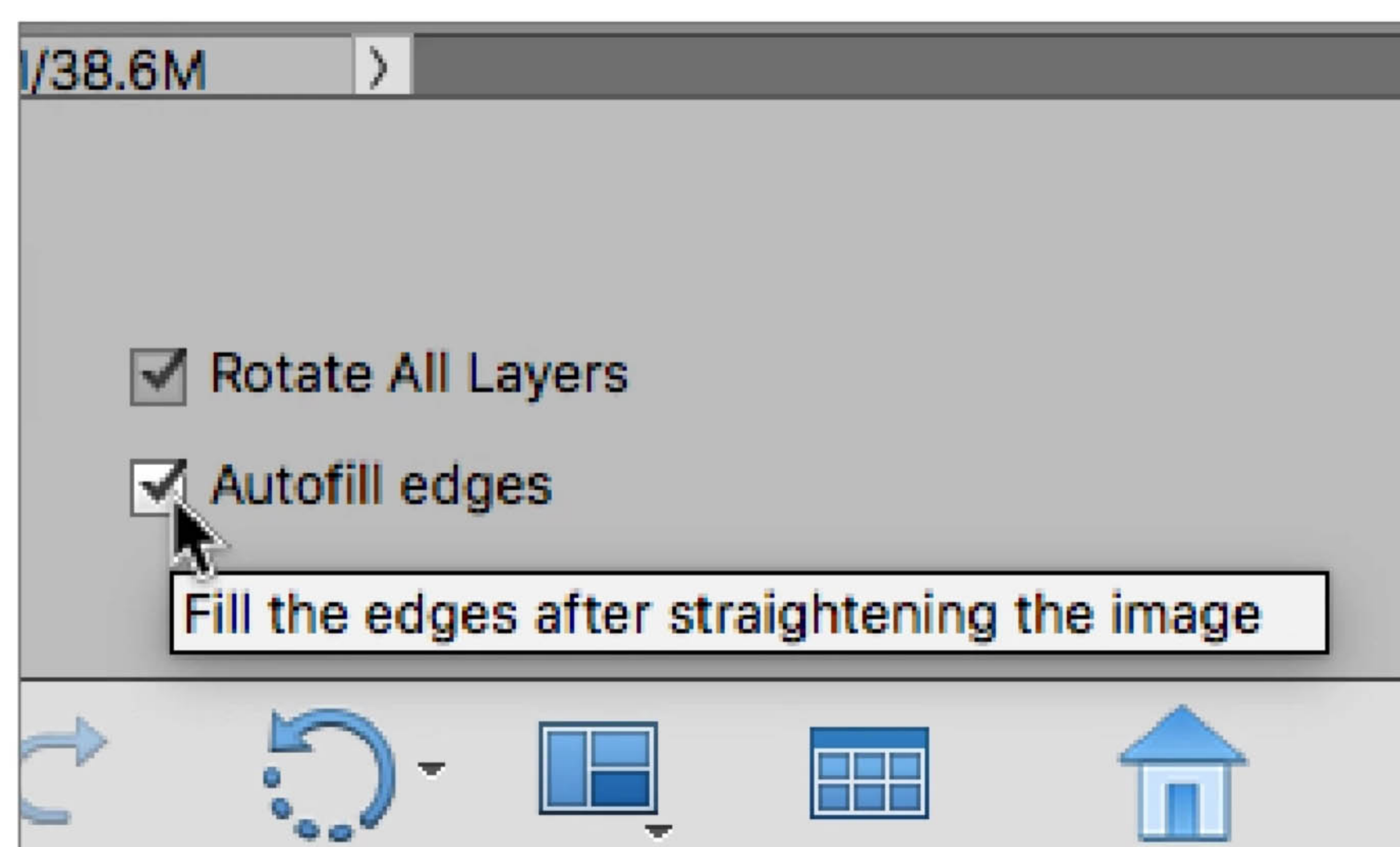
5 When the image is straightened, you can choose how the crop is dealt with once the photo is rotated. You don't want to lose too much of the photo so choose the Grow or Shrink Canvas to Fit option. This way, it won't matter how much the image rotates, it will not be cropped.



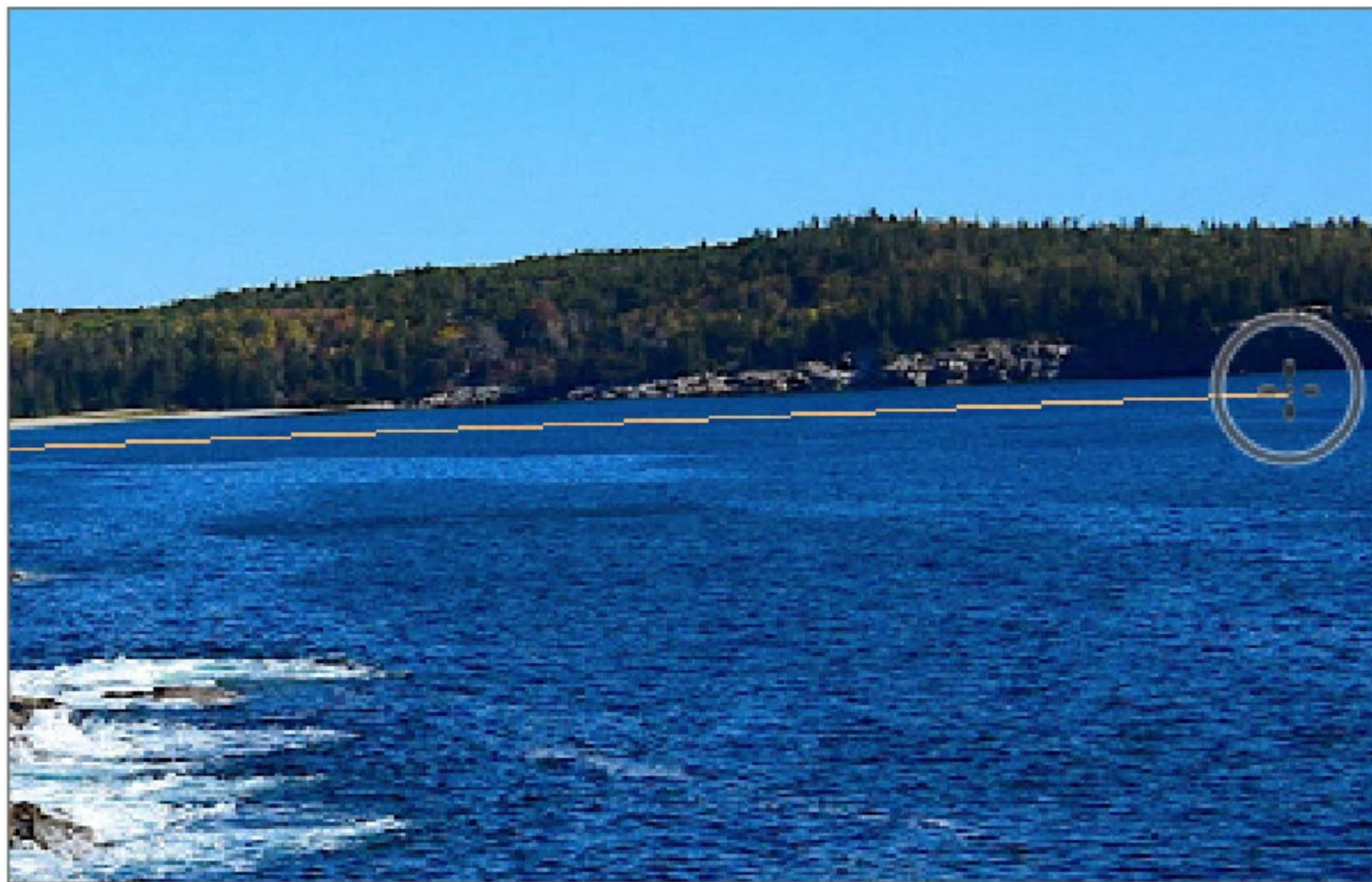
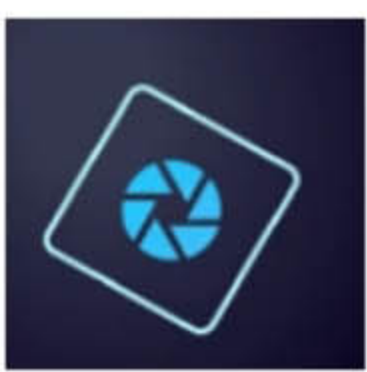
2 Our example is a shoreline image taken on a beautiful blue sky day. Unfortunately, that blue sky just looks a bit empty and is in need of a little attention to make it more appealing. All the trees and rock details below make the image look a bit bottom-heavy. Some clouds should help.



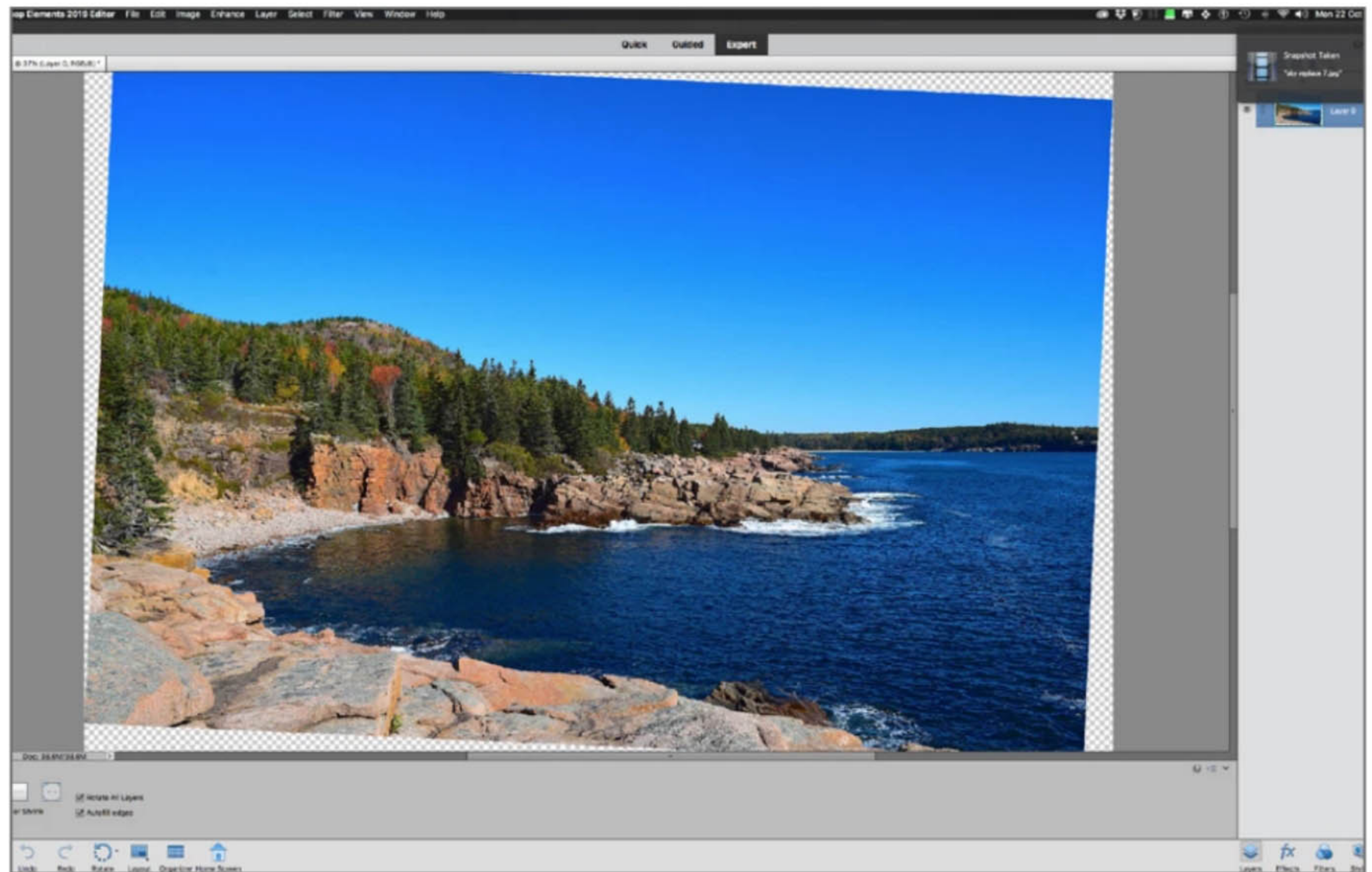
4 Go to the toolbar and in the Modify section and then click on the Straighten Tool (P) to make it active. When you do this, the options panel at the bottom of the screen will display all of the available parameters and options available for that particular chosen tool.



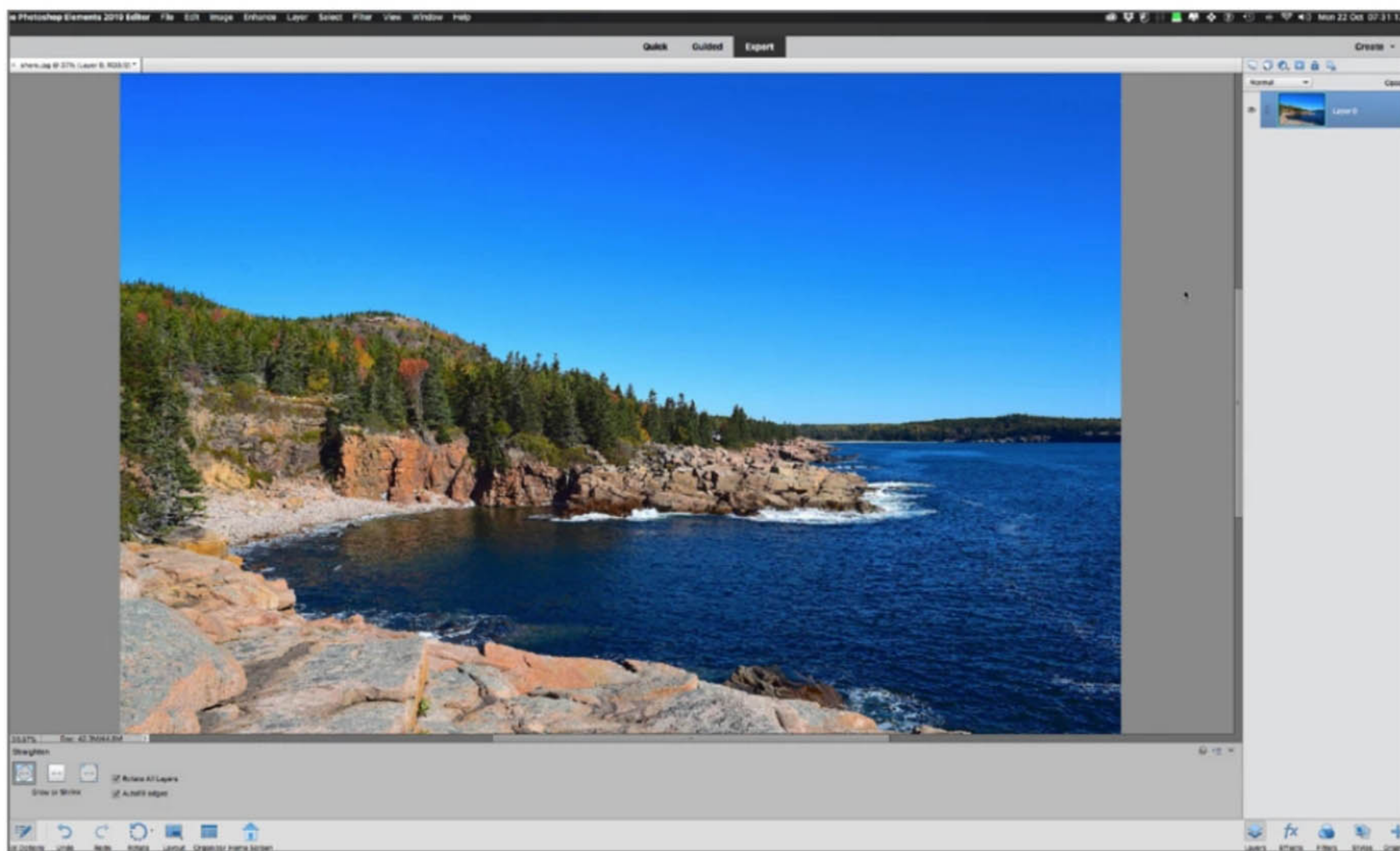
6 Since rotating the image will create blank areas at the edges of the photo, you can also select the Autofill Edges option. This uses the Content Aware Fill technology to analyse the nearest textures at the edges and fill in the blanks using cloned texture.



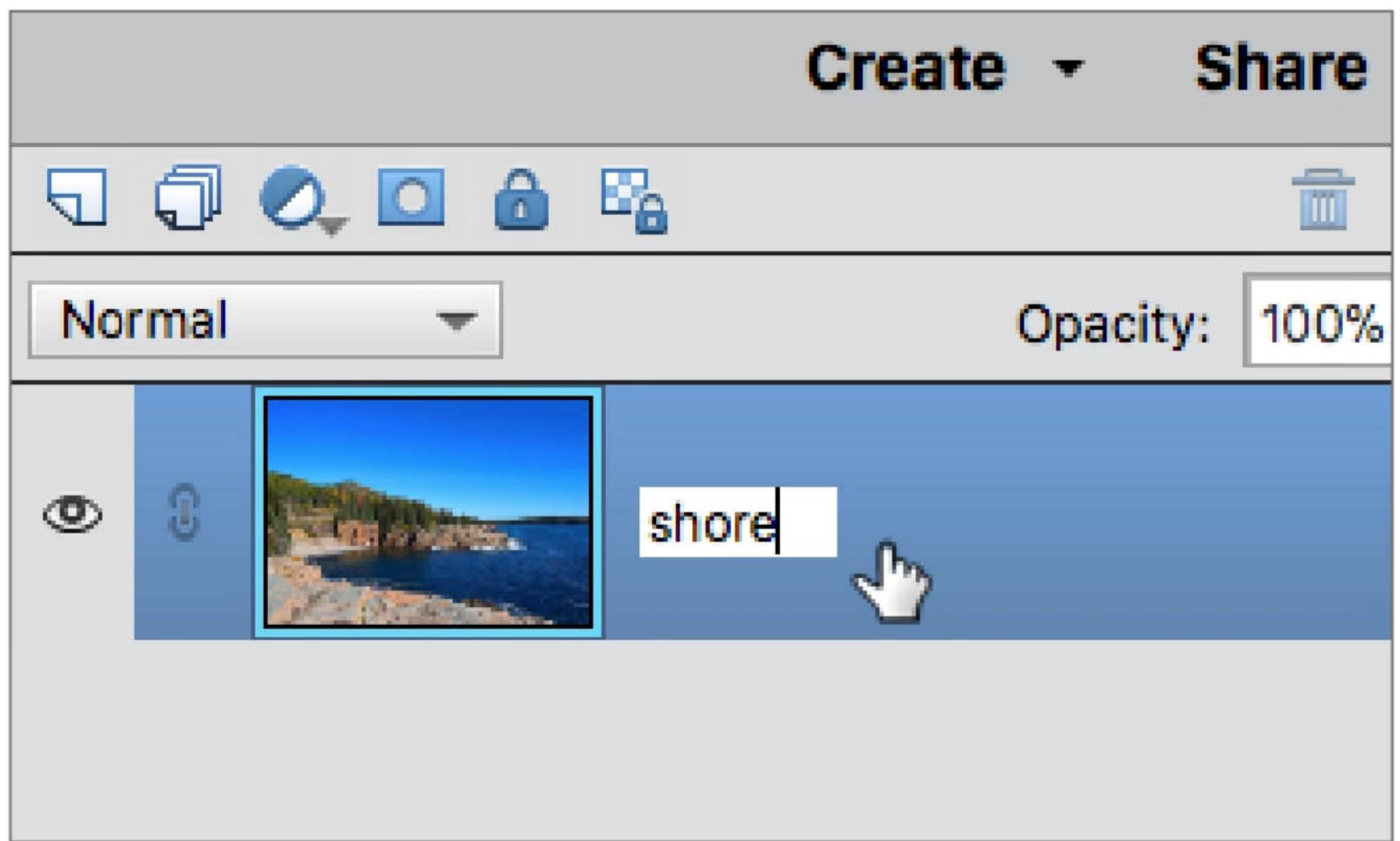
7 Now you can actually straighten that horizon out. Take the Straighten Tool and click and drag a line across a tilted area that you know has to be level. In the back of this photo is a shoreline which can be used as a guide. Drag along it from left to right.



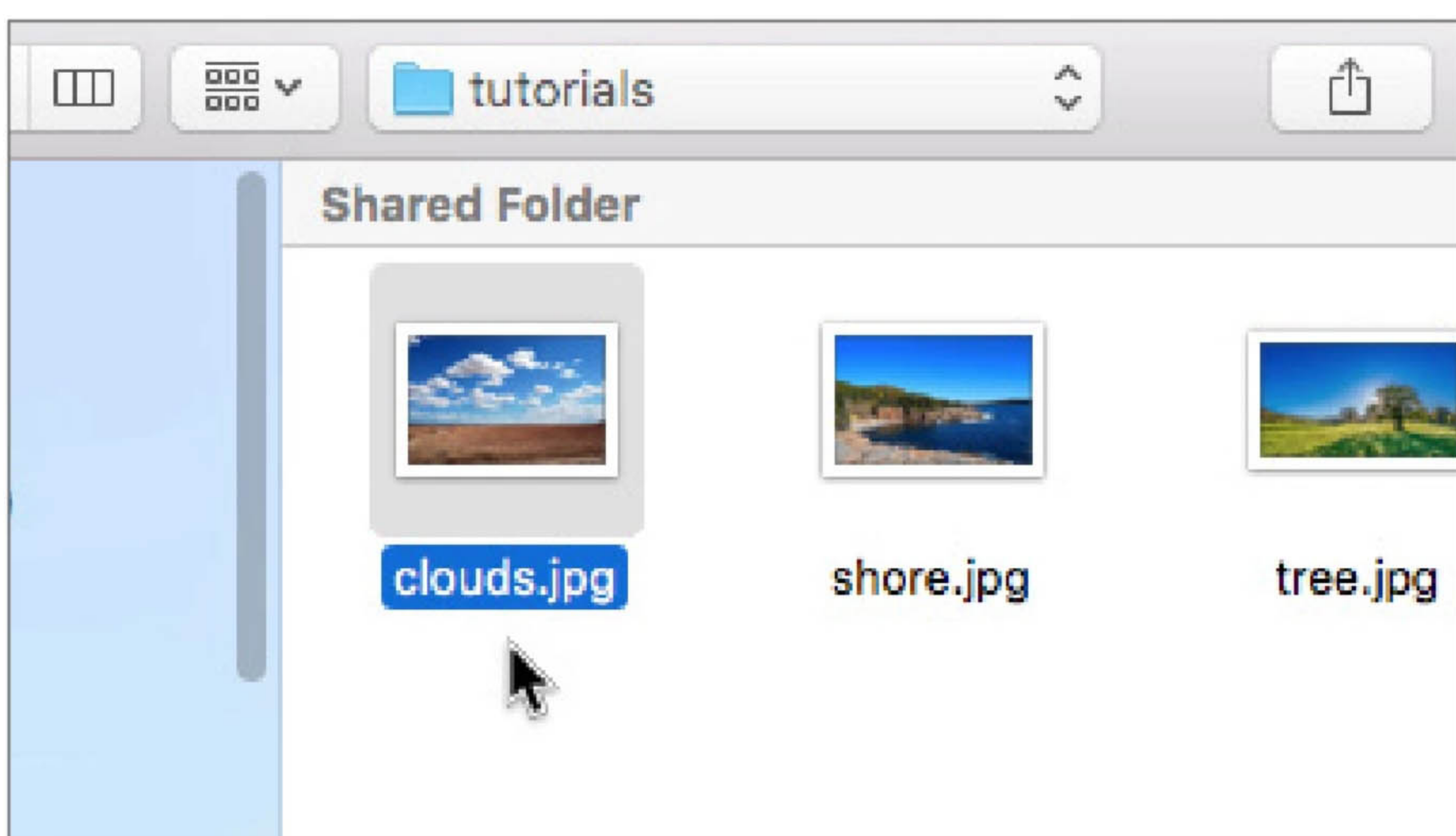
8 When you let go of the mouse, the Straighten Tool rotates the image enough to level out the shoreline. The entire image rotated about 6°, which has created blank areas as the canvas expanded to make sure the photo was not cropped.



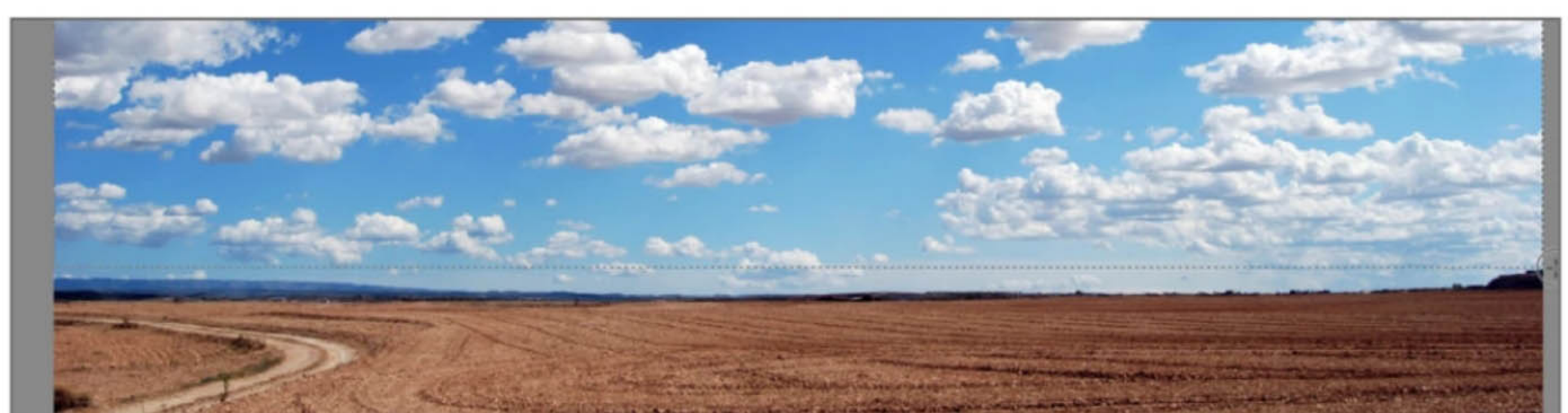
9 When you choose to Autofill the edges, the blank areas are now analysed and then filled with similar textures. Because of the random fractal nature of the trees, rocks and sea, the filled areas match very well, with no obvious cloning errors to be seen.



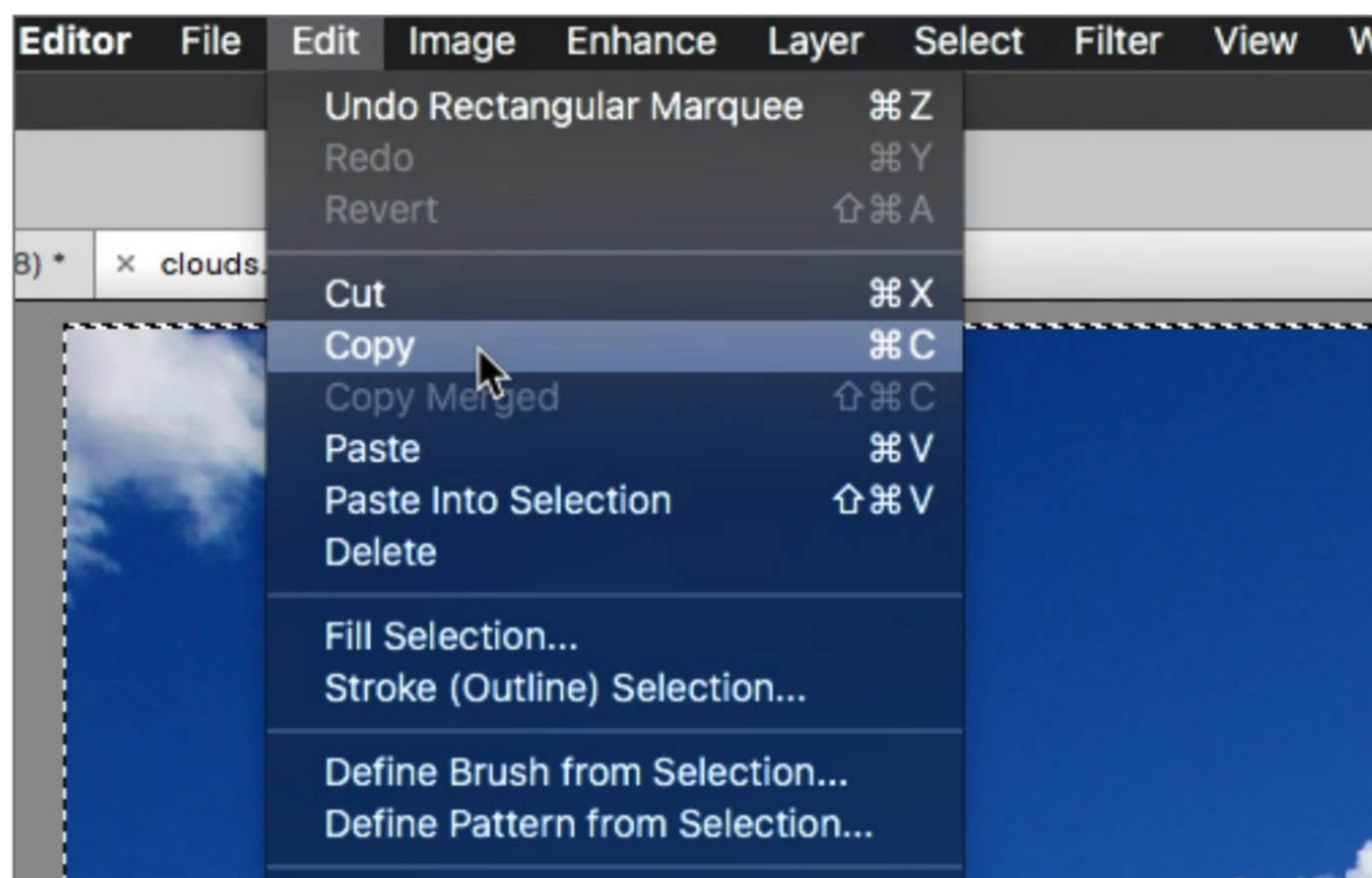
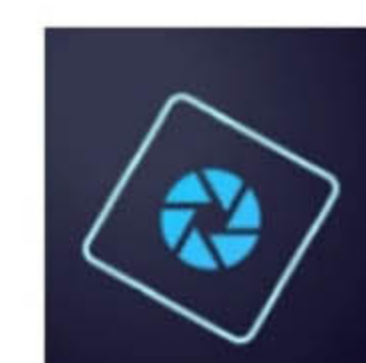
10 If you click on the layer thumbnail for the photo, you can rename it. We called ours 'shore'. Now the image is ready for its blue sky makeover. Go to File > Open (Cmd + O) once again and navigate to the folder where your cloud replacement photo is kept.



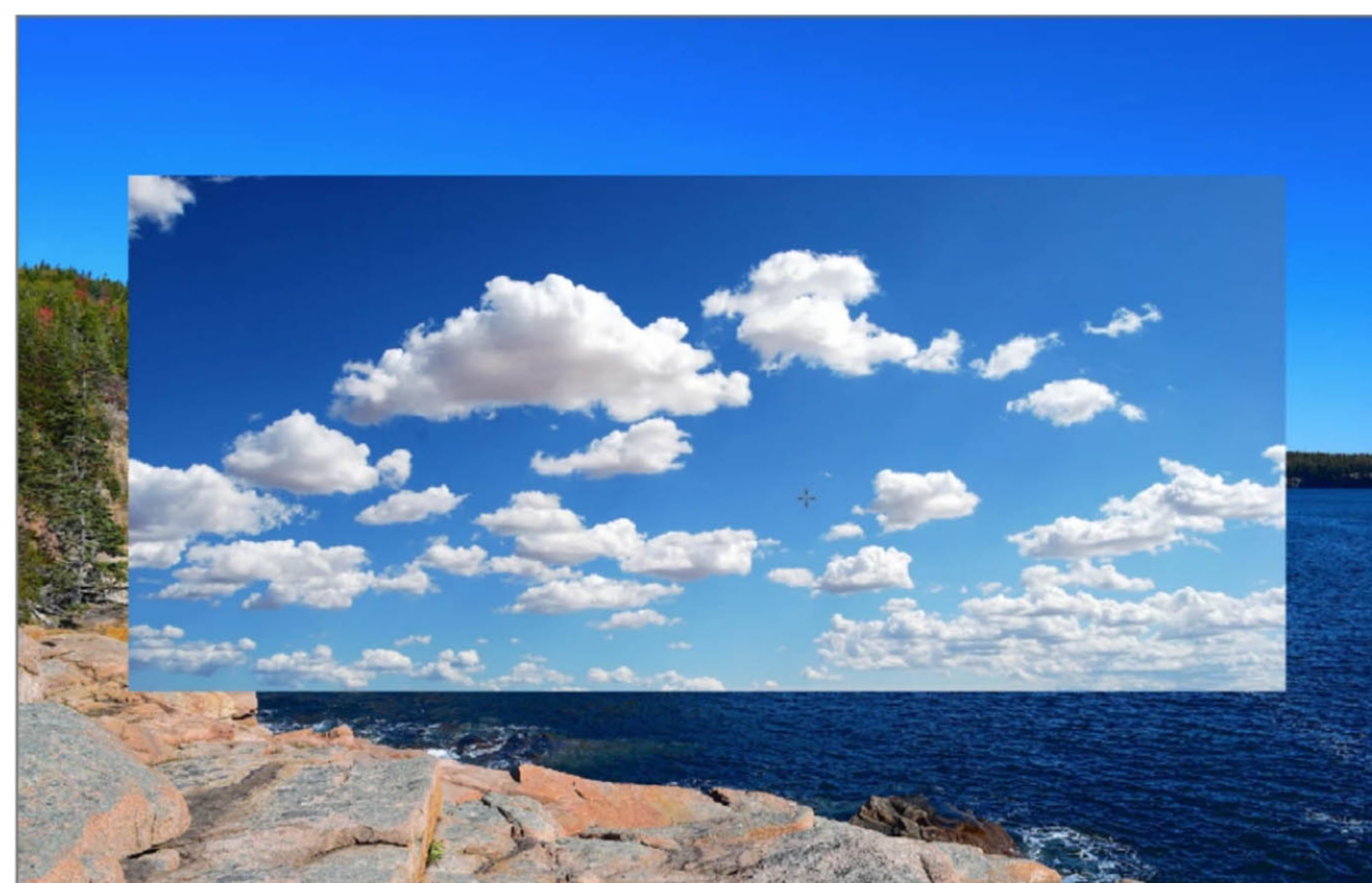
11 Our example clouds were chosen because they are lit in a similar way to the primary photo at roughly the same time of day. This is an important consideration since you want the clouds to look as if they belong in the shot; otherwise the effect is going to look very odd.



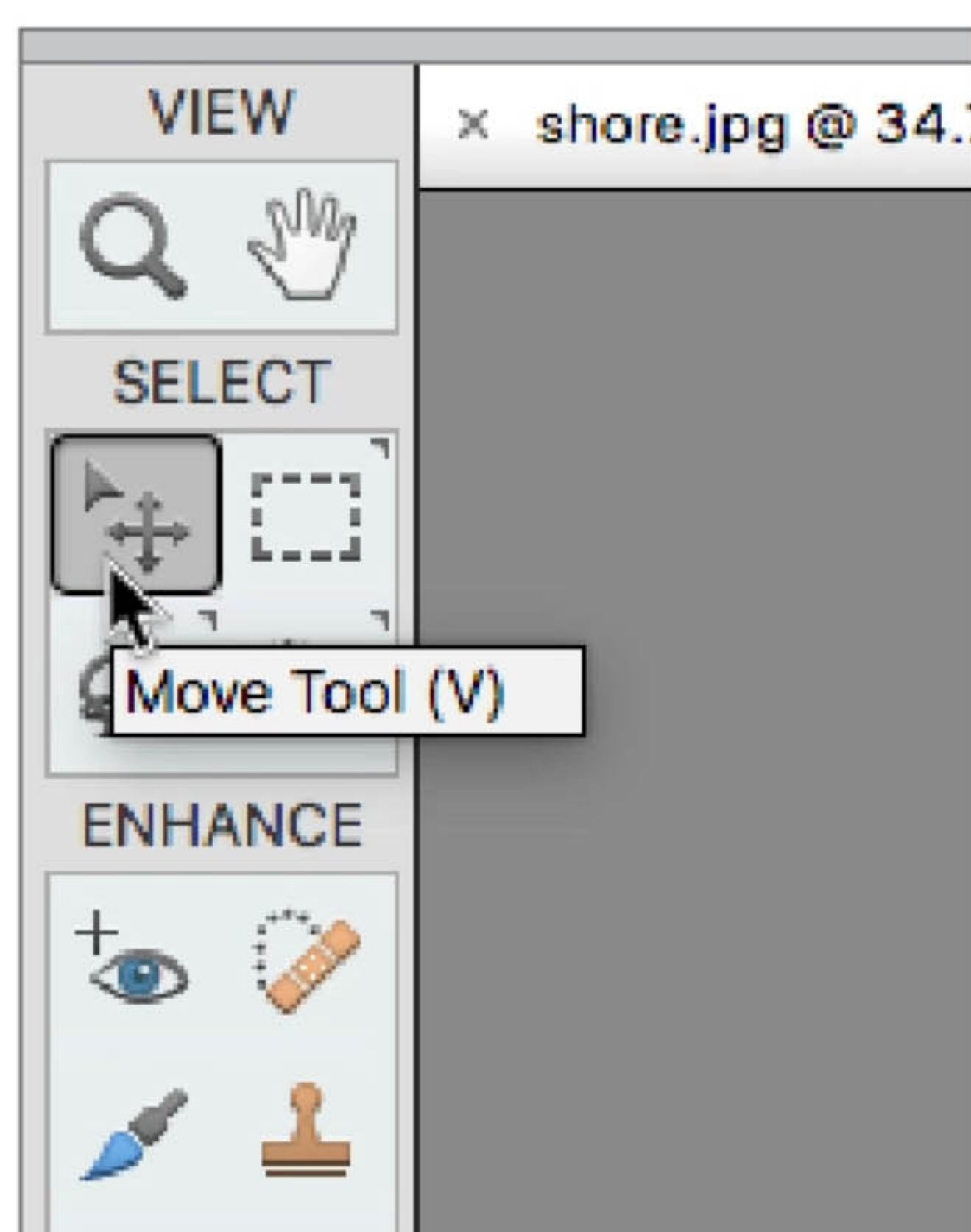
12 Double-click the 'clouds' image to open it. Since you only need the clouds, you can selectively choose just that area to add to the primary photo. Go to the toolbar and choose the Rectangular Marquee Tool (M). You can use this tool to drag a selection box from the top left corner to the right horizon.



13 When you let go of the mouse the selection you drew will become active with black and white dashes known as 'marching ants'. With the selection active, go to Edit > Copy (Cmd + C) to copy the selected sky area to the clipboard ready to use in your photo.



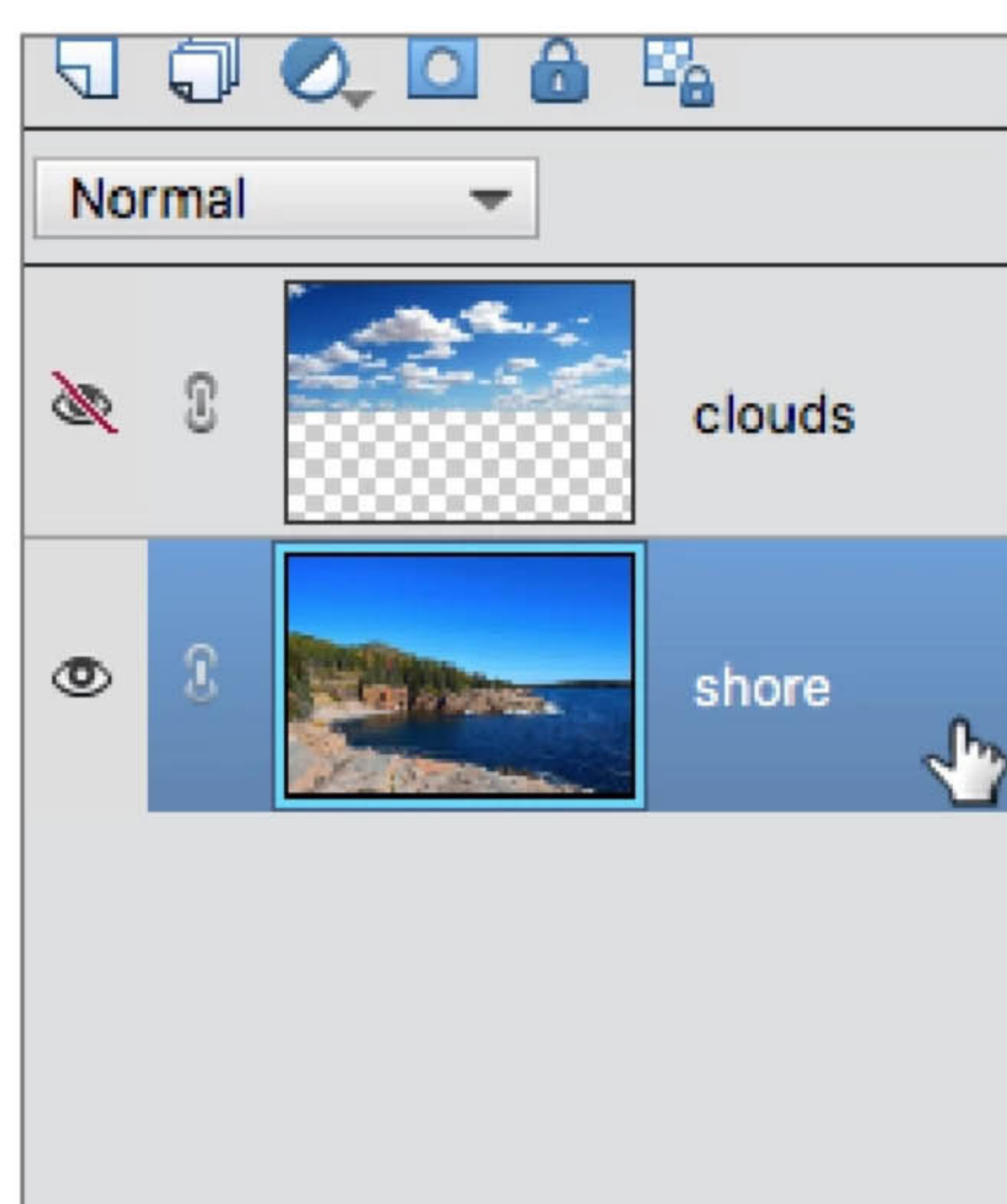
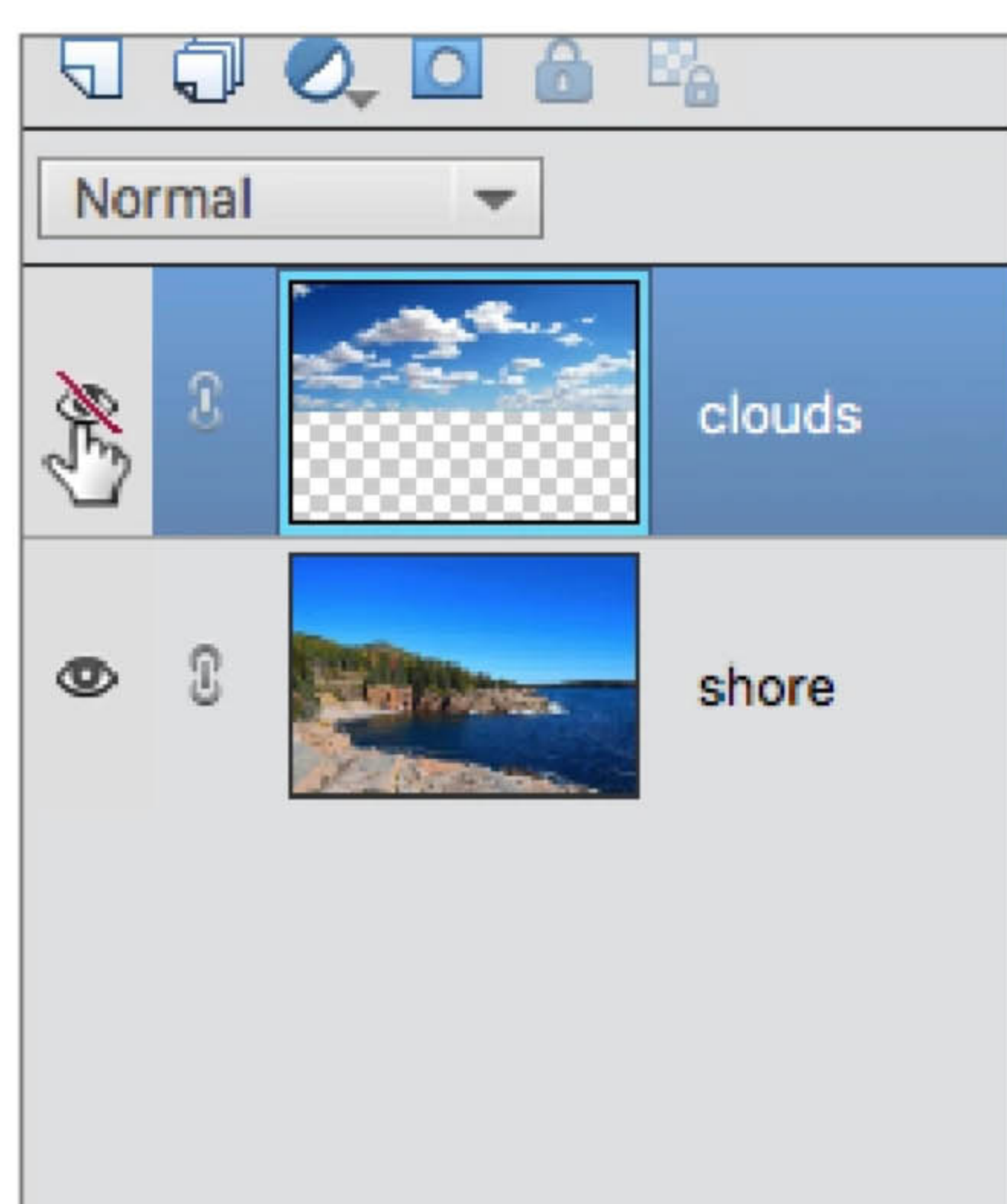
14 Click on the document tab of your primary photo to make it active and go to Edit > Paste (Cmd + V) to paste the copied clouds onto the current photo. It will automatically appear centred on its own layer so as not to destroy the shoreline photo below it. By default the new layer is called 'Layer 1'.



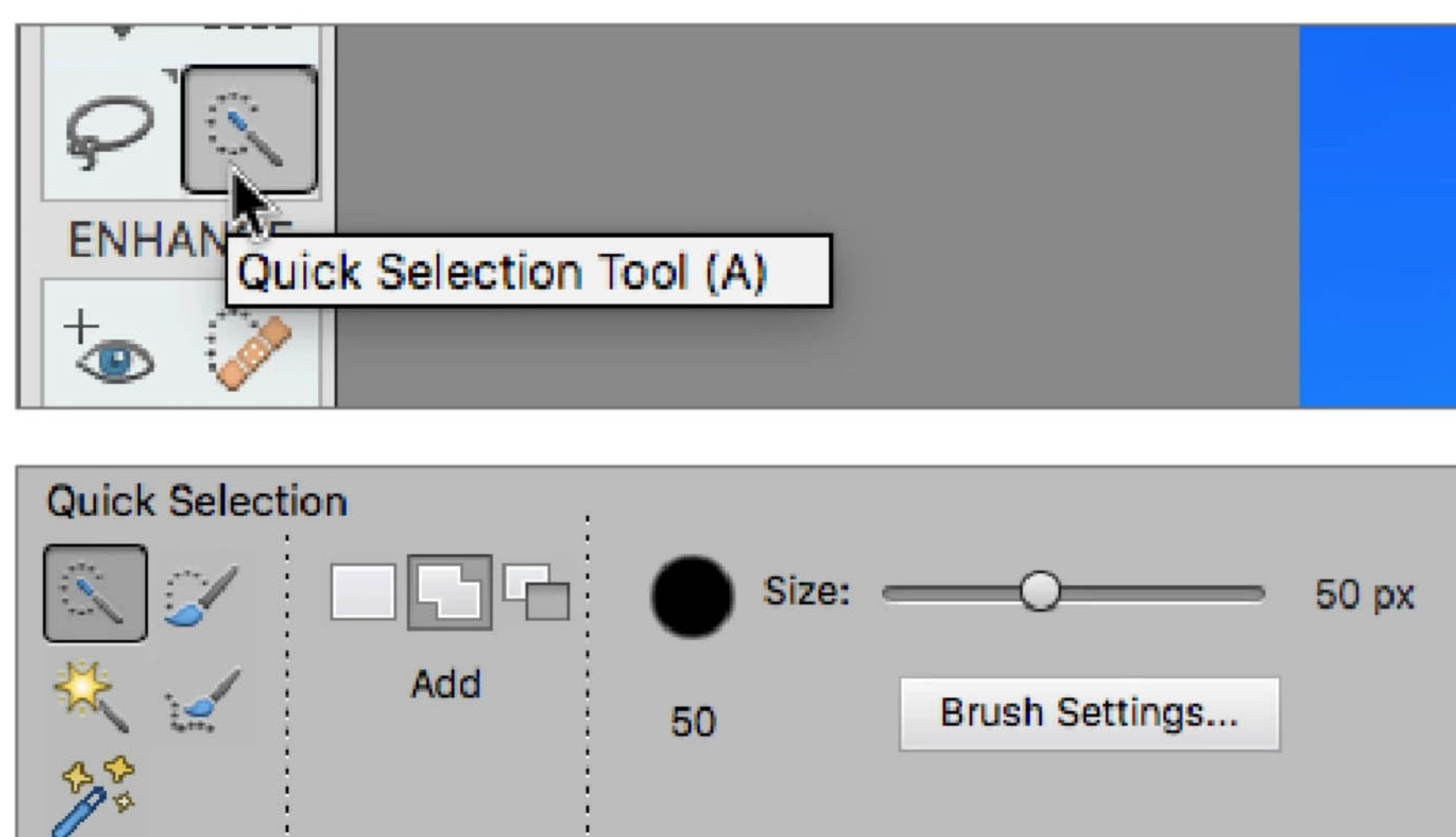
15 Go to the toolbar and choose the Move Tool (V). You can use this to physically click and drag the clouds into the top left corner of the photo and set about making it the right size to match the dimensions of the primary photo.



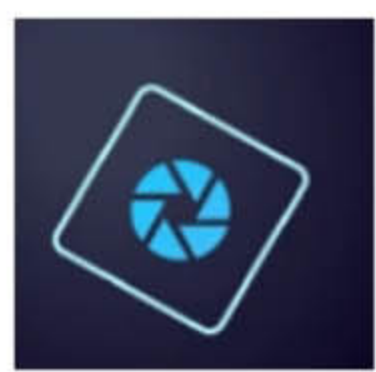
16 You will see that an active layer element will have control points around its perimeter. You can click and drag these control points in order to scale the clouds to fit the new photo. In this example, clicking and dragging the far right centre control point to the edge of the photo.



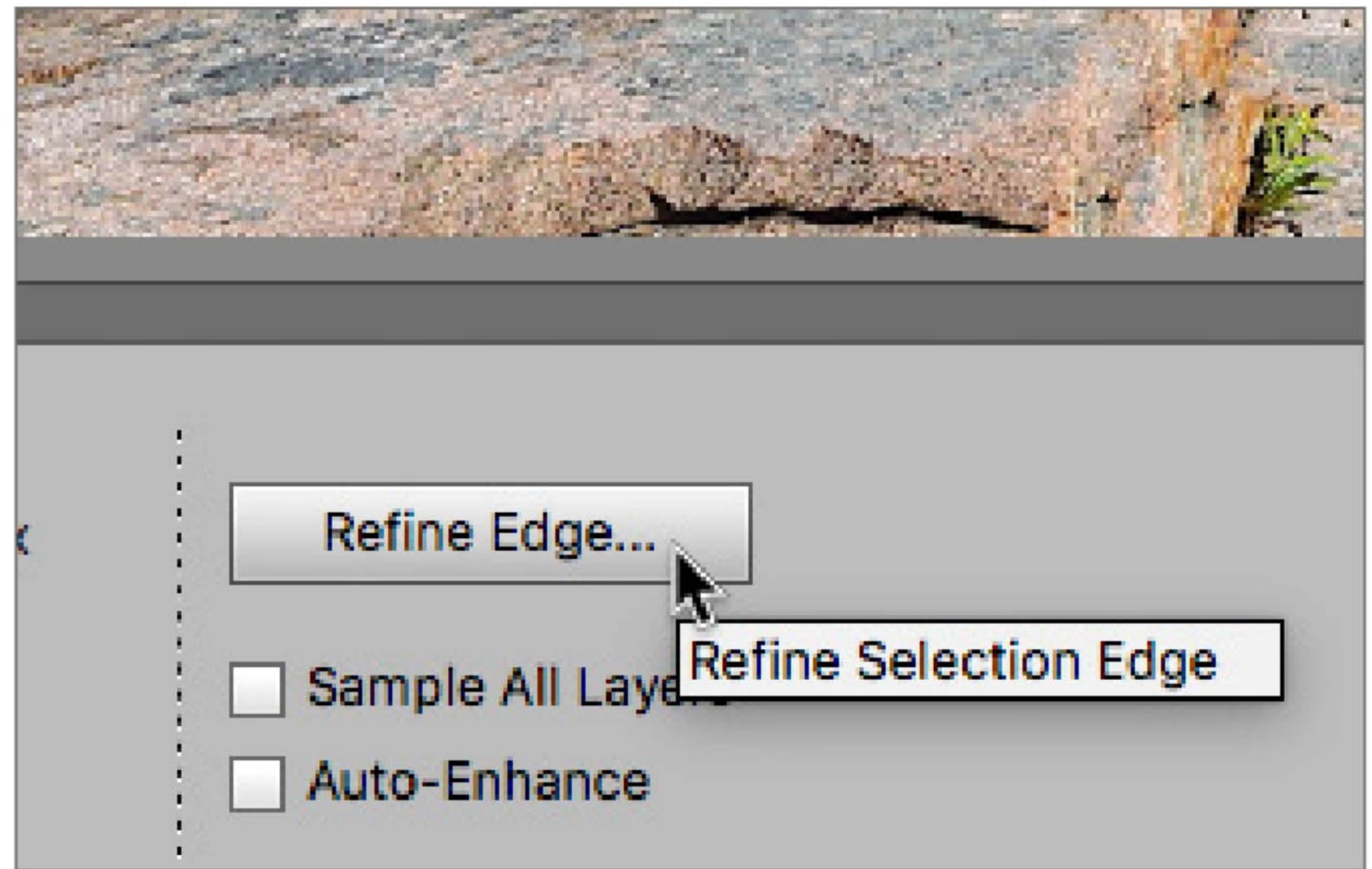
17 You can rename 'Layer 1' as 'clouds'. Now click on the little eye icon to the left of the 'clouds' layer thumbnail. This will make it invisible for the moment. You need to work on the 'shore' layer, so click its thumbnail to make it active.



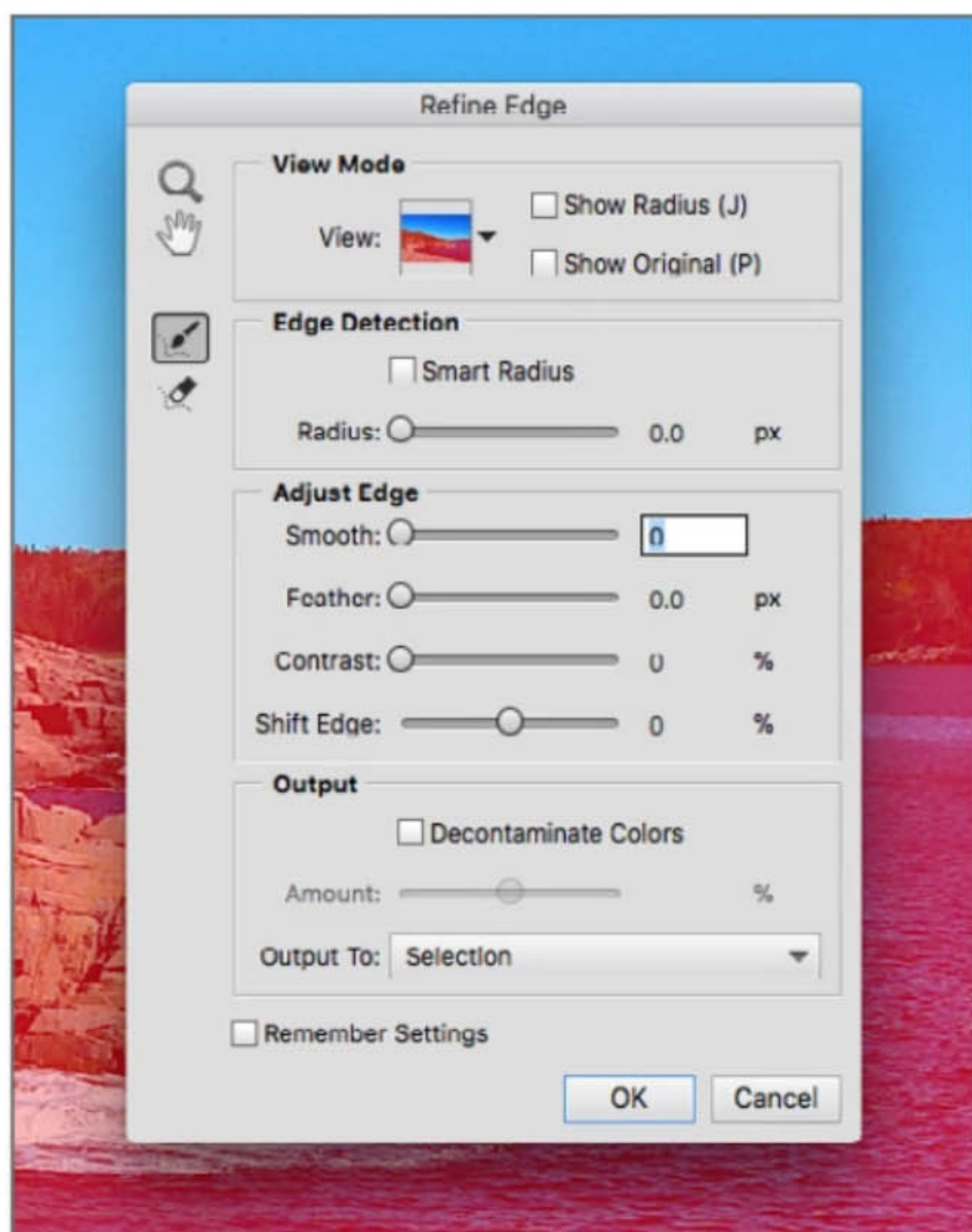
18 Go to the toolbar and choose the Quick Selection Tool (A). You need to use it to make a selection of the sky area. With the Quick Selection Tool active, you will see various options available in the tool options panel at the bottom of the screen. Choose a brush size of about 50 pixels.



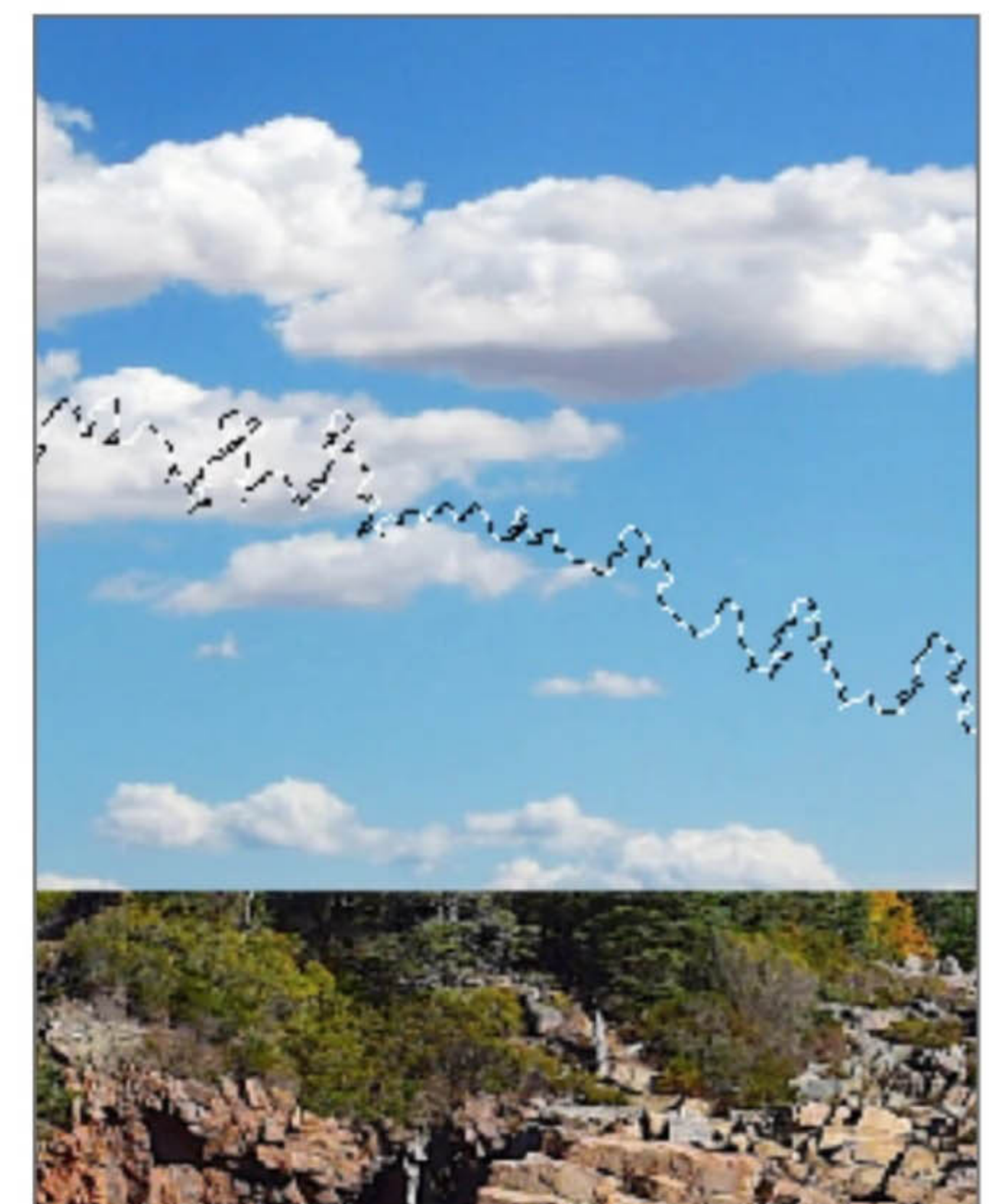
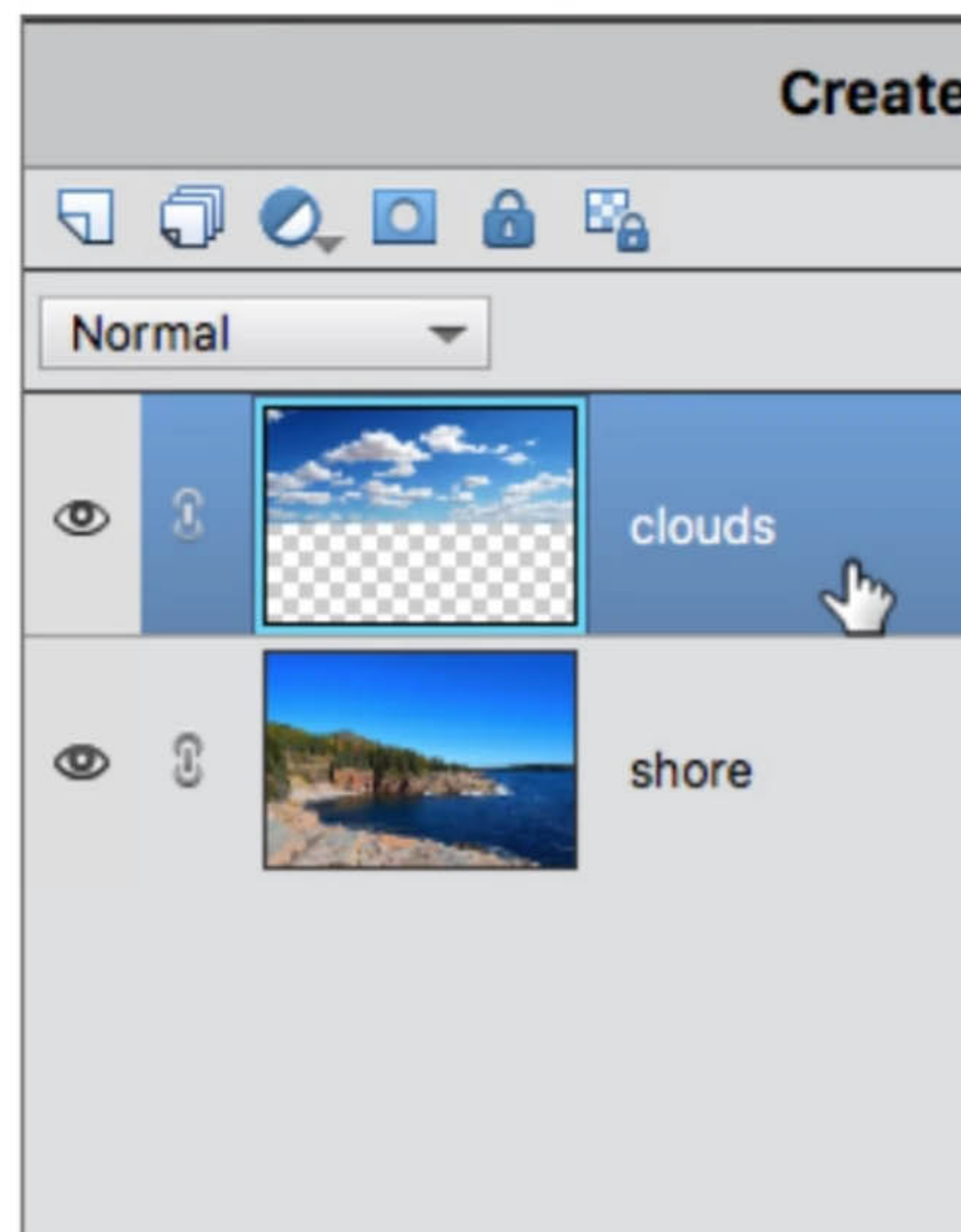
19 Use the Quick Selection Tool to start selecting just the blue sky. Drag the cursor over all blue areas, avoiding all others, and it will automatically select as you go. Because the tree line is of a different colour and hard-edged, the selection tool has no real difficulty in choosing just the sky.



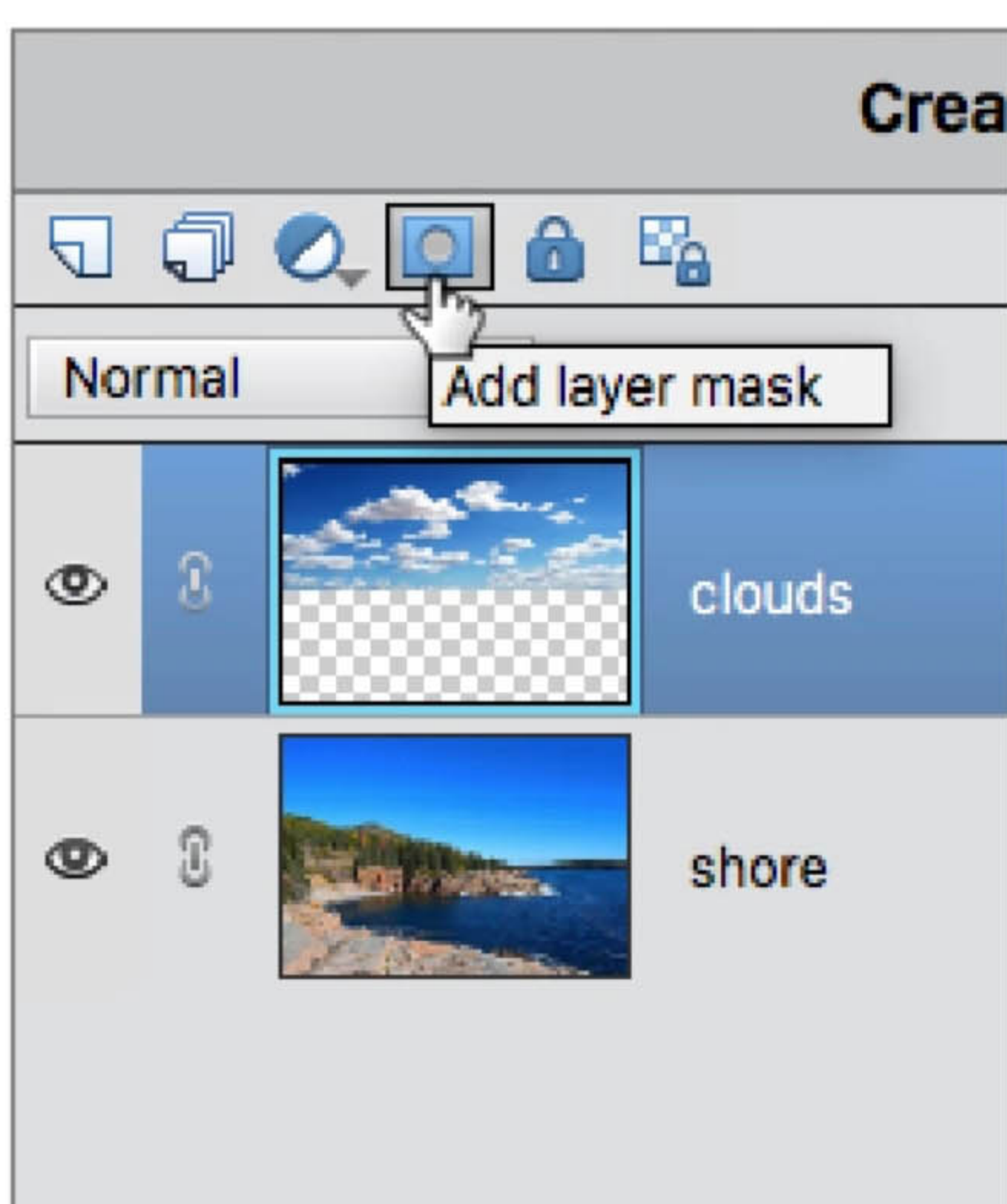
20 With all of the sky selected, you can now use the Refine Edge tool to make the selection even more accurate. Click the refine Edge button in the tool options panel to open the Refine Edge dialog panel. In this case, the default Edge Detection and Adjust Edge settings will be fine.



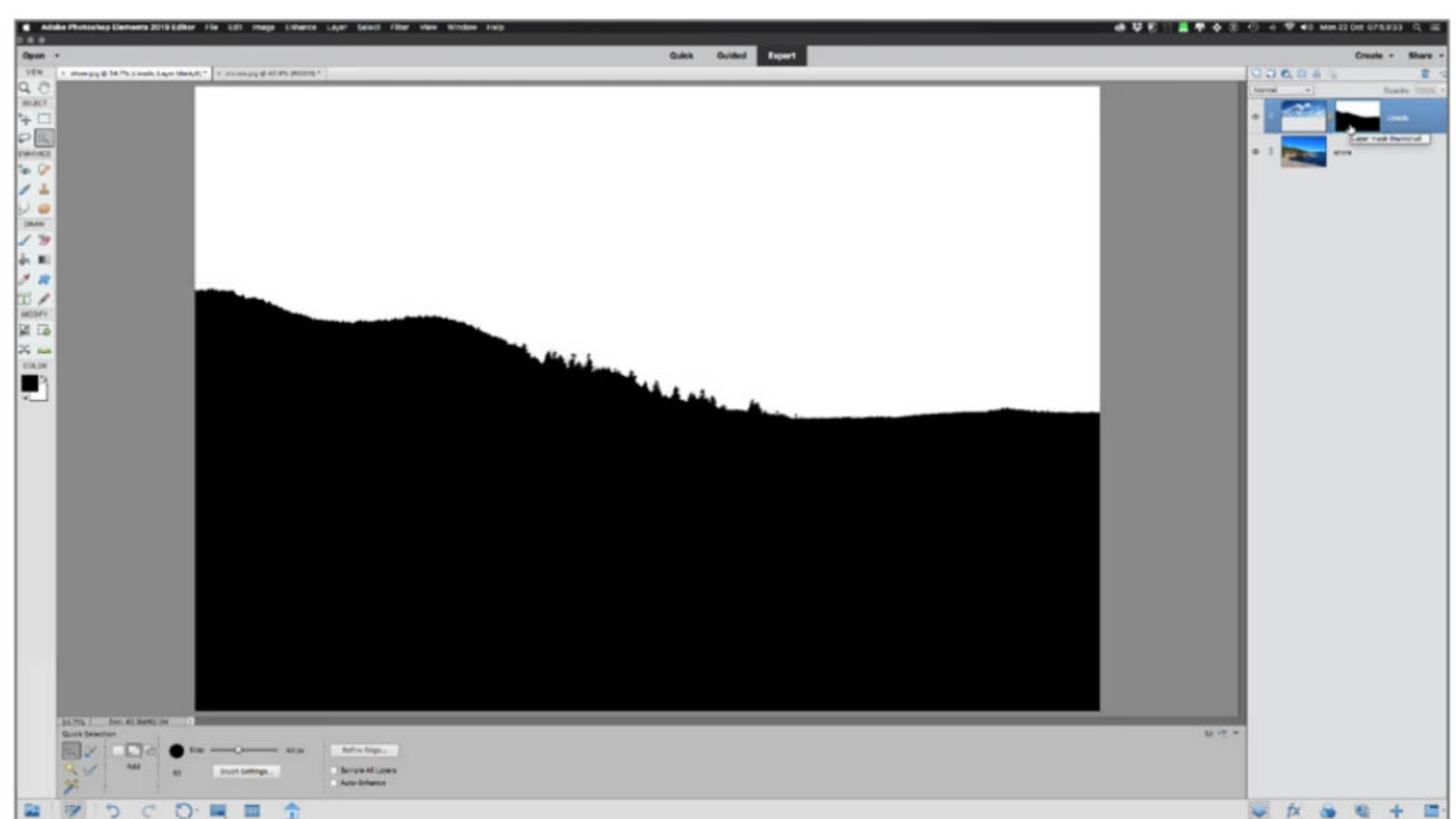
21 Simply start to brush over the areas where the sky meets the horizon line and trees. The Refine Edge tool will make more accurate, targeted refinements, particularly around the tree areas. If you are happy that the selection is as good as it can be, you can click OK to proceed.



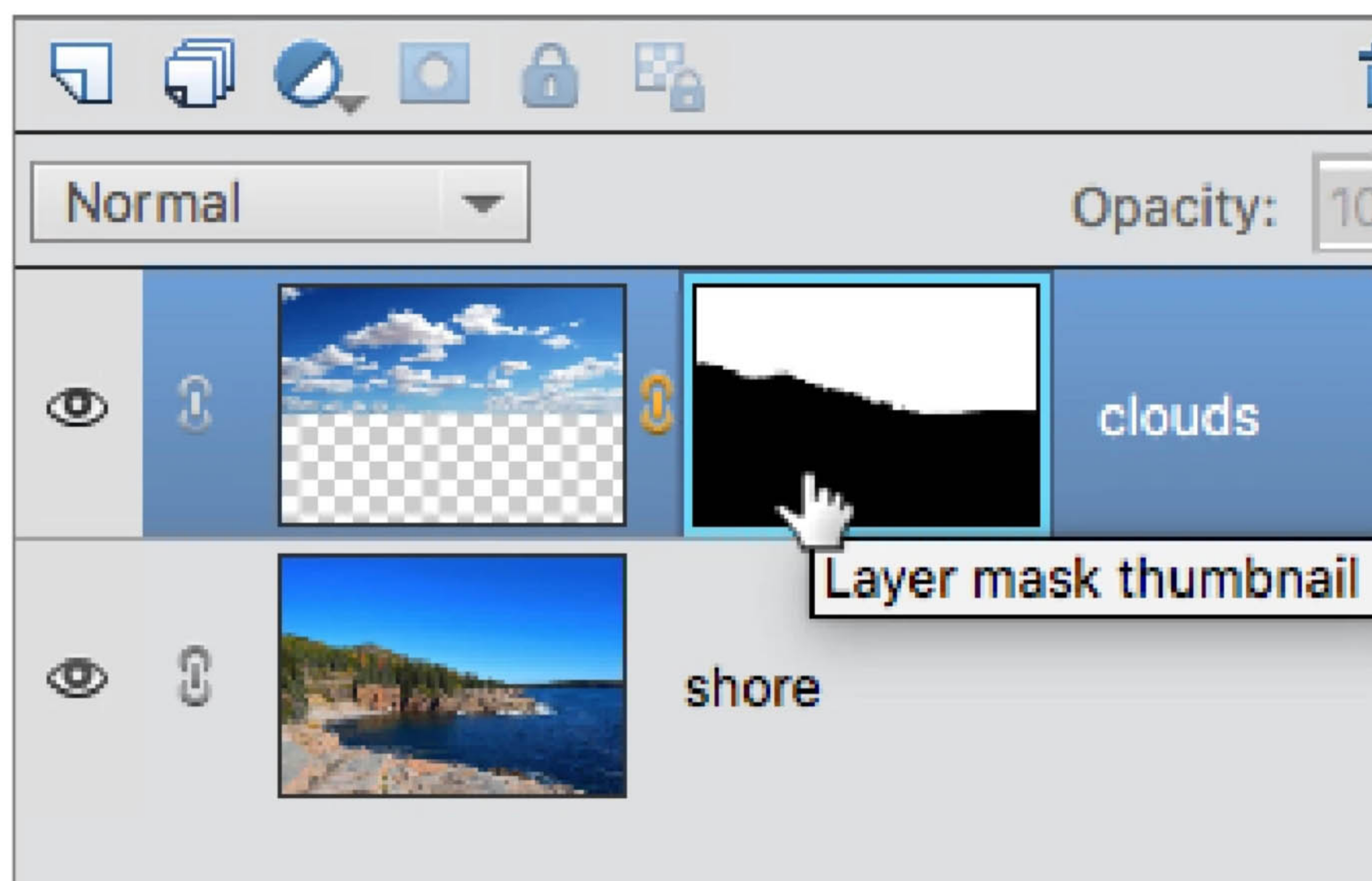
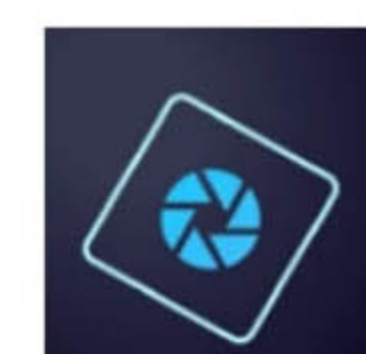
22 The selection edge will be refined, ready for the next step. Click the 'clouds' layer visibility icon to make it visible again and you will see the selection, denoted by 'marching ants', overlaid on the clouds. Keep the selection active and make sure the 'clouds' layer is also active.



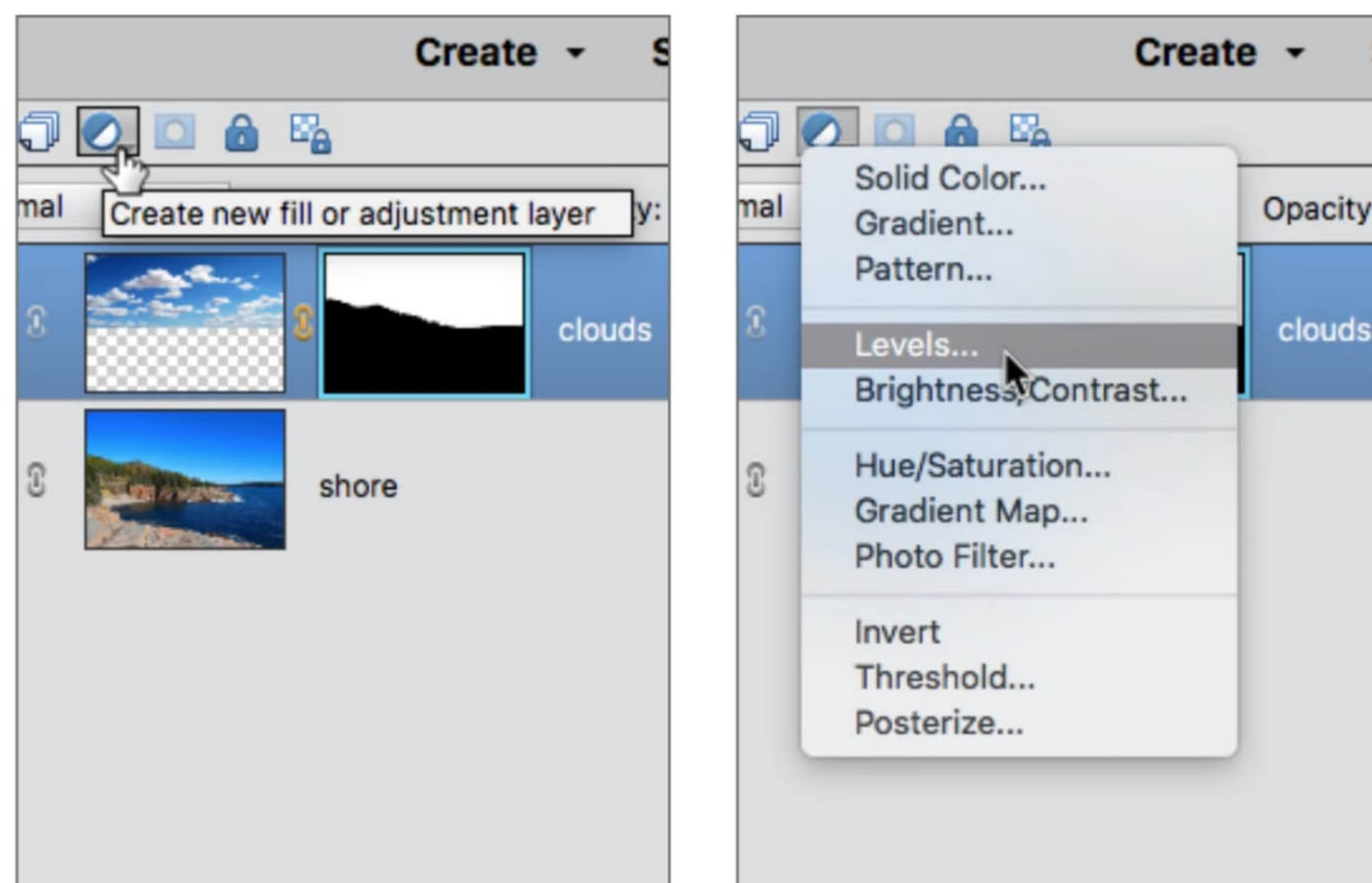
23 Click on the Add Layer Mask button in the layer options panel and a layer mask will automatically be added to the 'clouds' layer in the shape of the active selection. Anything inside the selection is white, anything outside the selection is black.



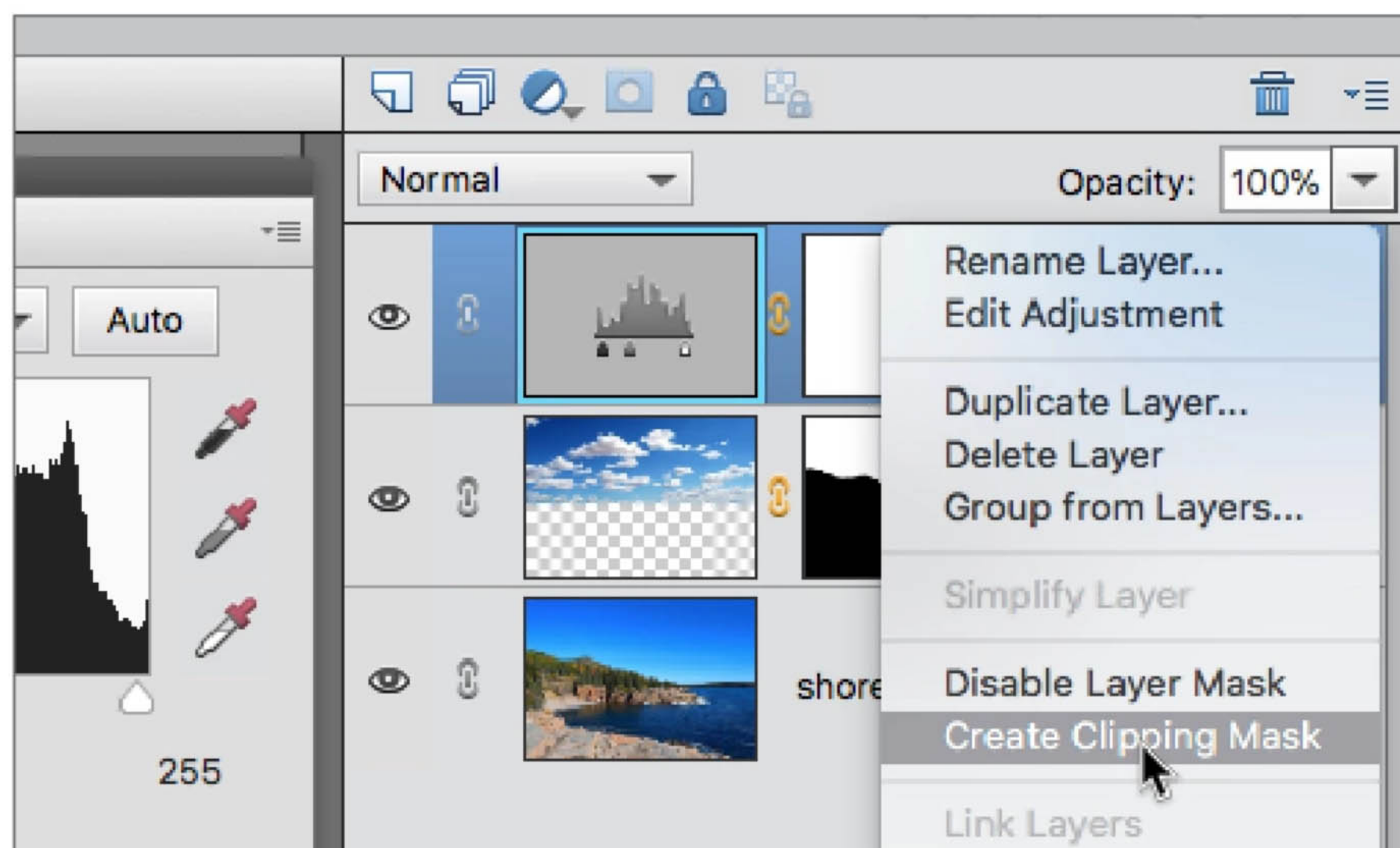
24 When you Alt + left-click on the layer mask thumbnail, you can view the mask on its own in black and white. You can see how the Refine Edge Tool has quite accurately masked the trees and horizon. You can Alt + left-click the layer mask again to return to the normal view.



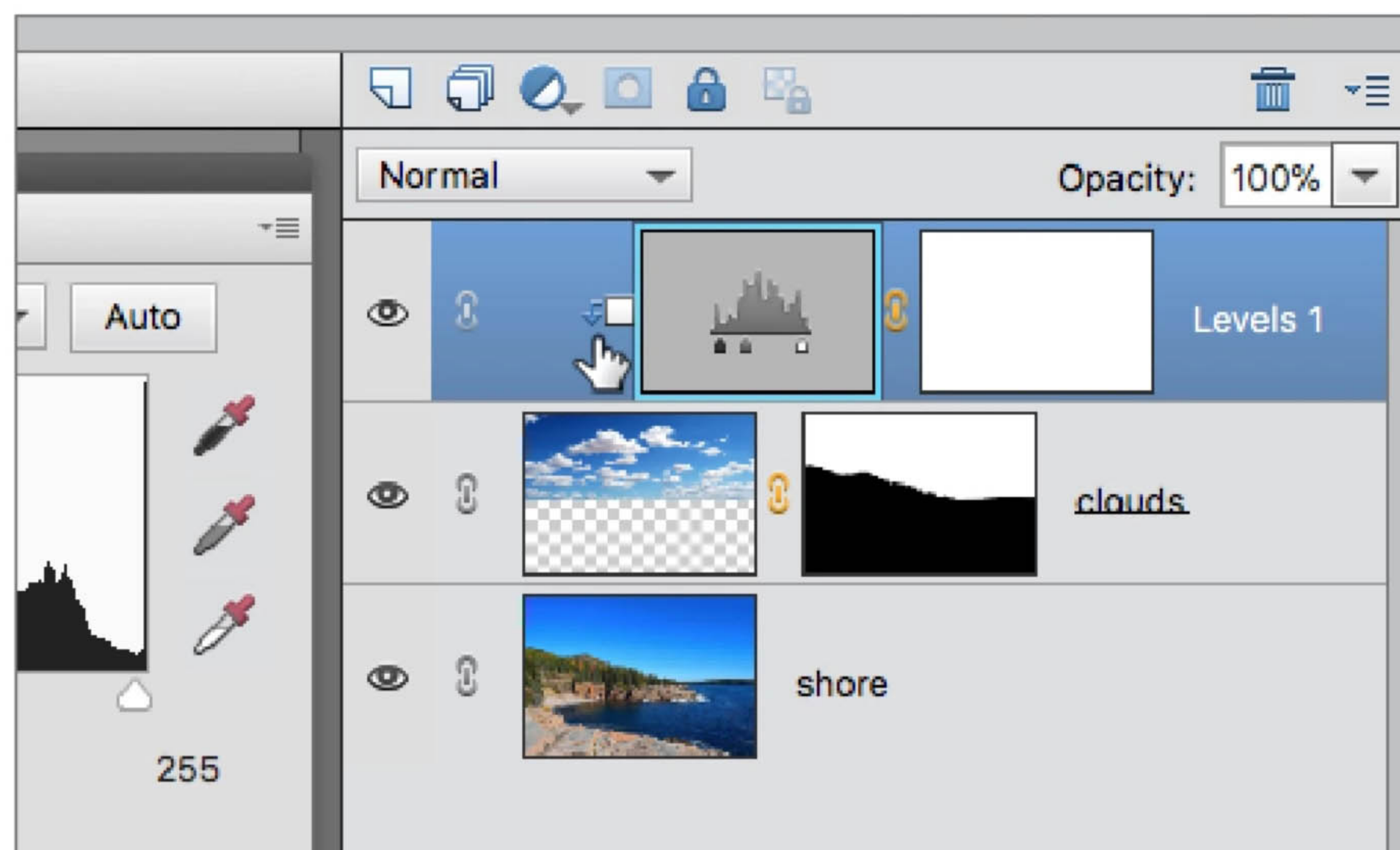
25 With masks, the rule of thumb to keep in mind is that white reveals part of a masked image, whereas black will conceal areas of your photo. In this case, the clouds are allowed to be visible but anything below the trees is hidden by the black areas of the mask.



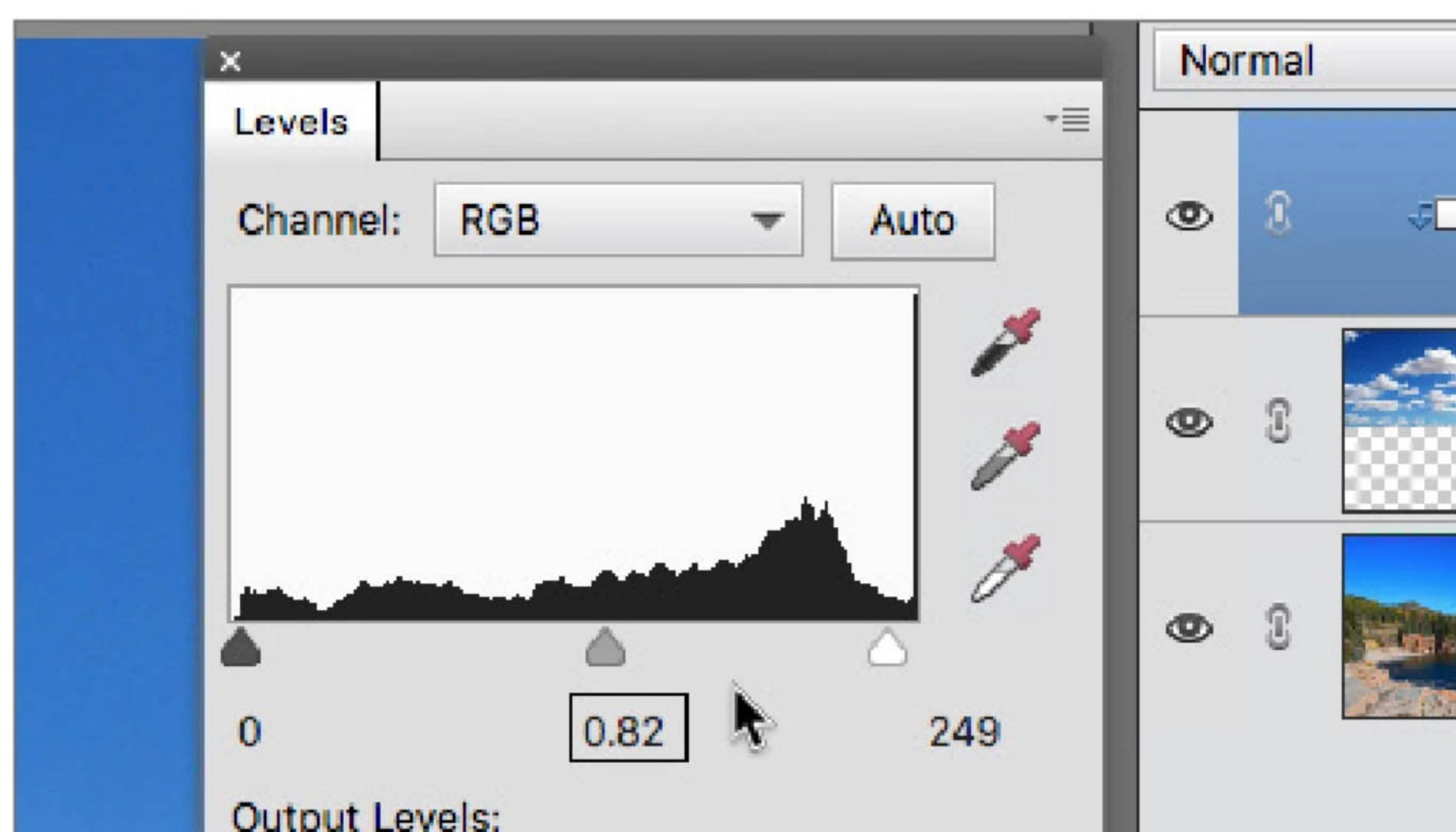
26 It would be good if the sky was just a little darker to match the exposure of the primary photo. Keep the 'clouds' layer active and click the Create New Fill or Adjustment Layer. Select Levels from the menu that appears. A 'Levels 1' adjustment layer will be added above the 'clouds' layer.



27 Right-click the 'Levels 1' adjustment layer and choose Create Clipping Mask from the context menu that appears. This will clip the adjustment layer to the 'clouds' layer which is directly below it in the stack. Any adjustments made will only affect the 'clouds' layer and nothing else.



28 A small box with an arrow will appear to the left of the adjustment layer thumbnail to indicate it has been clipped to the layer below. A Levels dialog panel will open automatically, ready for you to make adjustments to the clouds.



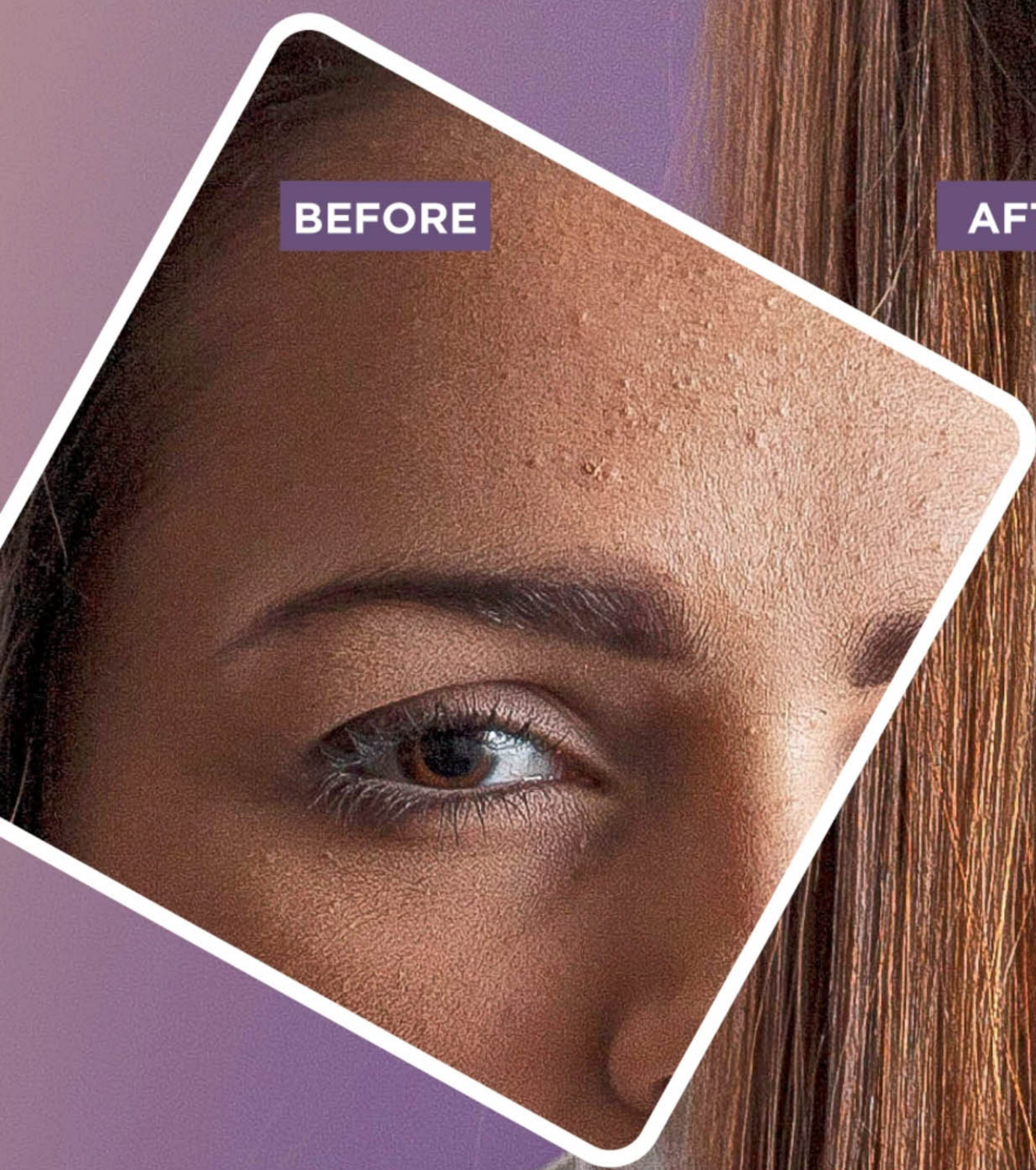
29 The sliders in the Levels panel allow you to darken and lighten the Shadows, Midtones and Highlight areas of the photo. Dragging the Midtones slider to the right slightly will darken the sky. You can experiment with all the sliders until you have something you like.



30 With that, your sky replacement is complete; you can go to File > Save As and save your layered document as a PSD file. This will keep all your edits intact should you ever want to revisit this image and make more amends to it.



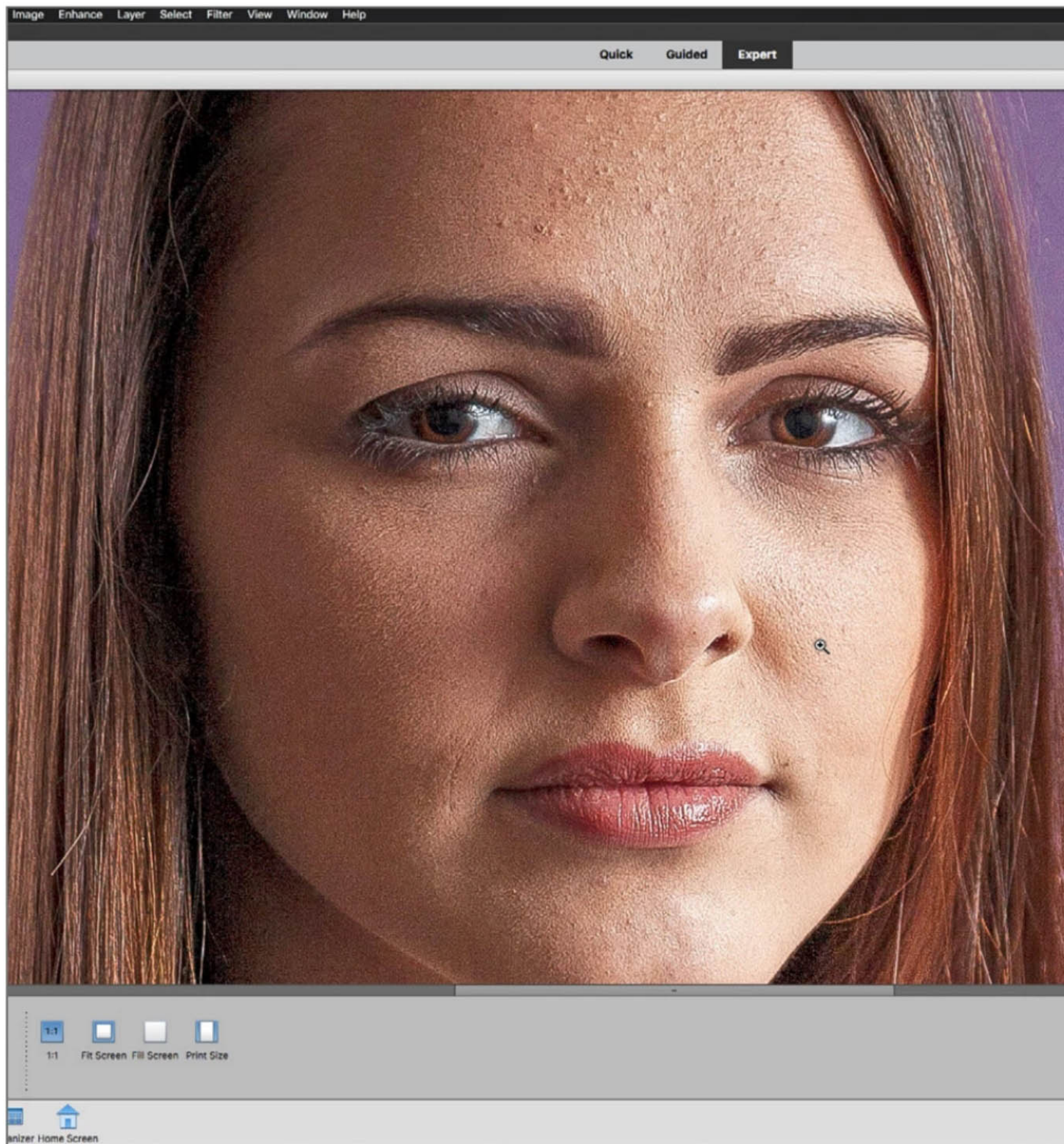
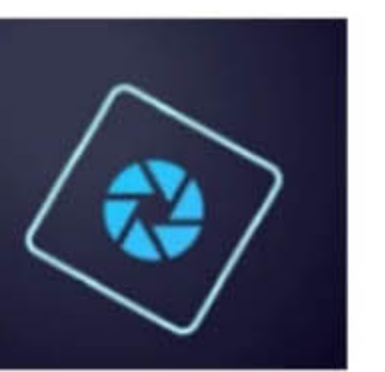
Frequency Separation



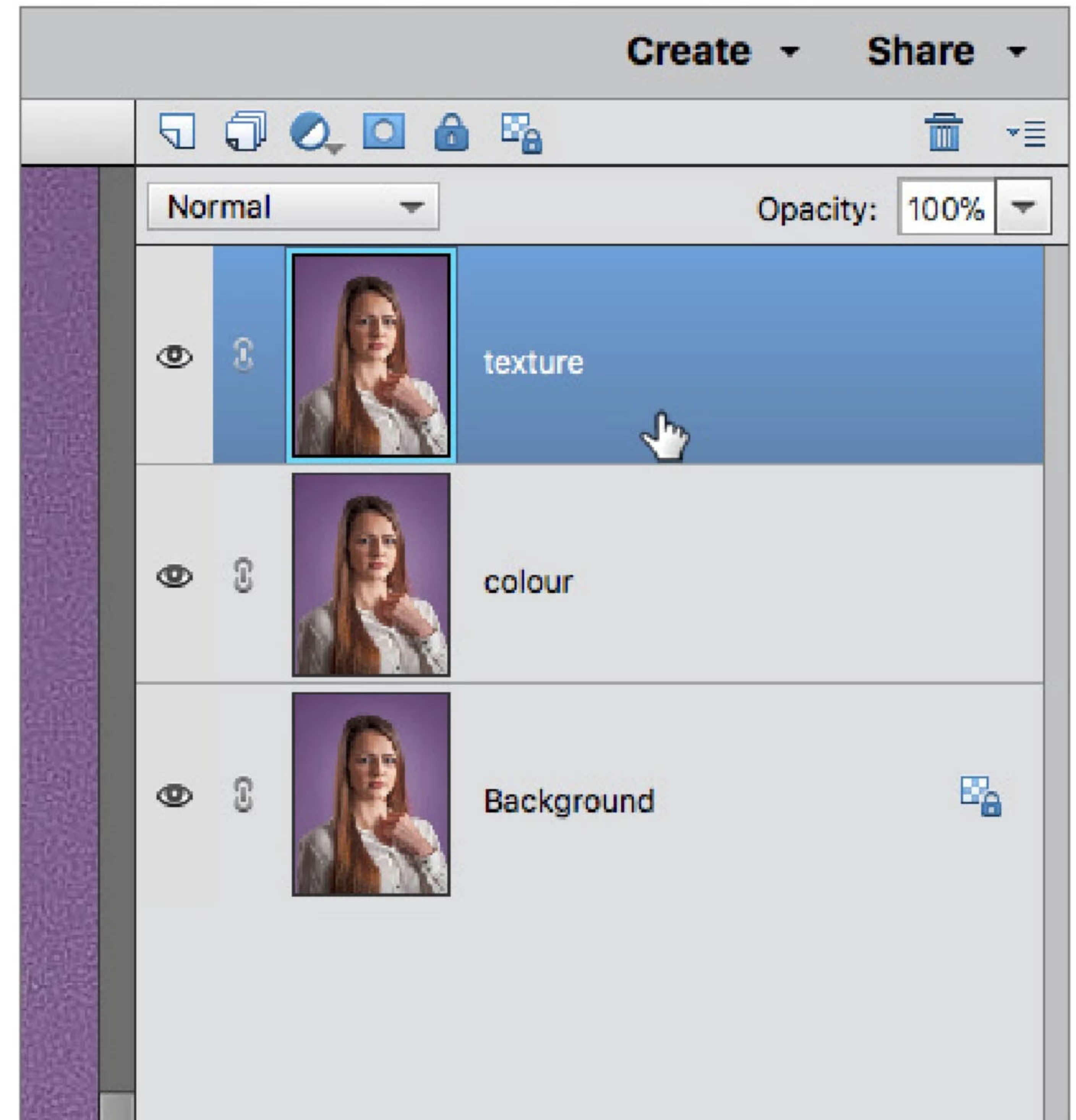
BEFORE

AFTER

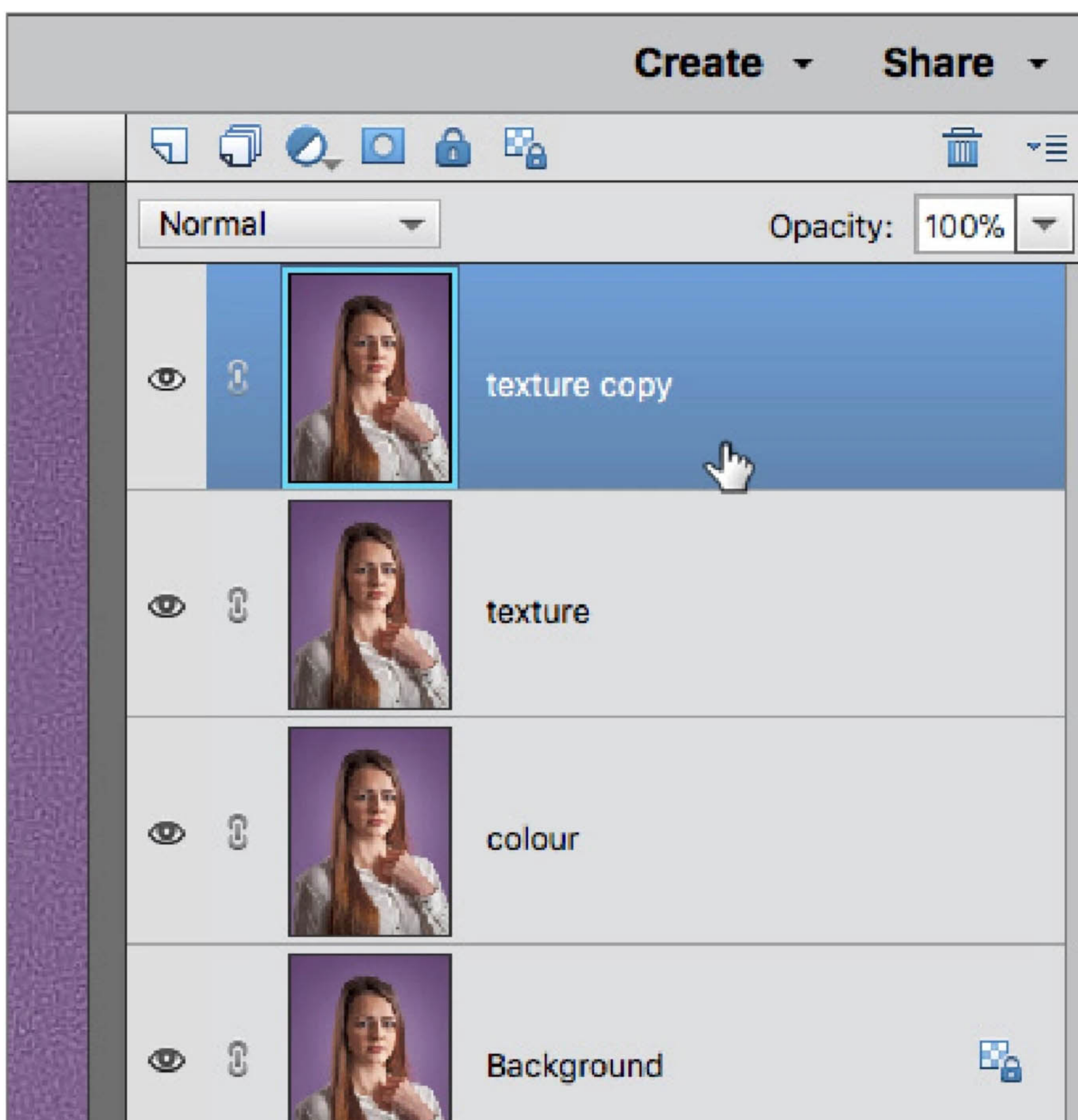
Thanks to digital technology you can be a makeup artist and control exactly how you want your subject to look. Naturally, there are numerous ways you can go about retouching skin. Some techniques are very simple but do not give natural results. Some people take it to extremes and end up with their models looking like mannequins. All we are looking to do is make our model's skin look as healthy and glowing as possible. We are going to use a technique called frequency separation. Simply put, you break the base image down into two components. One layer carries just colour and tonal information, the other layer holds detail and texture. This means you can work on one, without affecting the other. It's a simple and effective method.



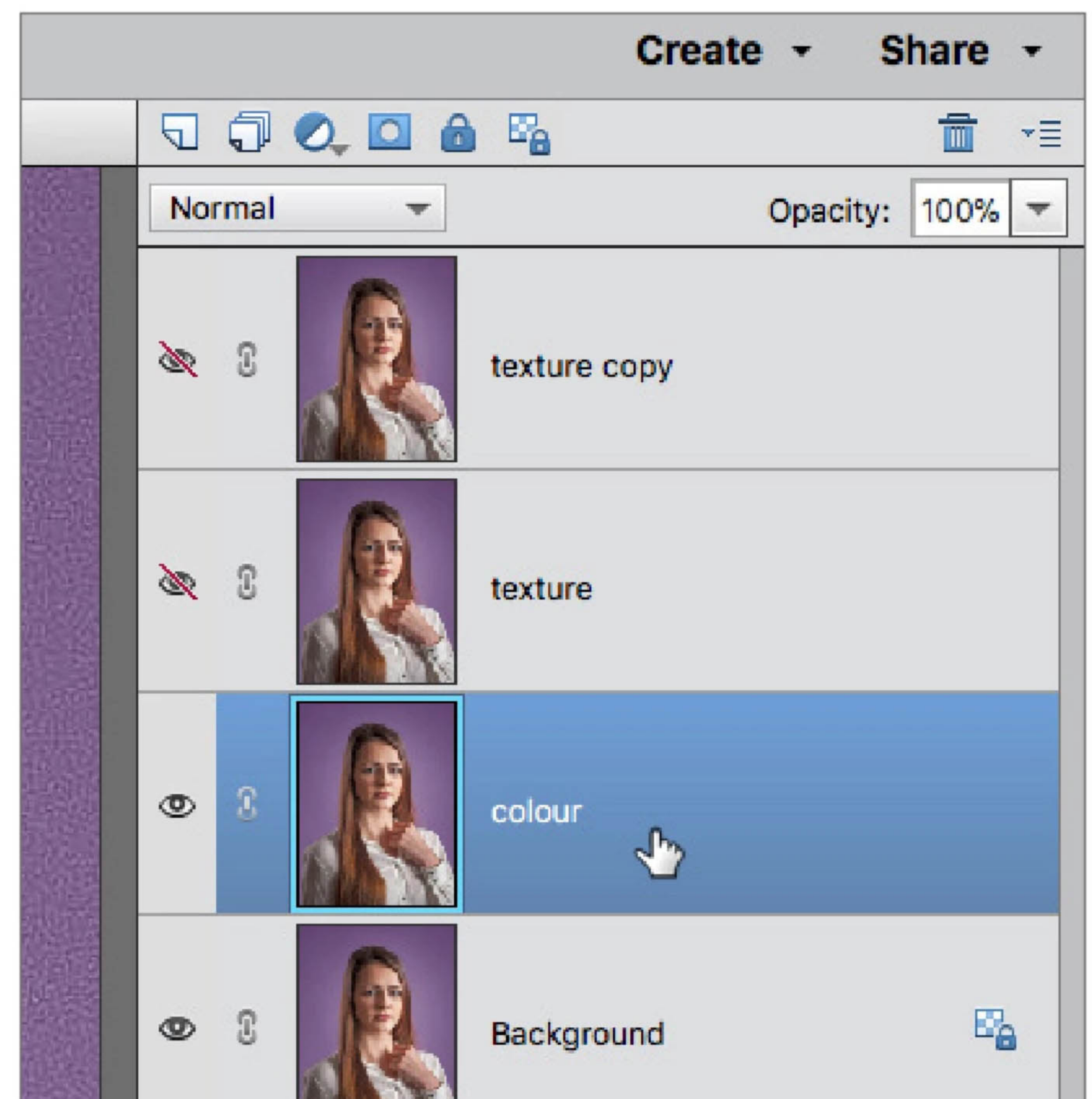
1 Our example is from a portrait shoot of a young girl called Courtney. Open the photo in Elements as a new document. Courtney has some makeup applied but she had some spots that the makeup couldn't obscure so we are going to improve her complexion by removing the blemishes from her forehead.



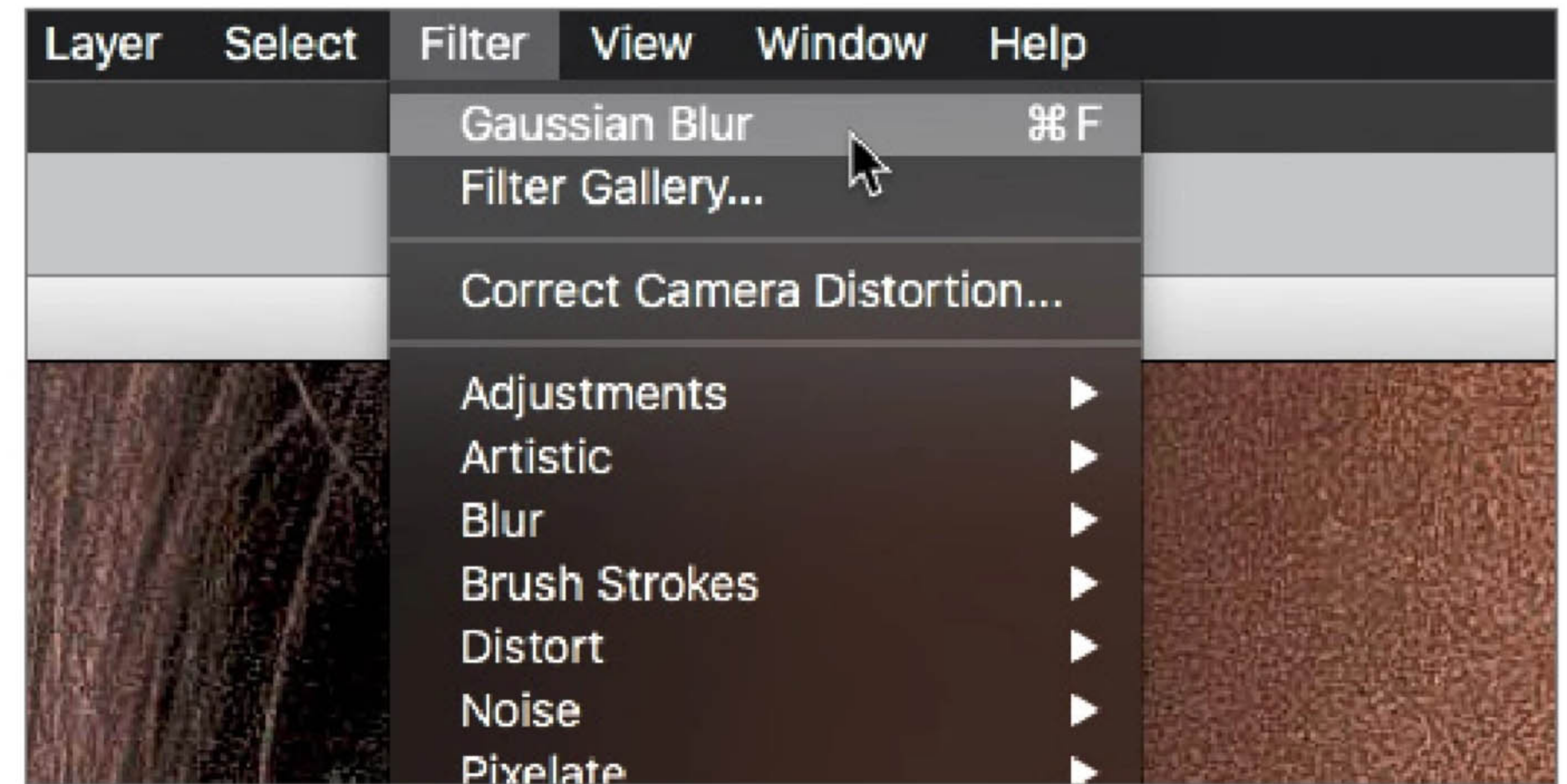
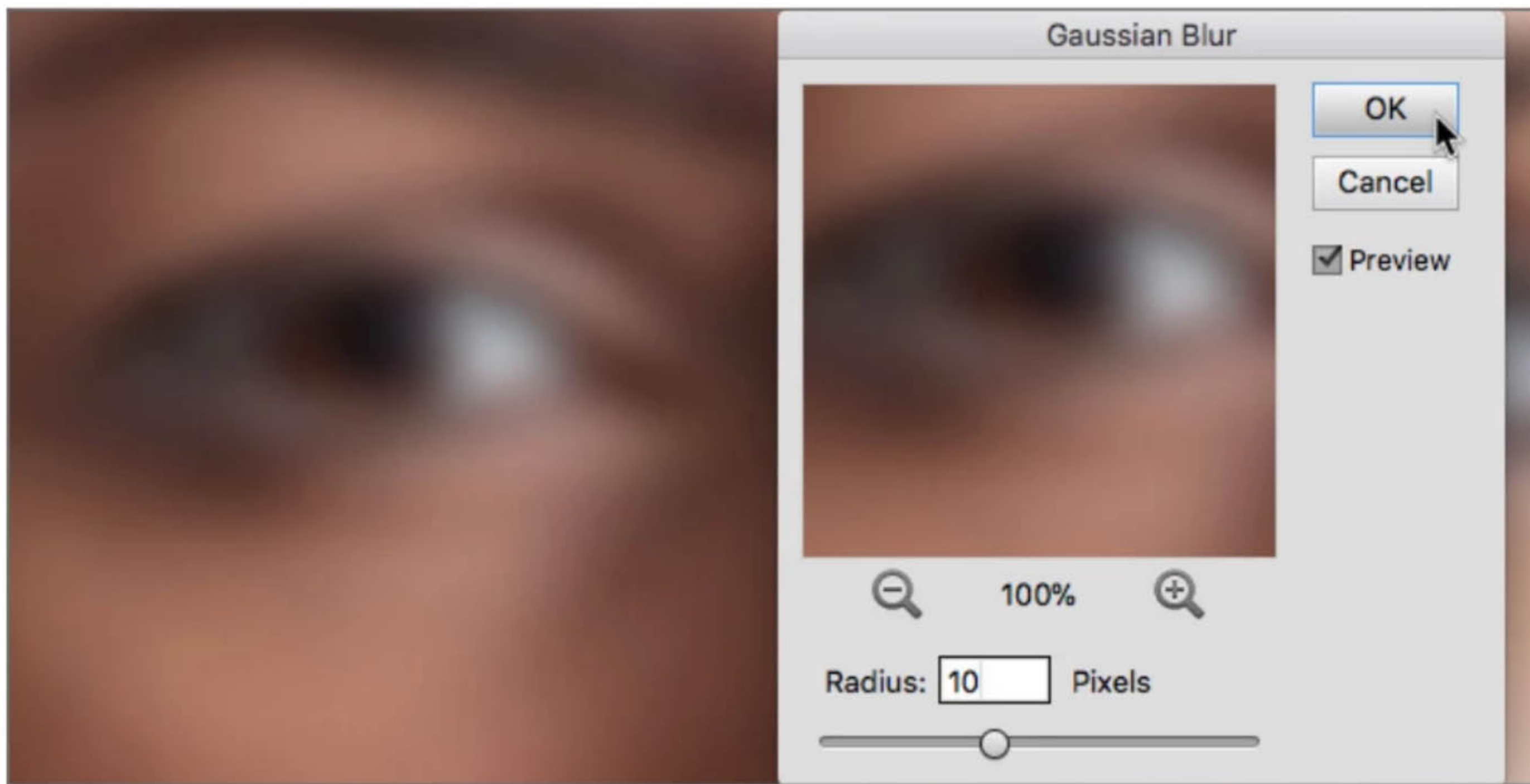
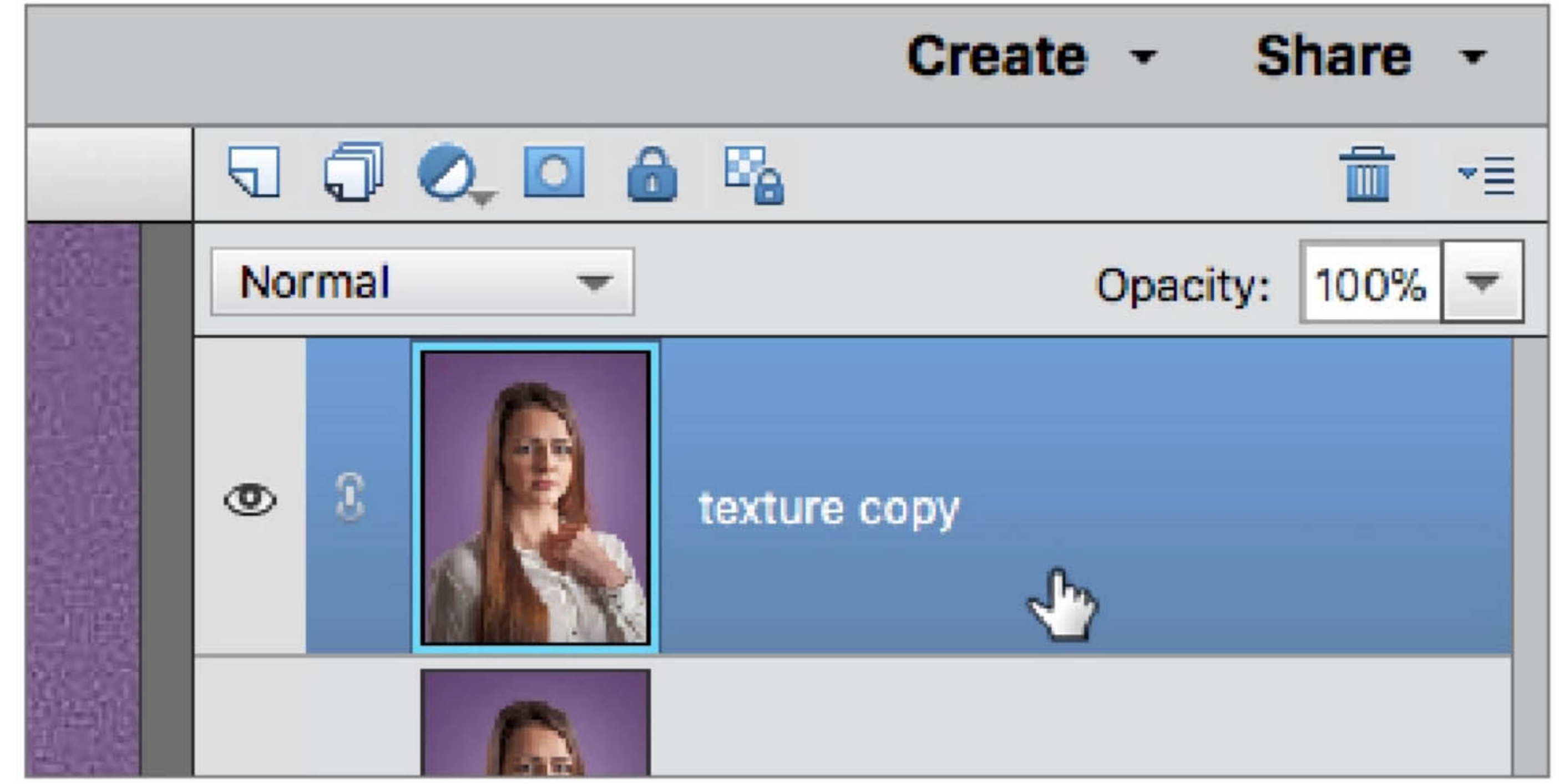
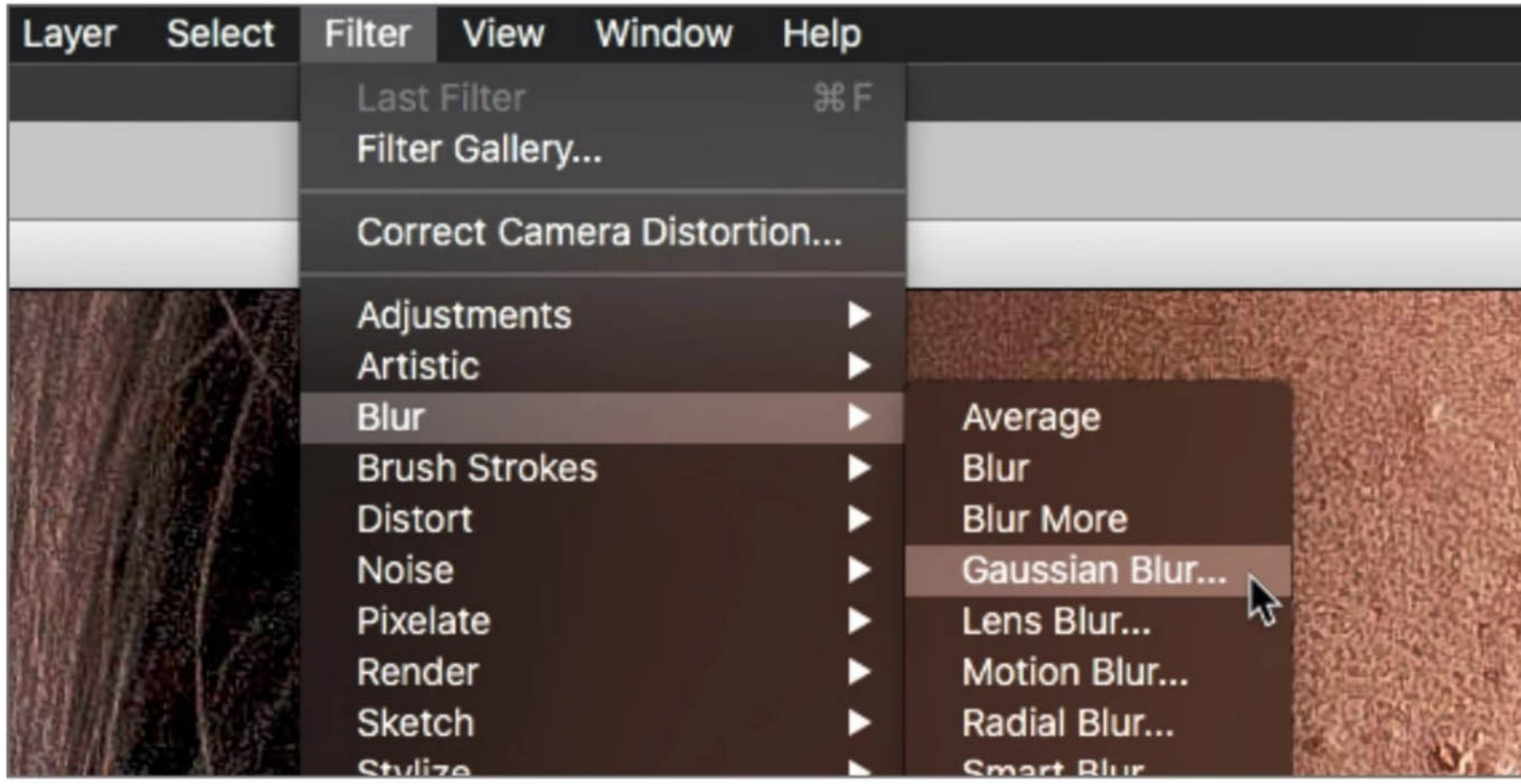
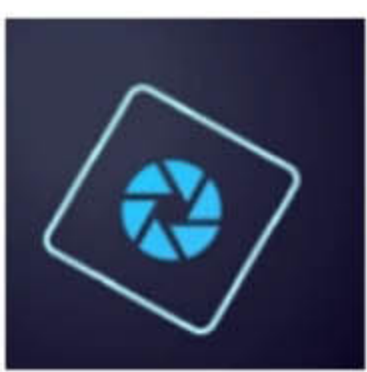
2 Click the 'Background' layer to make sure it is active; it will highlight in blue to let you know it is selected. Then press Cmd + J to create a duplicate layer. Name this layer 'colour'. Highlight the 'colour' layer then press Cmd + J once more to create yet another layer which you can name 'texture'.



3 Make sure the 'texture' layer is now highlighted and press Cmd + J one more time to create a layer that will be called 'texture copy'. These are all the layers you need to begin creating your two main layers of texture and colour to edit.

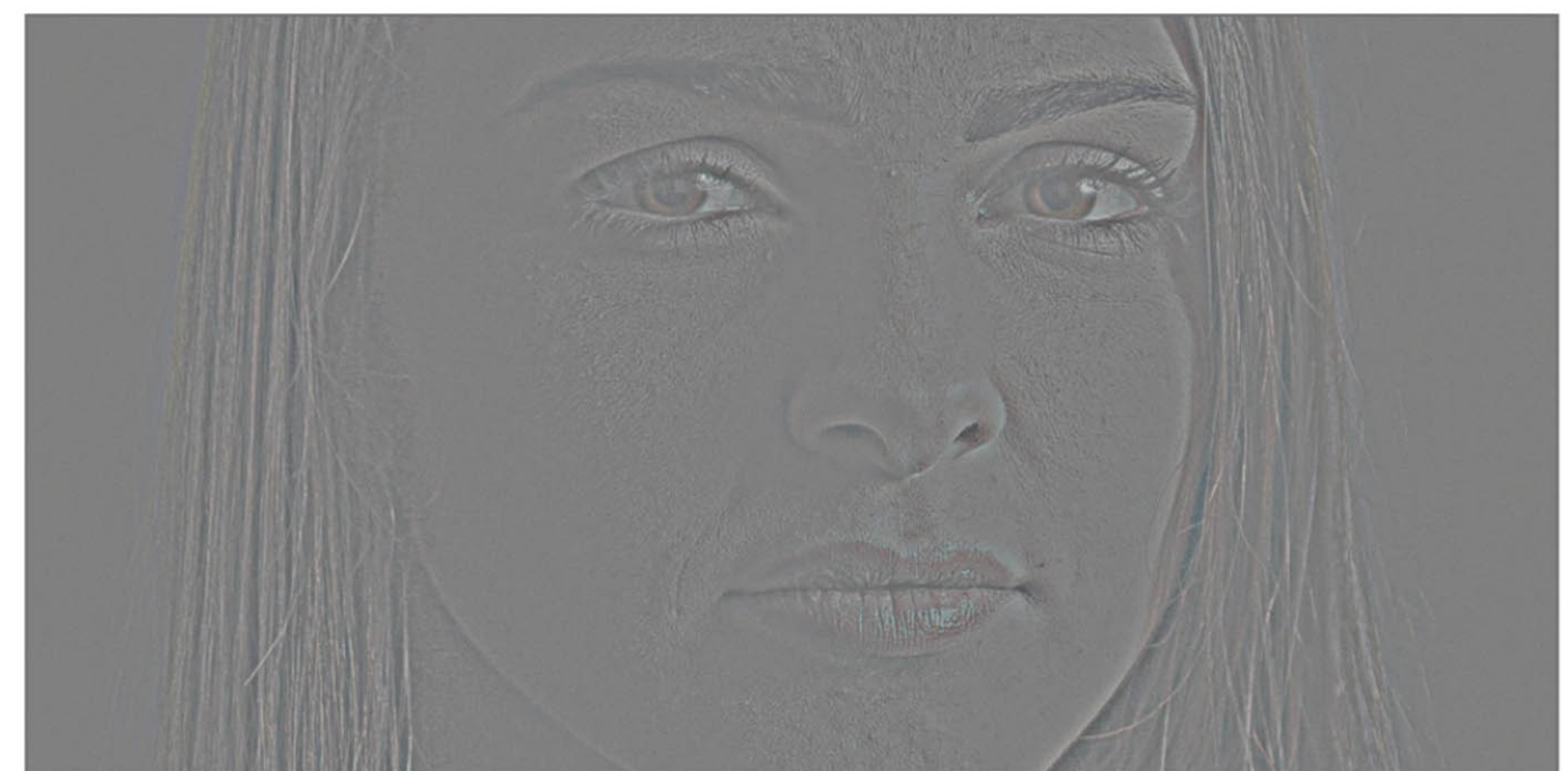
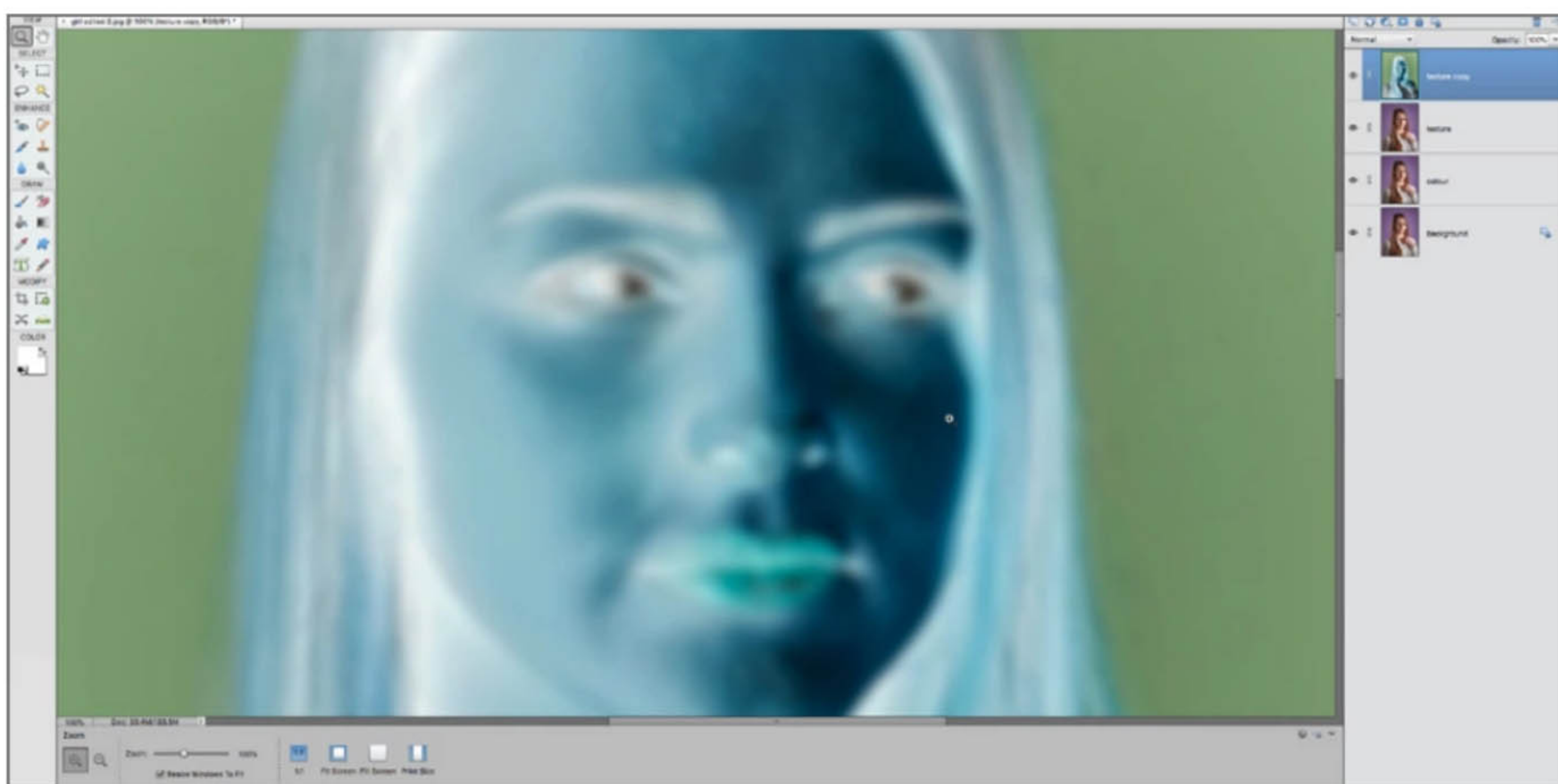
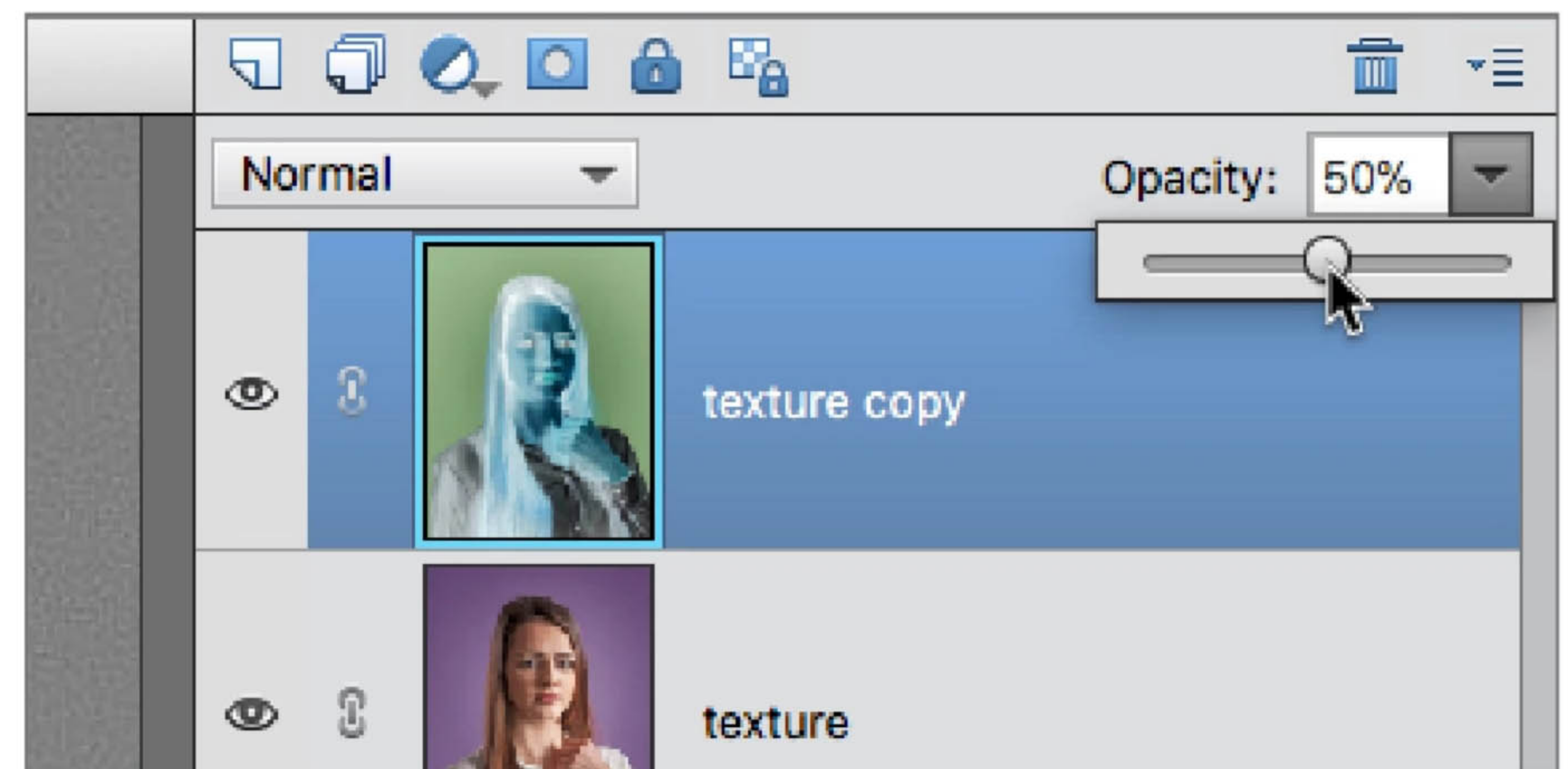
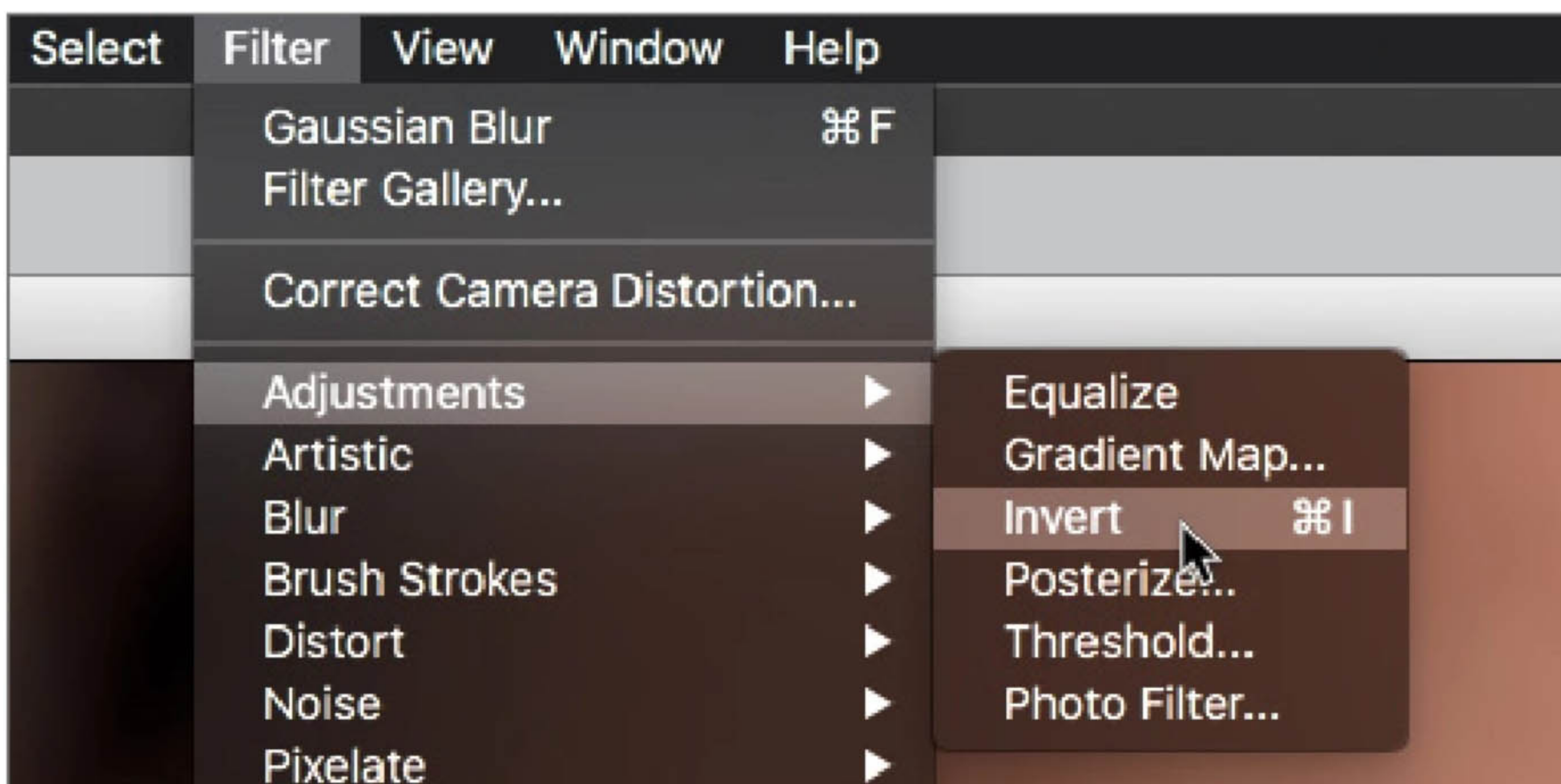


4 Make 'texture copy' and 'texture' invisible for the moment by clicking on their visibility icons to hide them. Make the 'colour' layer active. What you are going to do is turn this layer into colour data only. To do that you need to blur this layer to remove any obvious detail.



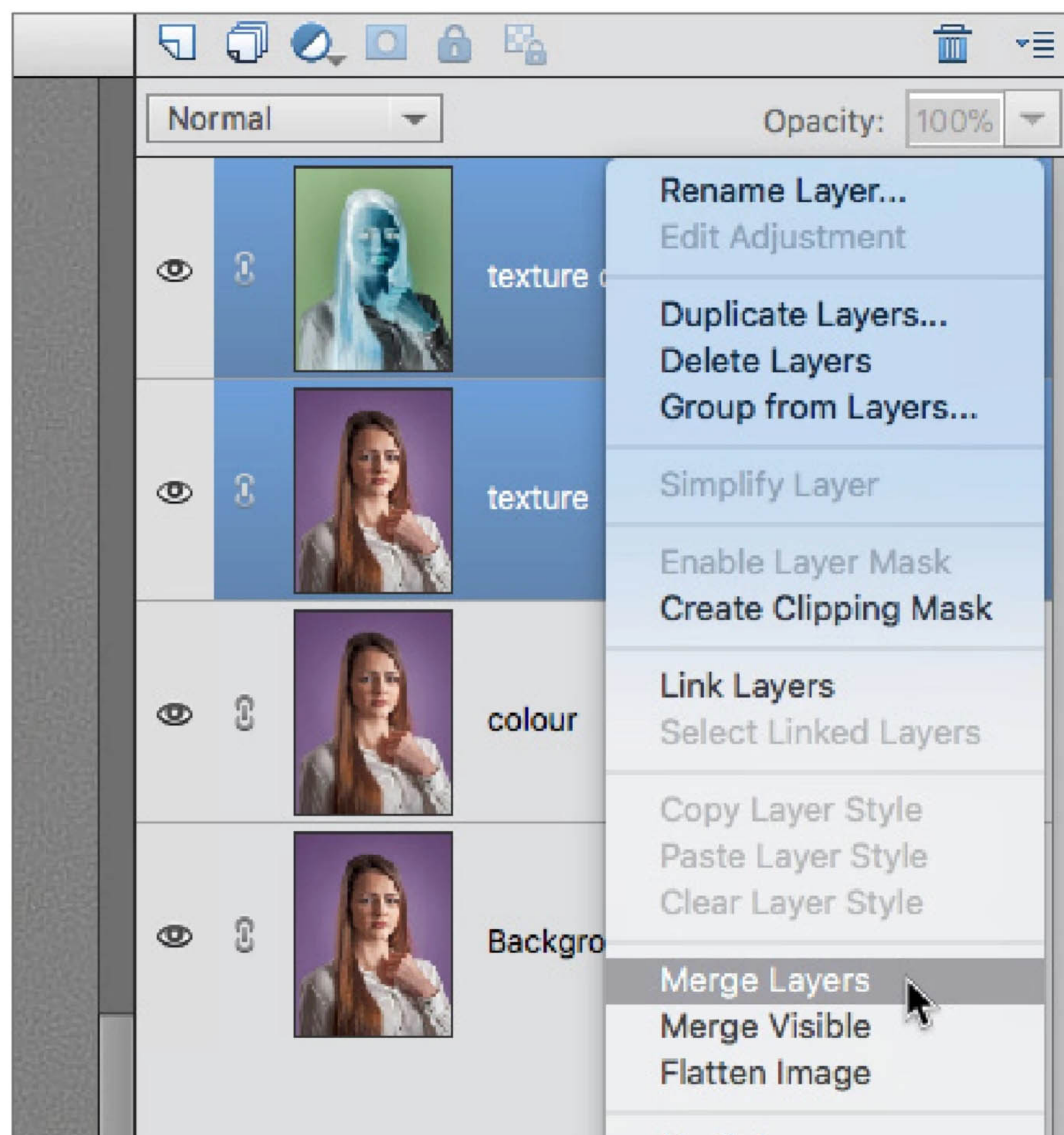
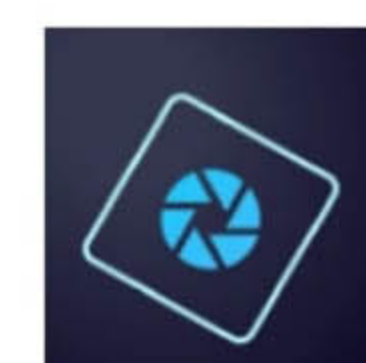
5 Go to Filter > Blur > Gaussian Blur to call up the blur dialog panel. Set the blur Radius to about 10 pixels. You have to apply just enough blur to remove any hard details but leave the general shape and colour intact. Do not over blur the image and merge colours together too much.

6 Make all the other layers visible again and make the 'texture copy' layer at the top of the layer stack active. You need to apply the same blur amount to this layer. Go to Filter and the top menu item will be the last effect you applied. You can also press Cmd + F to apply the last filter you used.

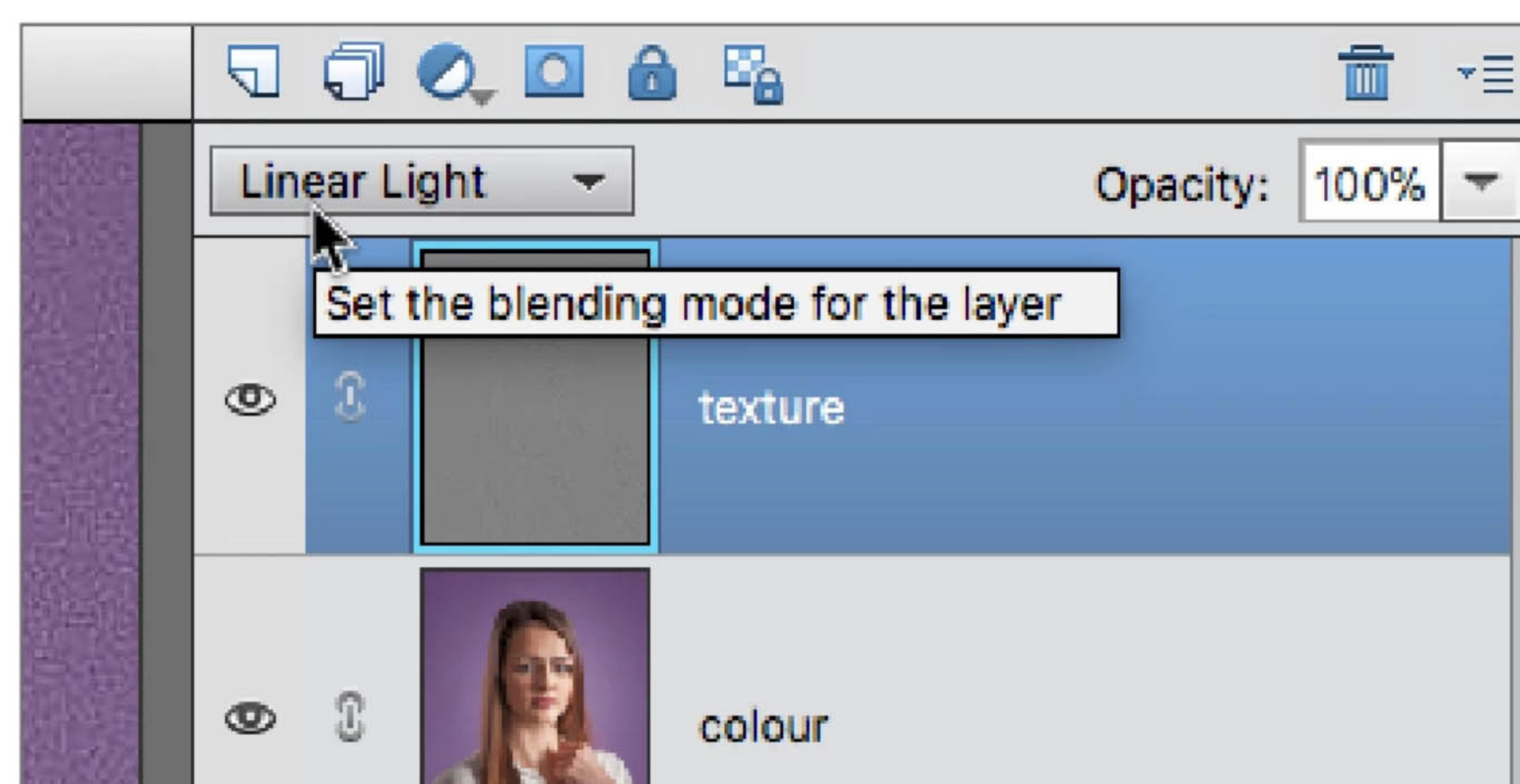
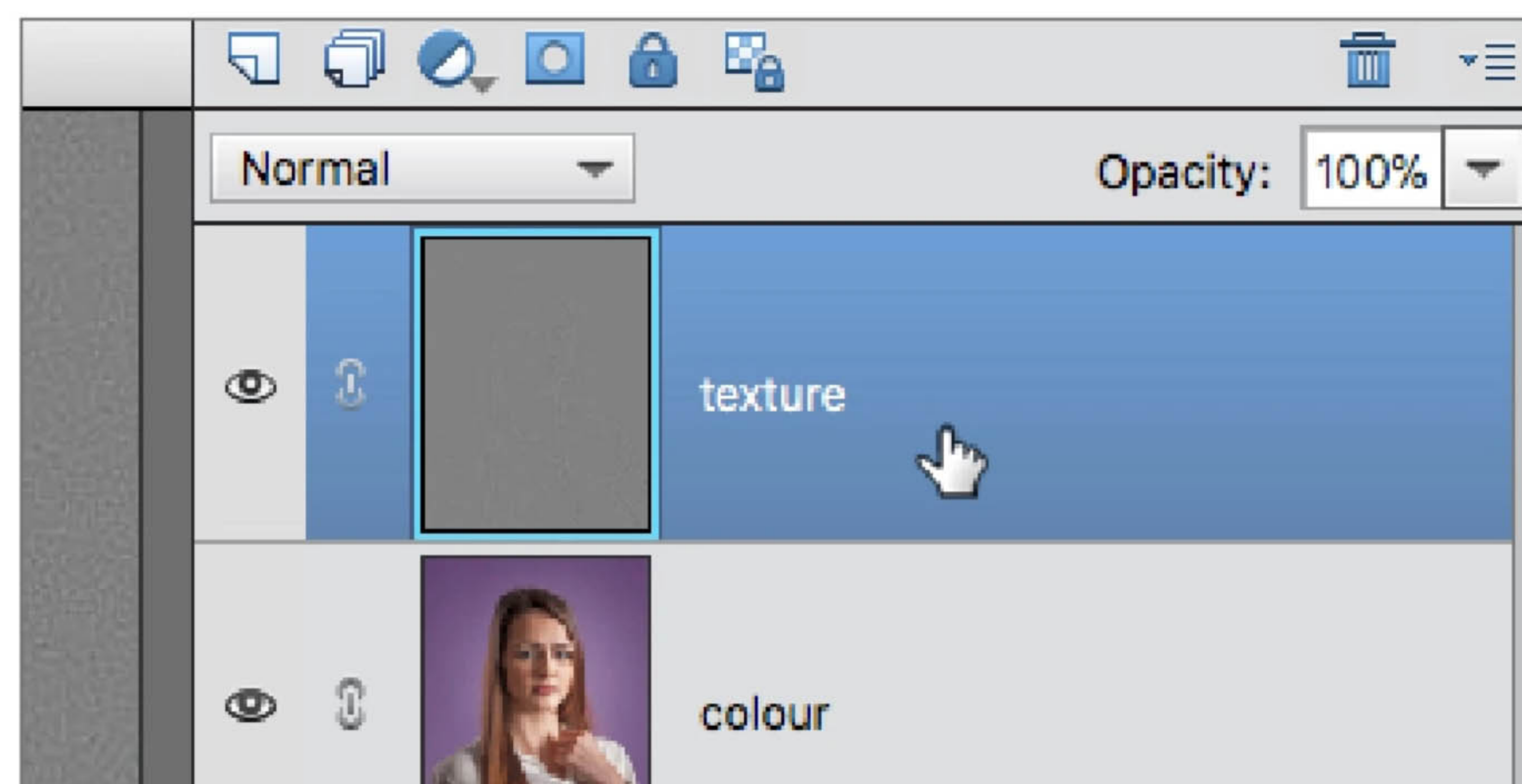


7 The 'texture copy' layer is blurred to the same degree as the 'colour' layer. You can use this layer and the un-blurred 'texture' layer below it to create the second component needed for the skin retouch. To do this, go to Filter > Adjustments > Invert (Cmd + I) to invert the 'texture copy' layer colours.

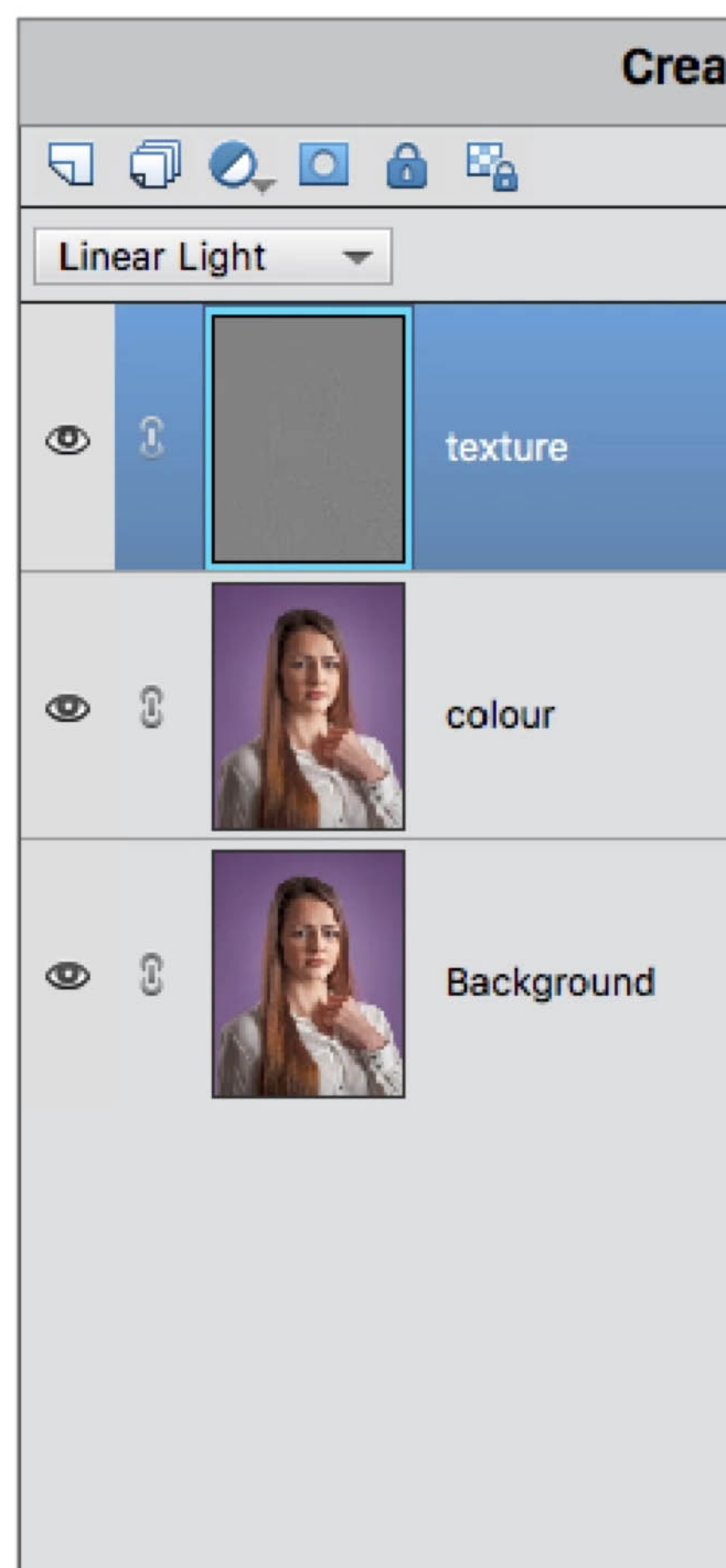
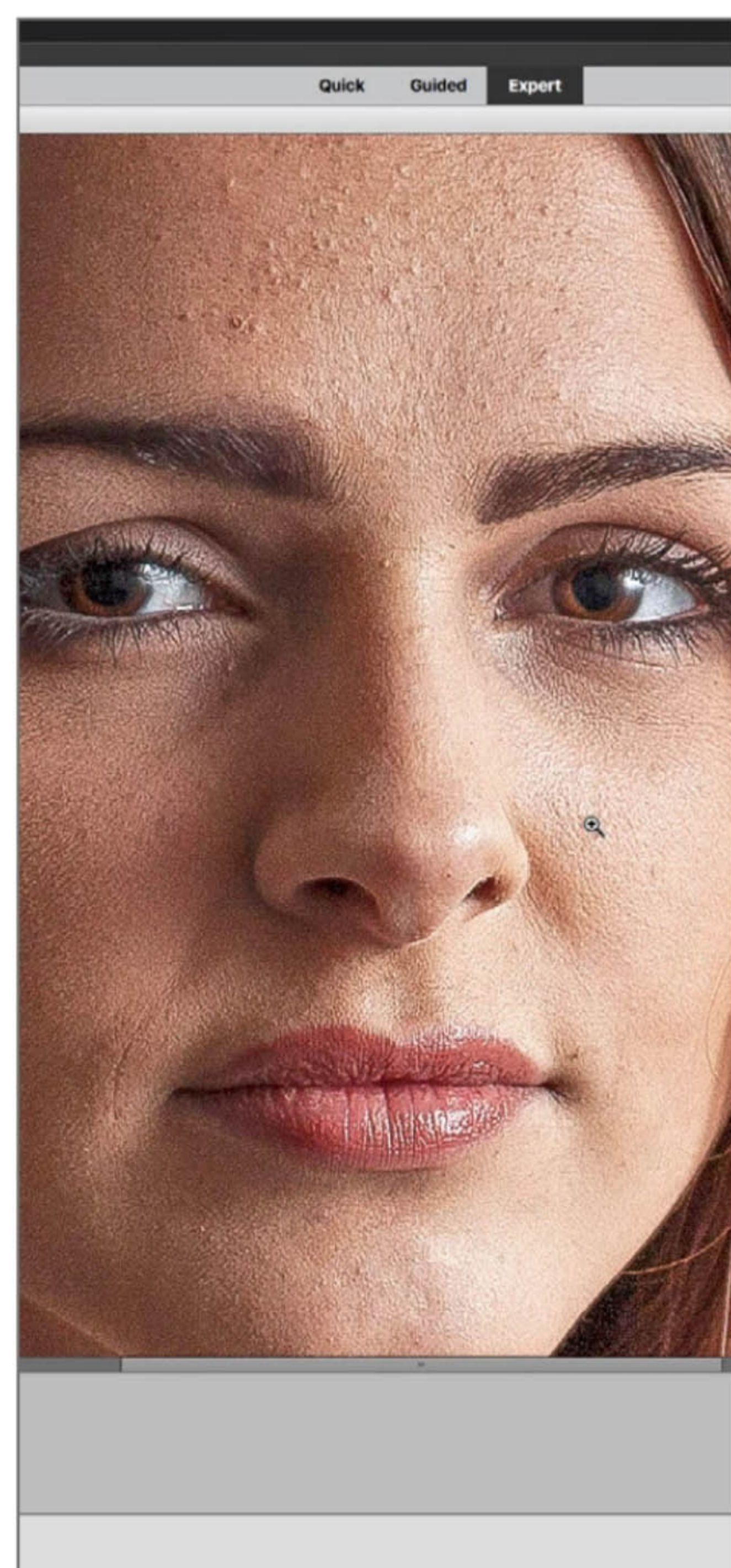
8 All the colours of the 'texture copy' layer will be inverted like a colour negative. With the 'texture copy' layer still active, move the Opacity slider down to 50%. What you see now is a combination of the 'texture' layer below and the current layer at 50% opacity. These two layers need to be merged.



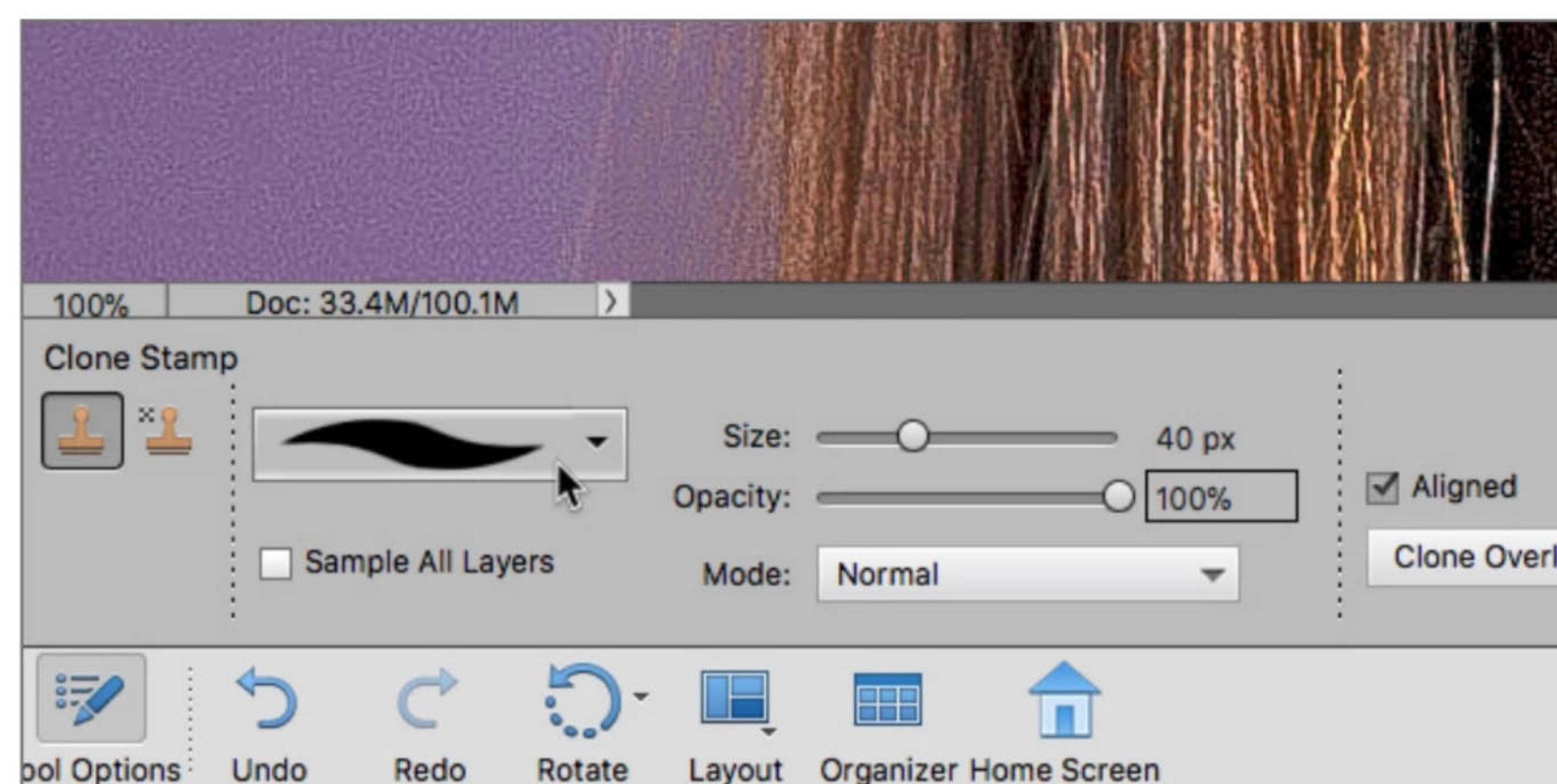
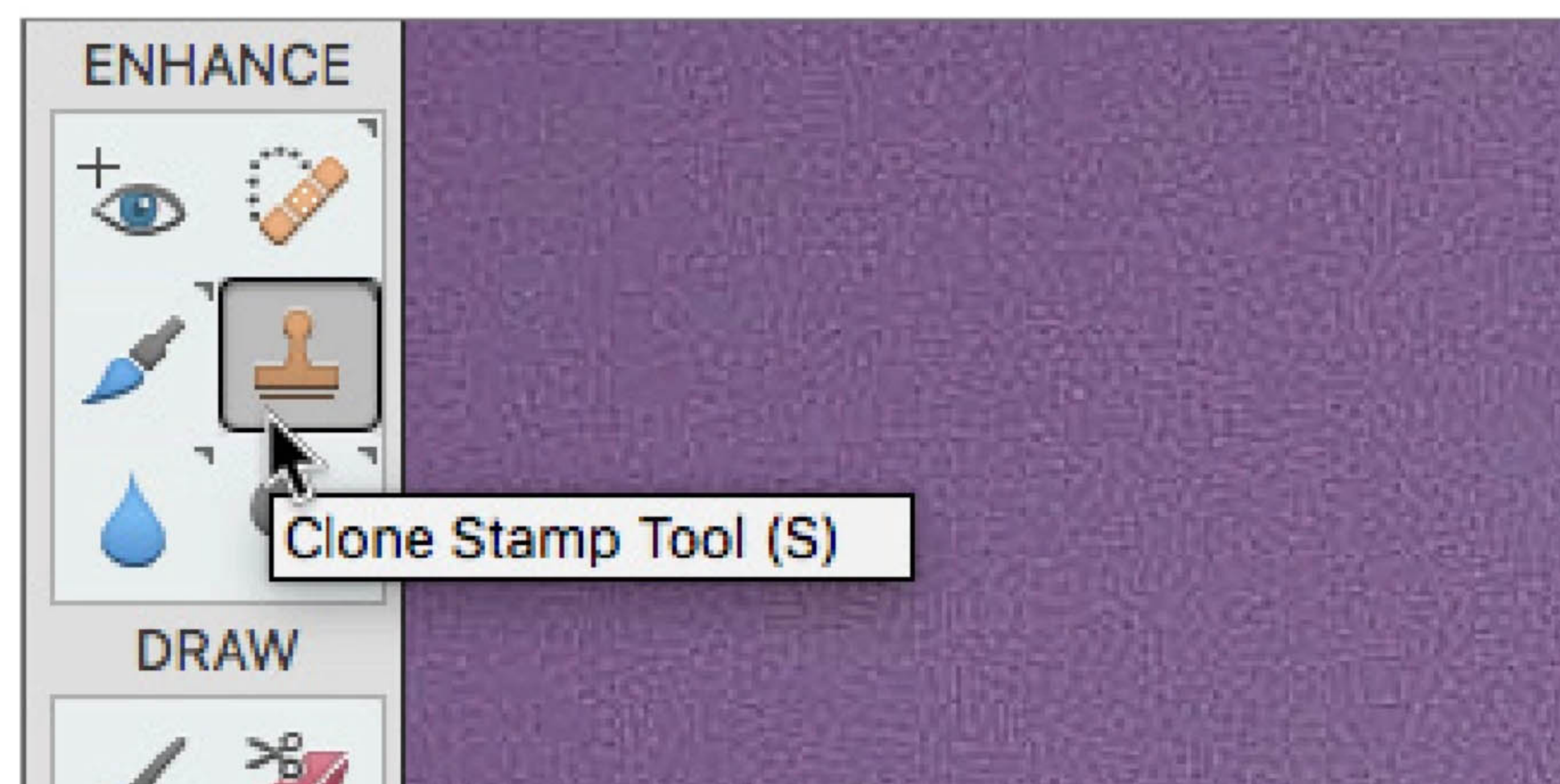
9 Hold the Shift key and click on the 'texture' and 'texture copy' layers to select them both, then right-click them to call up the context menu. Choose Merge Layers to merge them into one layer. You can rename this layer 'texture' now that it is ready to use.



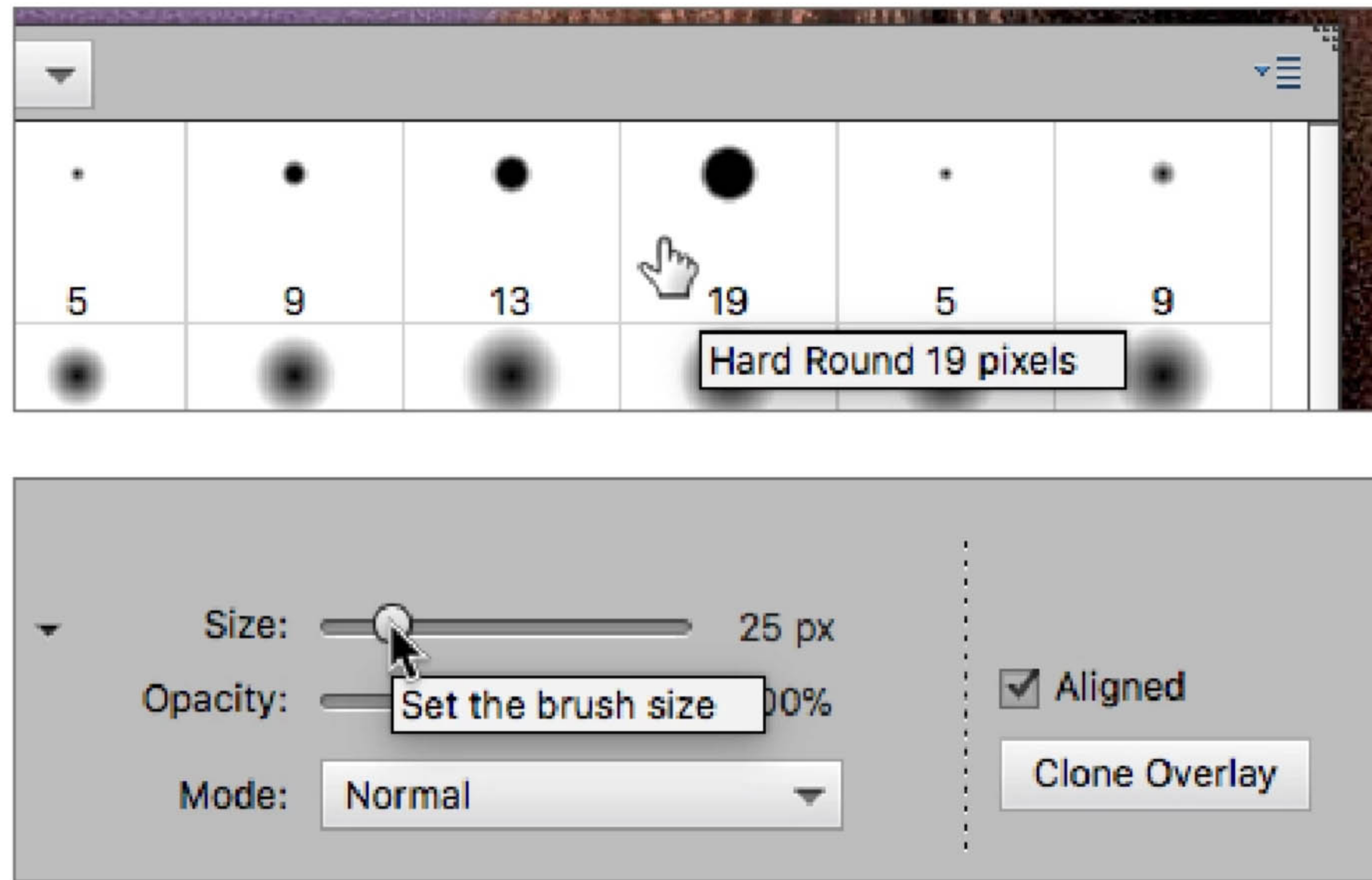
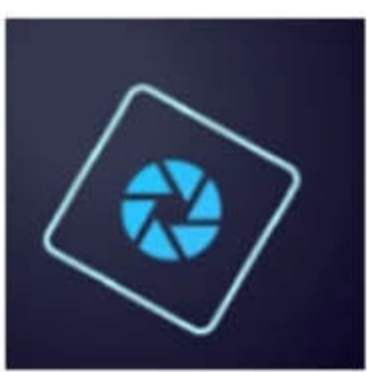
10 Next, keeping the new 'texture' layer active, go to the Blend Mode button and choose Linear Light from the dropdown list that appears. This will blend the 'texture' layer into the 'colour' layer below and the result of the two should look identical to the original image.



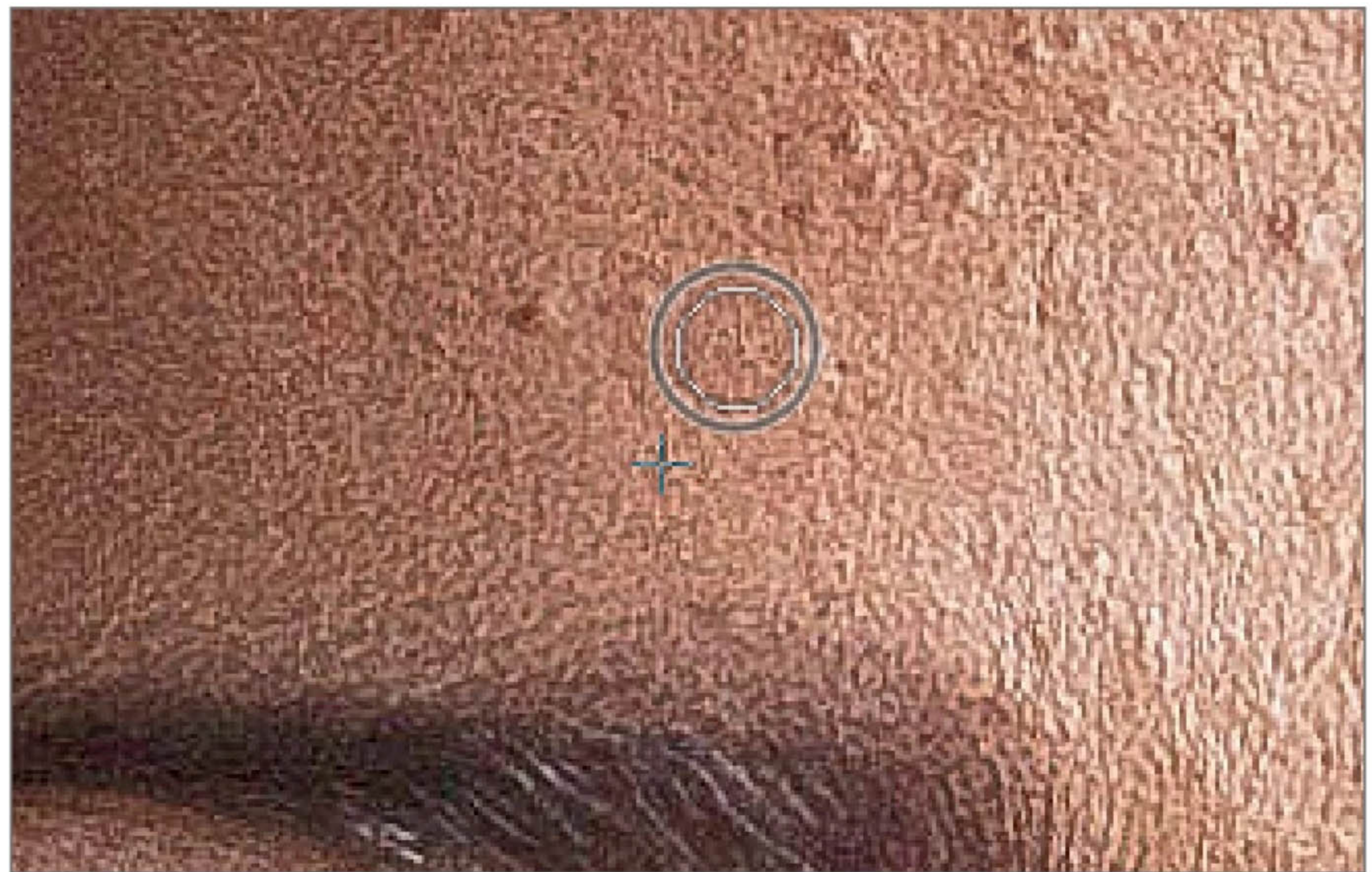
11 You now have your two components. The top 'texture' layer is detail only with no colour data and the 'colour' layer is only colour information with no real detail. This is the process of frequency separation in action. Editing is much simpler now colour and detail are separated from each other.



12 Click on the 'texture' layer to make it active. Texture will be your first stop for cleaning up the skin. Go to the toolbar and choose the Clone Stamp Tool (S). When you click on it, you will see various options become available down in the tool options panel.



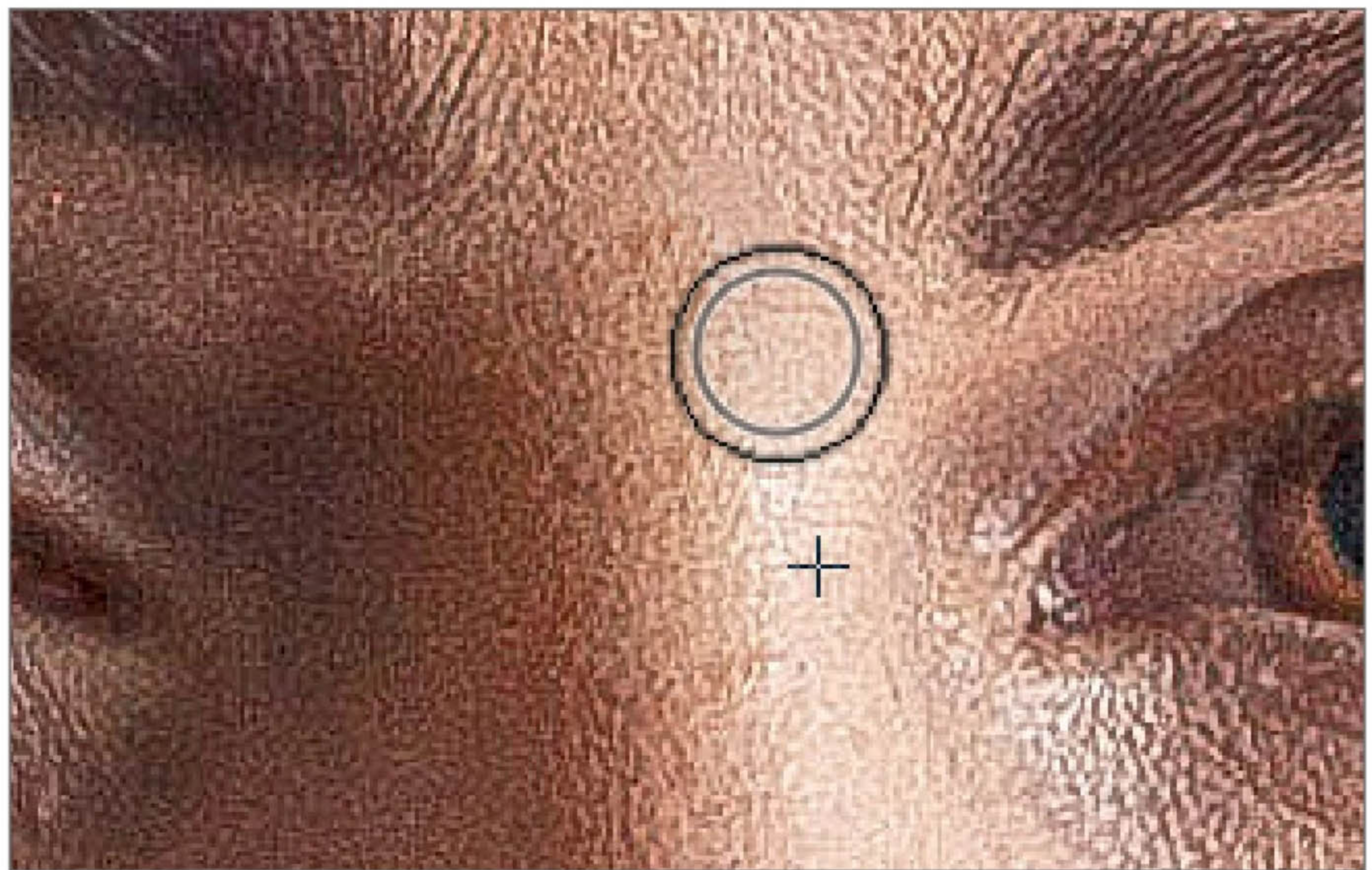
13 Go to the brush picker and choose a hard round brush. You can alter its size later. Hard brushes generally work better for the kind of cloning of skin we are about to do. You can use the Size slider to set a brush of about 25 pixels. To begin with, keep the Aligned box unchecked and Mode kept as Normal.



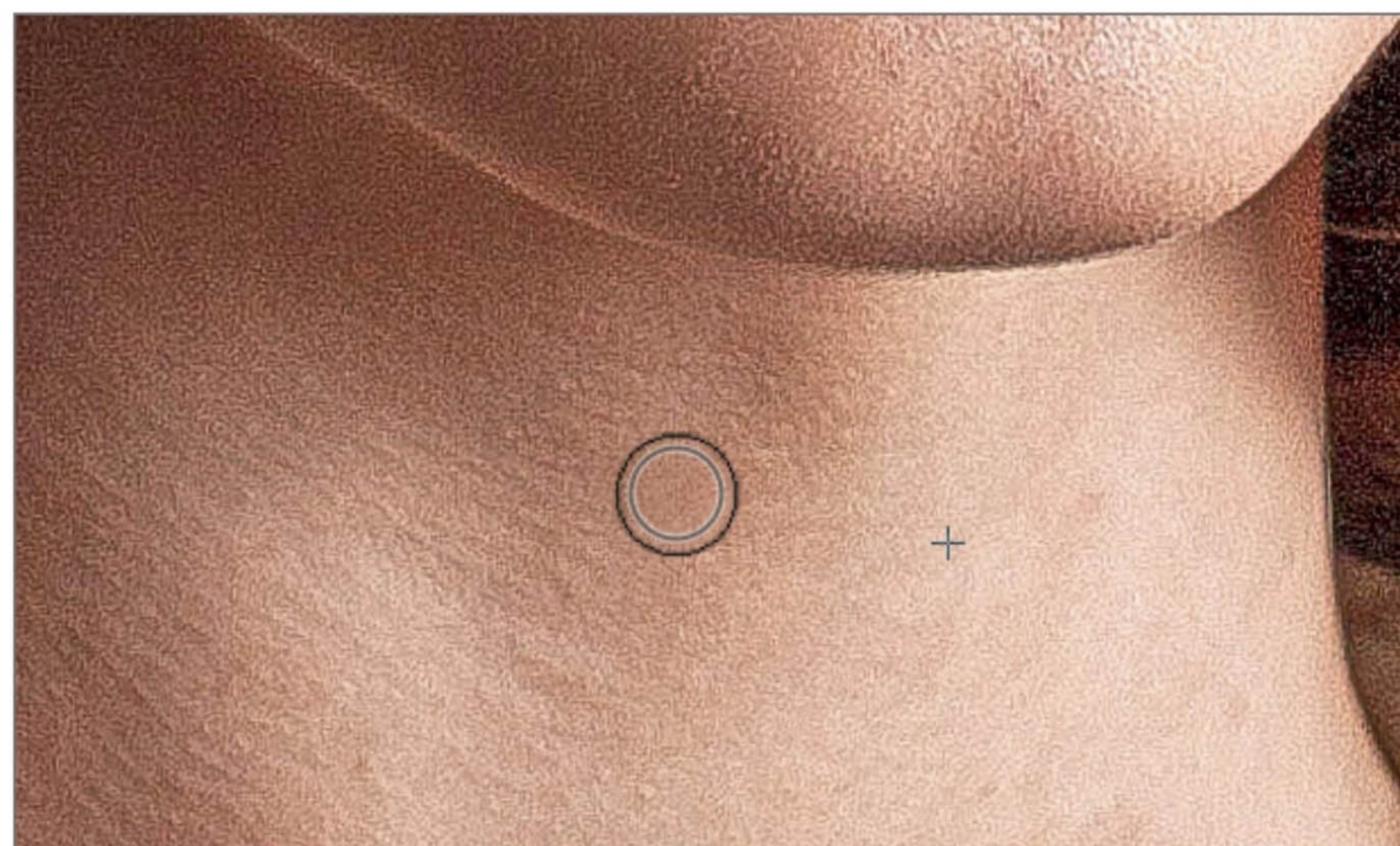
14 Now the process of cleaning the skin can start. Place your cursor over an area of skin that is clean and unblemished close to the first area you wish to start retouching. Press the Alt key and a small target cursor will appear. Left-click the cursor over the clean skin to set that as your clone source.



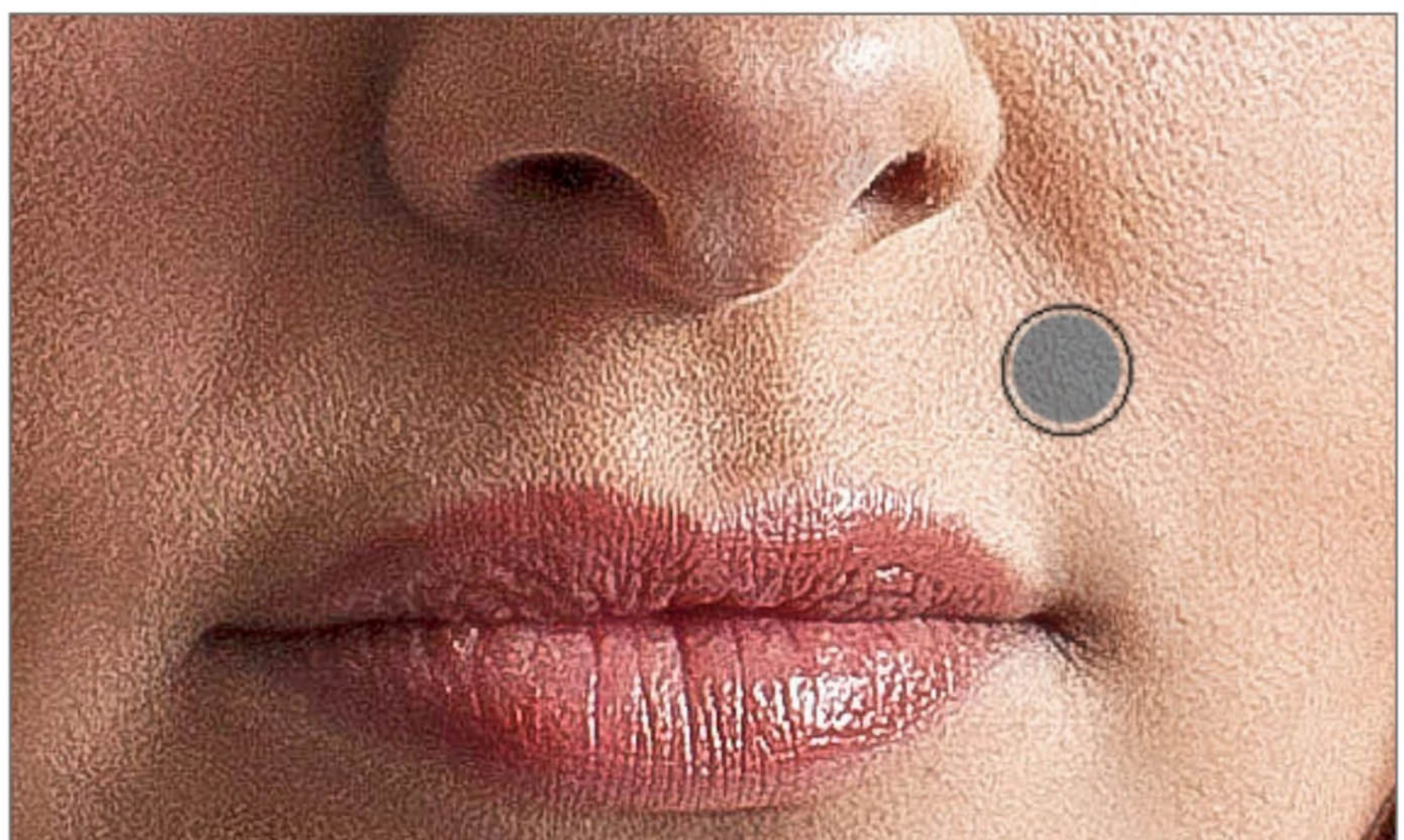
15 Now you can move your cursor over the nearest area of blemished skin you want to retouch. You should see a realtime representation of the clone source at the cursor position. When you click over a blemish, the clean source area will be 'stamped' over the blemish.



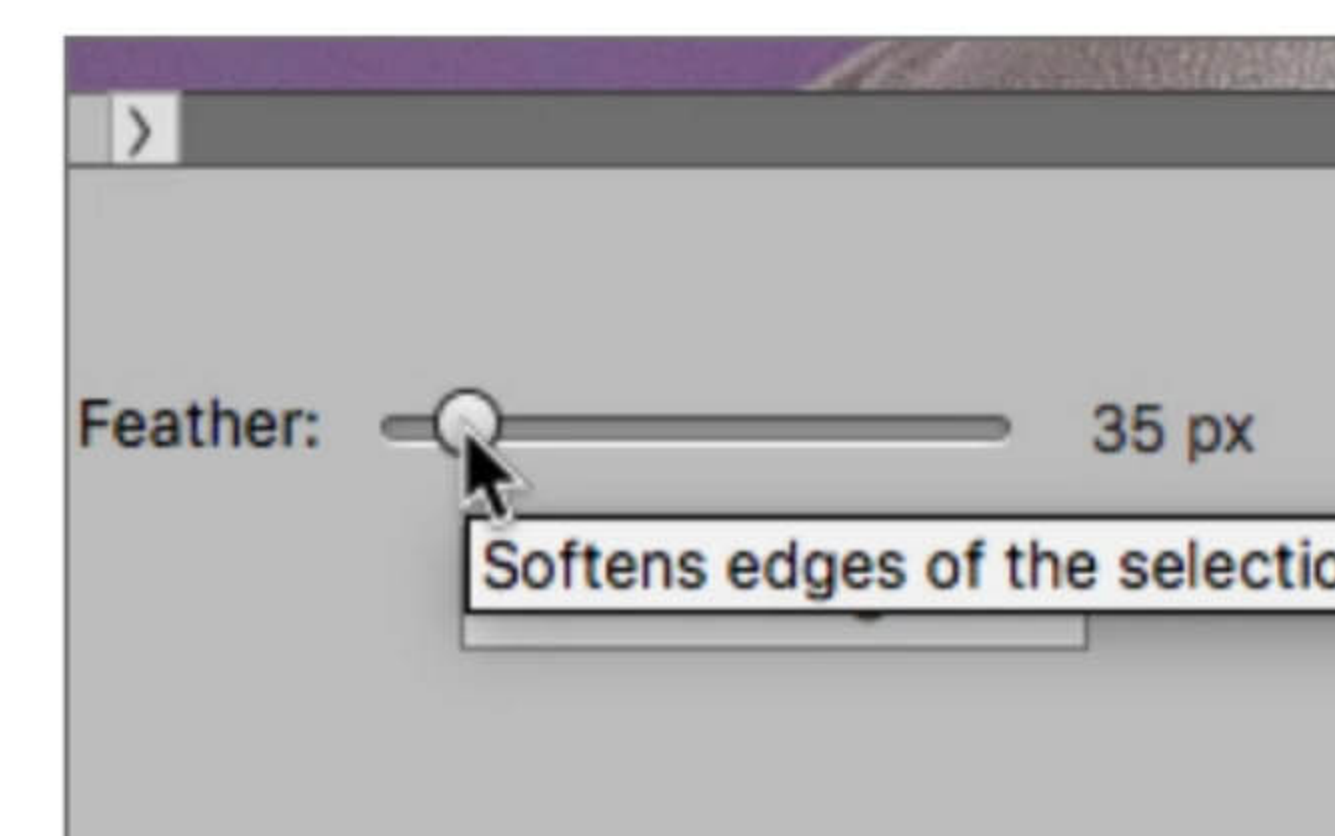
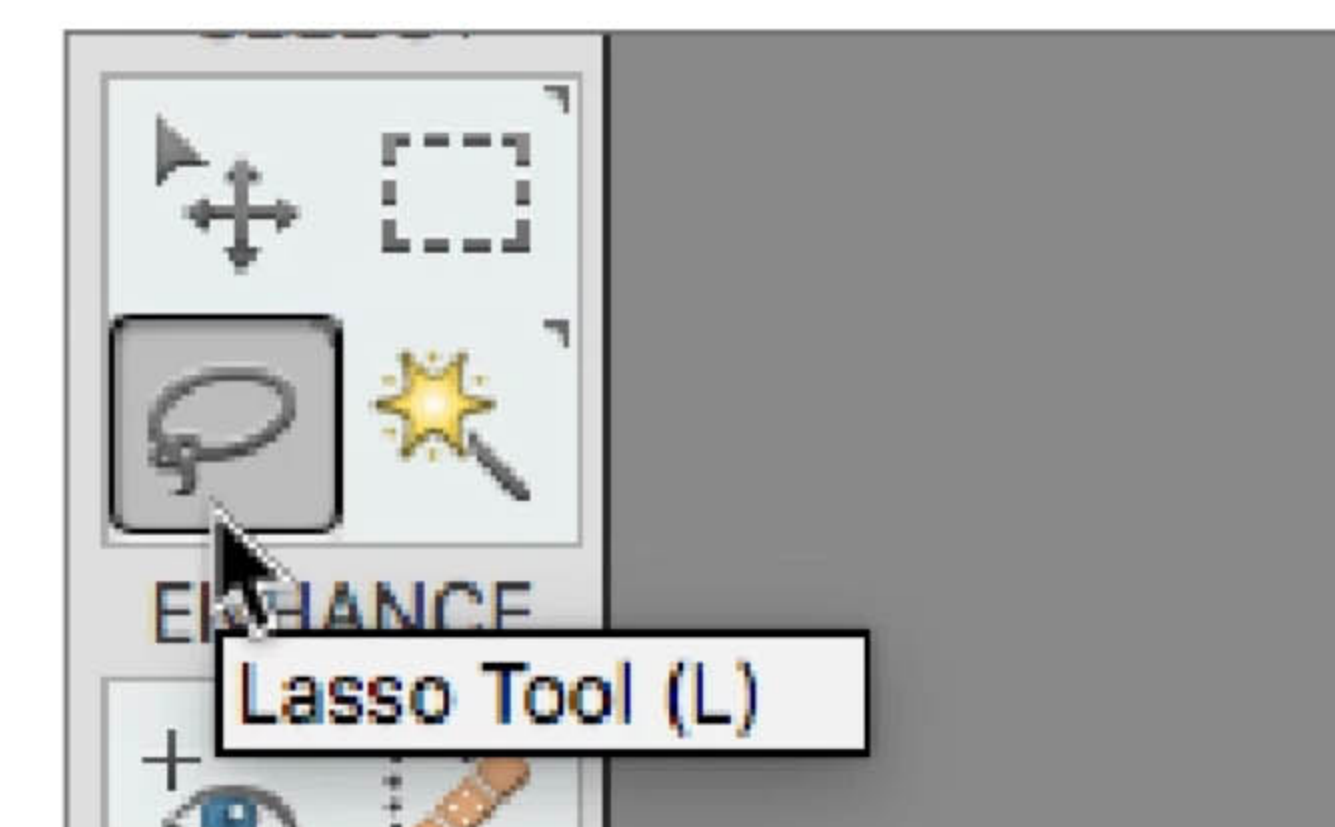
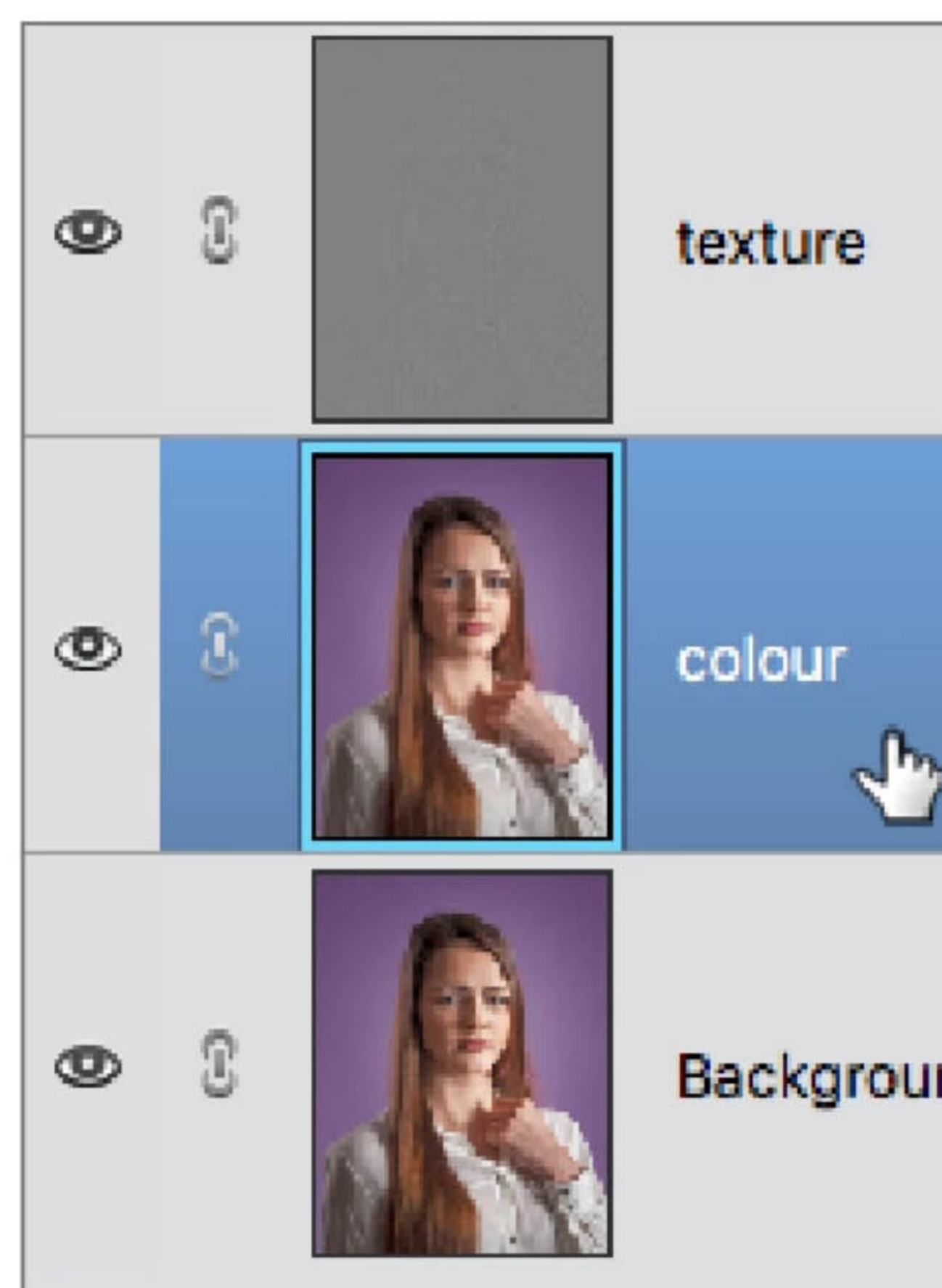
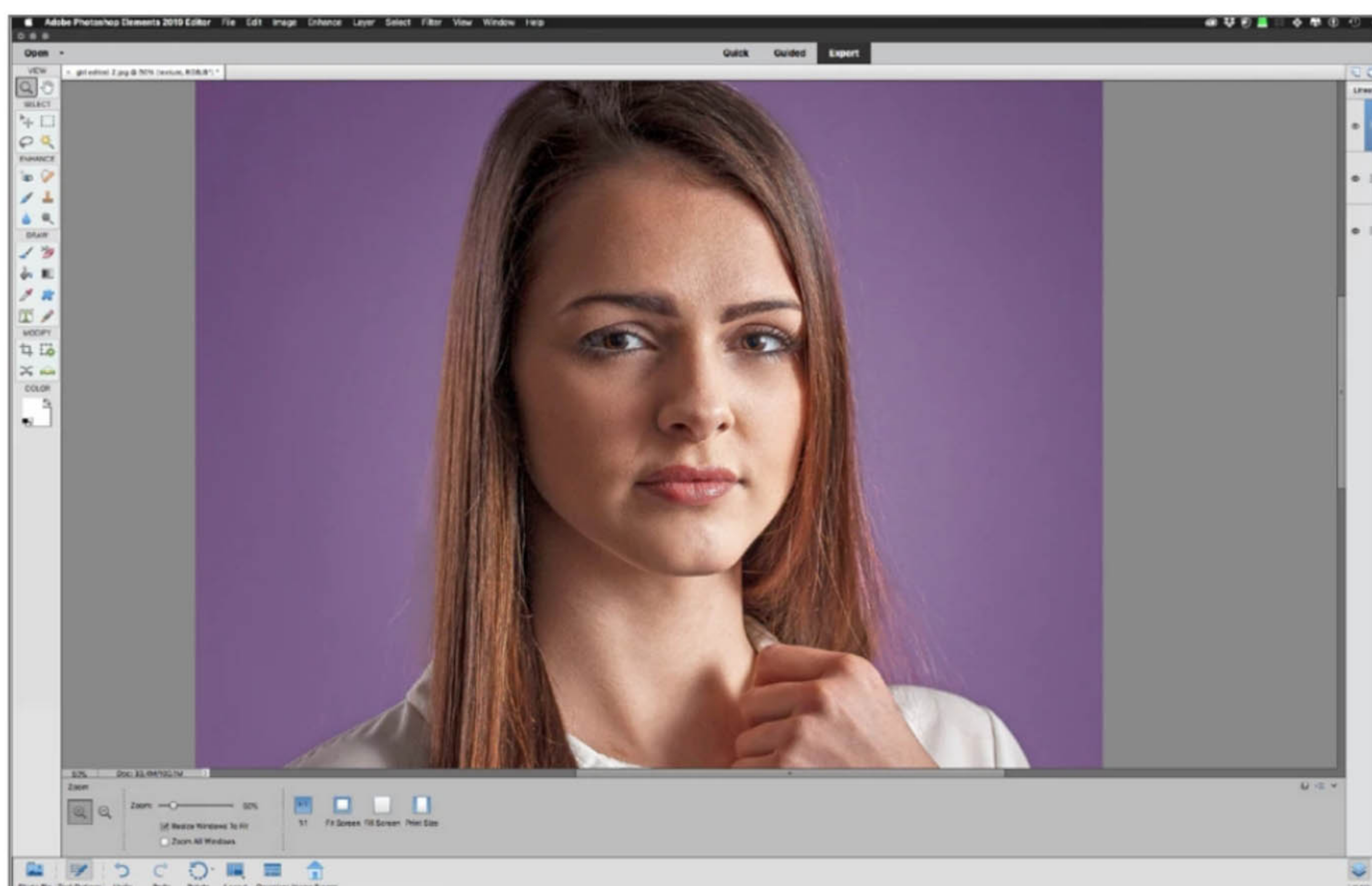
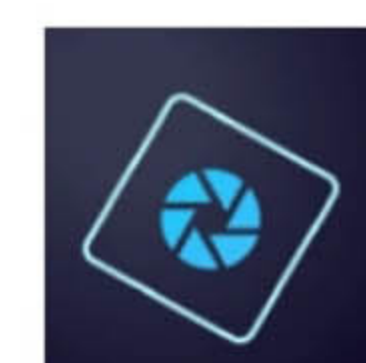
16 Now you can carefully begin to clone clean skin over the blemishes on her face. You can always press Alt and choose a new area of clean skin as your clone source if the texture changes too much and needs to be updated. Remember that all these edits are only happening on the 'texture' layer.



17 Take your time with this part of the process. Keep changing your clone source to avoid the build up of repeating patterns that give the game away as to the use of cloning. You can use the Size slider to make the brush larger or smaller if needed as well.

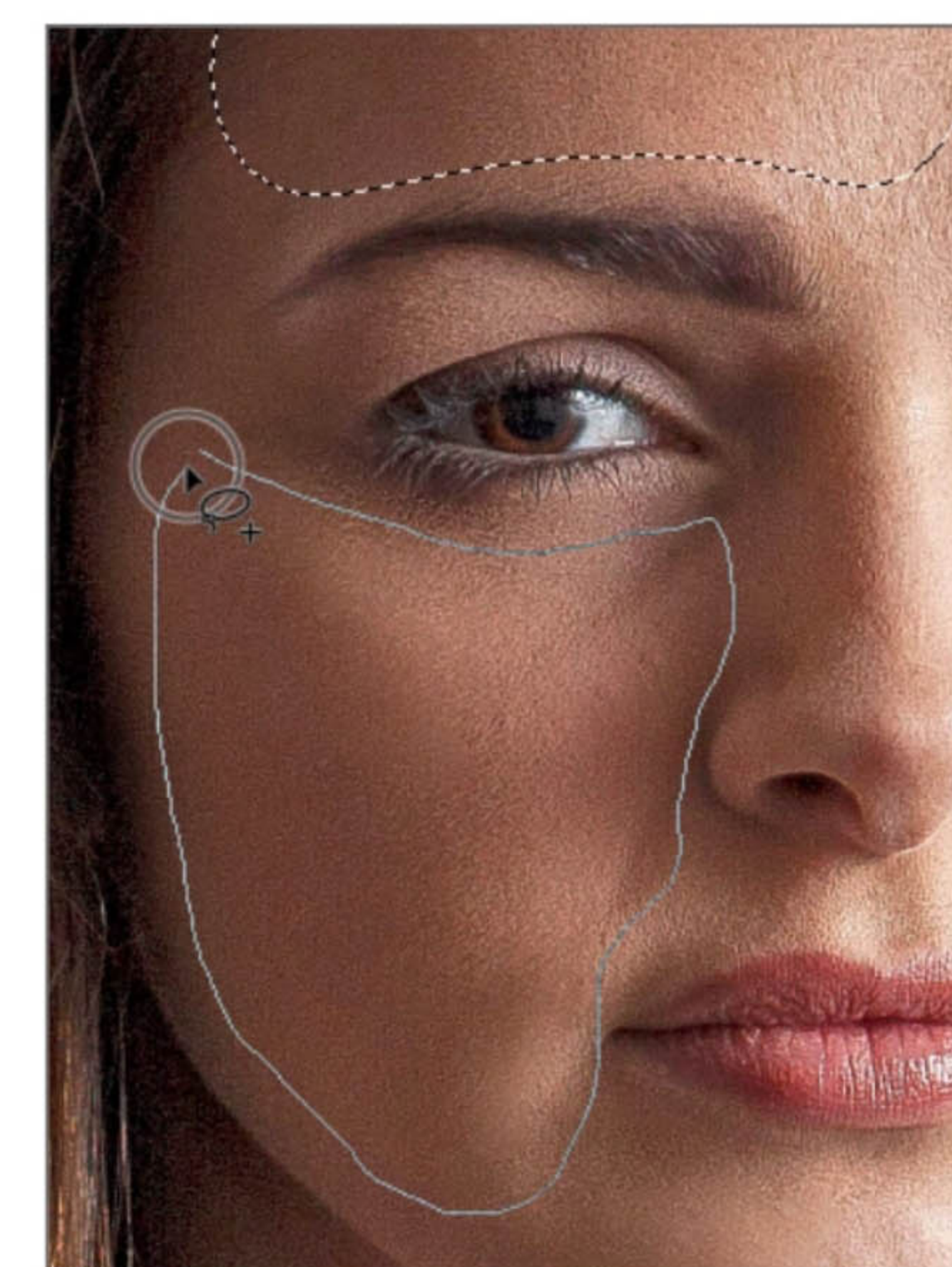
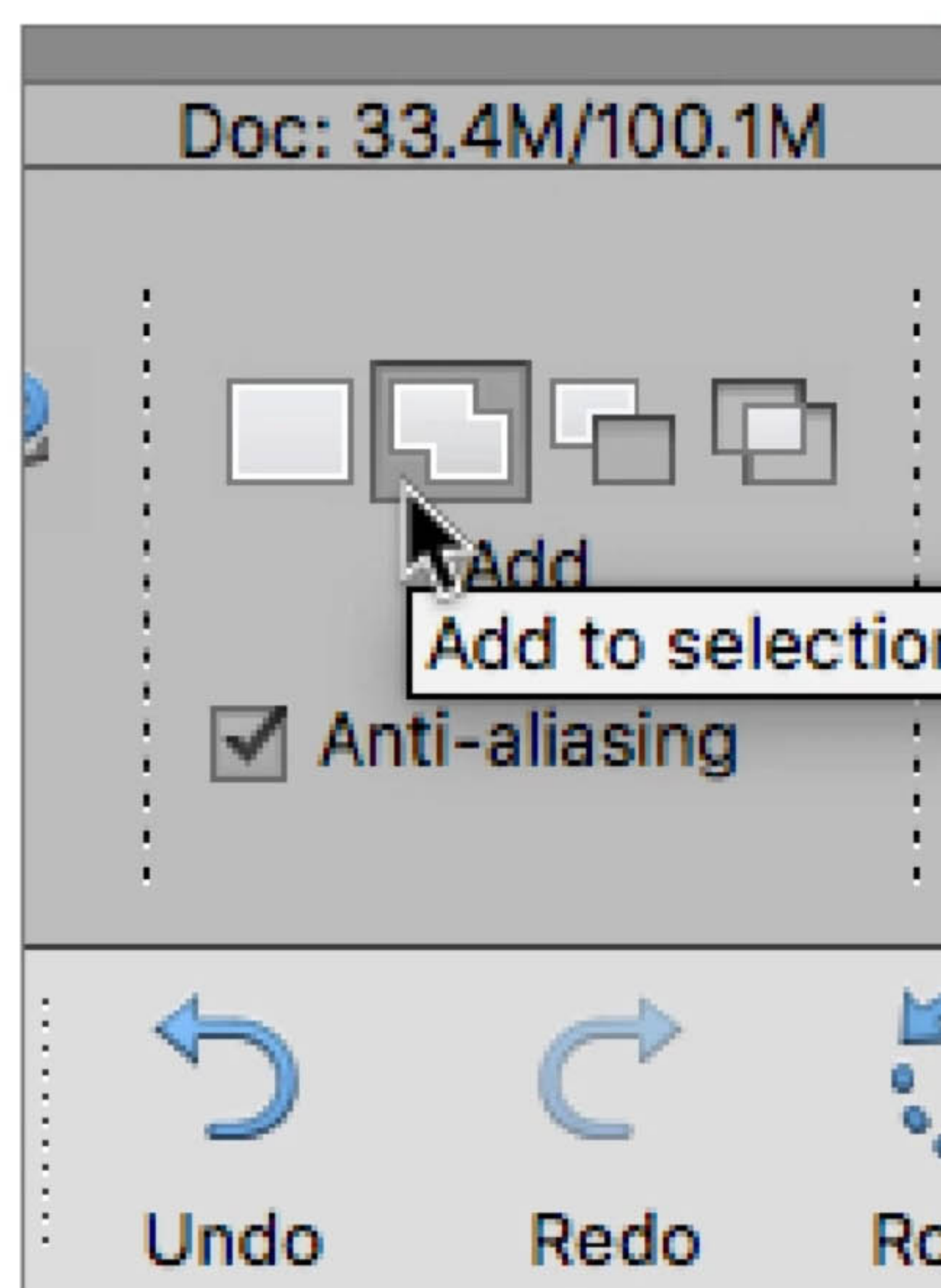
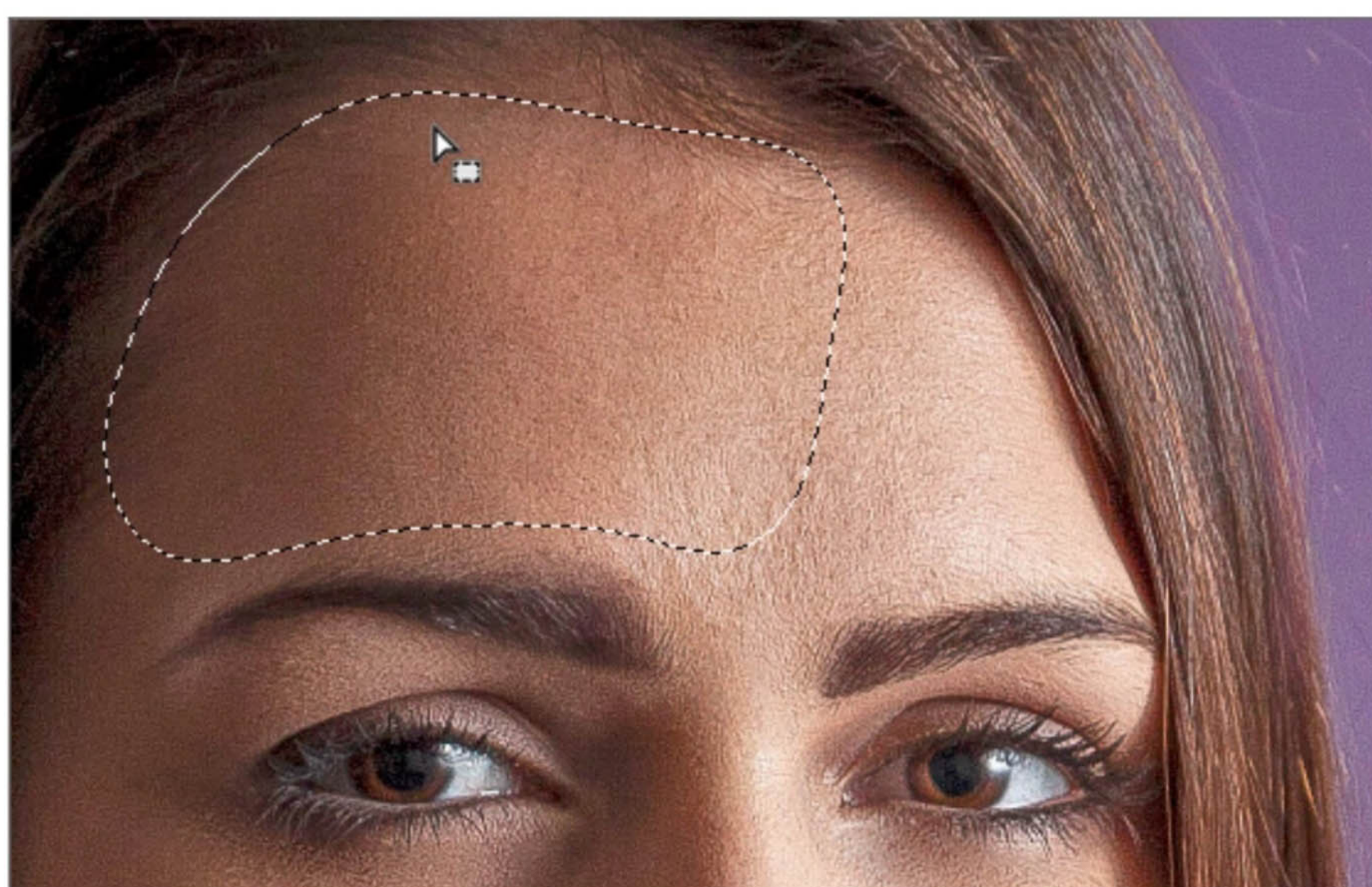


18 Once you are happy that her forehead is done, you can make amends to any other areas of her face and neck that might need cleaning up. You can remove wrinkles in exactly the same way by cloning clean skin over them. Stray hairs can also be cleaned up as well.



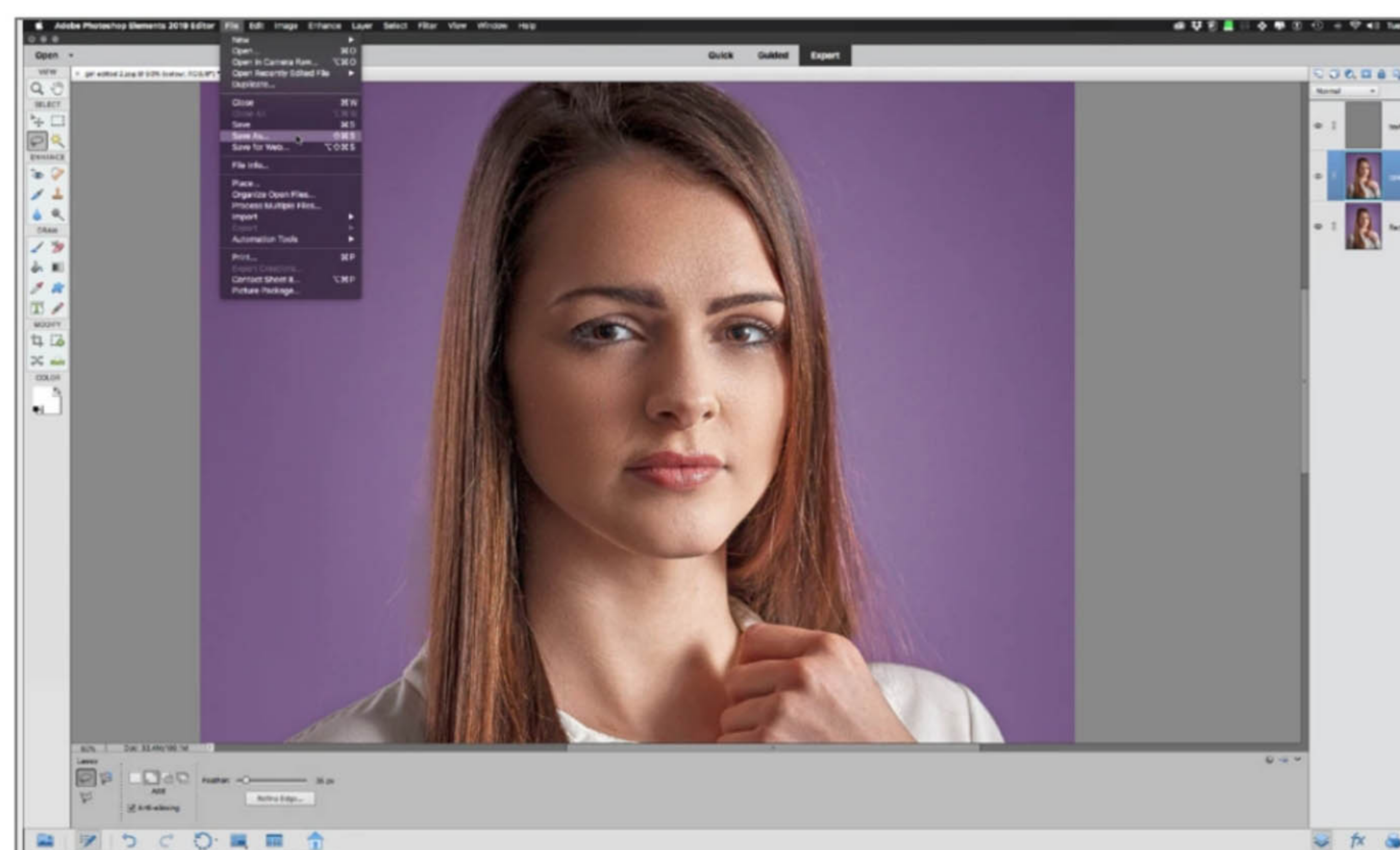
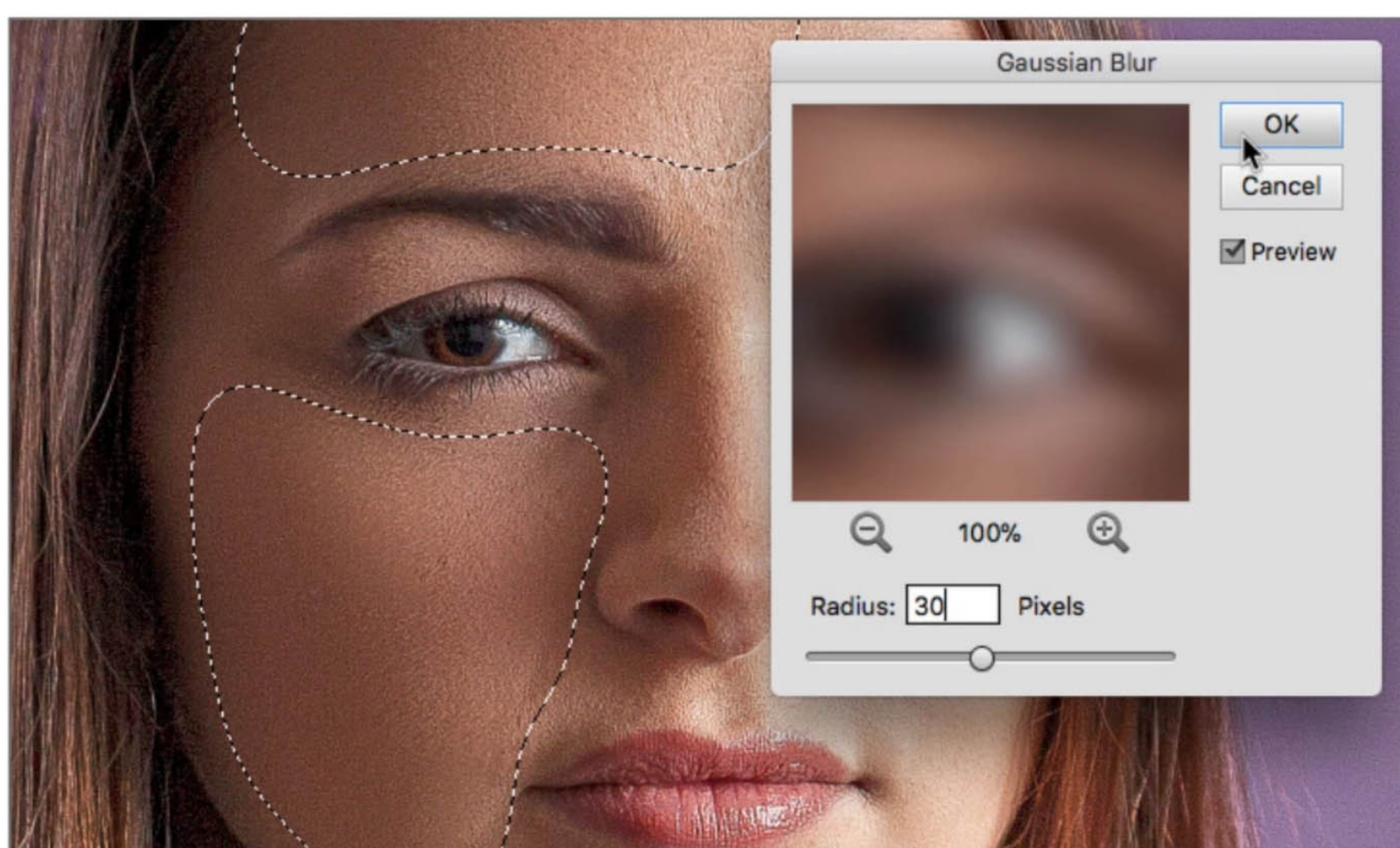
19 Now that the 'texture' layer is completed and her skin is looking flawless, you can turn your attention to the 'colour' layer and even out any mottling that may be present. This is an optional step, but it does give the portrait that extra level of professionalism and is very flattering.

20 Make the 'texture' layer invisible and make the 'colour' layer active. Go to the toolbar and choose the Lasso Tool (L). The Lasso optional panel will show you various options available for this tool. Go to the Feather slider and set it to about 35 pixels to soften the selection you are about to make.



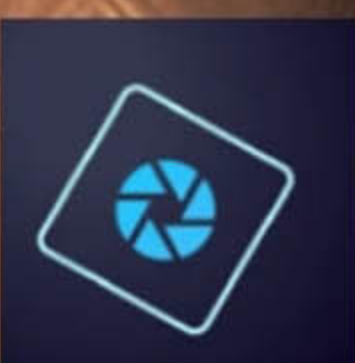
21 There is a small amount of mottling visible on her forehead which we want to remove, as well as softening the shadows around her left cheek, nose and chin. Draw around the areas you want to soften with the Lasso Tool. Join up to your start point and the selection will be closed and softened by 35 pixels.

22 Press the Shift key or click the Add button in the options panel to add more selections. An area around her left cheek has also been included and again, softened by 35 pixels to avoid any hard edges to the colour. Keep this selection active for the next part.



23 Go to the menu and choose Filter > Blur > Gaussian Blur to call up the blur dialog panel. Set the Blur ratio to about 30 pixels or however much you feel is needed to blur those areas a sufficient amount, to remove any mottling from her face. Click OK to blur the selected parts of the image.

24 If you want, you can also do the same to the highlighted areas of her right cheek to give more of a matt finish to her skin. It behaves a bit like adding more digital makeup foundation to her skin. When you are happy, you can go to File > Save As (Shift + Cmd + S) to save your finished result.



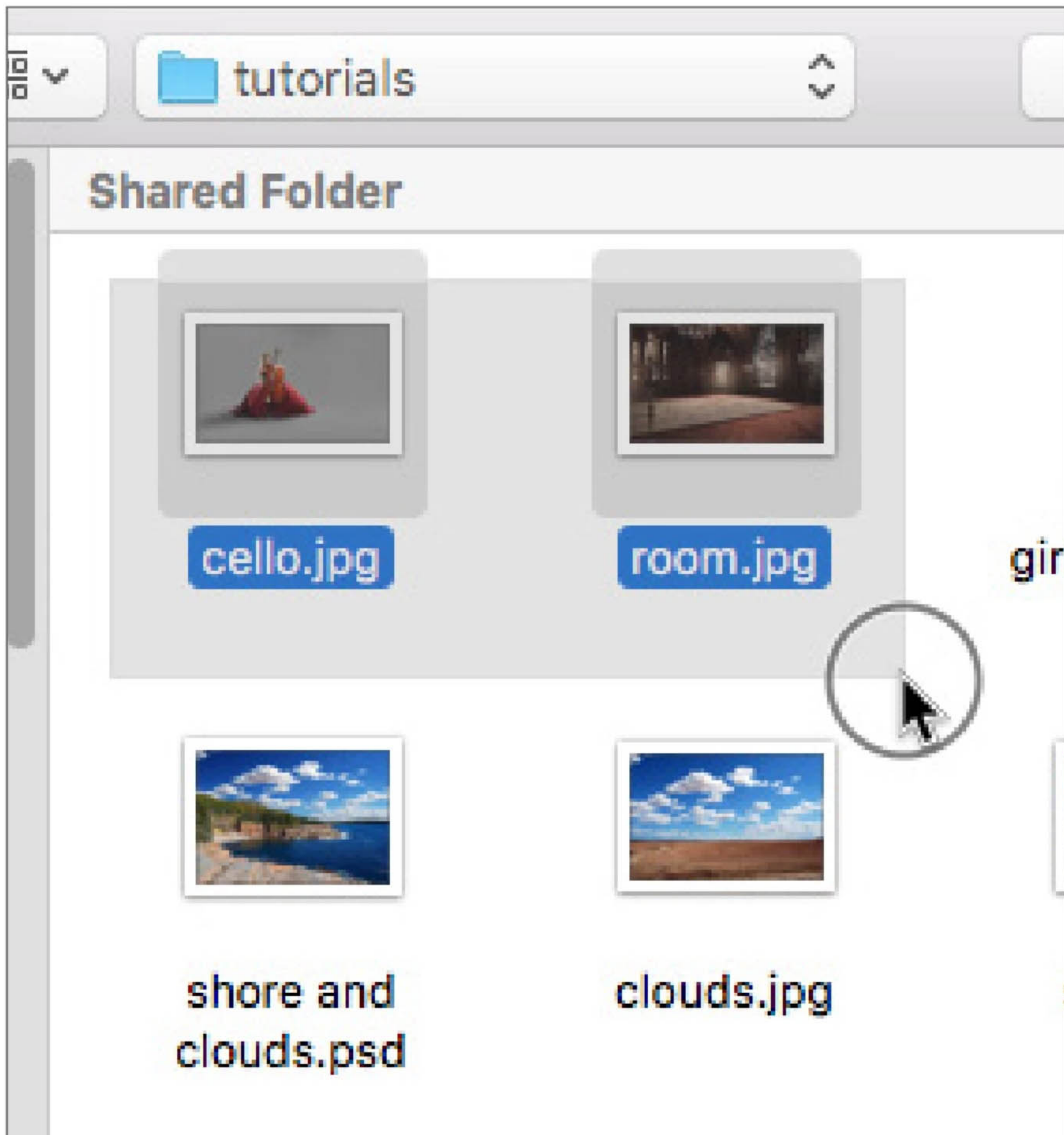
Composite Images



BEFORE

AFTER

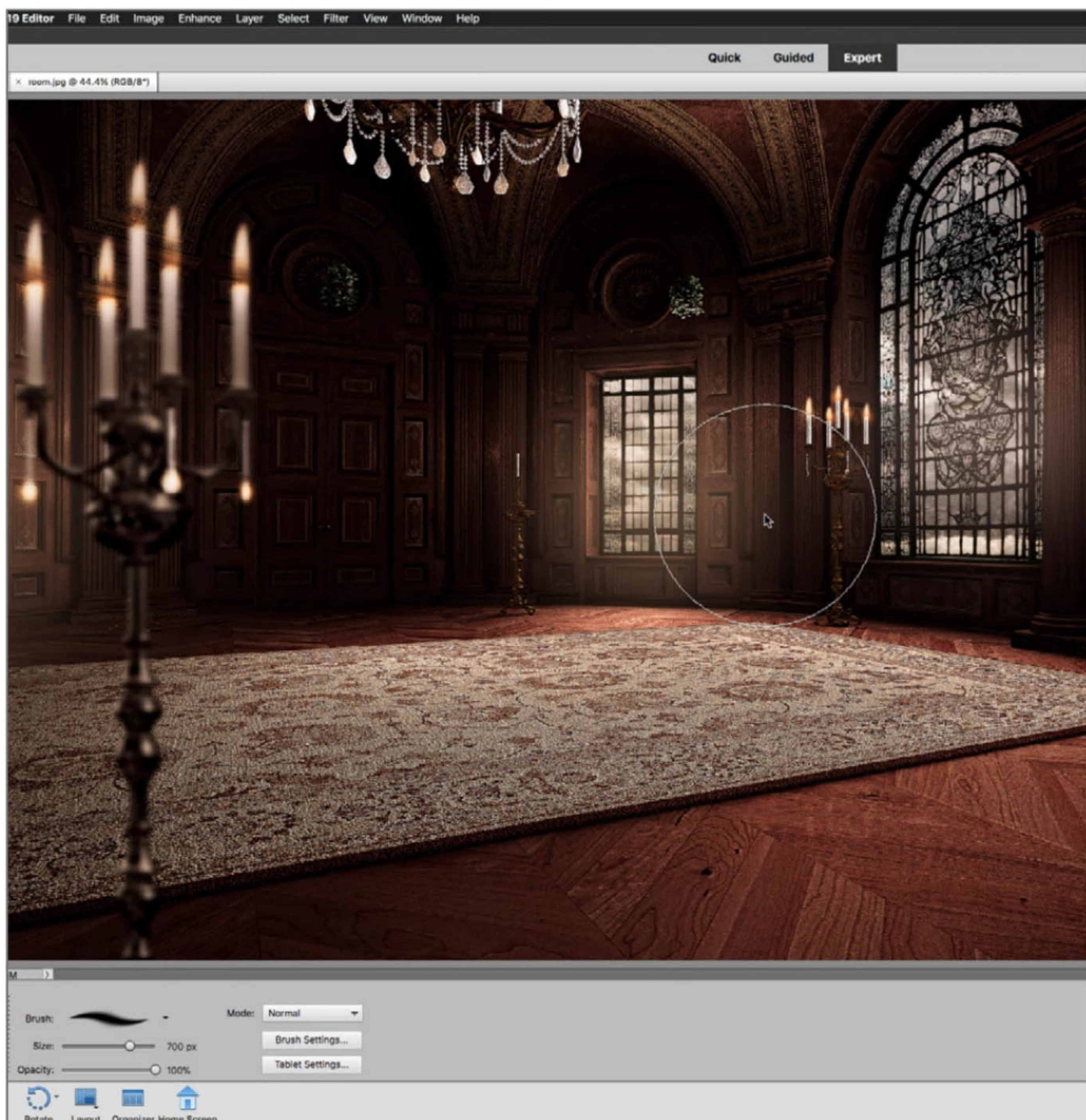
Compositing is the combining of visual elements from separate sources into single images, often to create the illusion that all those elements are part of the same scene. In this tutorial we will be looking at a fairly typical approach for the two main elements of the image which is the grey/neutral background compositing technique. Shooting your main subject against a grey screen gives them a well defined edge that makes the process of blending them into another environment all the easier. Grey screen compositing is the choice of many graphics professionals and is easier to do than you might think. We have a scenario in which we have a photo of a cellist and want to put them into a much grander environment than just a grey background.



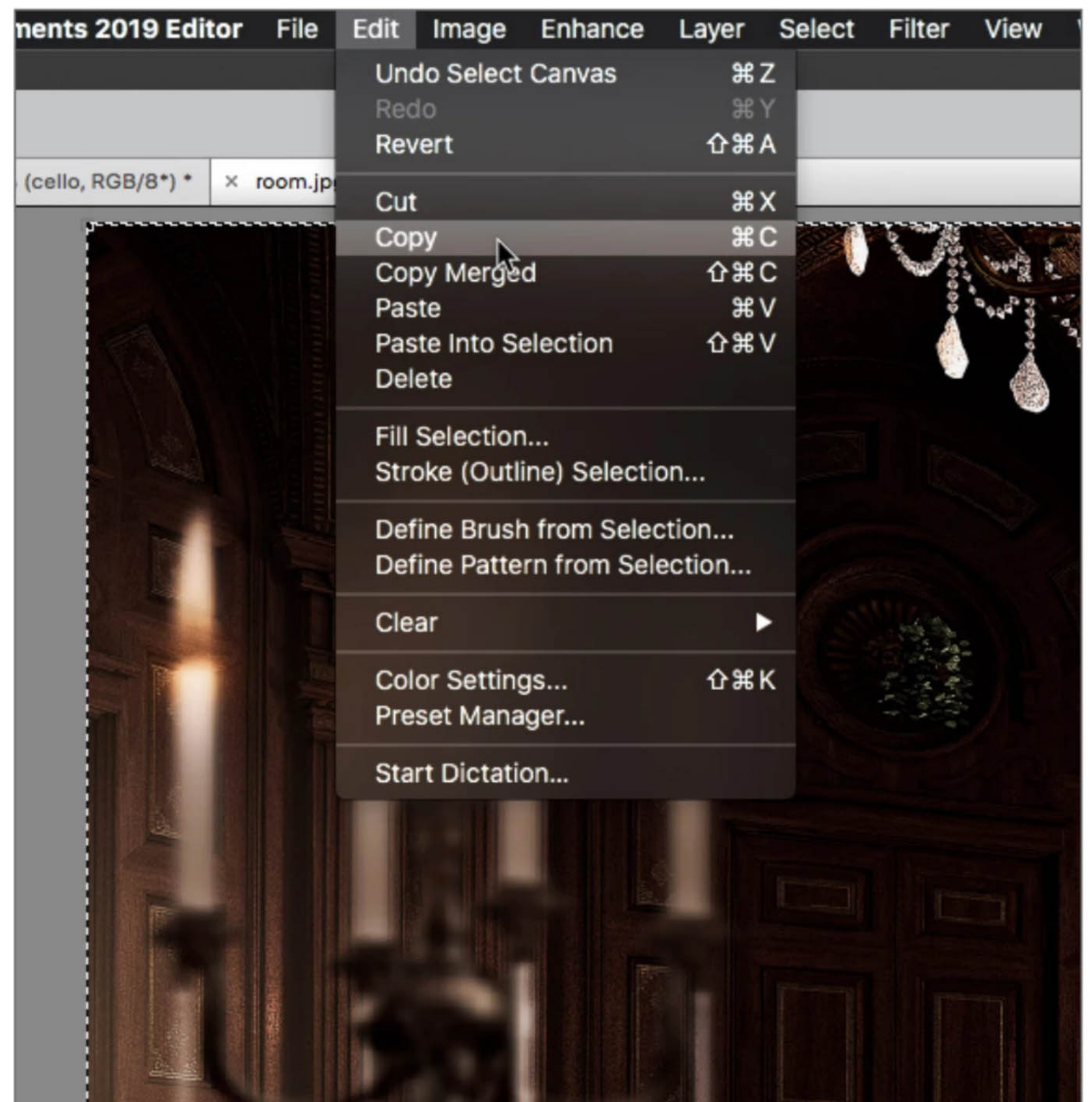
1 Go to File > Open and navigate to where the components for the scene are stored. In this example, we have our cellist image and a rendered scene to put her into. Highlight your images and click Open to create two new documents in Elements.



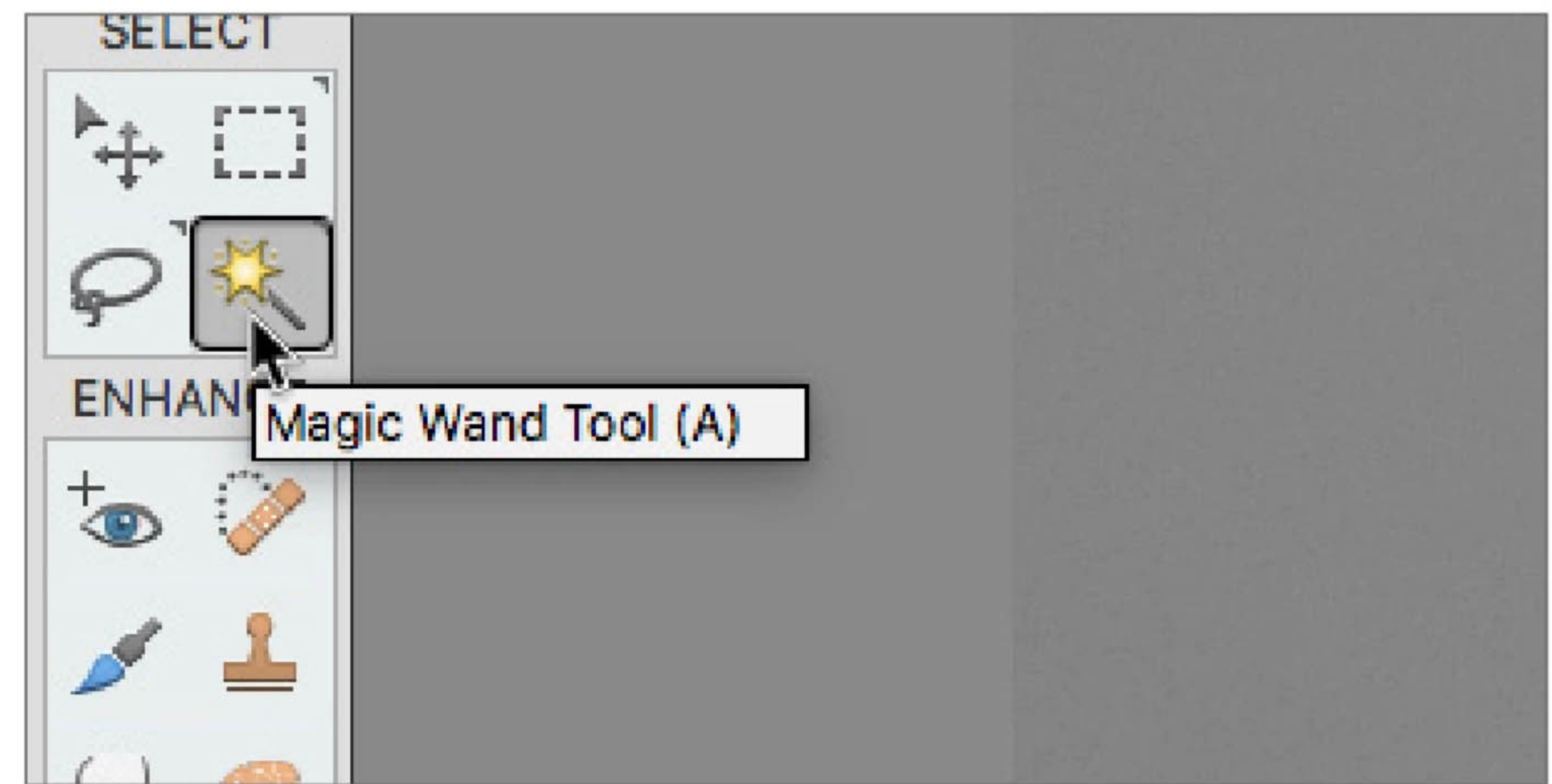
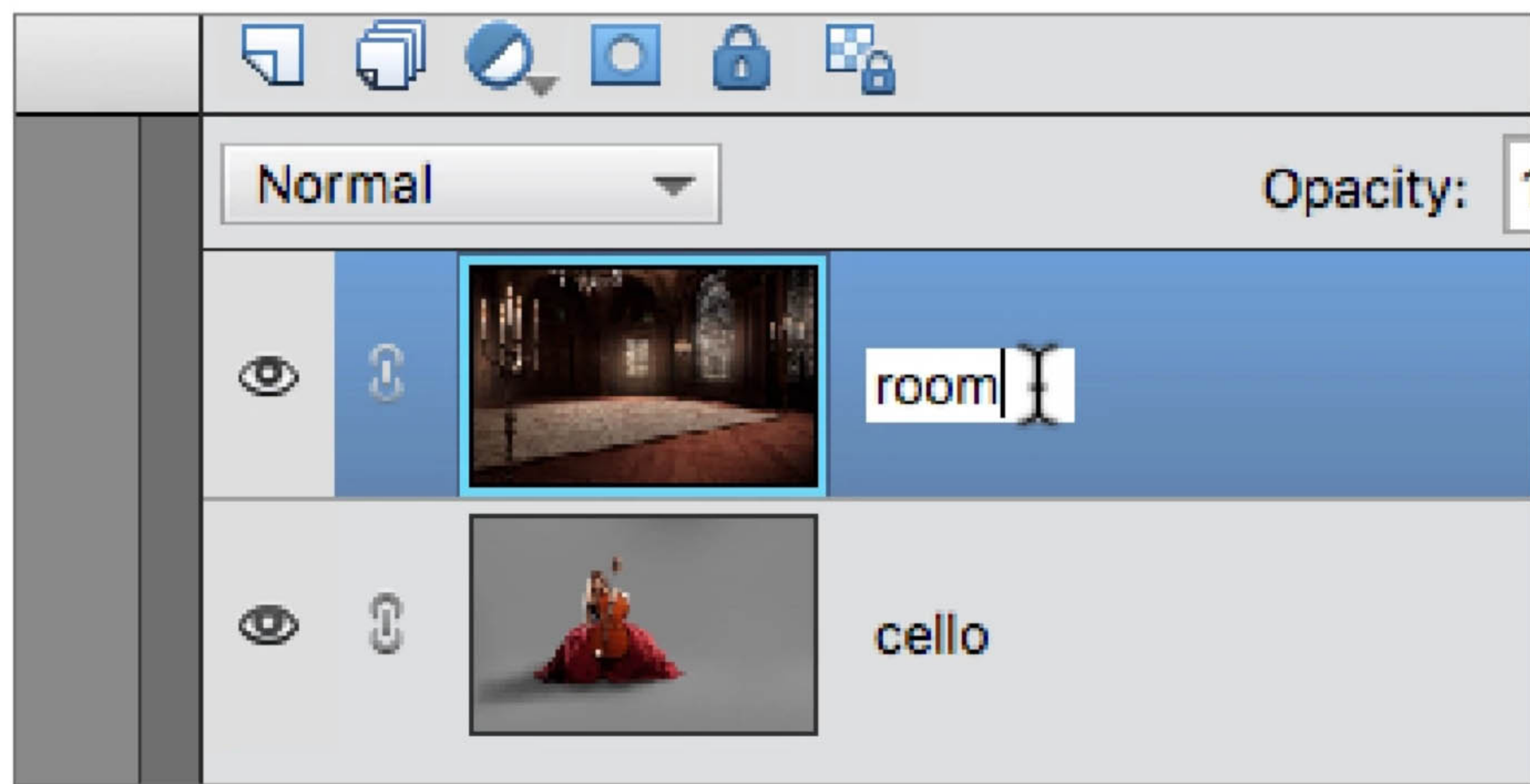
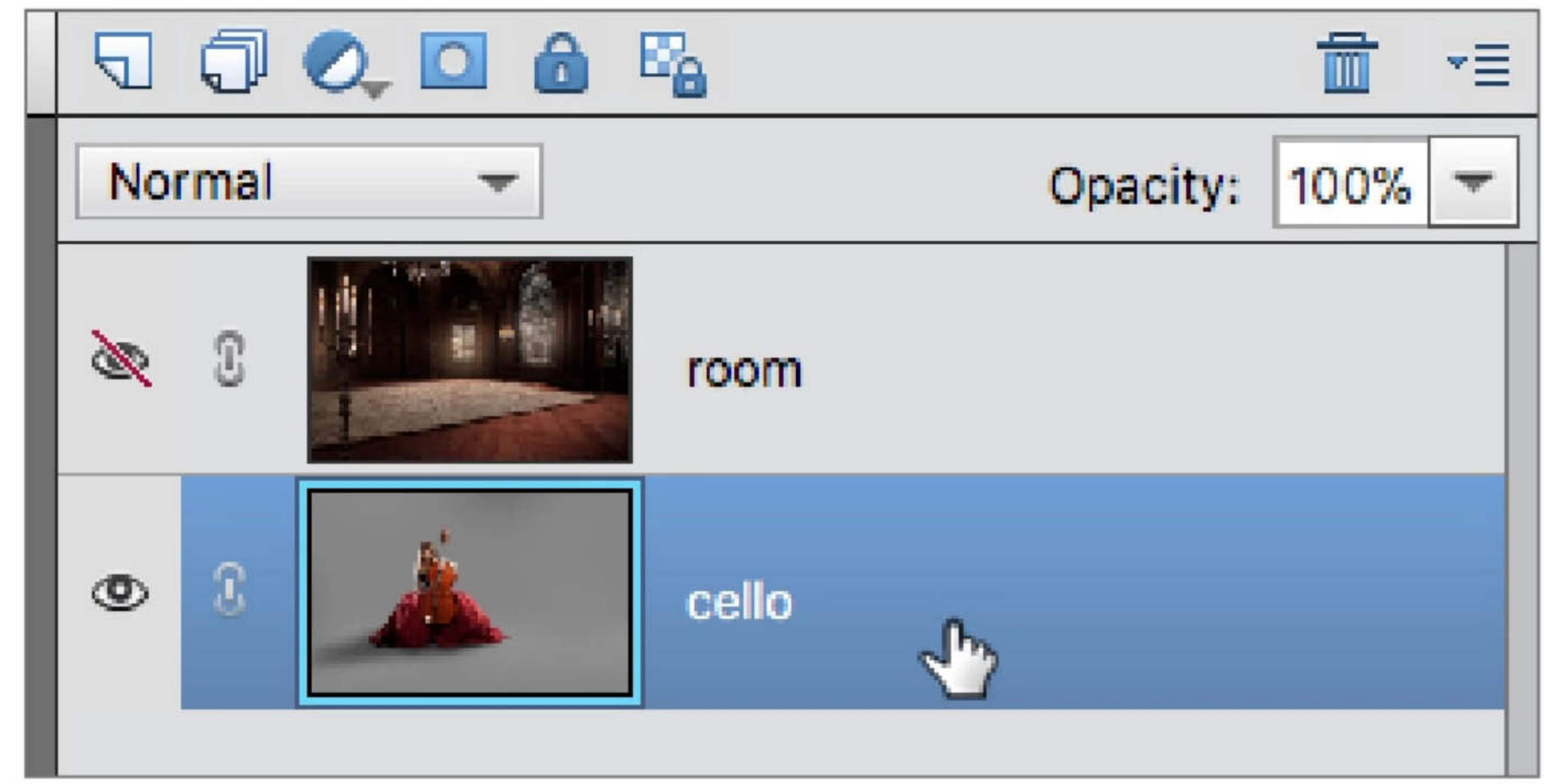
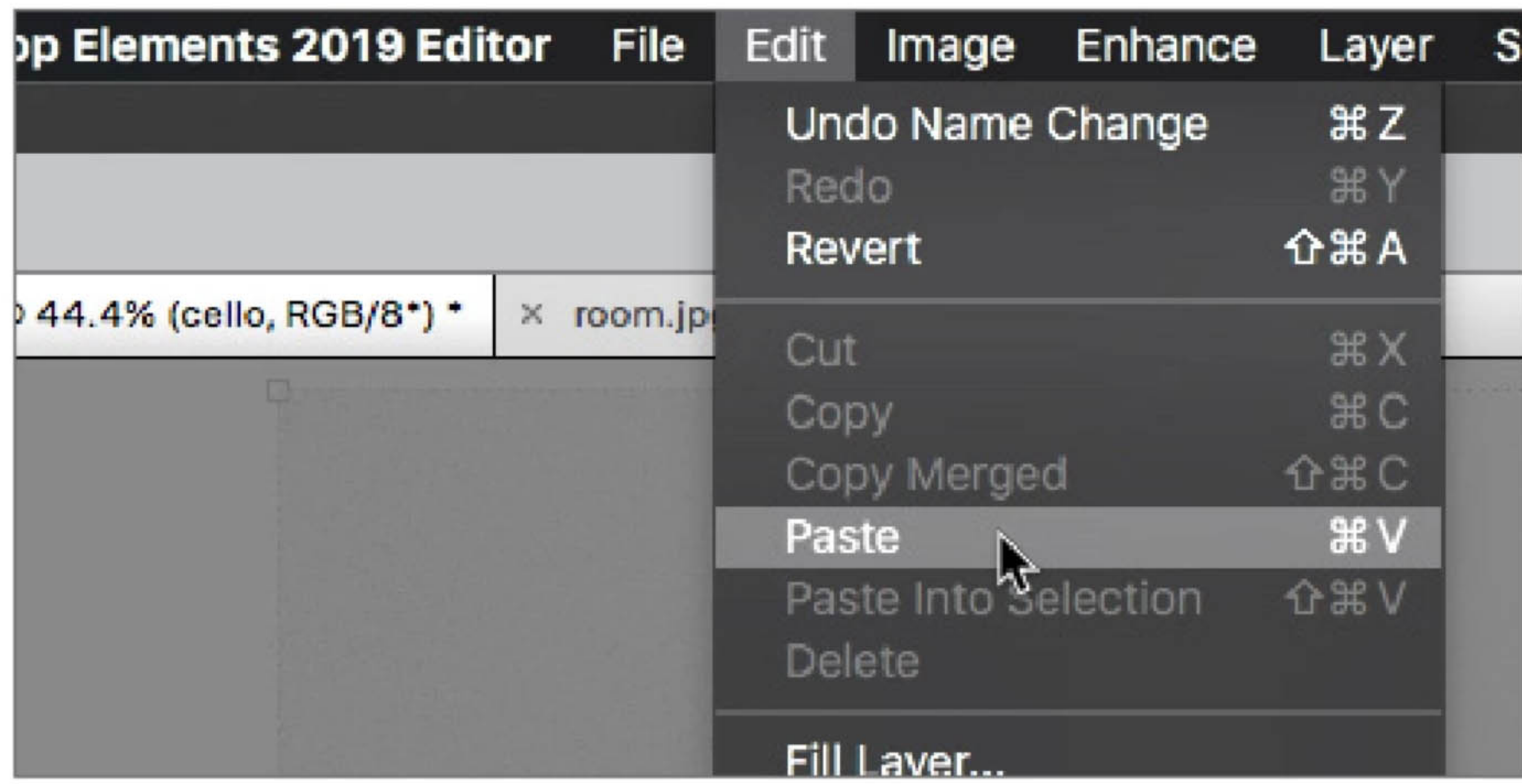
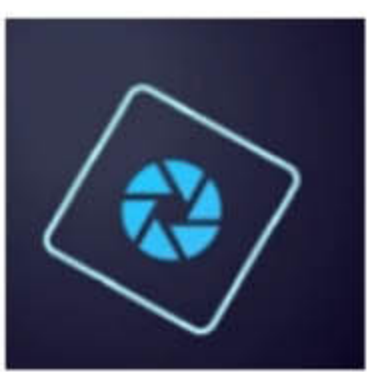
2 We have 'cello.jpg' and 'room.jpg'. You will see that the cellist is on a grey background. All the lighting gear and extraneous items present in the shot have been cloned out leaving just her and a plain grey background. The grey background is a key part of this process.



3 The other image we will be working with is a 3D render of a baroque ballroom. There is a perfect spot upon which the cellist can be placed. Now, you have the two images that will be combined. You will see that it is not done in the conventional way that you might imagine but is very effective nonetheless.

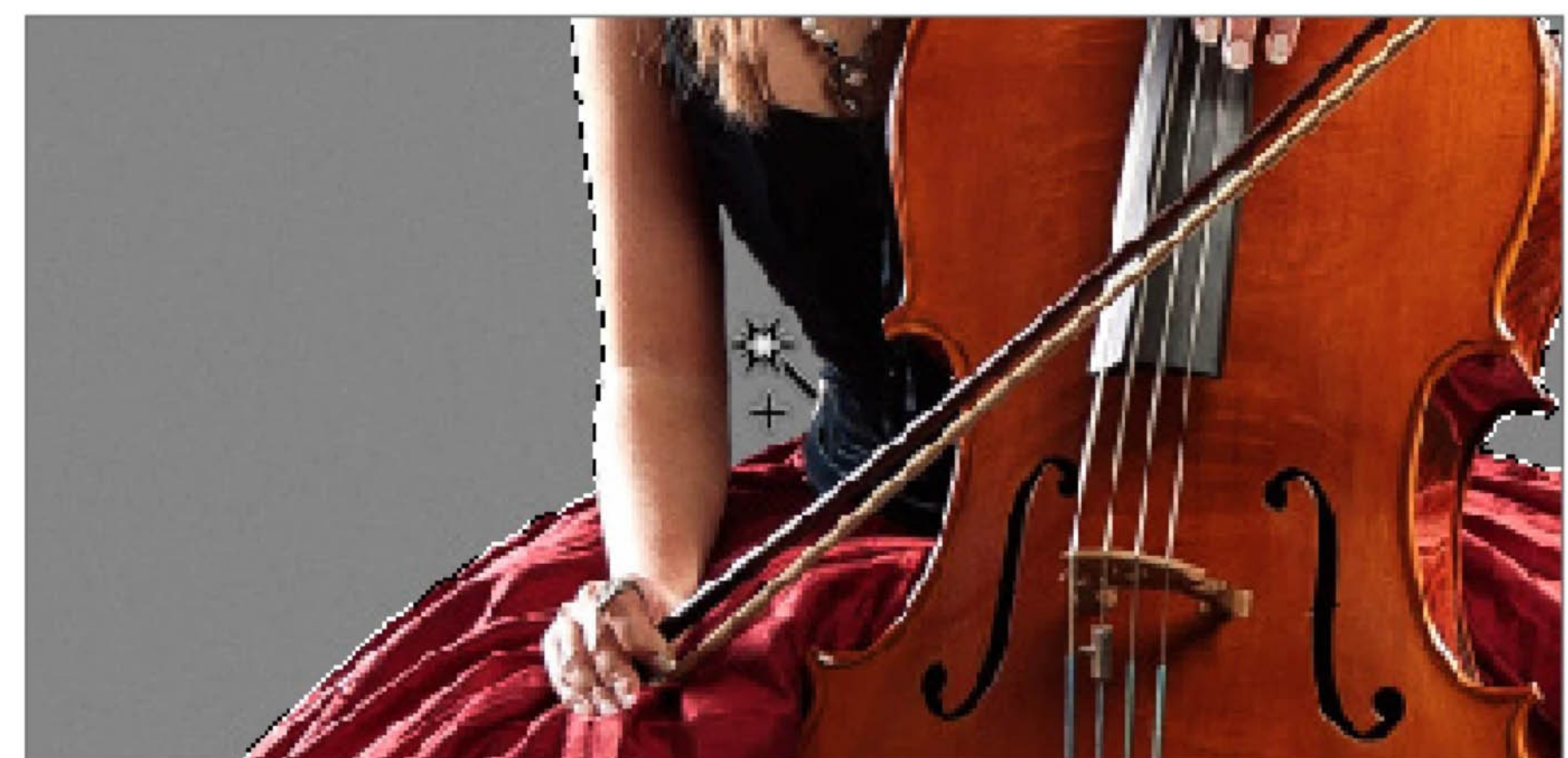
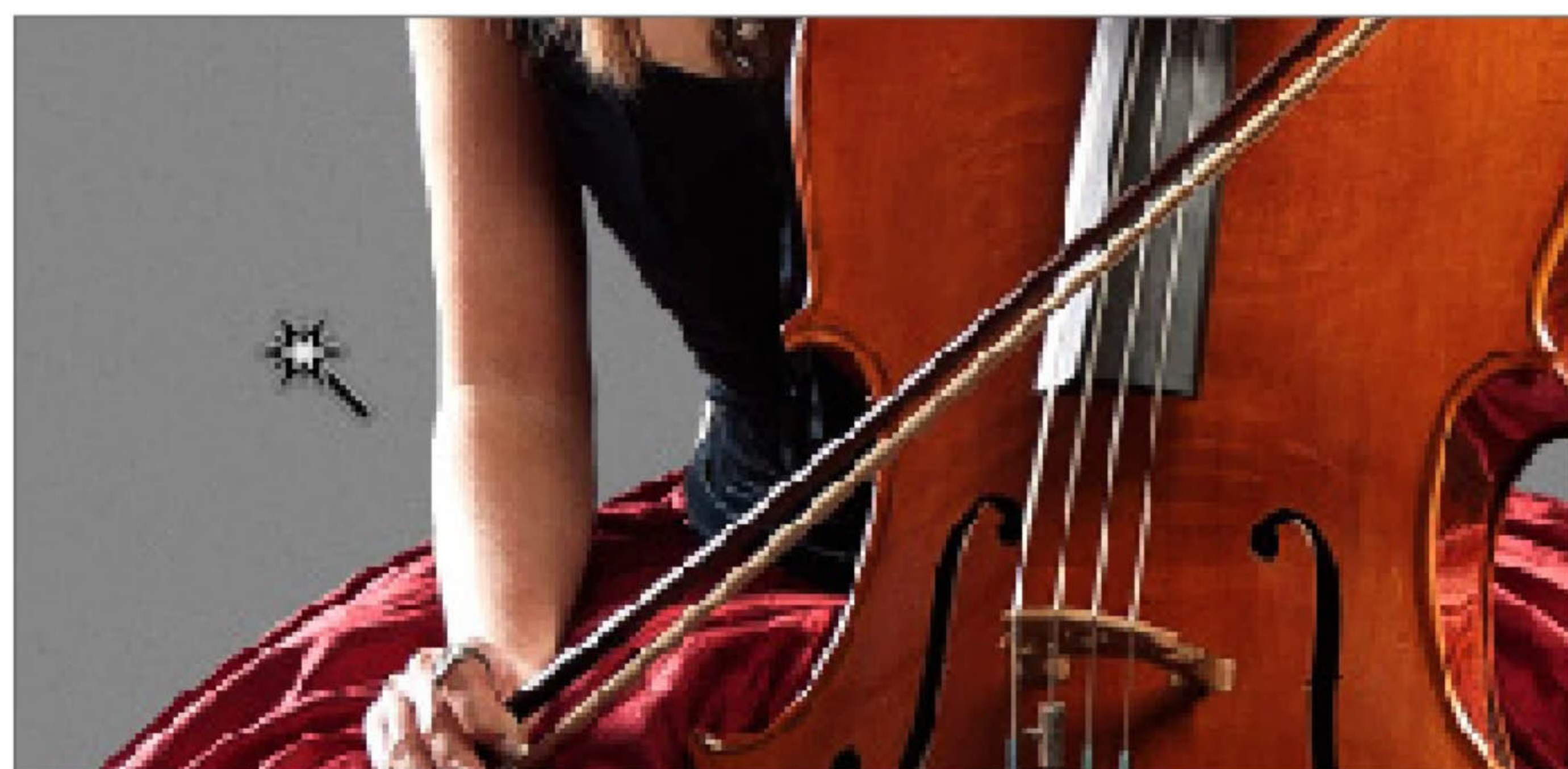
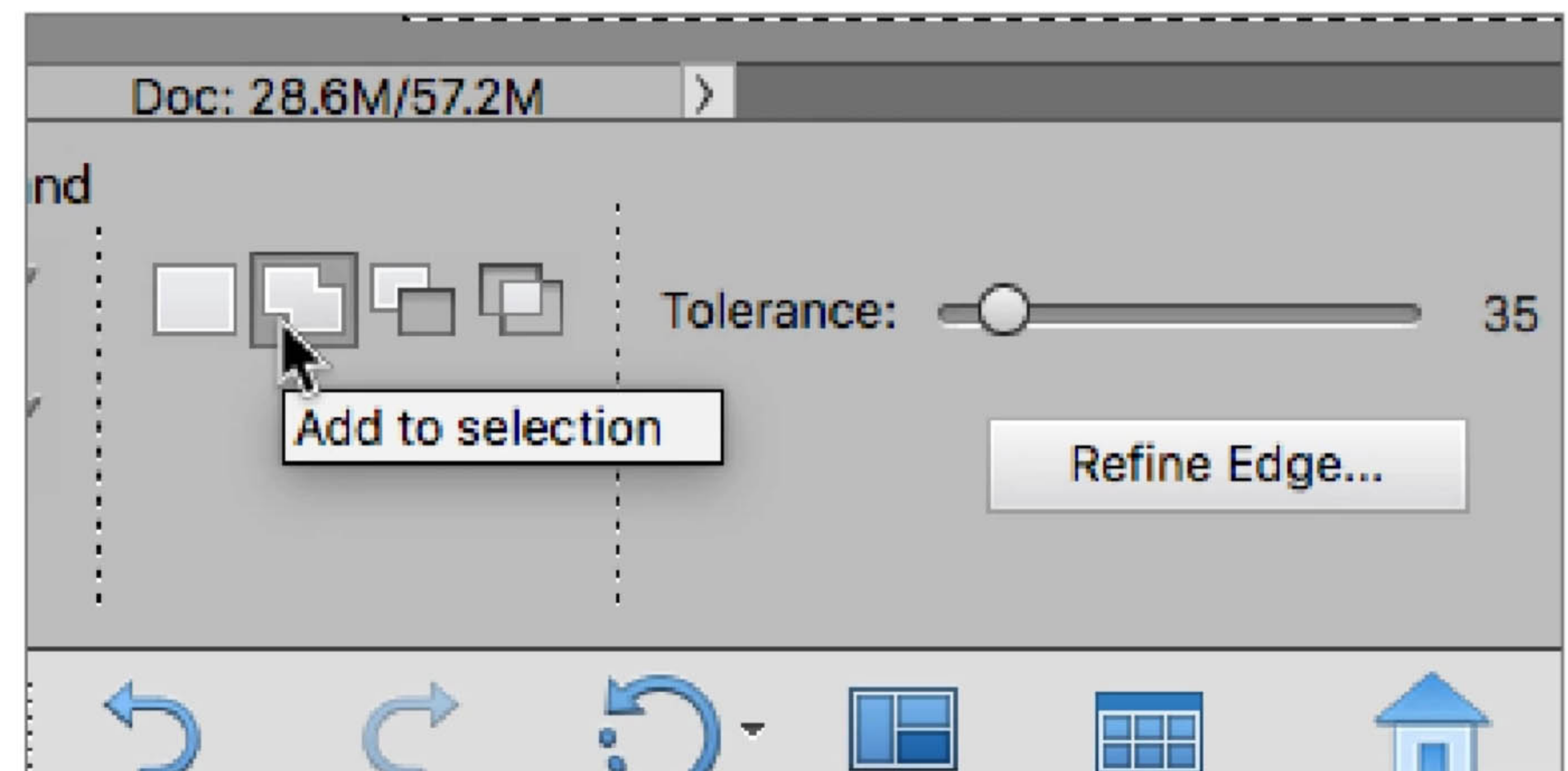
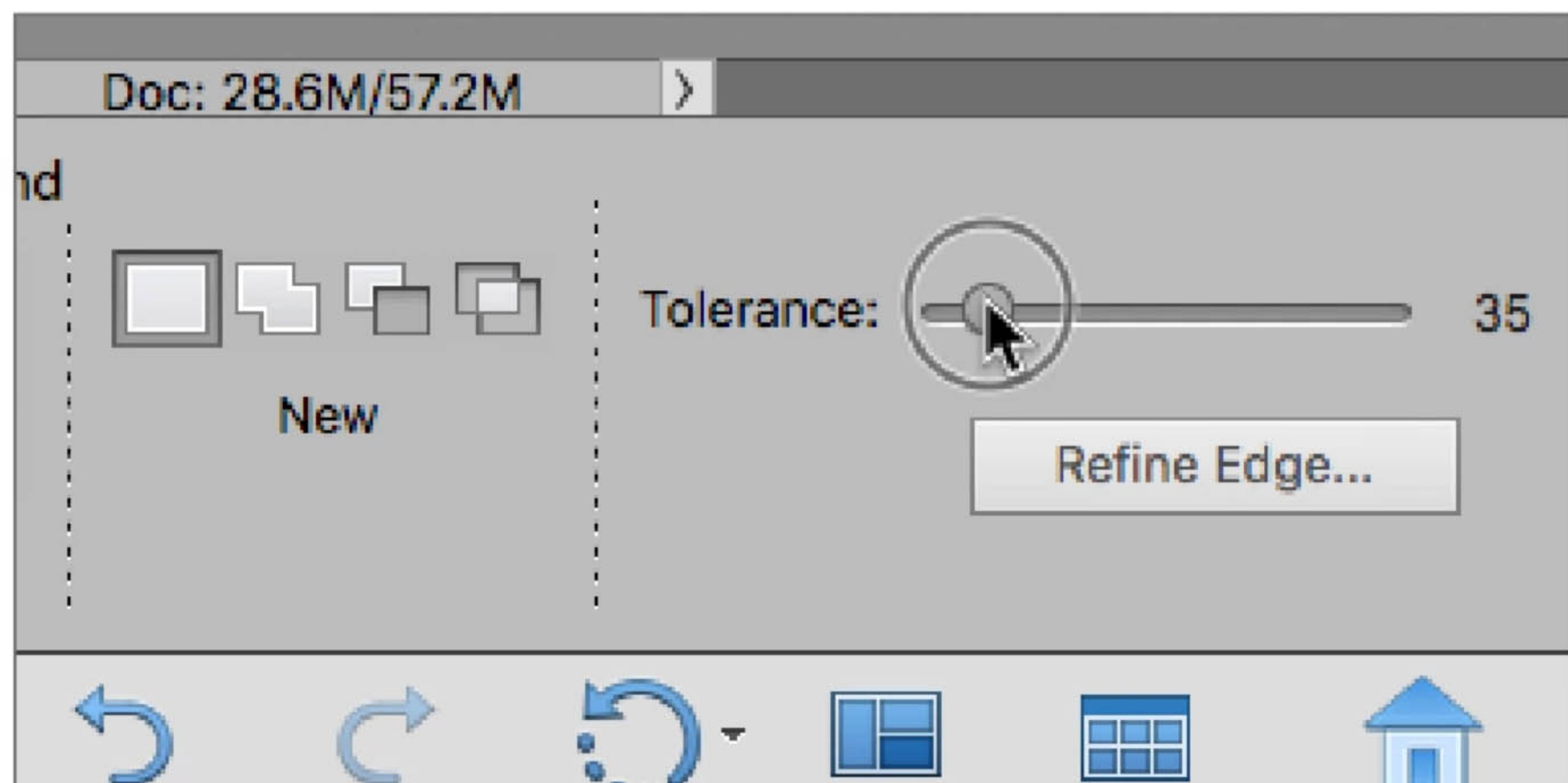


4 For the moment, return to the 'cello' document and click on the layer lock icon next to the layer thumbnail to unlock the layer. Go to the 'room' image and do the same. Press Cmd + A to select all pixels on that layer and then press Cmd + C to copy the 'room' image, or go to Edit > Copy.



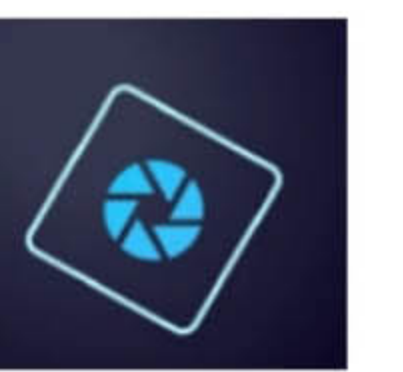
5 Go to the 'cello' document and go to Edit > Paste or press Cmd + V to paste the copied room image into the 'cello' document. It will appear on its own layer above the 'cello' layer. You can name this new layer 'room'. For the moment, click the visibility icon of the 'room' layer to make it invisible.

6 Click the 'cello' layer to make it active. You need to make a selection of her outline to start the compositing process. Go to the toolbar and select the Magic Wand Tool (A). Although the Magic Wand is a fairly simplistic selection method, it actually works really well in these situations.

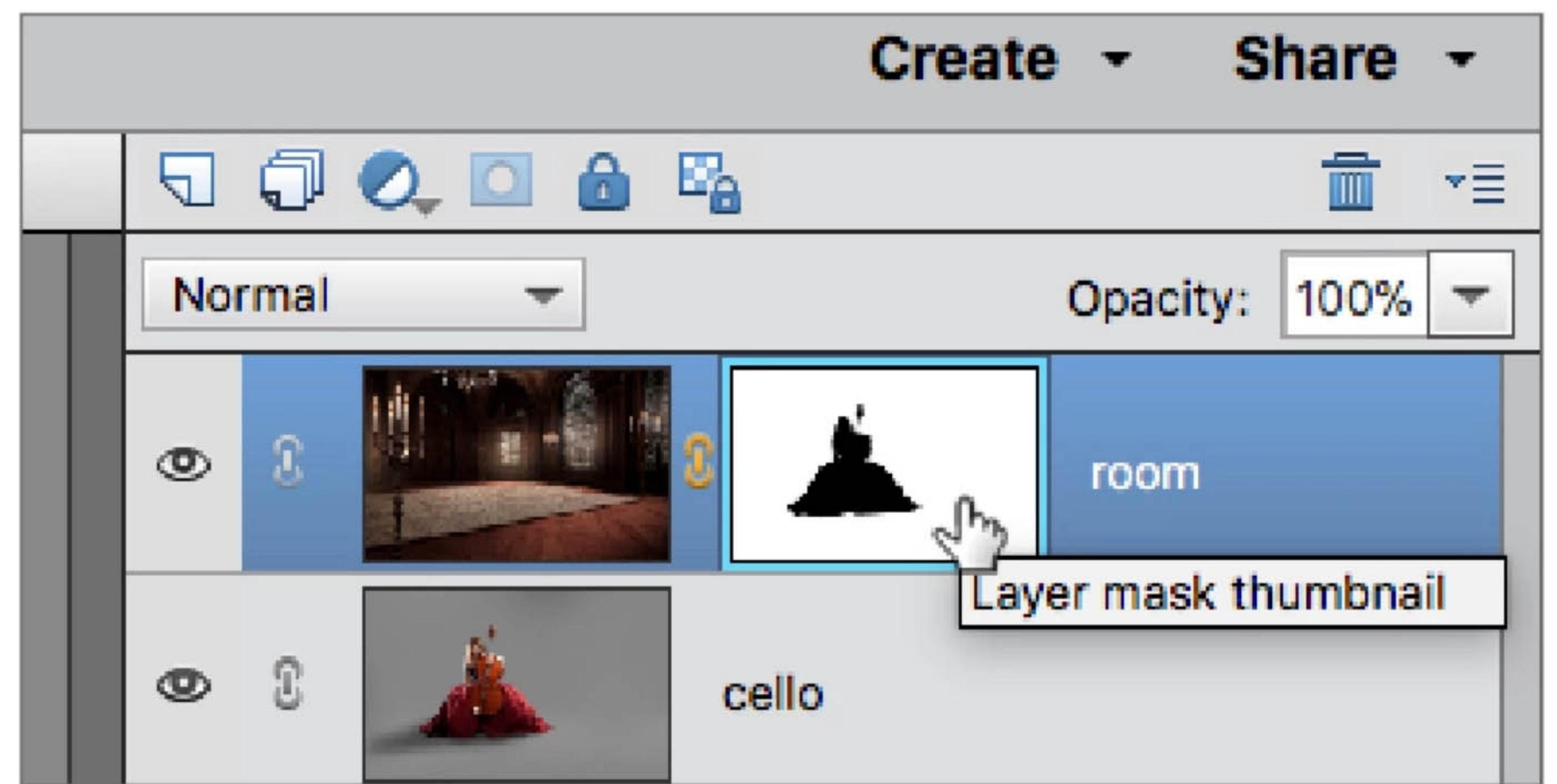
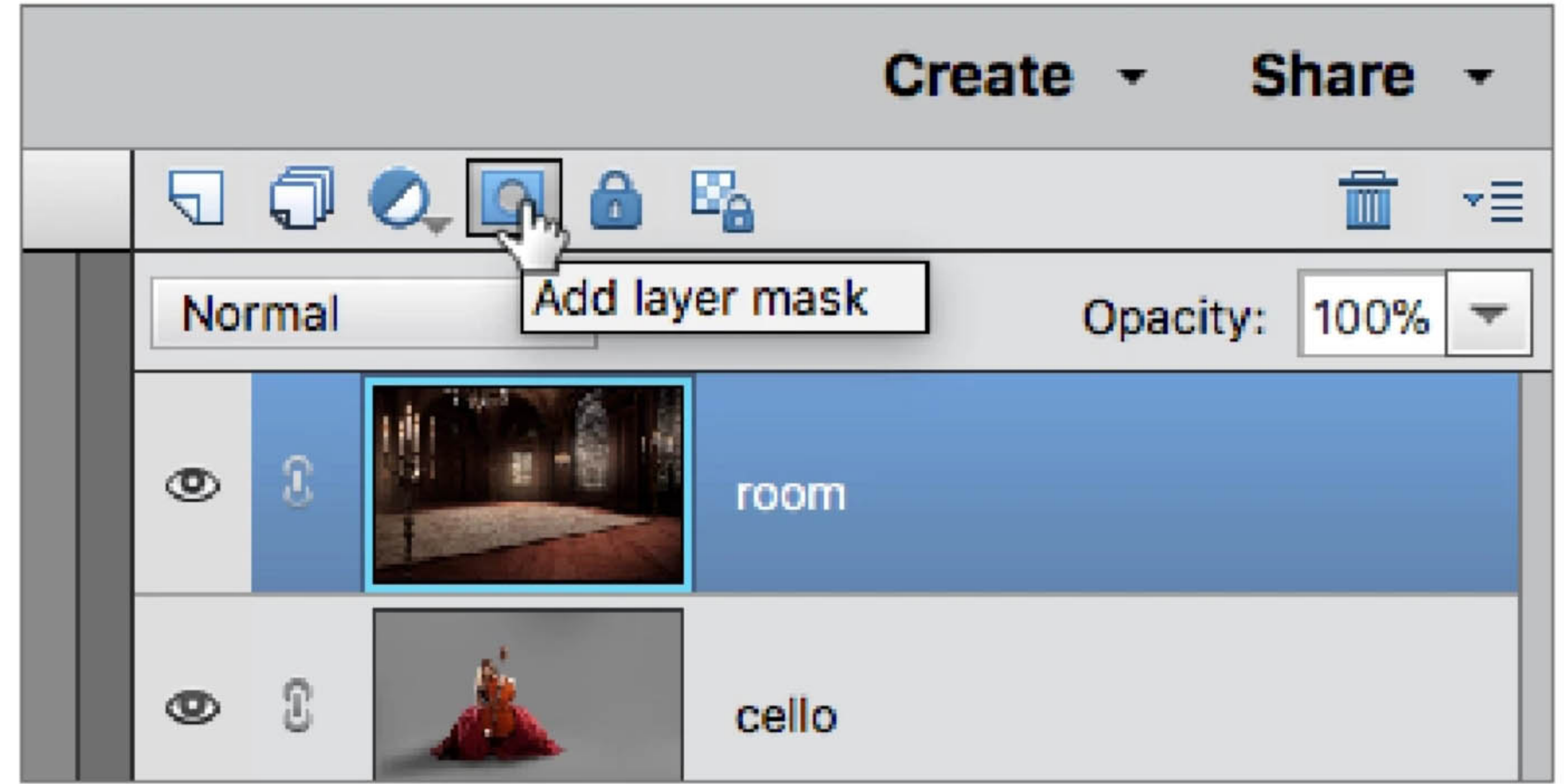


7 Set the Magic Wand Tolerance to about 35 and make sure the Contiguous button is checked. Position the cursor over the grey background surrounding the cellist and left-click. The Magic Wand will select as much grey as the Tolerance setting dictates. Now we need to add the parts it missed.

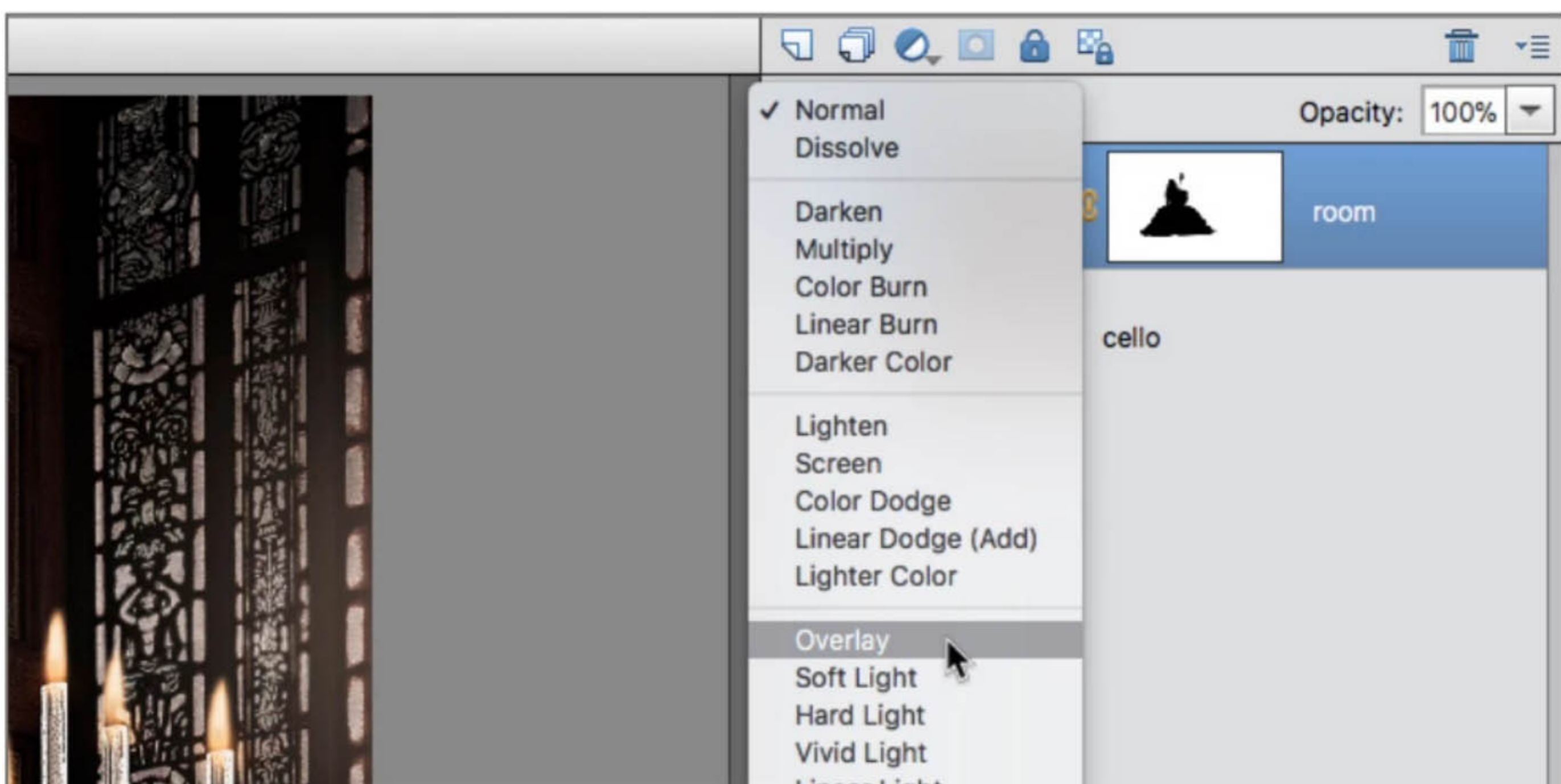
8 Click the Add To Selection button and a small plus symbol will appear on your cursor to indicate anything selected will be added to the currently active selection. Now you can click and add more grey areas until all the grey is selected.



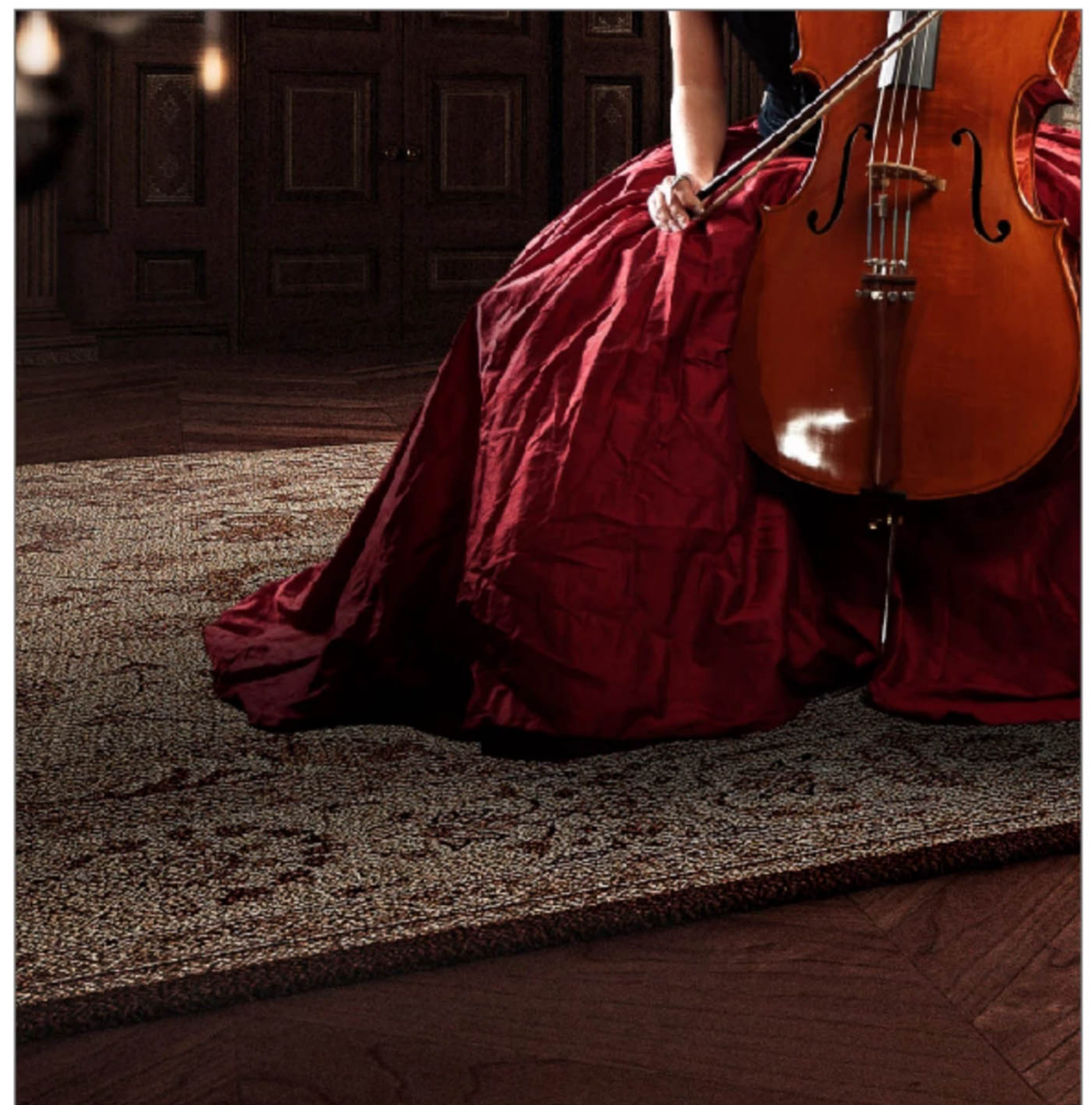
9 Make the 'room' layer visible and active again. You will see the selection you just made overlaid on the image as a series of black and white dashes known as 'marching ants'. This selection can be used to create a mask in the next step.



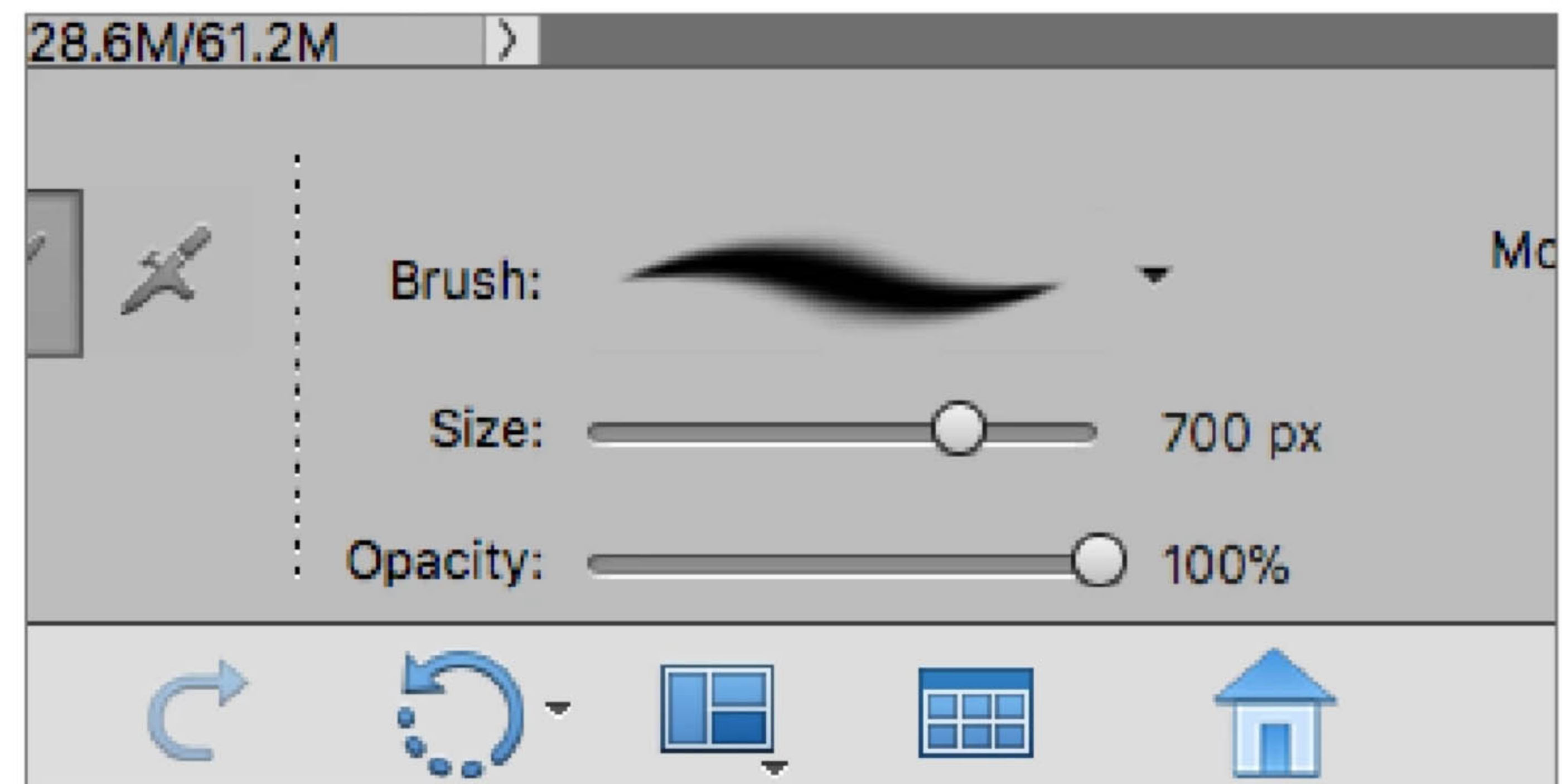
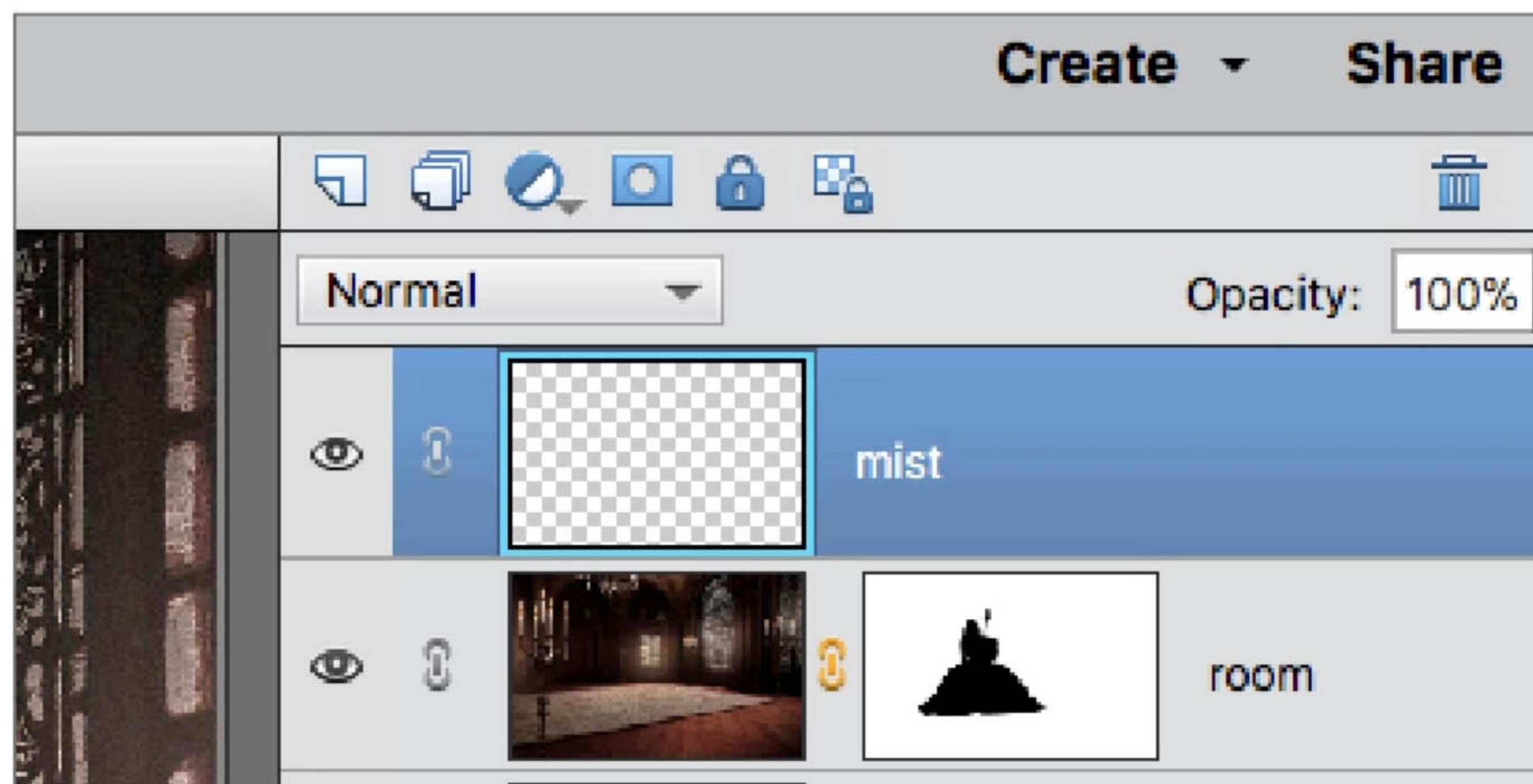
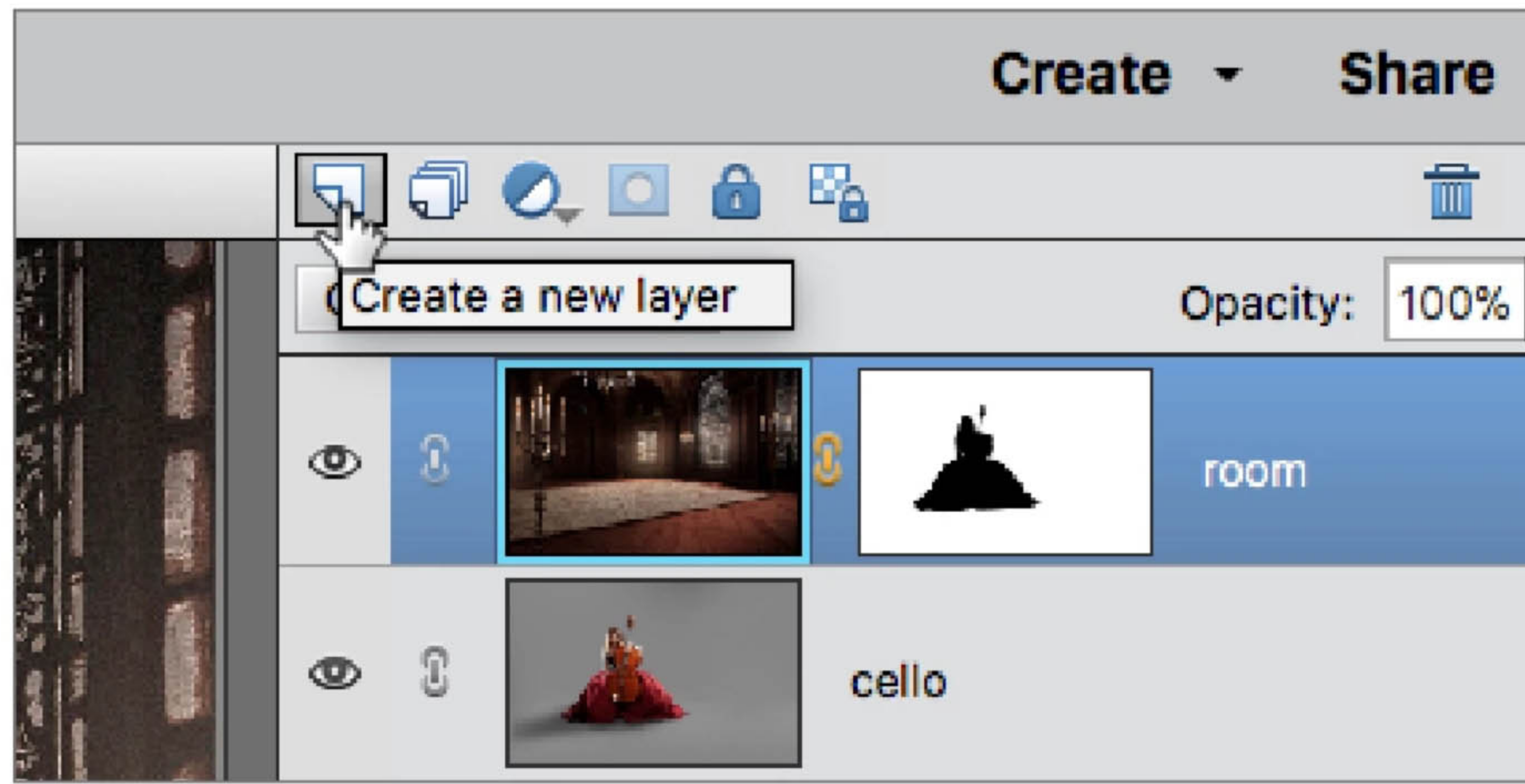
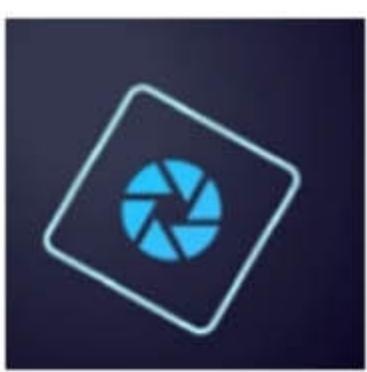
10 Go to the layer options panel and click on the Add Layer Mask button. When you do, a mask in the shape of the selection will be added to the 'room' layer. Anything within the bounds of the selection will be white and anything outside the bounds will be black. White reveals and black conceals.



11 You might notice that the cellist looks a little too much like a cut out figure. You can remedy that by changing the Blend Mode of the 'room' layer to Overlay. This blends the pixels of the 'room' layer into the 'cello' layer. Only the cellist is unaffected by the blend because of the mask on the layer above.

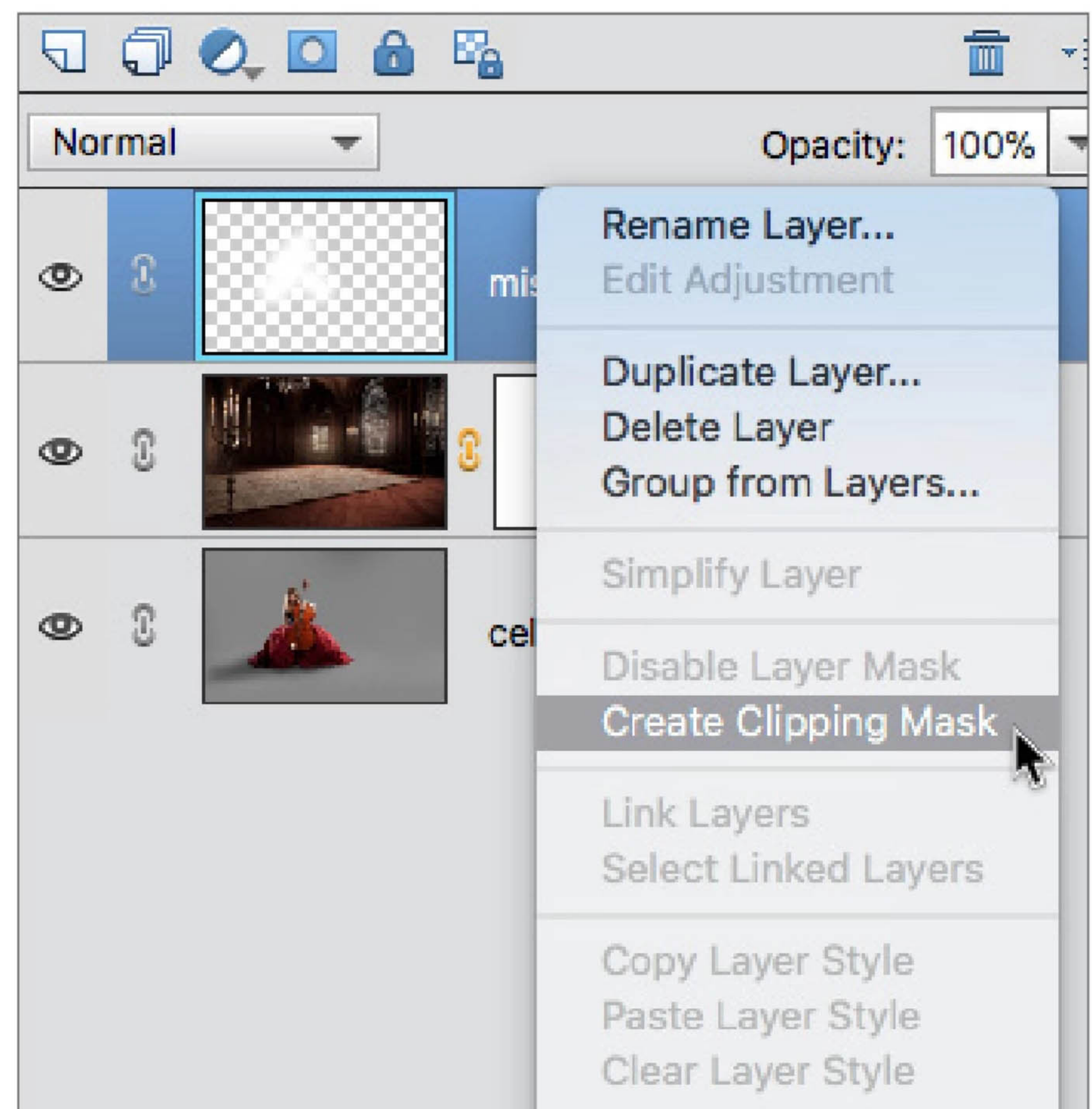


12 Any area of the neutral grey 'cello' background that is blended with the 'room' layer makes no visual difference but any parts of the grey background darker than about 50% grey show up. This is great since the cellist's shadow now appears on the ground.



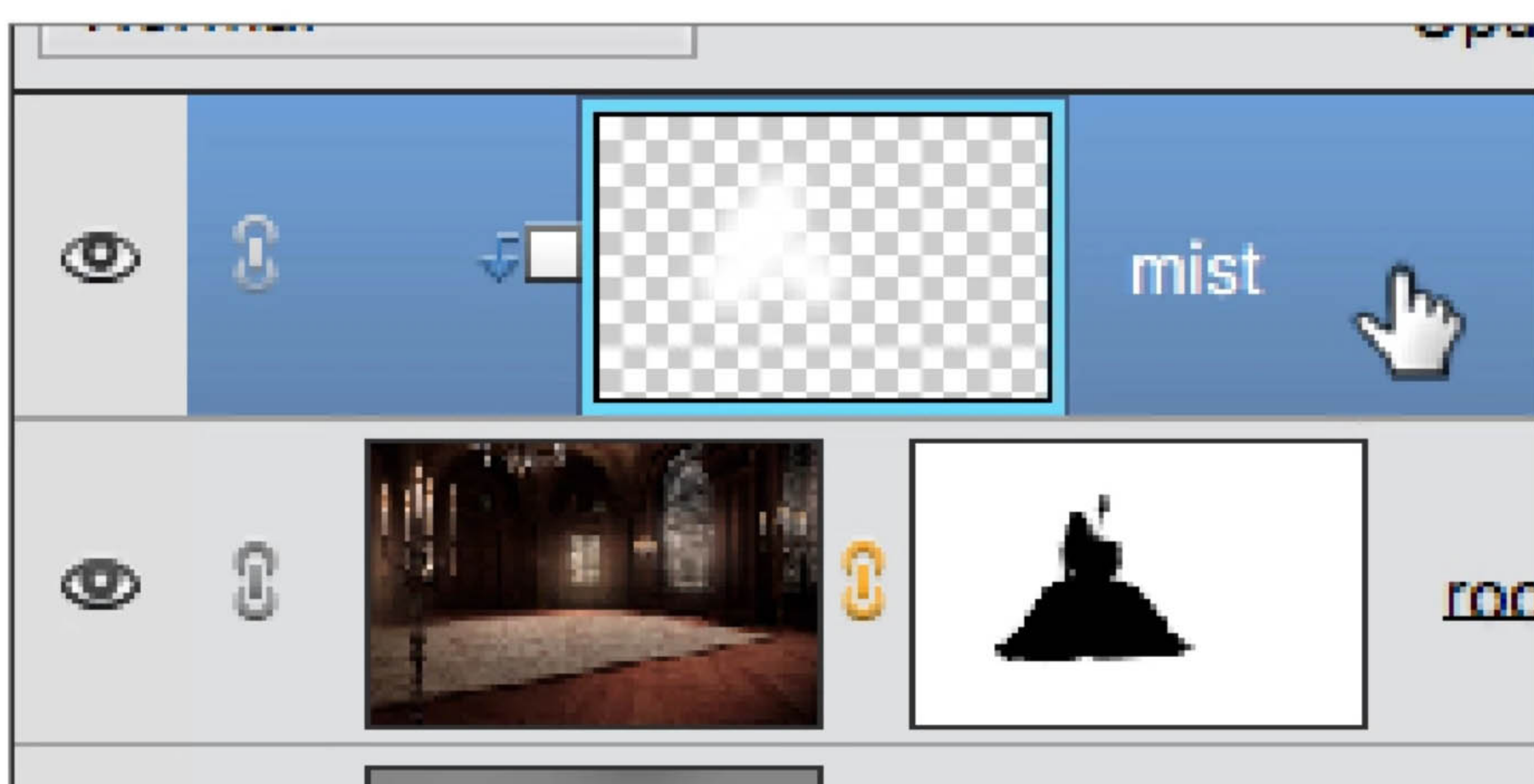
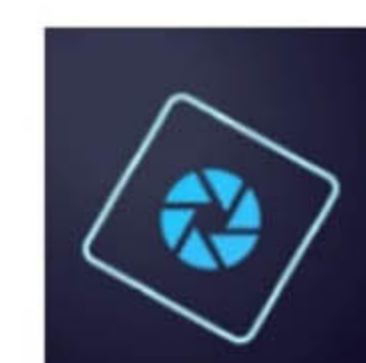
13 Now we can begin to make the whole image more cohesive. With the 'room' layer active go to the layers palette and click on the Create New Layer button. Call this new layer 'mist'. We are going to add a subtle atmosphere behind the figure which is a popular thing to do in images like this.

14 Keep the 'mist' layer active and go to the toolbar and choose the Brush Tool (B). In the tool options panel at the bottom of the screen, choose a large soft brush of about 700 pixels. Keep its opacity at 100%. Make sure the foreground colour is white.

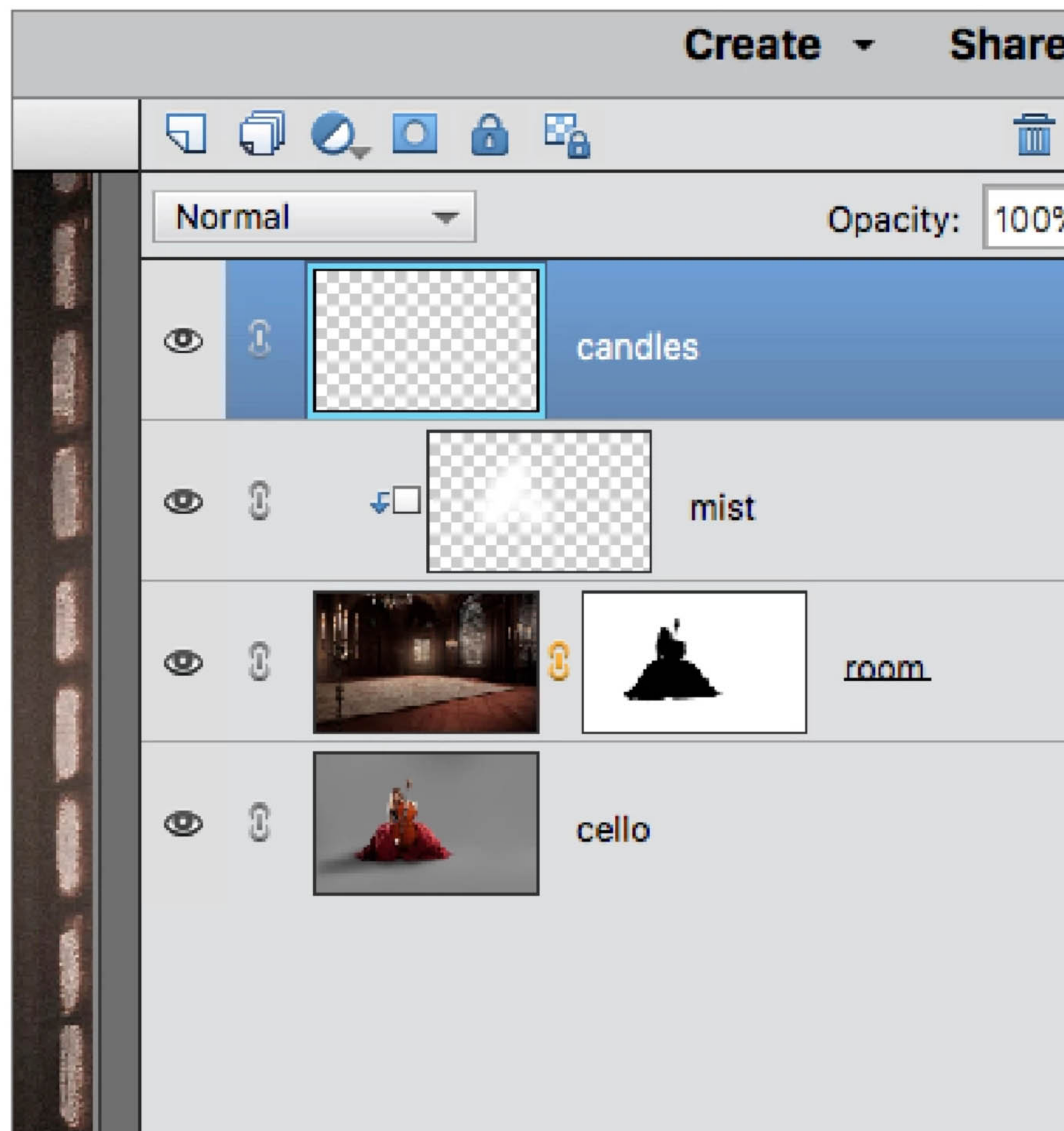


15 Take the brush and paint white on the 'mist' layer around the upper part of the cellist's outline. You will be painting over your foreground figure of course but we can actually use the mask on the 'room' layer below to help us remedy the issue.

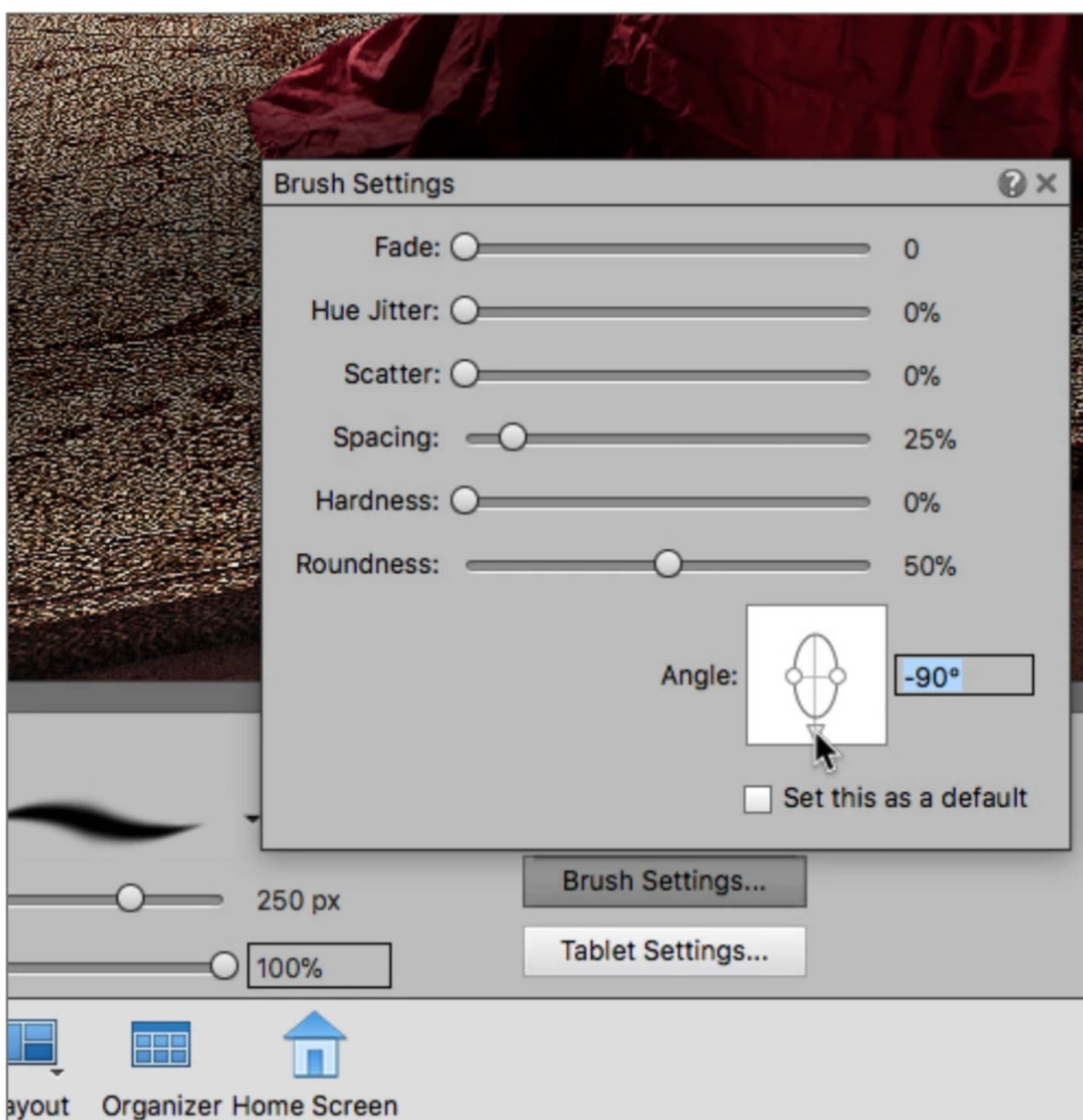
16 Right-click the 'mist' layer and choose the Create Clipping Mask option from the dropdown menu that appears. When you clip the 'mist' layer to the 'room' layer, it inherits the mask as well. Suddenly, the mist is appearing behind the cellist even though it is on the layer above.



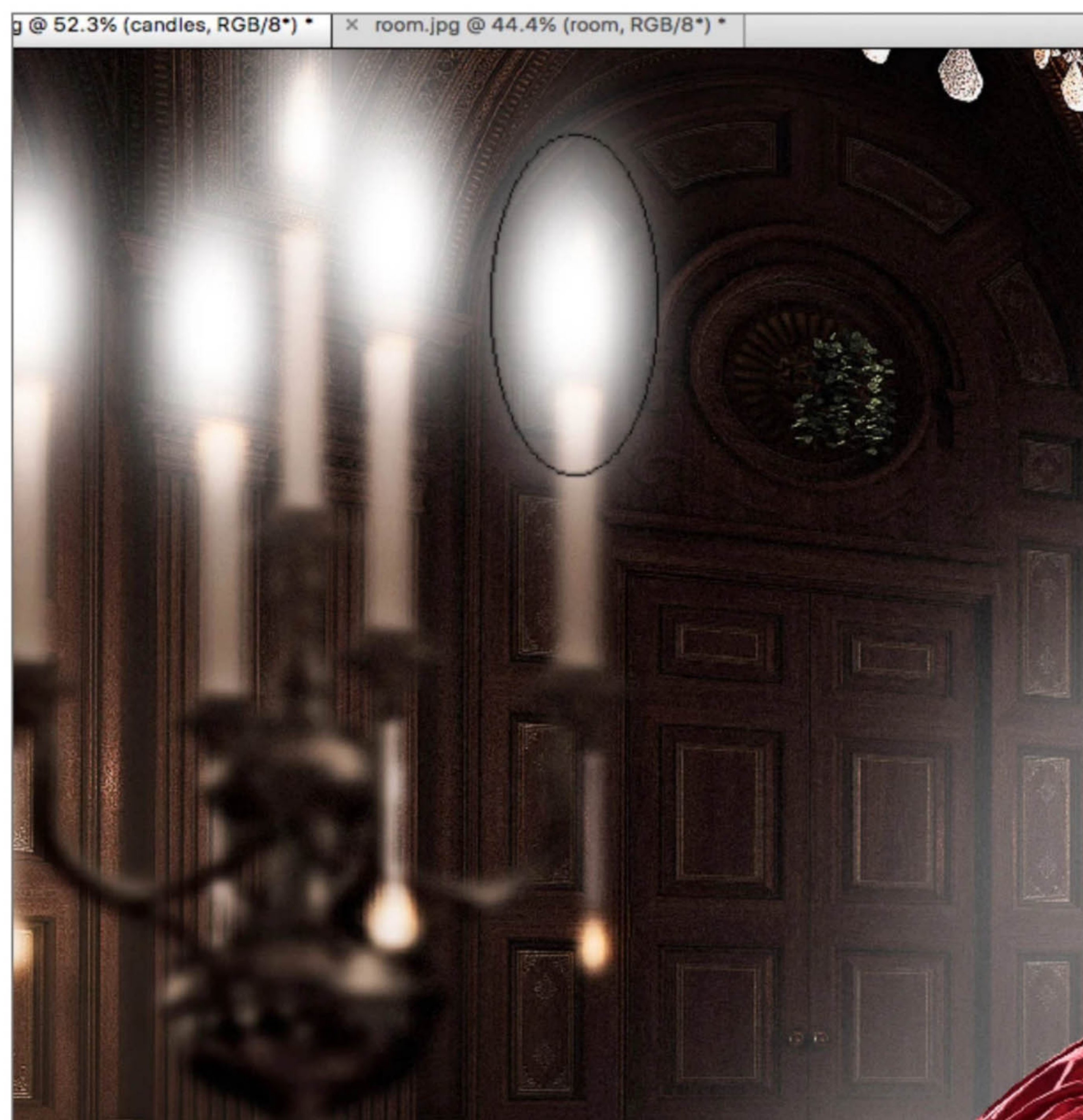
17 The 'mist' layer will now have small arrow icon next to its thumbnail to indicate it is clipped to the layer below. At the moment the white brush strokes look way over the top. Reduce the Opacity to about 40% and add Gaussian Blur to the mist to soften it if you want as well.



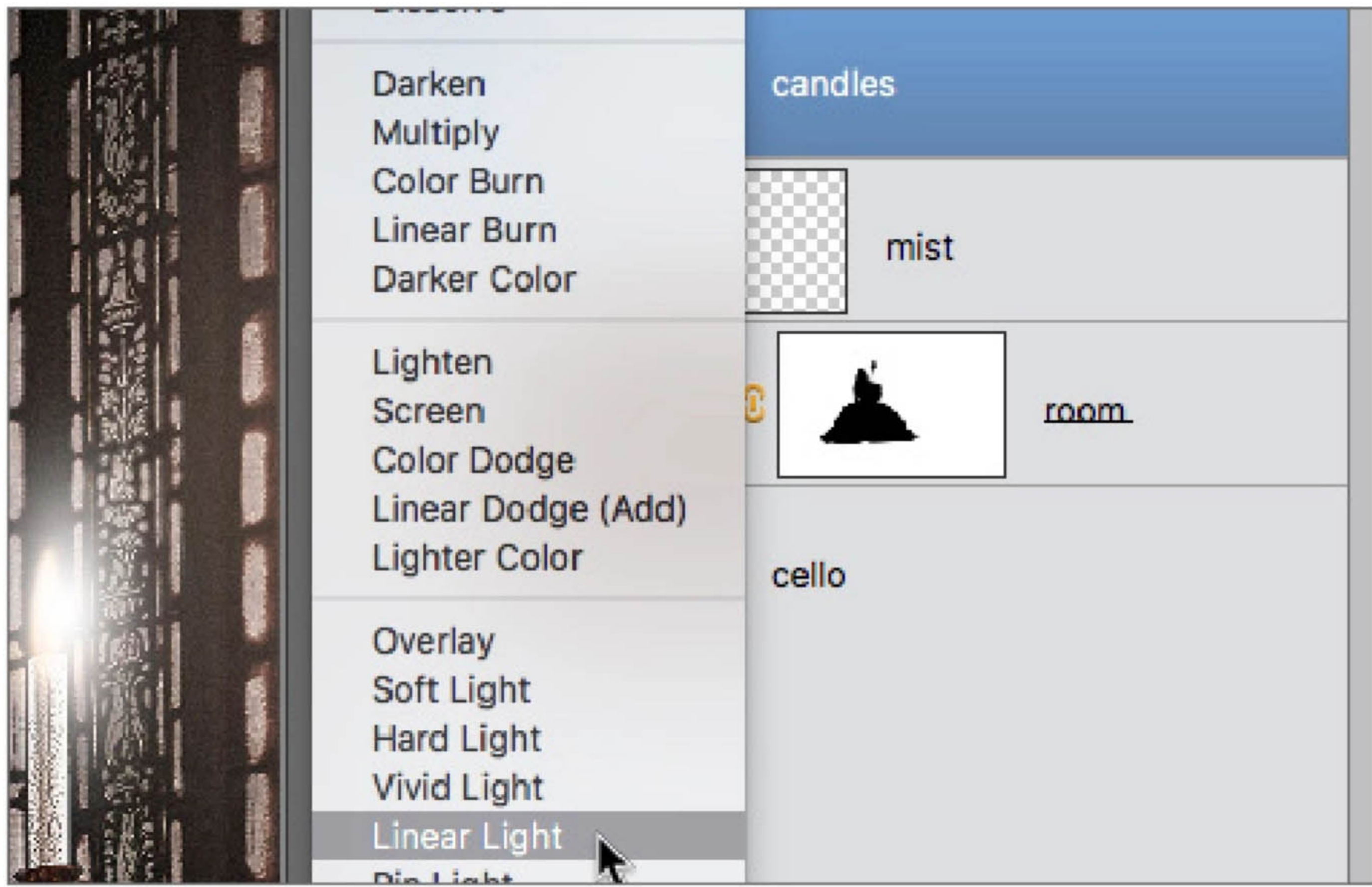
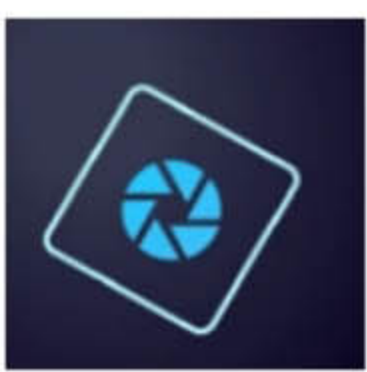
18 Next you can add some subtle lighting effects to the candles and windows for a moody feel. Create a new layer and name it 'candles'. Make sure it is at the top of layer stack and active. Go to the toolbar and choose the Brush Tool (B) again if not still selected.



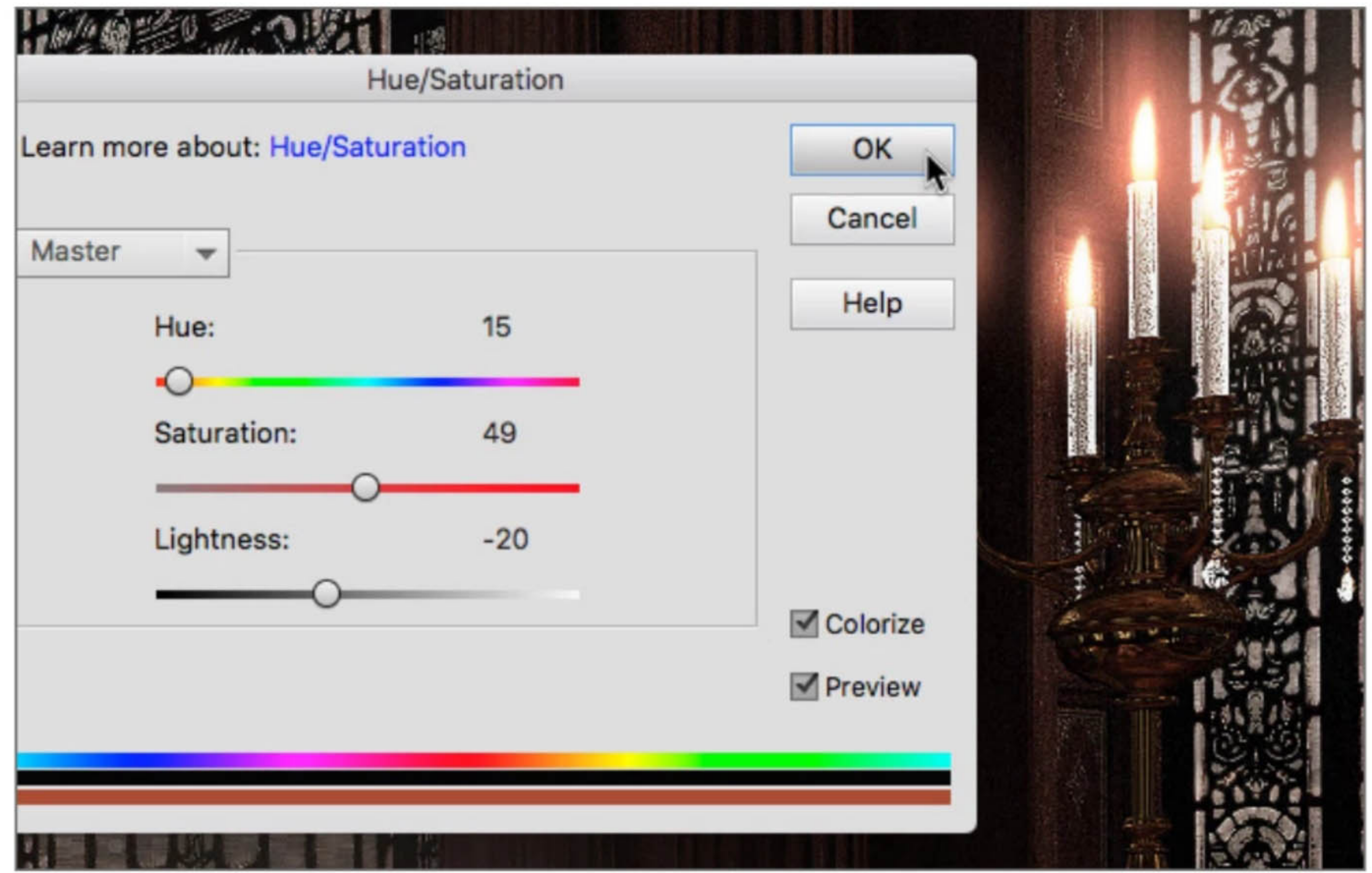
19 In the tool options panel, chose a soft brush, click on the Brush Settings button and change the Roundness setting to 50% and the Angle to -90°. This will make the brush oval rather than circular. Set the Size to about 400 pixels and ensure that the foreground colour is still white.



20 Start to dab your white oval brush over each candle flame in the scene. You can use the Size slider to alter the size to match the candle sizes that are dotted around the scene. Although the brush strokes are currently white, you can use Blend Modes to get a nice glow on those candles.



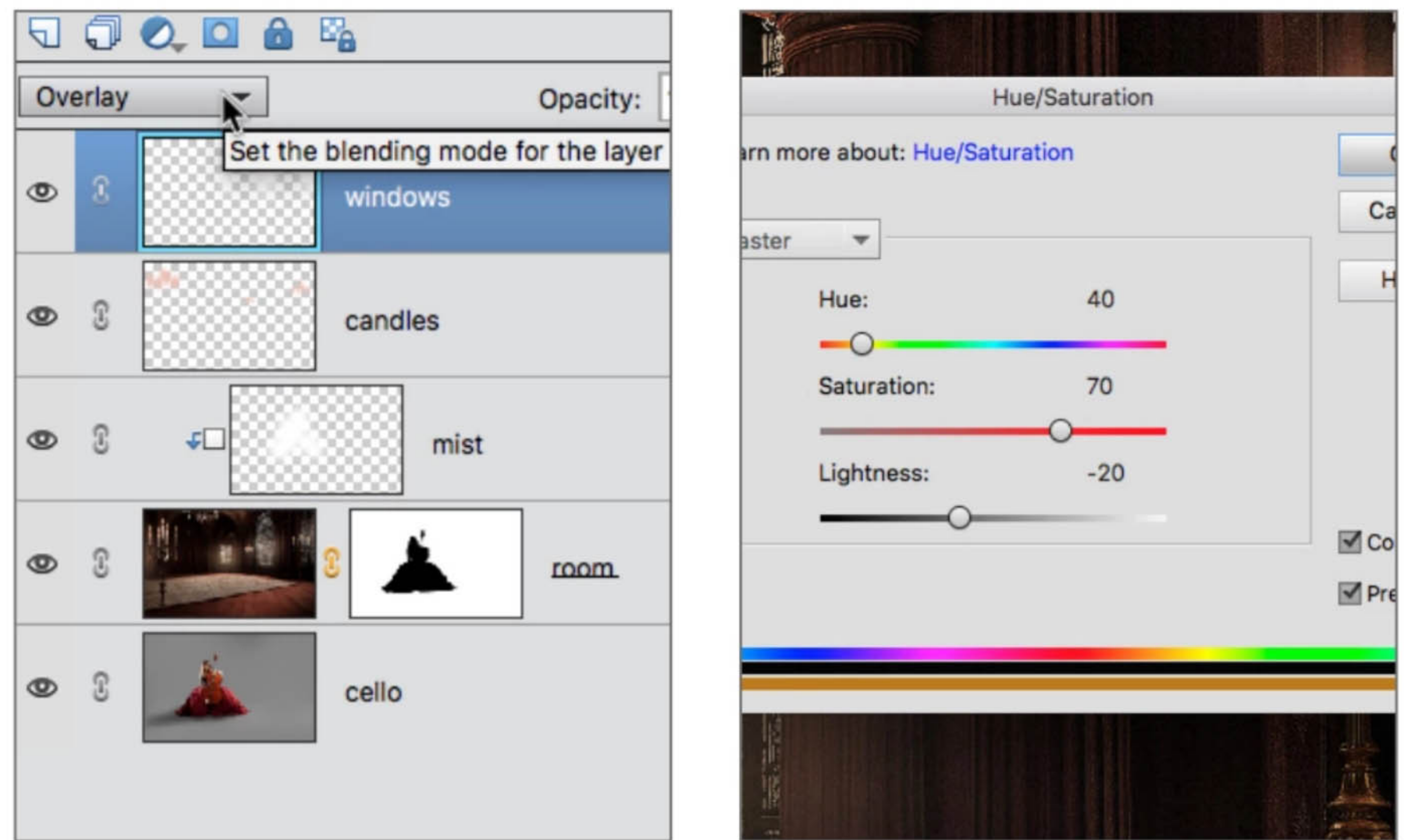
21 With the 'candles' layer still active go to the blend Mode button and choose Linear Light from the dropdown list that appears. There will be no apparent change at the moment but the next step will create a cosy glow for the candle flames.



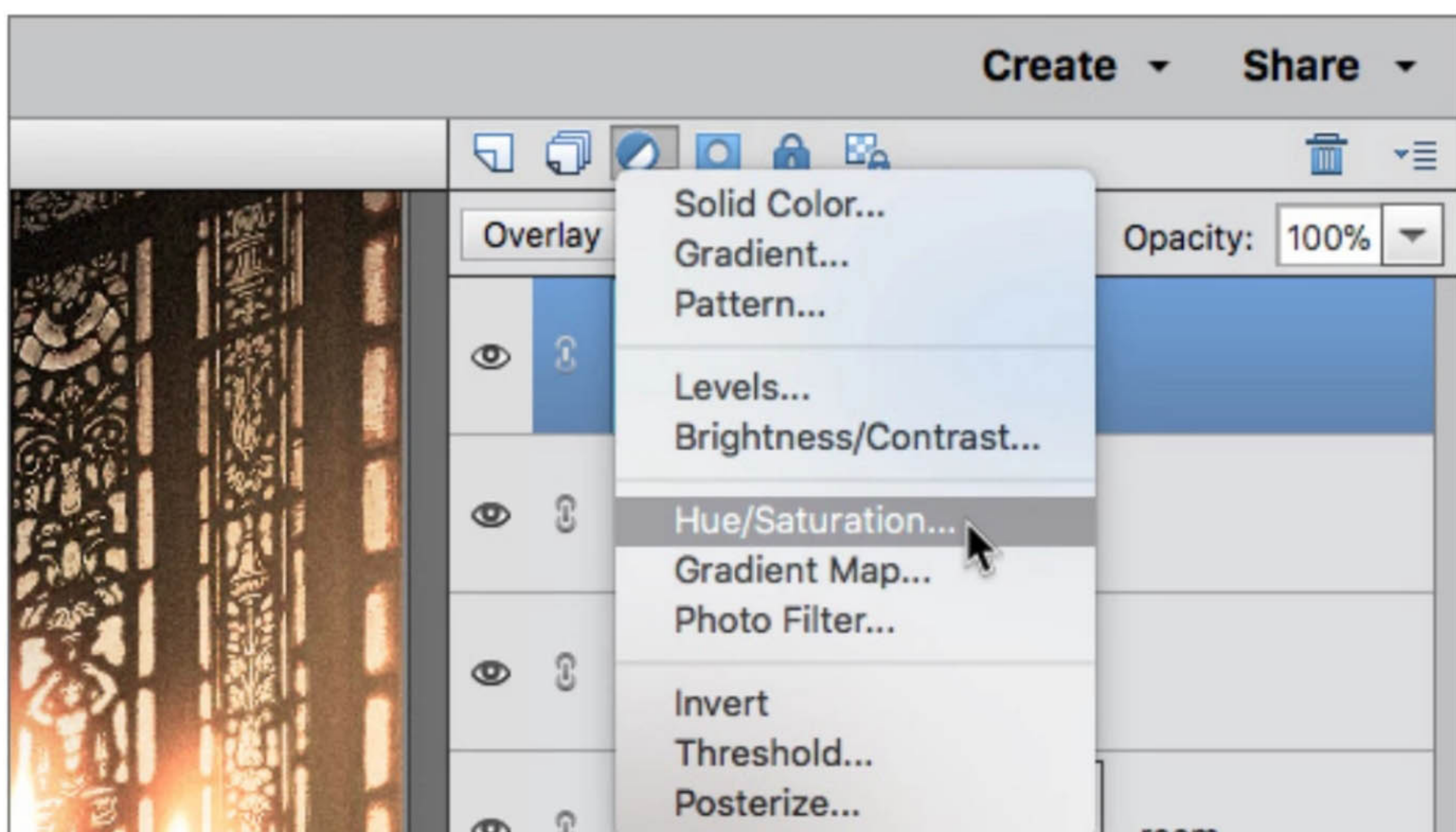
22 Go to Enhance > Adjust Colour > Adjust Hue/Saturation (Cmd + U) to call up the Hue/Saturation dialog panel. First, make sure the Colorize button is checked. Then set Hue to 15, Saturation to 49 and Lightness to -20. This colours the white brush strokes orange and blends them into the layers below.



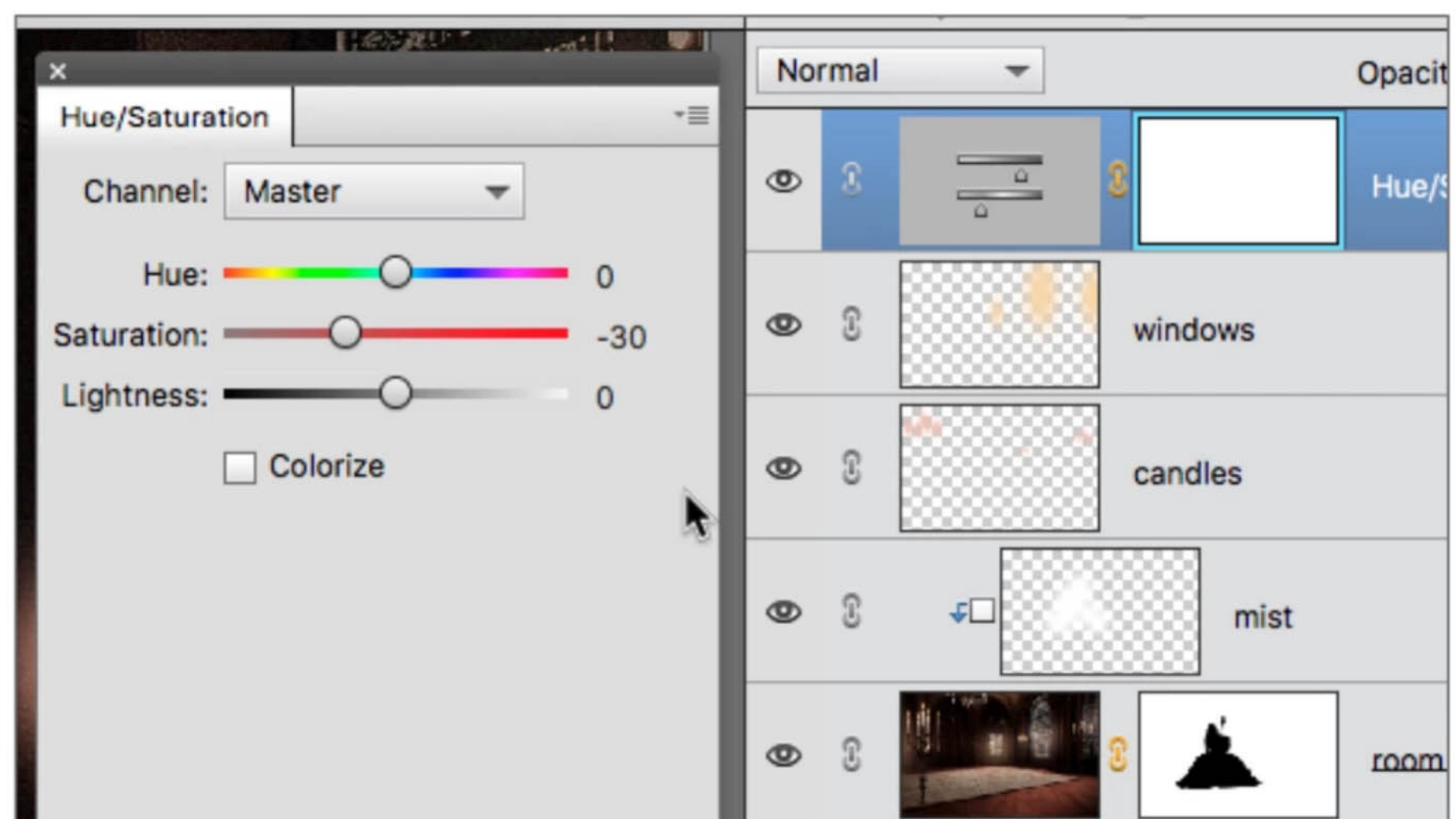
23 You can do a similar technique with the windows. Create a new layer called 'windows' and use your oval white brush to paint large dabs of white on the three main windows. You can use the Size slider again to adjust brush size to match the size of each window.



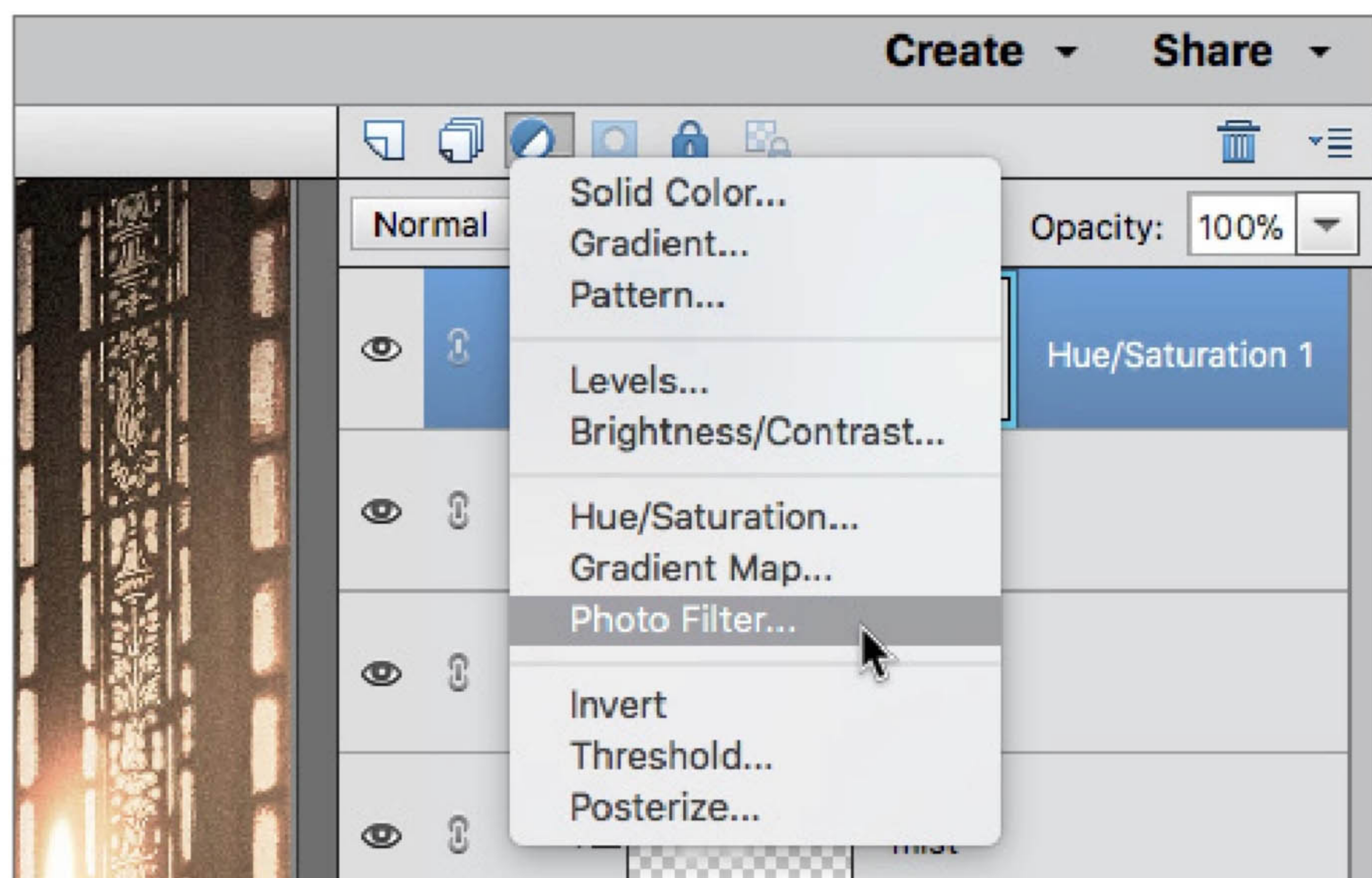
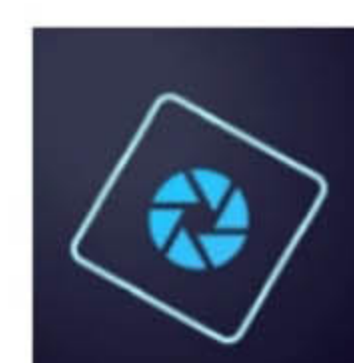
24 Now set the Blend Mode of the 'windows' layer to Overlay, then go to Enhance > Adjust Colour > Adjust Hue/Saturation (Cmd + U) again and click the Colorize button so it is checked. Make Hue 40, Saturation 70 and Lightness -20 to add a warm glow to the windows.



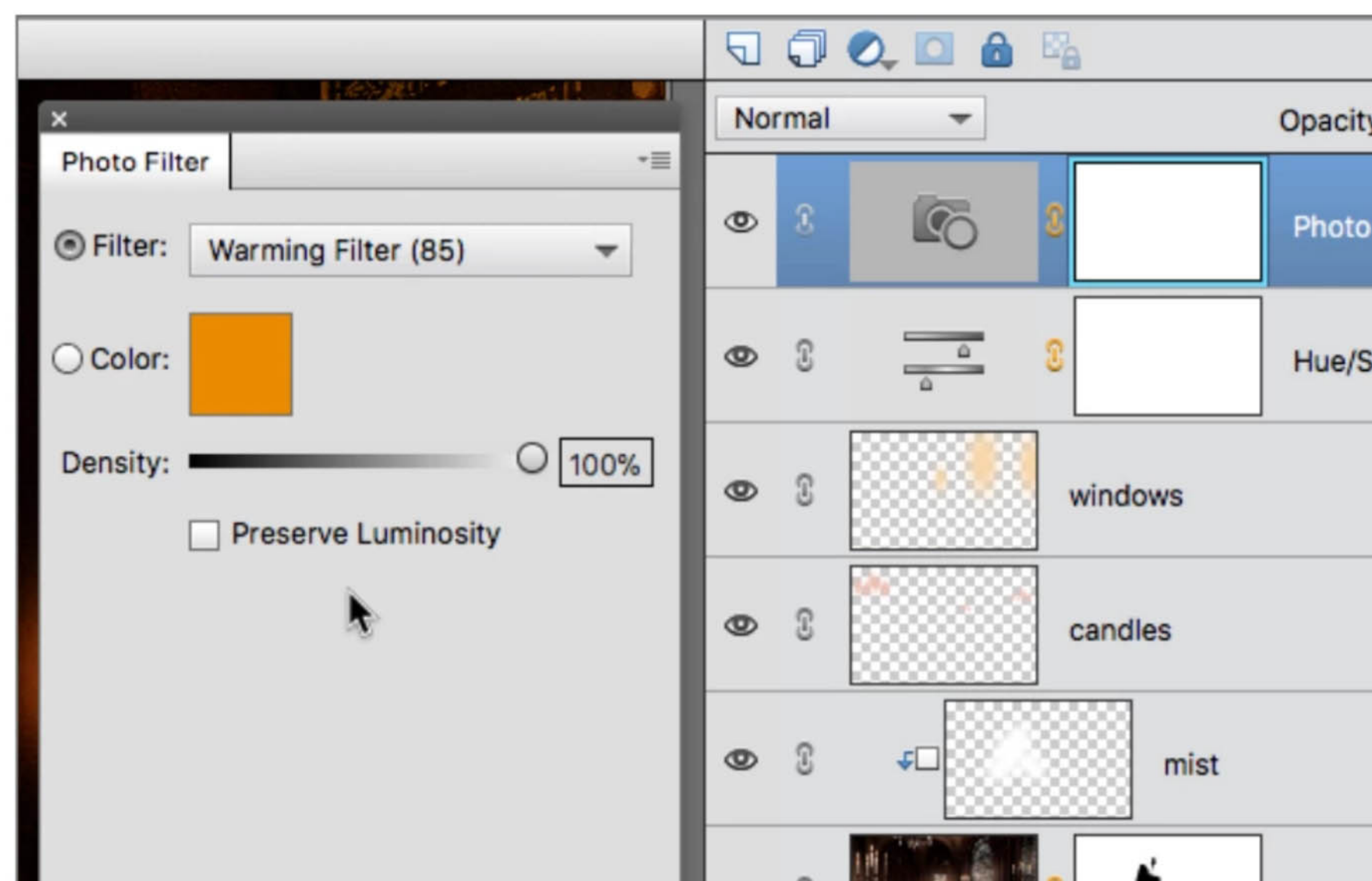
25 Now, you can add colour effects to tie the foreground and background elements together. Go to the layer options panel and click the Create New Fill Or Adjustment Layer button. Choose Hue/Saturation from the dropdown list that appears.



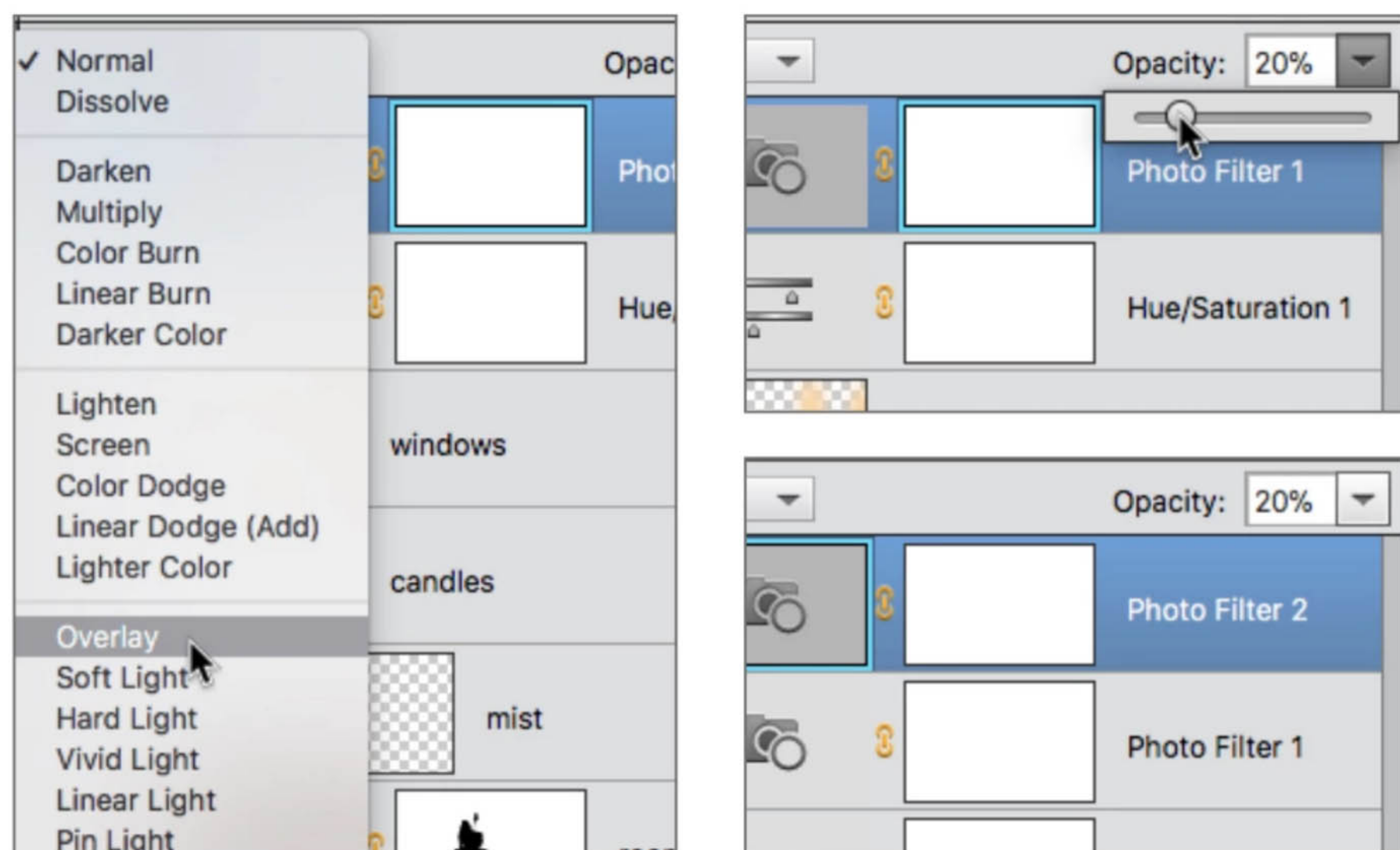
26 A 'Hue/Saturation 1' adjustment layer will be added to the top of the layer stack. All the layers below it will be affected by what adjustments are made. A dialog panel will open and go to Saturation and choose a value of about -30 to desaturate the whole image slightly.



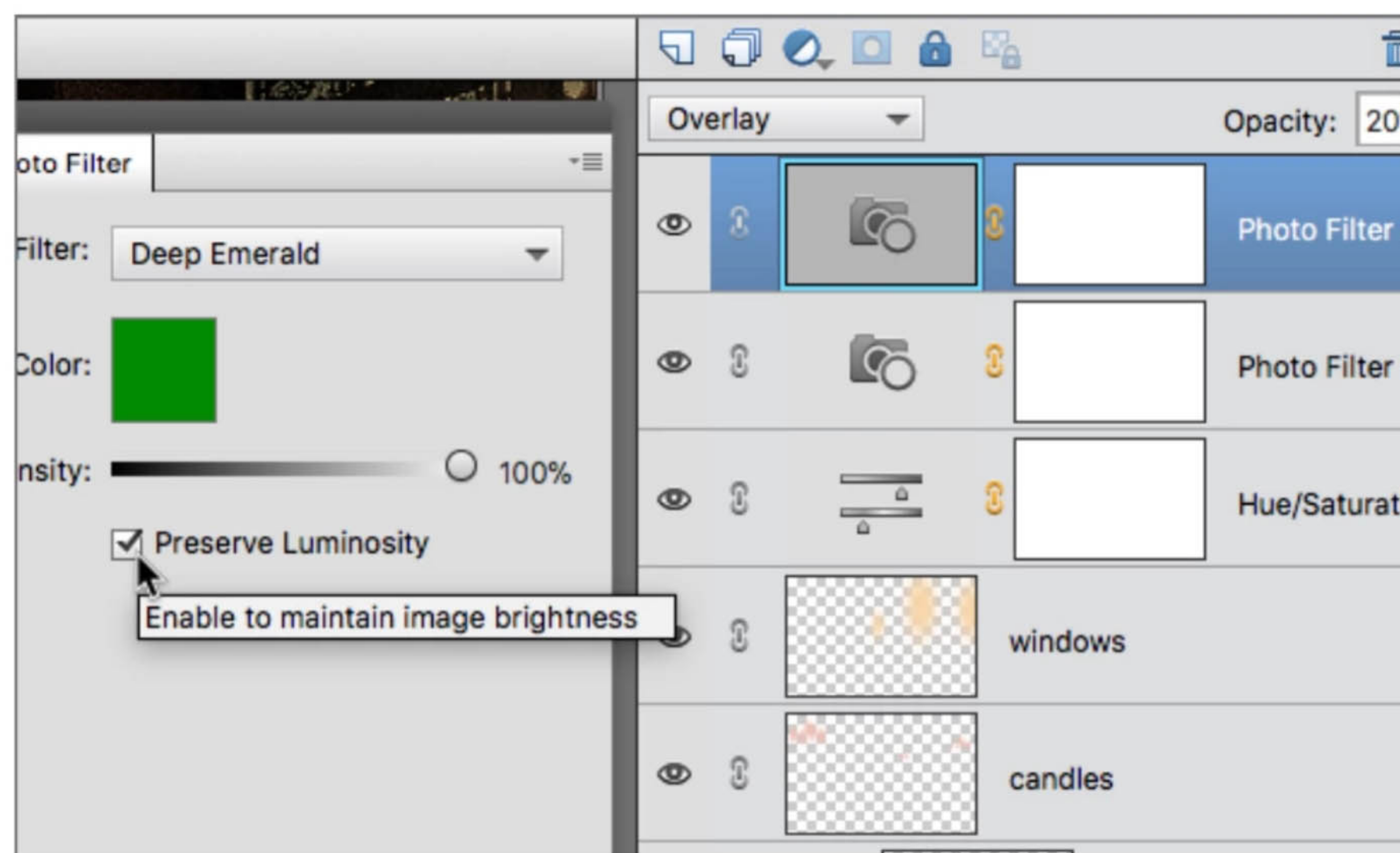
27 Next, go to the layer options panel again and choose Create New Fill or Adjustment Layer again and this time select Photo Filter from the list. 'Photo Filter 1' will be added to the top of the stack. You are going to add a colour cast to tie the various elements together a bit more.



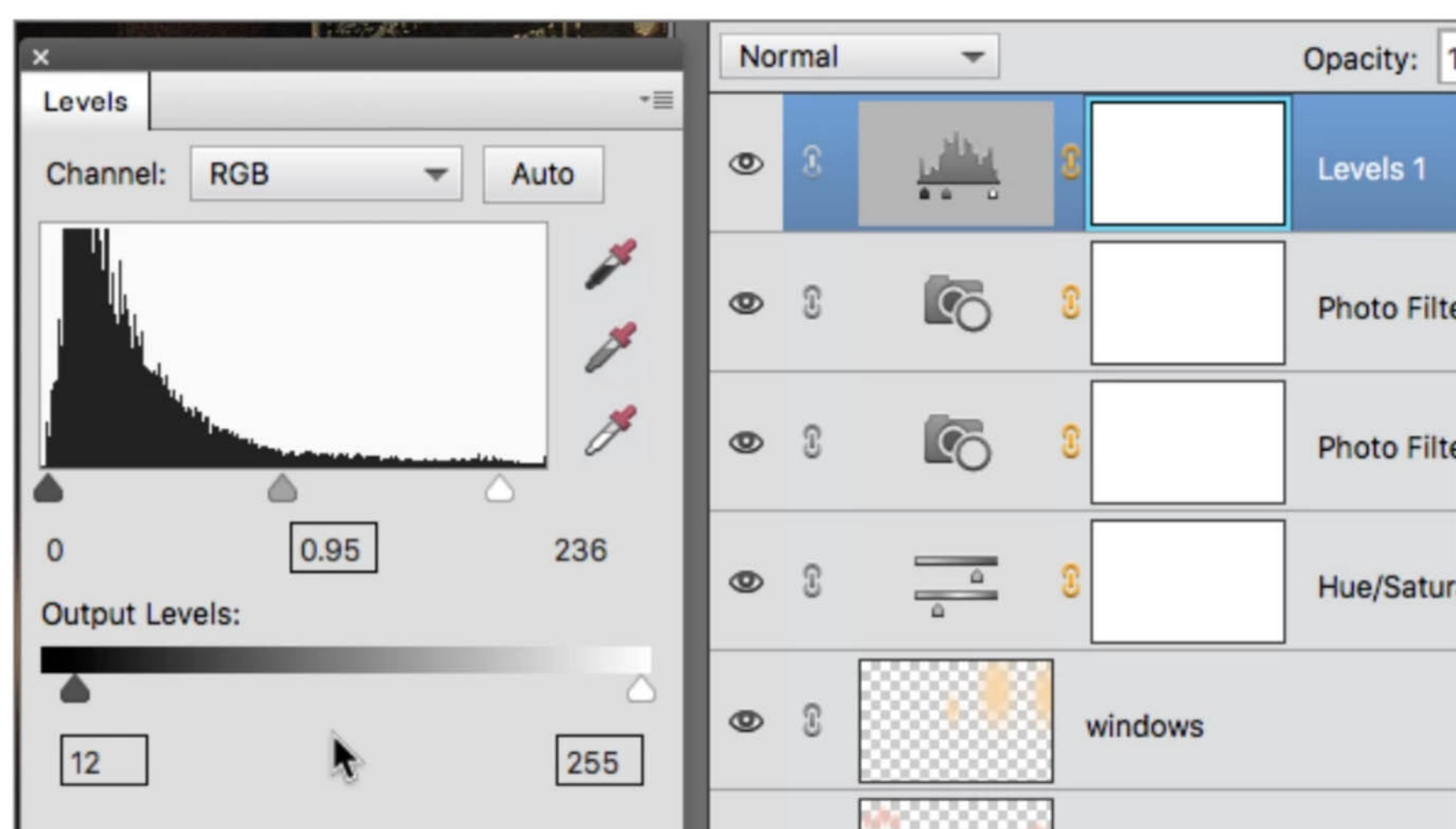
28 The Photo Filter dialogue panel will open when you add the adjustment layer. Set Filter to Warming Filter (85), Density to 100% and make sure the Preserve Luminosity button is not checked. The whole image will look dark orange now but not to worry.



29 Set the blend Mode for the 'Photo Filter 1' layer to Overlay. This makes the image very contrasty but if you set the layer's Opacity to about 20%, the effect is much more subtle. You can deepen the colour effect even more. Press Cmd + J to duplicate the 'Photo Filter 1' layer. Rename it 'Photo Filter 2'.



30 Change its parameters by choosing Deep Emerald as the Filter type. Density is 100% and now check the Preserve Luminosity box to maintain image brightness. Set this new layer to 20% Opacity as well to create a moody image where all the colours look more harmonious.



31 You can adjust the brightness by adding another adjustment. Use a Levels adjustment layer and adjust the Midtone and Highlight sliders to brighten the middle tones and highlights a little. You can also alter the Shadow Output Levels to about 12 to change the darkest colours to slightly lighter ones.



32 Your composite is complete. You can now go to File > Save As (Shift + Cmd + S) and save it as a named PSD file. This saves the layered document so you can return to it at any time and make amendments to the image.



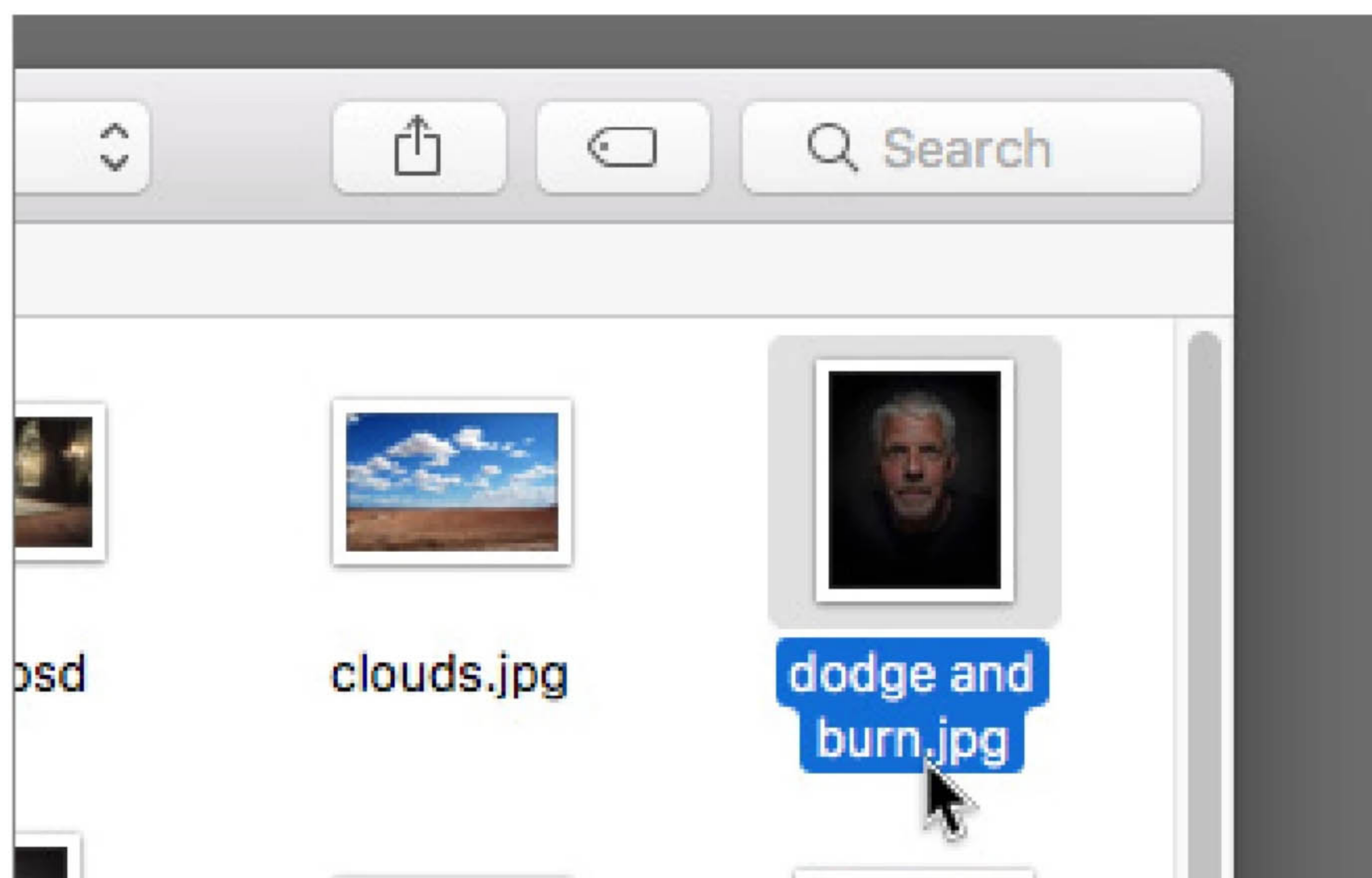
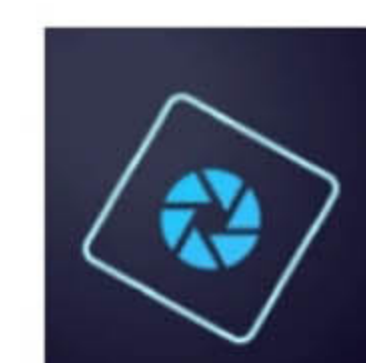
Dodging and Burning



BEFORE

AFTER

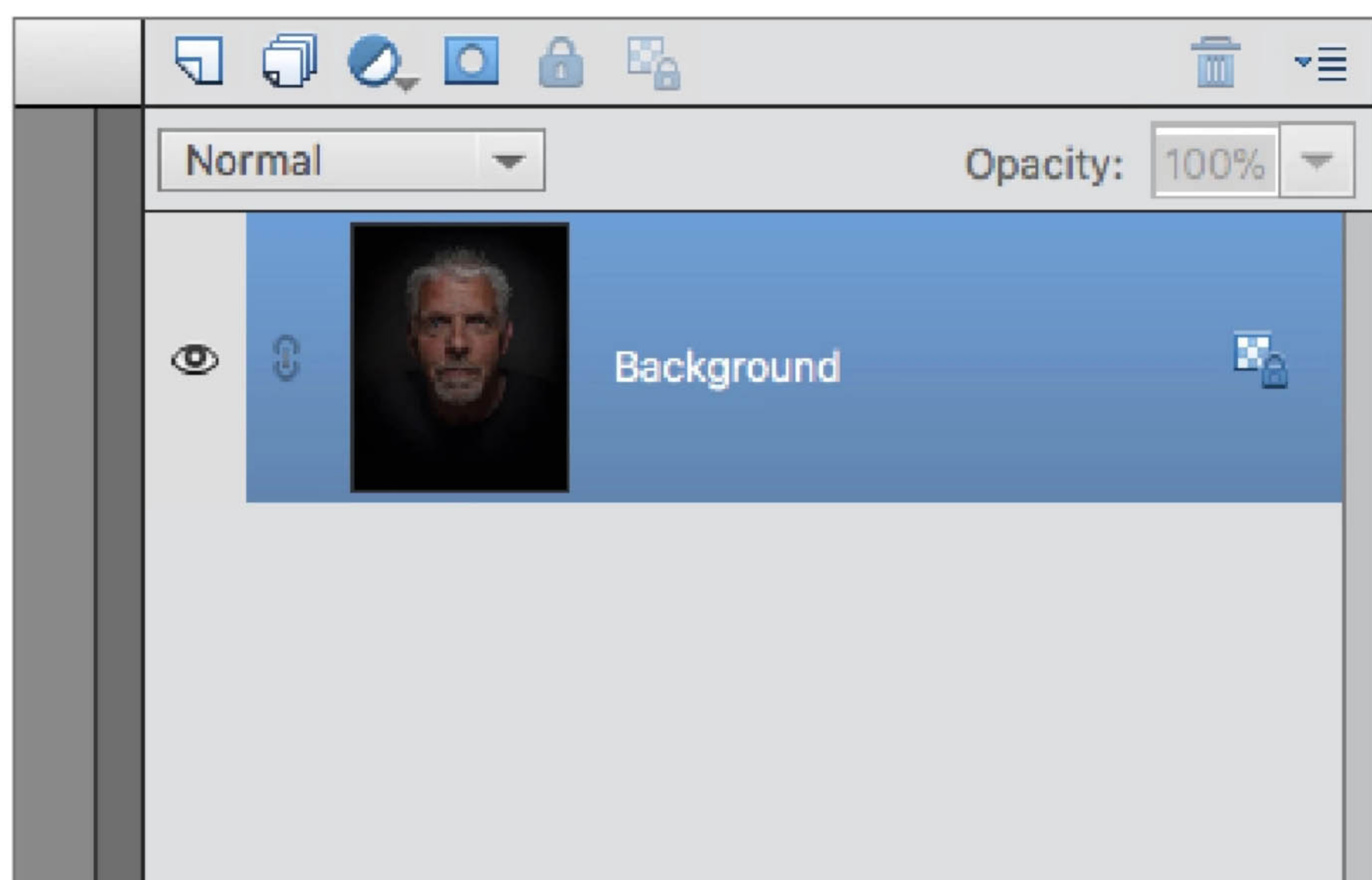
Dodging and burning have their roots in the days of analogue photography, long before digital cameras and computers were in use. Dodging refers to the technique of lightening an image at the darkroom stage by reducing the exposure of a photographic print in specific areas. Burning is the opposite, where parts of the image are exposed for longer onto the print, making those areas darker. With the advent of digital technology the process is done on a computer but the basic principle and its terminology remain the same. In our example we had a basic image that was lacking in contrast; using the dodge and burn techniques, brightness and contrast was selectively added to produce a much stronger image.



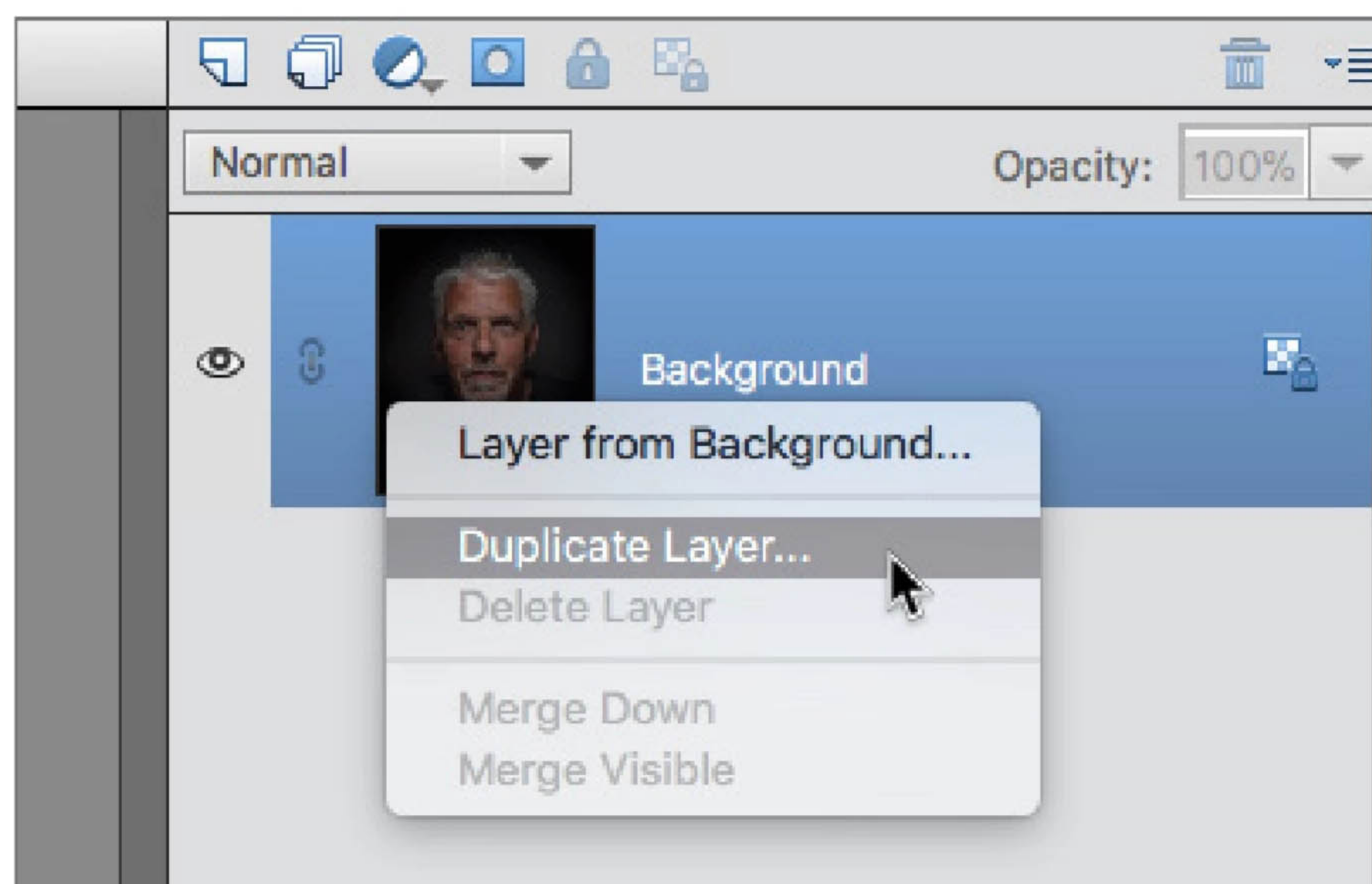
1 Begin by opening a relevant image to work on. Go to File > Open (Cmd + O) and navigate to the location of the image you wish to work on. Our example is a portrait named 'dodge and burn.jpg'. Double-click it to open or select it and press Open at the bottom of the browser window.



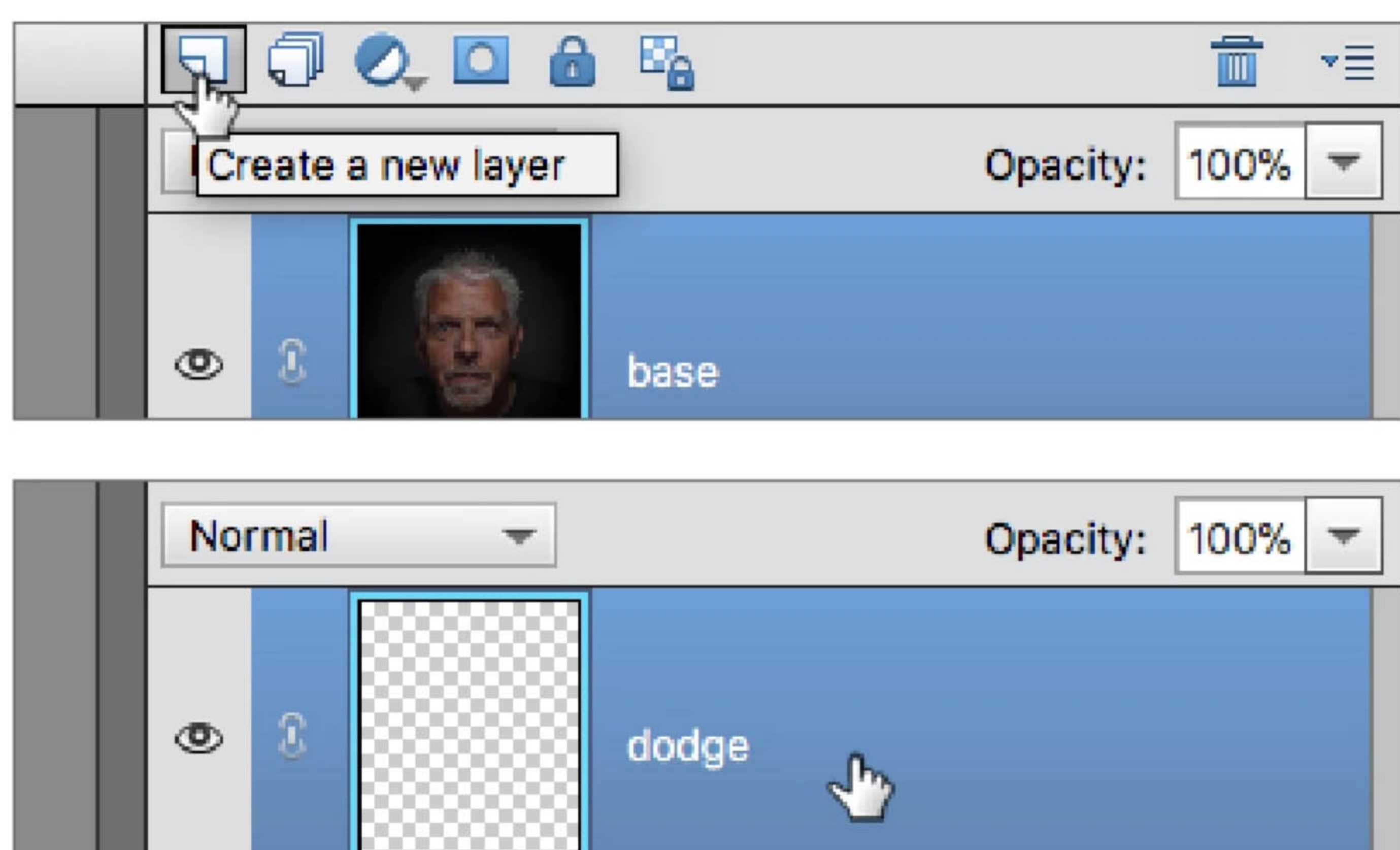
2 The image we are using as our example is a moody portrait but it is quite low in contrast. You could use levels adjustments or brightness and contrast, but they are quite global amends. Using Dodge and Burn Tools you can be much more selective in your approach.



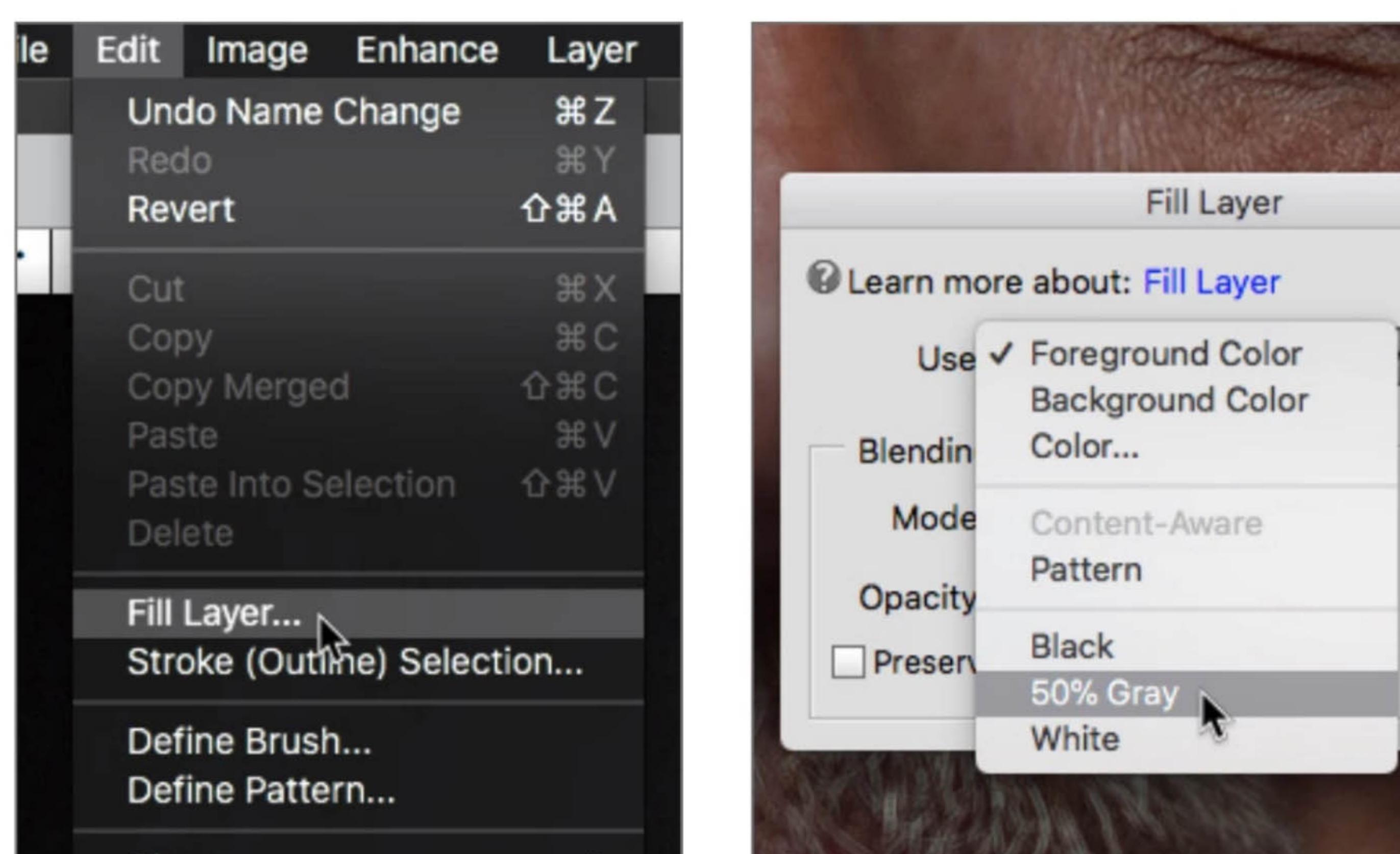
3 It's good procedure to work on a duplicate of your image rather than your original. You never know when you might need to call upon it. It's better to have it and not need it, than need it and not have it.



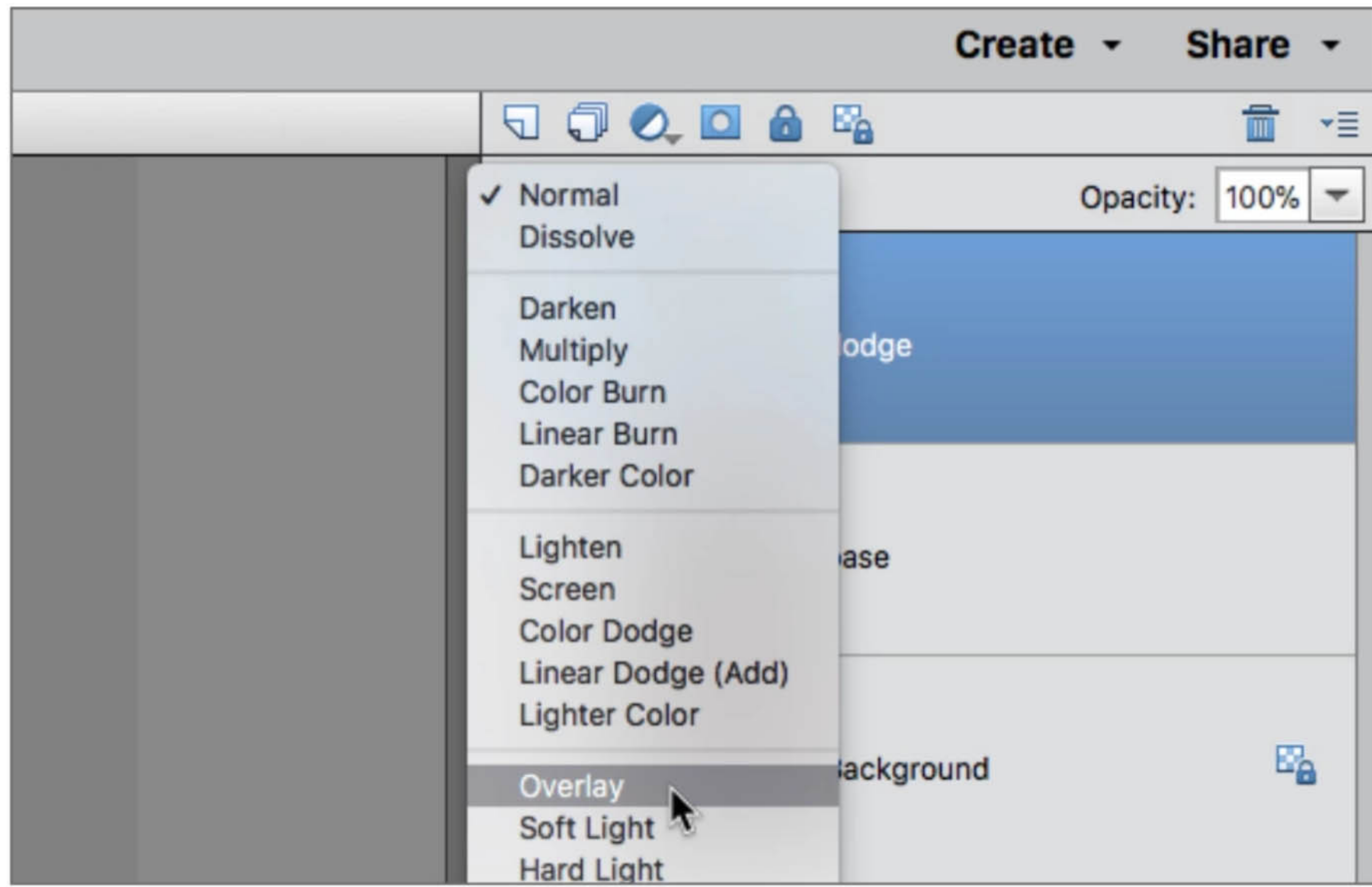
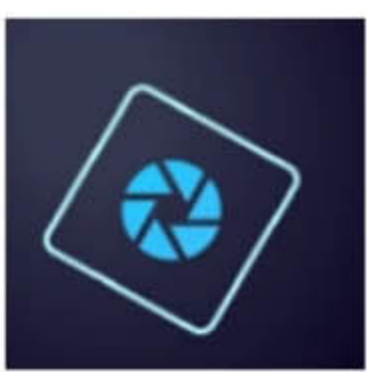
4 Right-click your 'Background' base layer and choose Duplicate Layer from the menu that appears. The Duplicate Layer dialog panel opens and you can choose a name for your new layer and then click OK at the top right of the panel. A new duplicate layer called 'base' is created for you.



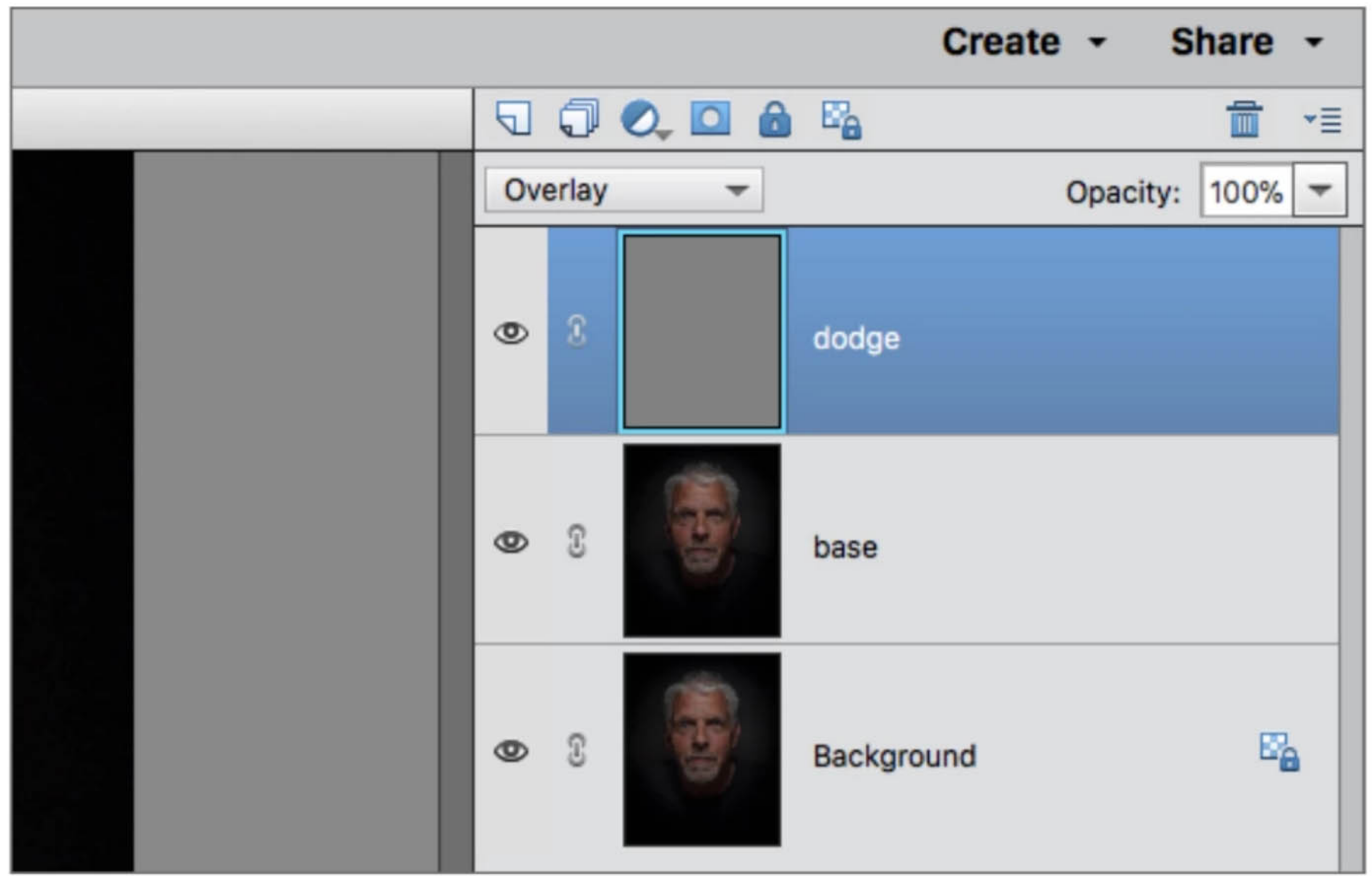
5 You can use a great little non-destructive method, as we did, for applying Dodge and Burn effects to your image without altering its pixel data. Make sure the 'base' layer is active and then go to the layer options panel and click the Create A New Layer button. Name this new layer 'dodge'.



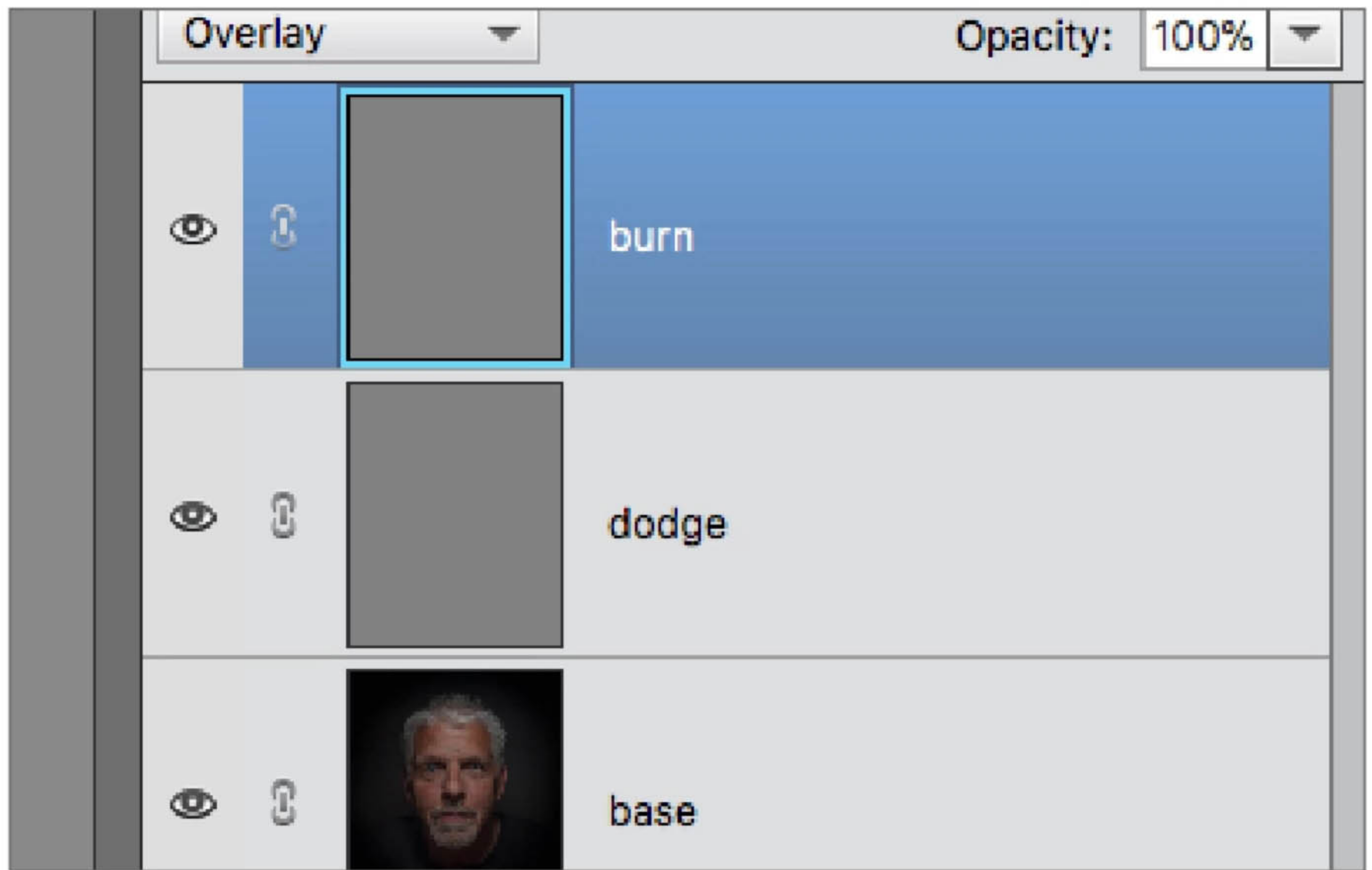
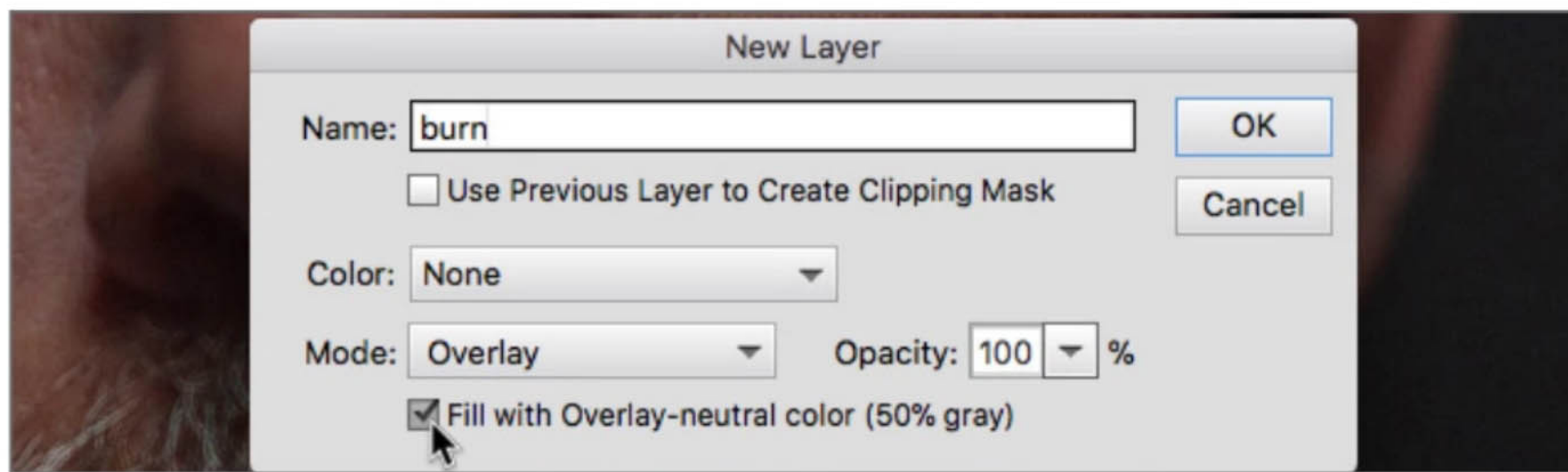
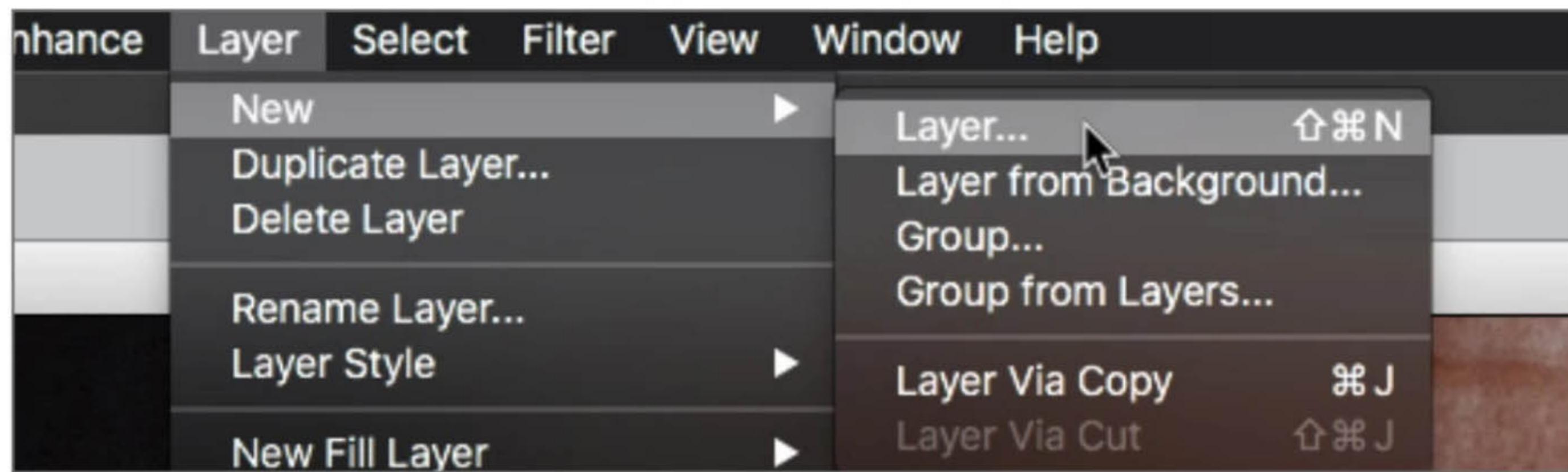
6 Go to Edit > Fill Layer to open the Fill Layer panel. Rather than selecting the dual options of Foreground Colour or Background Colour, choose 50% Grey as the fill option. The reason for this will become apparent in the following steps. The 'dodge' layer is filled grey, obscuring the portrait for the moment.



7 Keep the 'dodge' layer active and go to the Blend Mode button and choose Overlay as the blend. Because the grey is 50% neutral it will not be visible using Overlay as the blending mode. Anything lighter or darker will have an effect on the layer below. This is key to the non-destructive method.

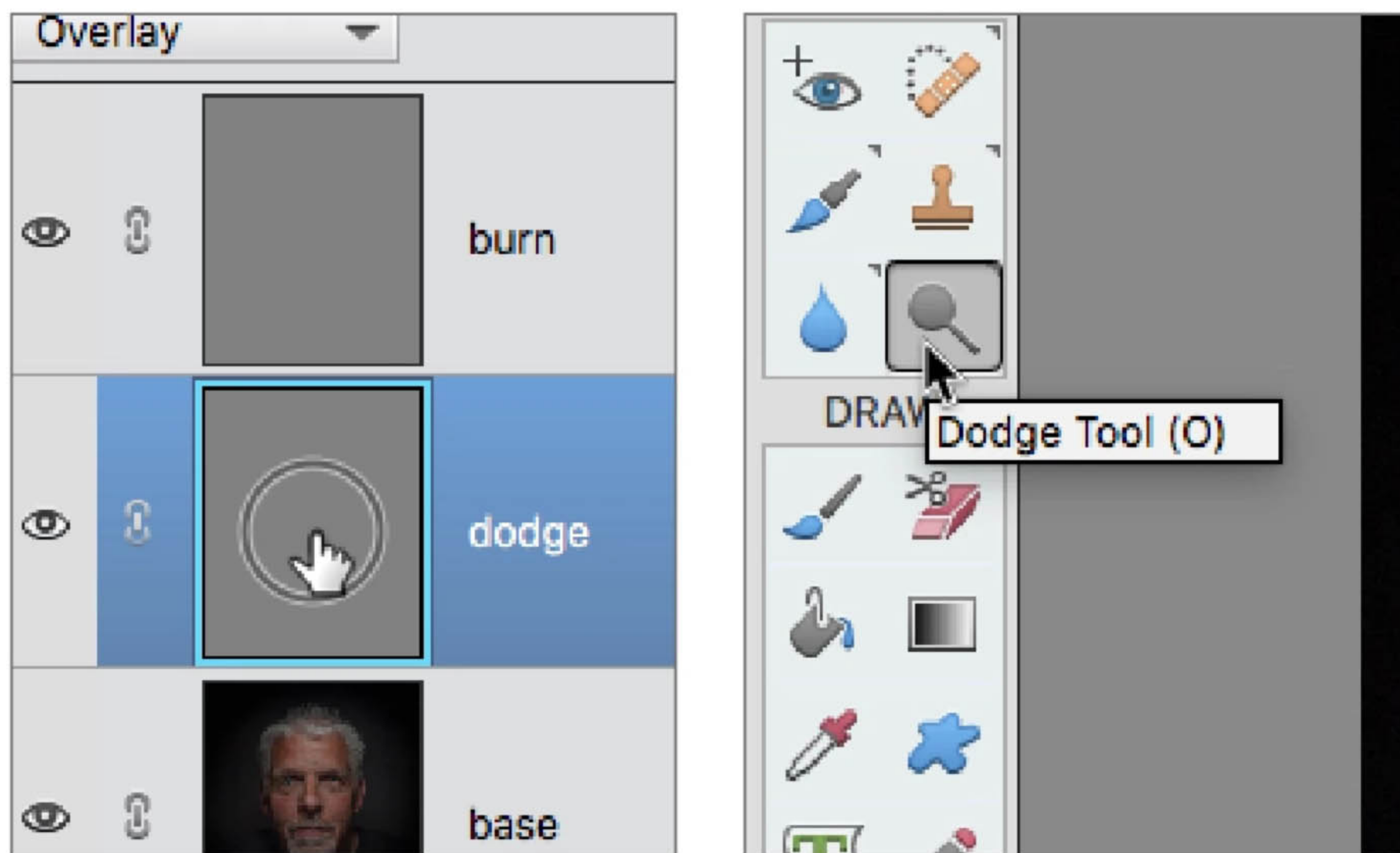


8 We needed a second layer just like the 'dodge' layer and could have just pressed Cmd + J to duplicate it but we wanted to show you another method of creating the 50% grey layer with the blend mode applied and ready to go.

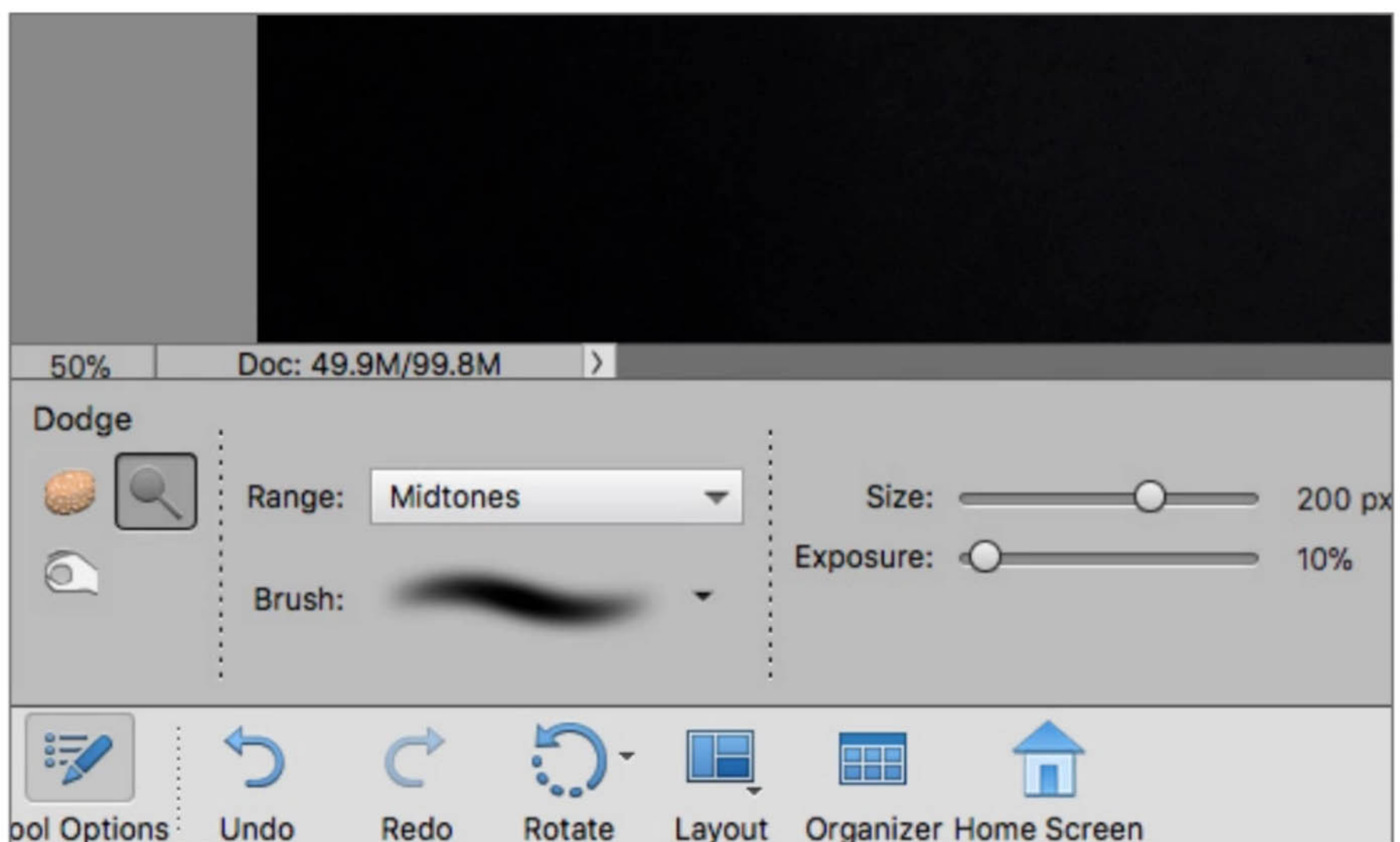


9 Go to Layer > New > Layer (Shift + Cmd + N). The New Layer panel will open. Under Name, call the layer 'burn'. Keep Colour as None and under the Mode button, choose Overlay as the Blend Mode. Then make sure the Fill with Overlay-Neutral colour button is checked.

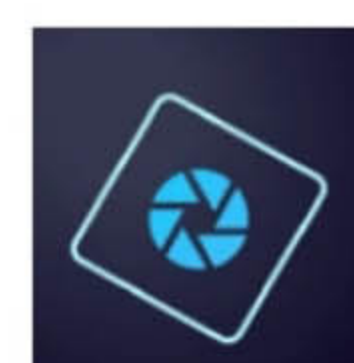
10 A new layer called 'burn' will be created for you that is already filled with 50% grey and set to the Overlay Blend Mode. You now have the two layers needed to start Dodging, to make the picture lighter and Burning, to make areas of the picture darker.



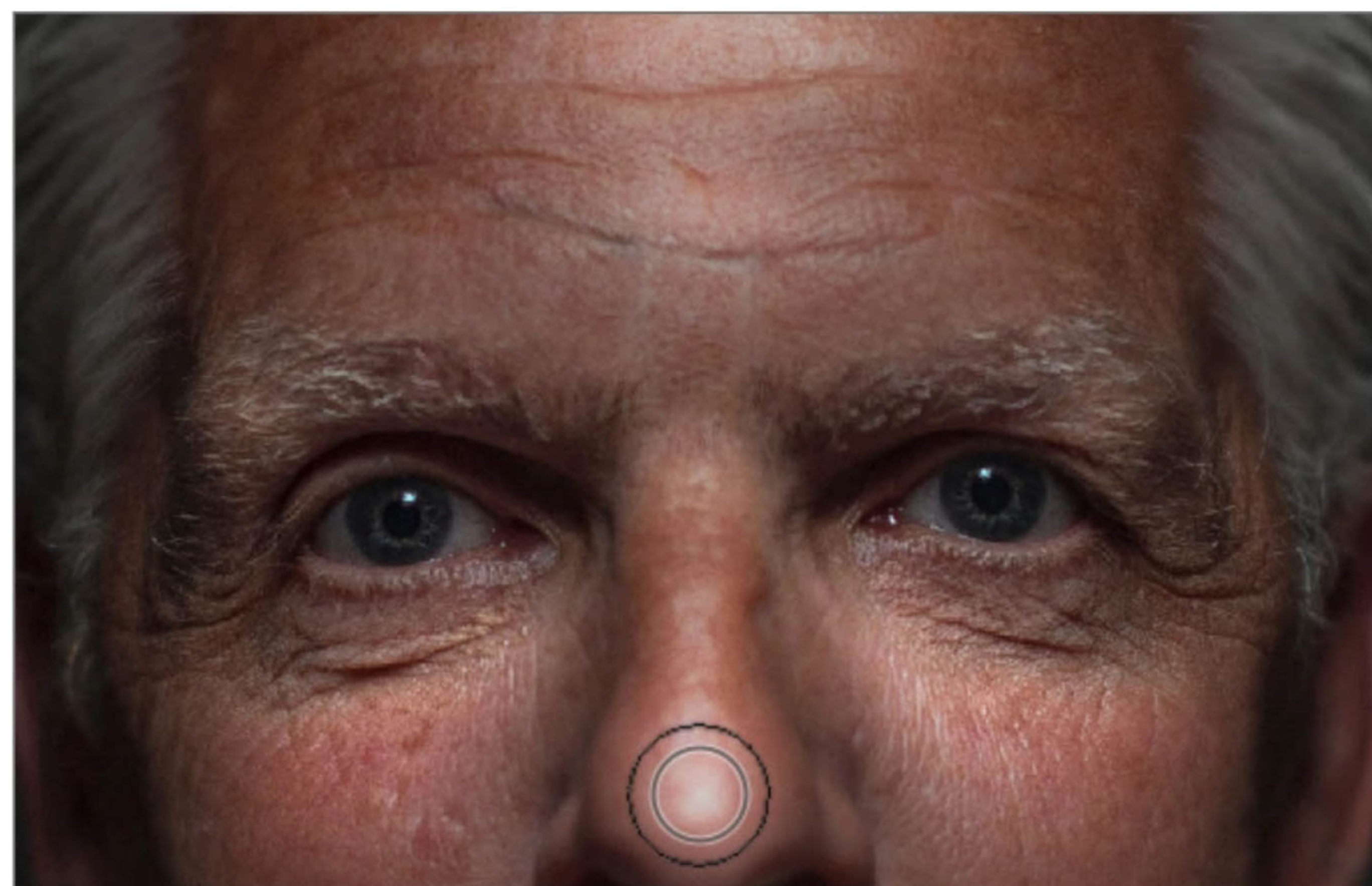
11 Begin by making the 'dodge' layer active. It will highlight in blue to confirm it is active. Go to the toolbar and choose the Dodge Tool (O). The tool options panel will show you the available parameters you can apply to the Dodge Tool.



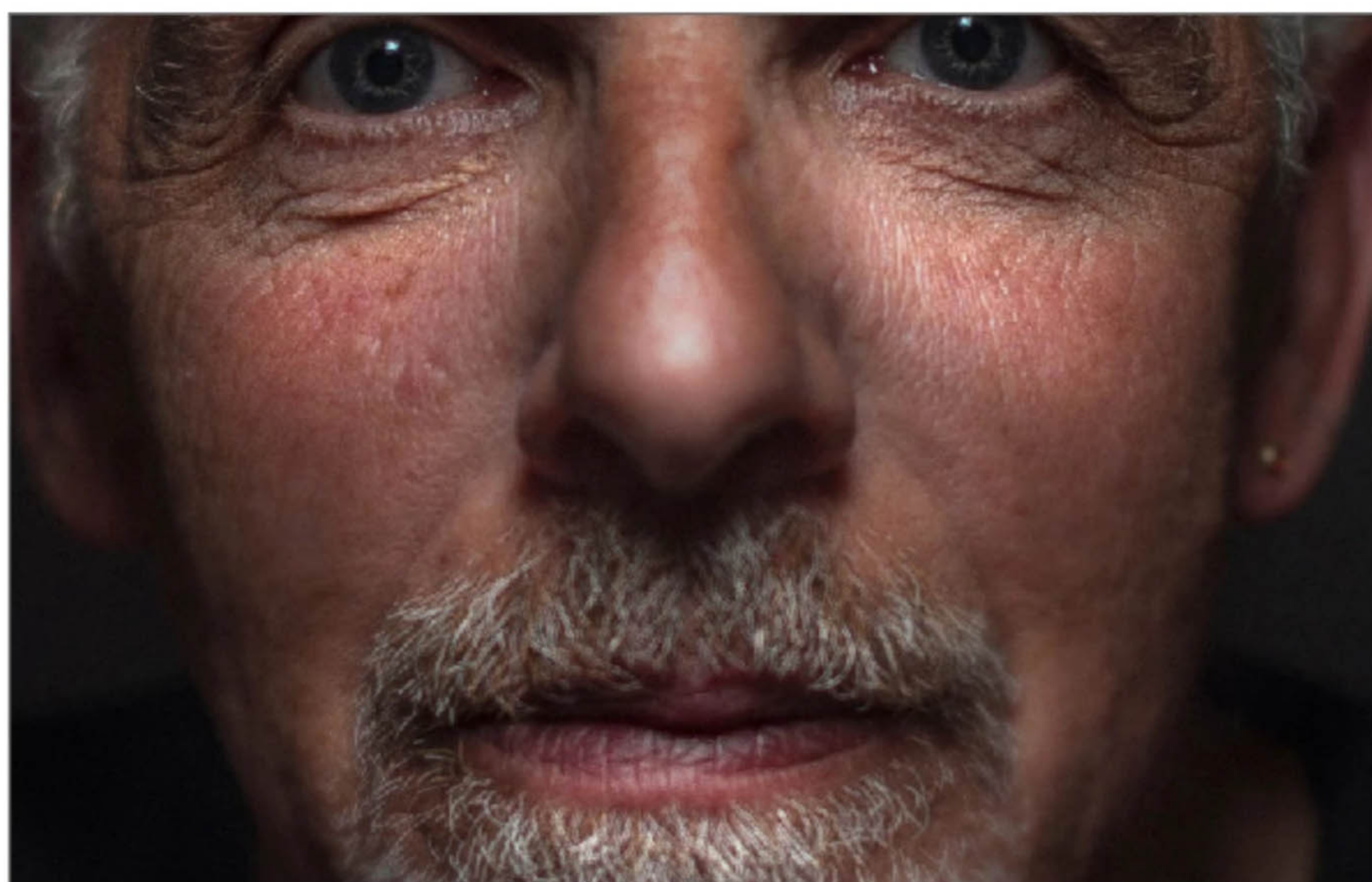
12 Under Range, choose the Midtones Painting Mode and under the Brush picker, choose a soft brush of about 200 pixels. You can use the Size slider at any time to alter the brush size if required and also use the bracket keys [and] to scale the brush. Set the brush Exposure to 10% or less.



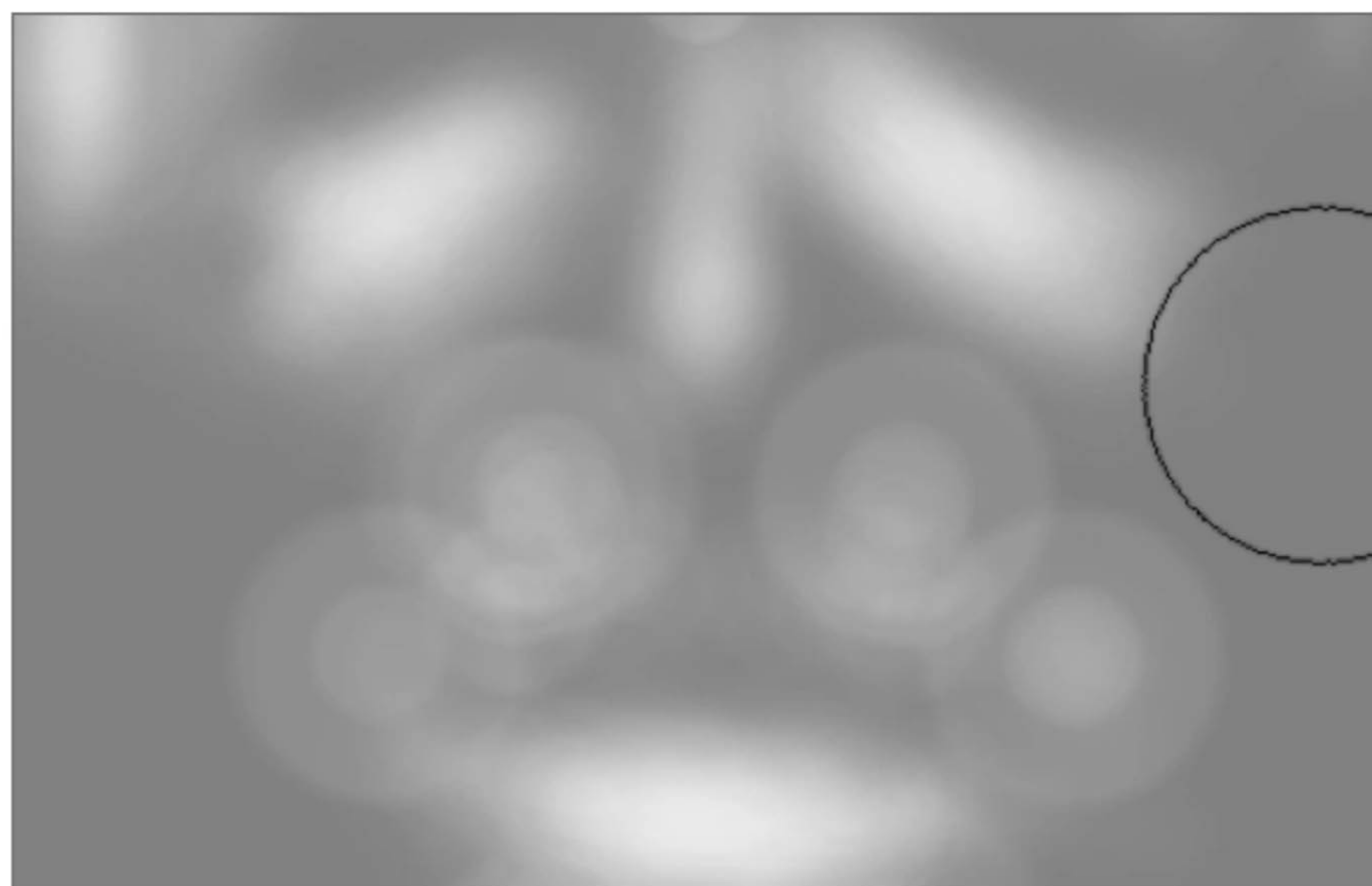
13 You can now begin to lighten specific parts of the portrait. It will be a subjective thing depending on your preferences but areas that are currently the lightest can be made lighter to begin to increase contrast. Start brushing over areas like the forehead, cheeks and nose.



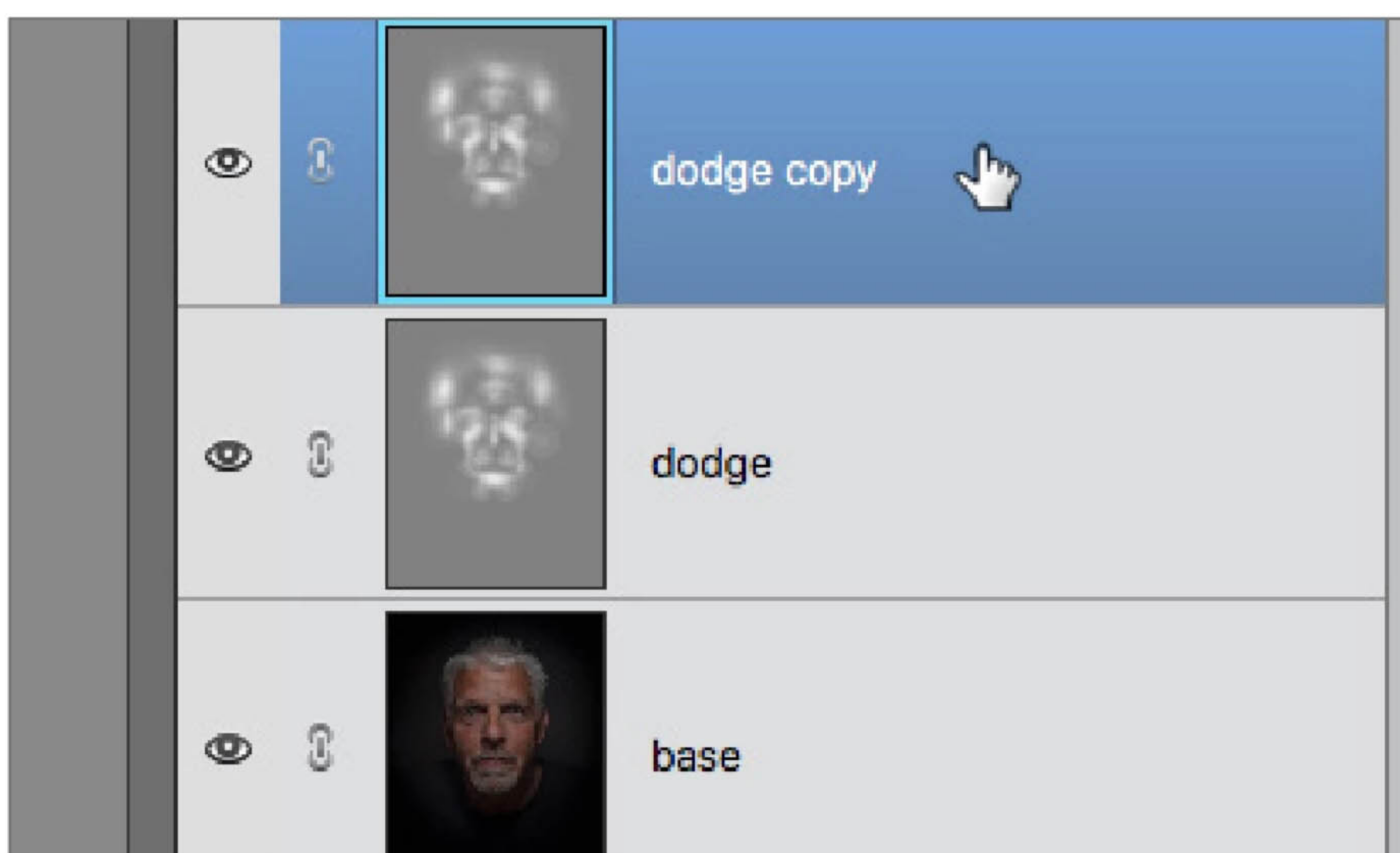
14 With each individual stroke of the brush, those light areas will be made lighter and lighter. Using an Exposure of 10% or less means that you can be a bit more subtle and build up the lightening effect gradually rather than applying it all at once.



15 Continue to build up the brightness with your brush strokes on the 'dodge' layer. Work around the beard, hair and eyebrows to increase the brightness. If you feel you've applied too many brush strokes in one area, you can always press Cmd + Z to undo a number of steps and try again.



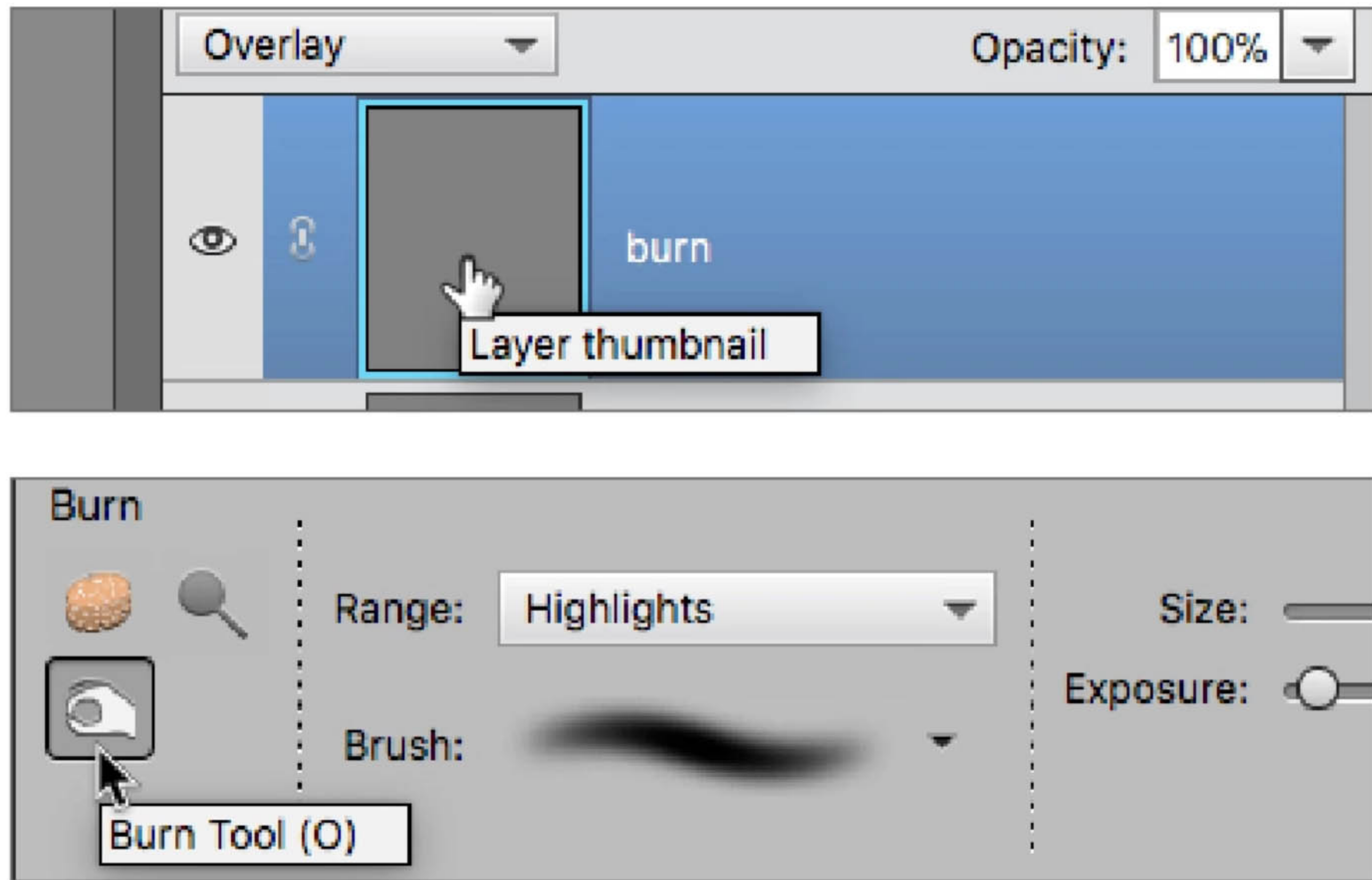
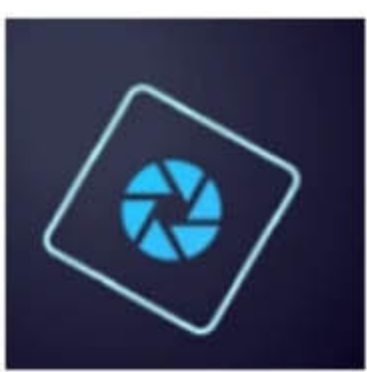
16 If you press Alt and click the 'dodge' layer thumbnail, you can see exactly what is happening on that layer. Any part of the image that is lighter than 50% grey has its brightness added to the layer below because of the blending method used. Alt + click again to return to the normal view.



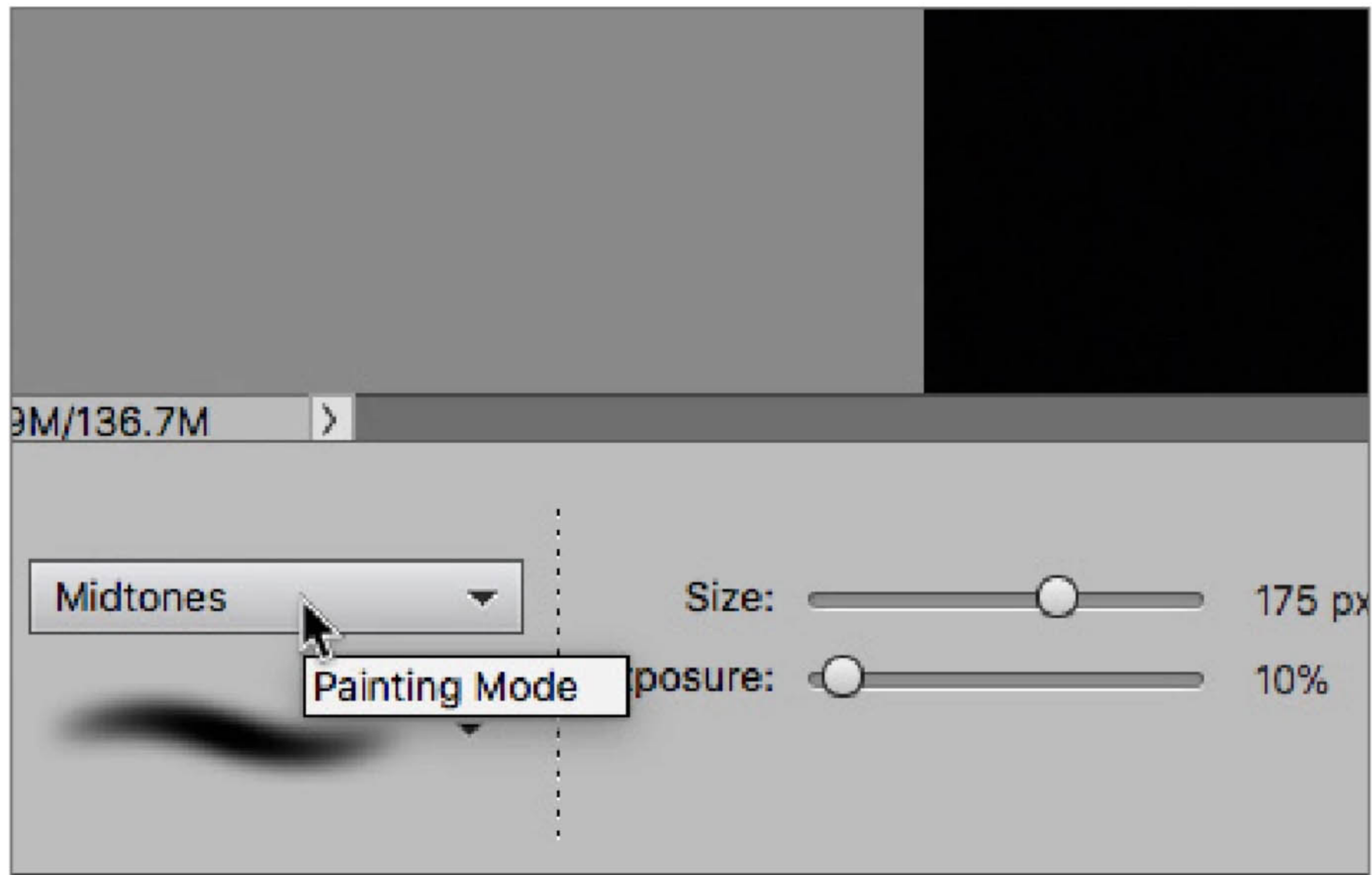
17 Once an area of the layer is dodged to pure white, it cannot get any brighter. However, if you feel the effect still isn't strong enough, you can always duplicate the layer for a more intense effect and adjust the layer opacity if required.



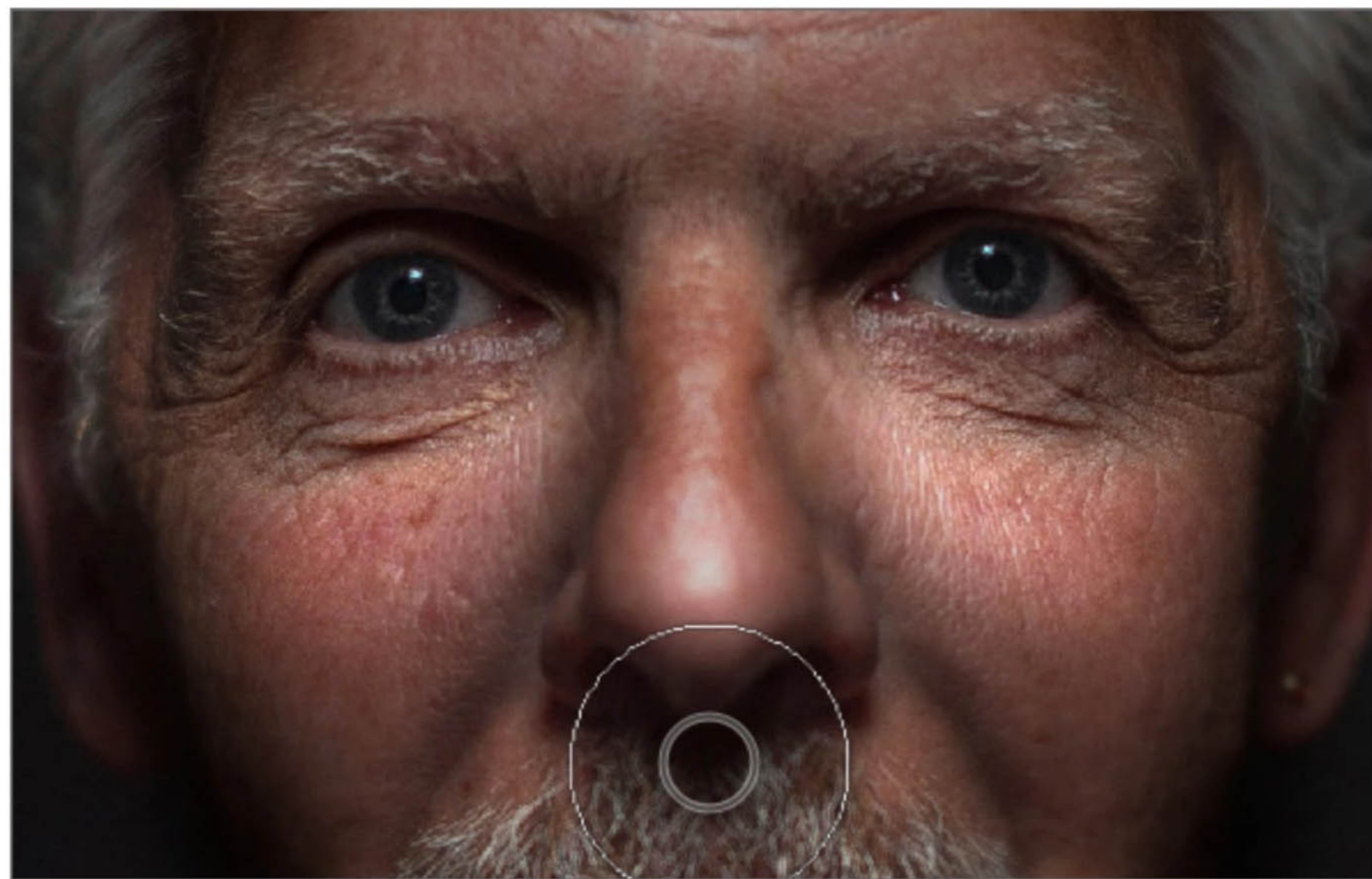
18 If you compare the dodged version of the portrait to the original you can see how the brightness has been focussed on, making the face more three dimensional with the addition of those brightened skin areas. If you are happy with the dodge effects so far, you can turn your attention to the 'burn' layer.



19 Click the 'burn' layer to make it active and swap from the Dodge Tool to the Burn Tool by either pressing O until the Burn Tool is highlighted or click on its icon in the tool options panel.



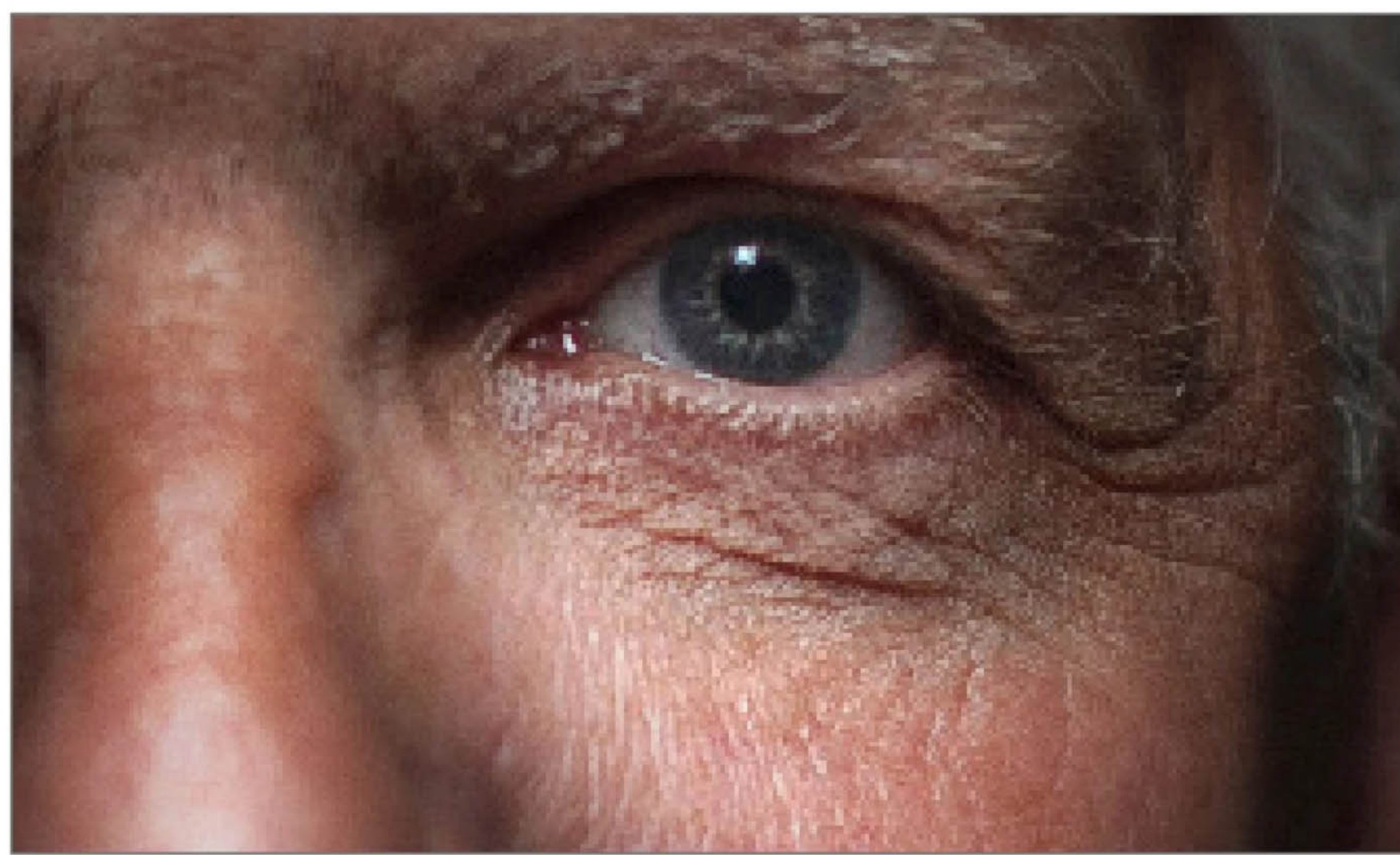
20 Just as with the Dodge Tool, choose Midtones as the Painting Mode by clicking on the Range button. Keep the brush as a large soft one and Exposure at 10% or lower.



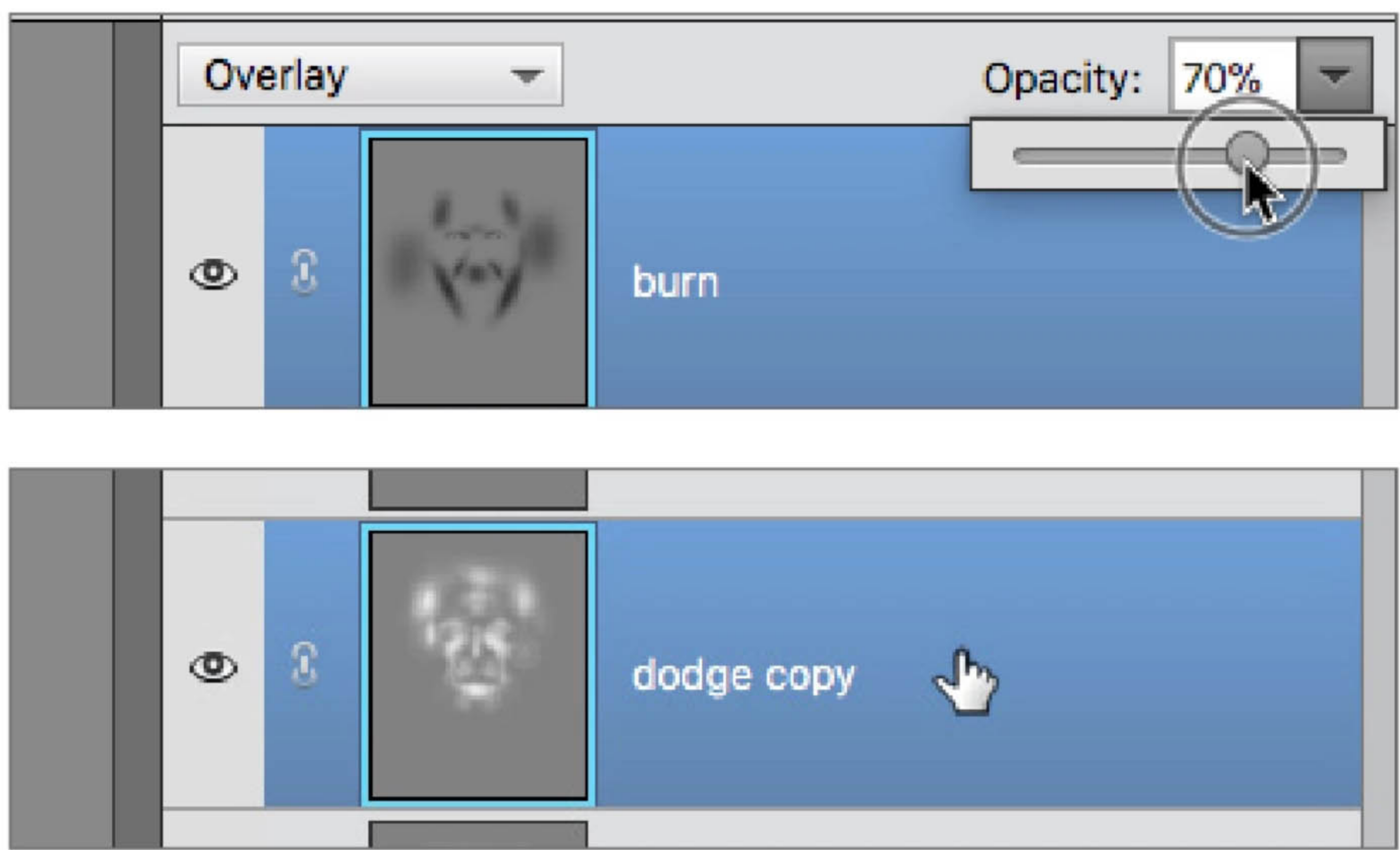
21 Start to add brush strokes on the 'burn' layer to the darker areas of the photo. We started around the eyes and darkened the sides of his forehead, under the nose and the sides of the cheeks. Again, apply the brush strokes singly and build up the darker areas until you have it as you want it.



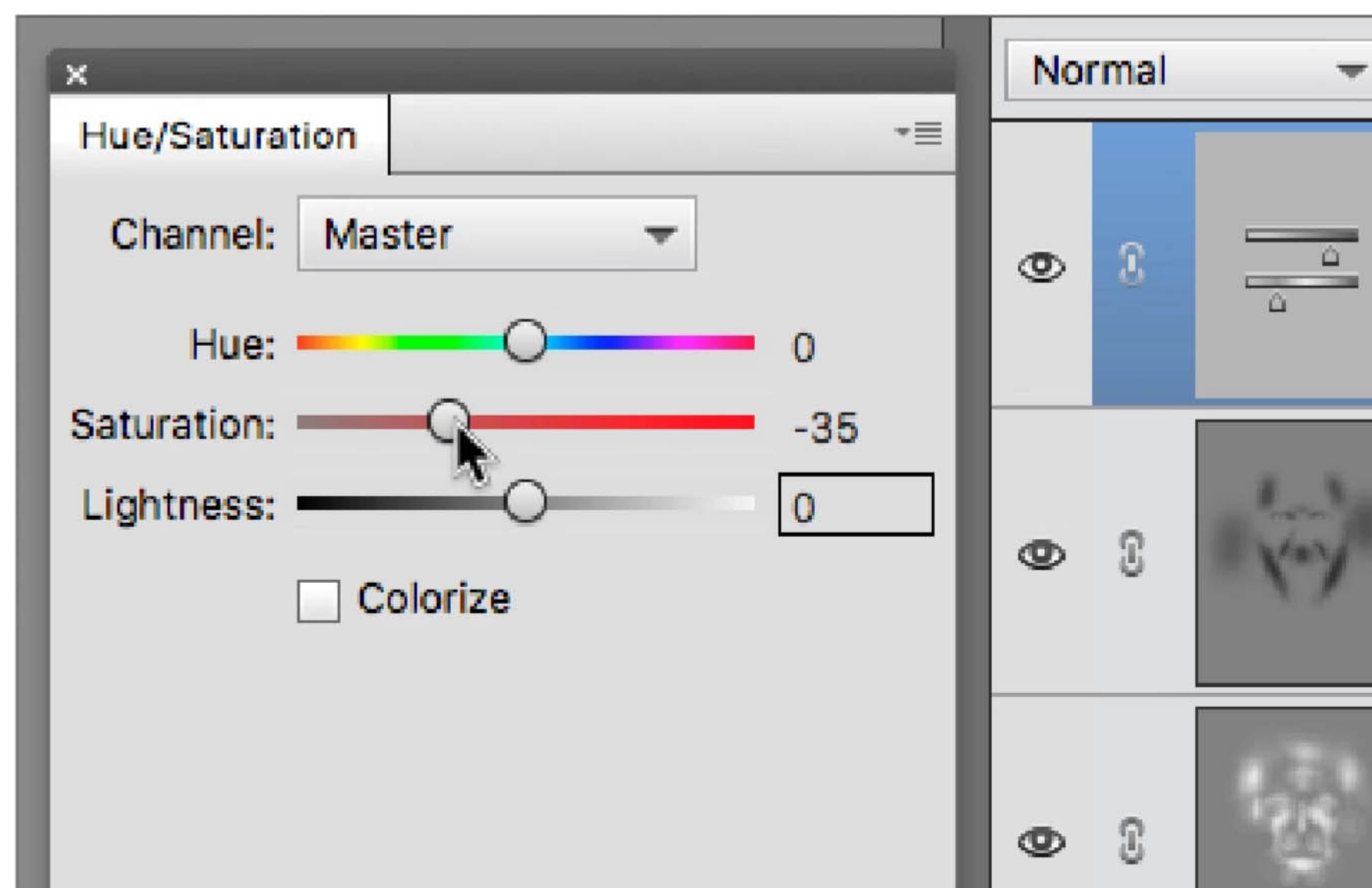
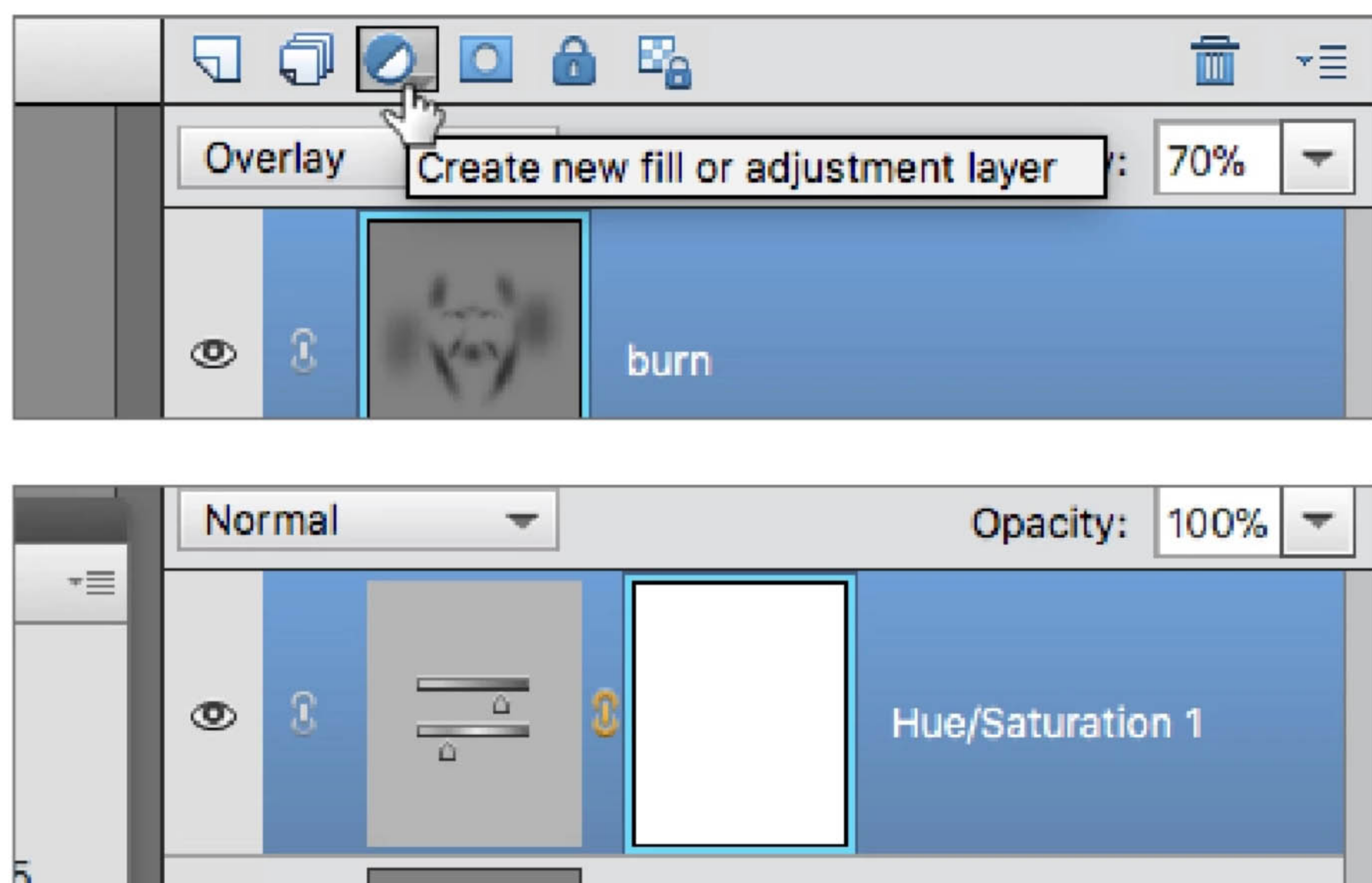
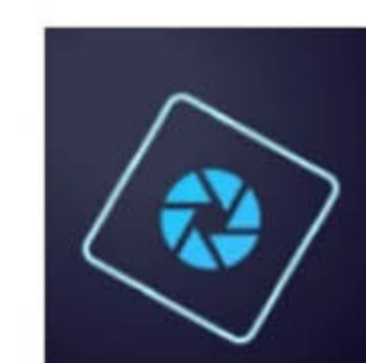
22 If you Alt and click the 'burn' layer, you can view that layer in isolation. Now, any dodged area that is darker than 50% grey is added to the layers below, darkening the portrait. Alt + click again to return to the normal view.



23 Because you are working on separate layers, you can return to the 'dodge' layer if you want, swap the Burn Tool for the Dodge Tool again and continue to brighten areas of the image to your taste. In the case of this image, we went back and brightened the eyes themselves.

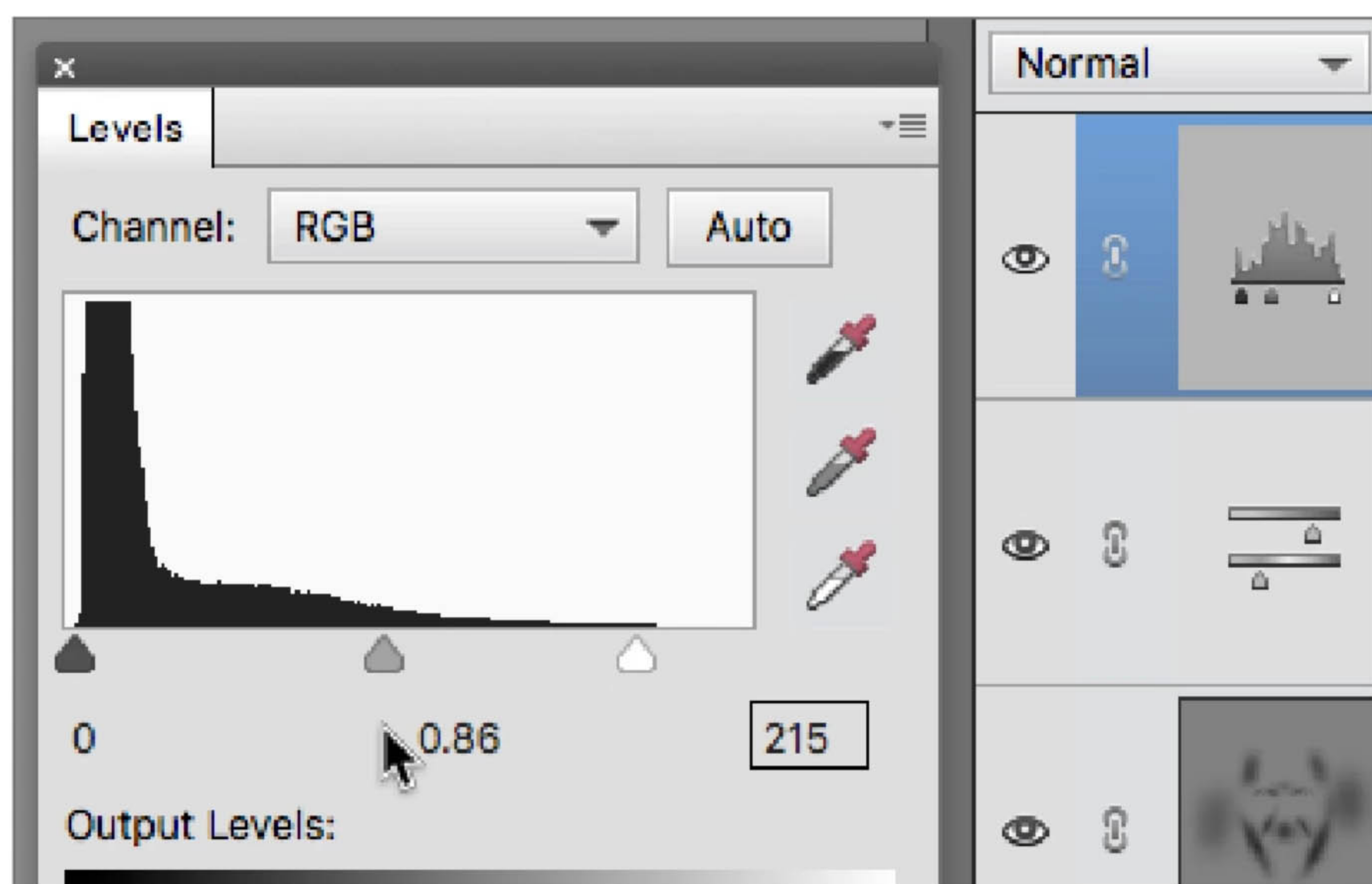


24 If it looks like the 'burn' layer effect is too strong, you can always click on the layer Opacity slider and reduce that layer's opacity to about 70%. We also duplicated the 'dodge' layer and set the second layer to 25% opacity for little extra contrast to the brightest areas.



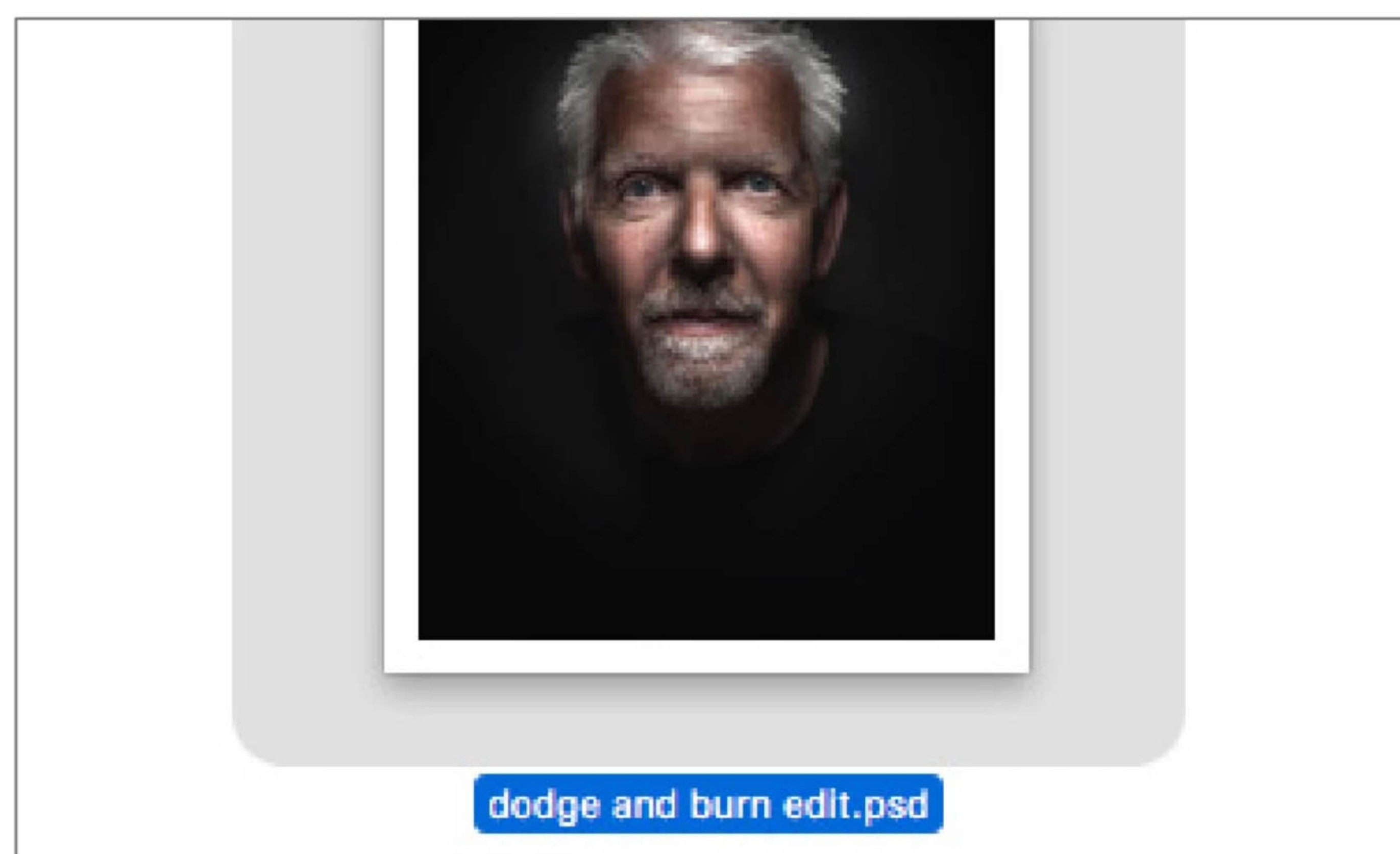
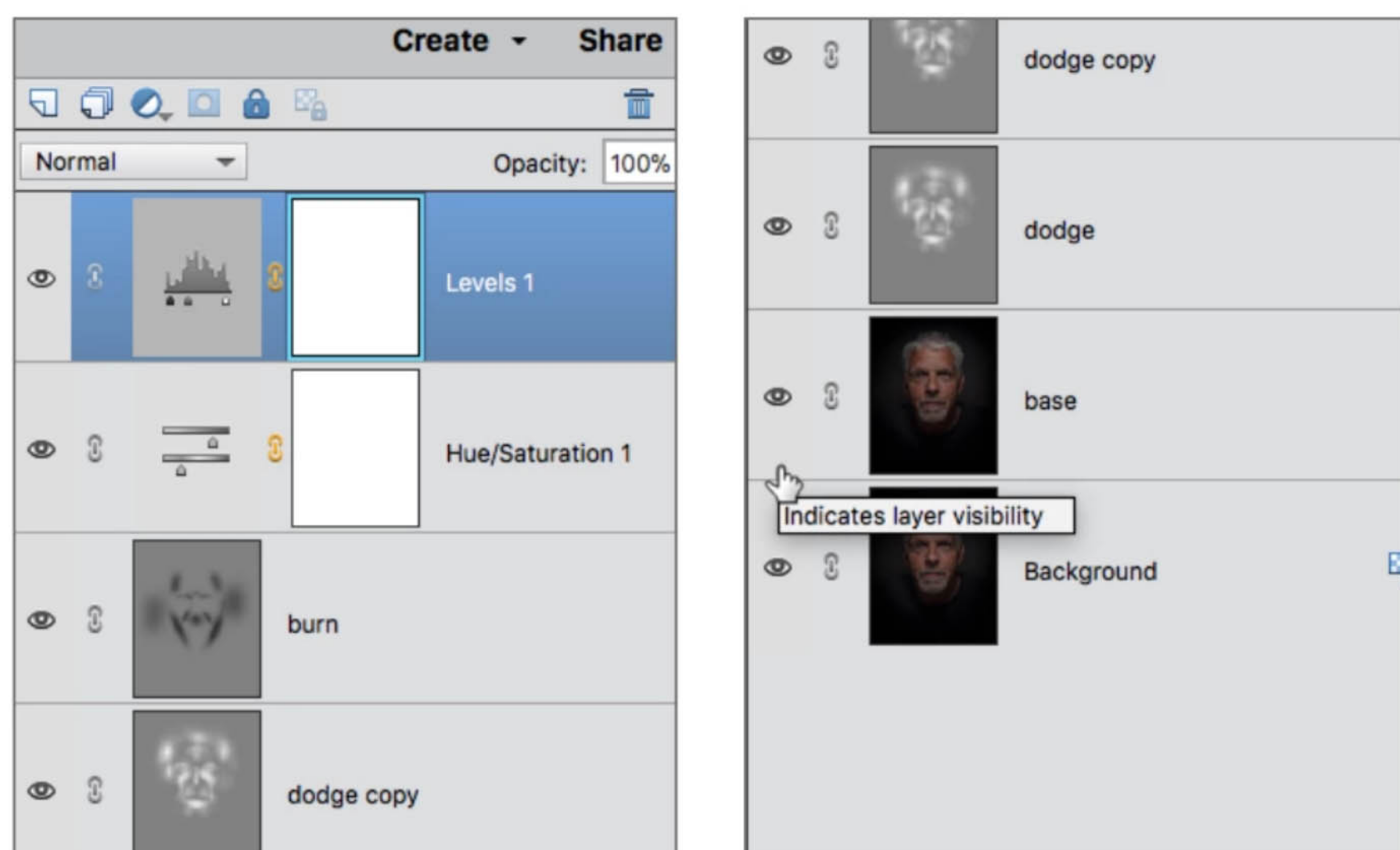
25 The next few steps are optional and down to personal taste. Go to the layer options panel and click on the Create New Fill or Adjustment Layer button. Select Hue/Saturation from the menu that appears to set it as an adjustment layer above the layers already created.

26 We wanted to reduce the saturation of the image a little. When you add an adjustment layer to the layer stack the properties panel for that layer will be displayed automatically. We used the Saturation slider to reduce saturation to about -35.



27 One additional tweak was to add a Levels adjustment and push the Highlights and Midtones sliders to the left; this helped boost contrast a little more and highlighted all the work already done with the Dodge and Burn Tools.

28 A side by side comparison now shows how much the image has been transformed with the use of targeted brightening of midtones and also selective darkening of certain areas to increase the overall contrast of the image that wasn't present in the original.

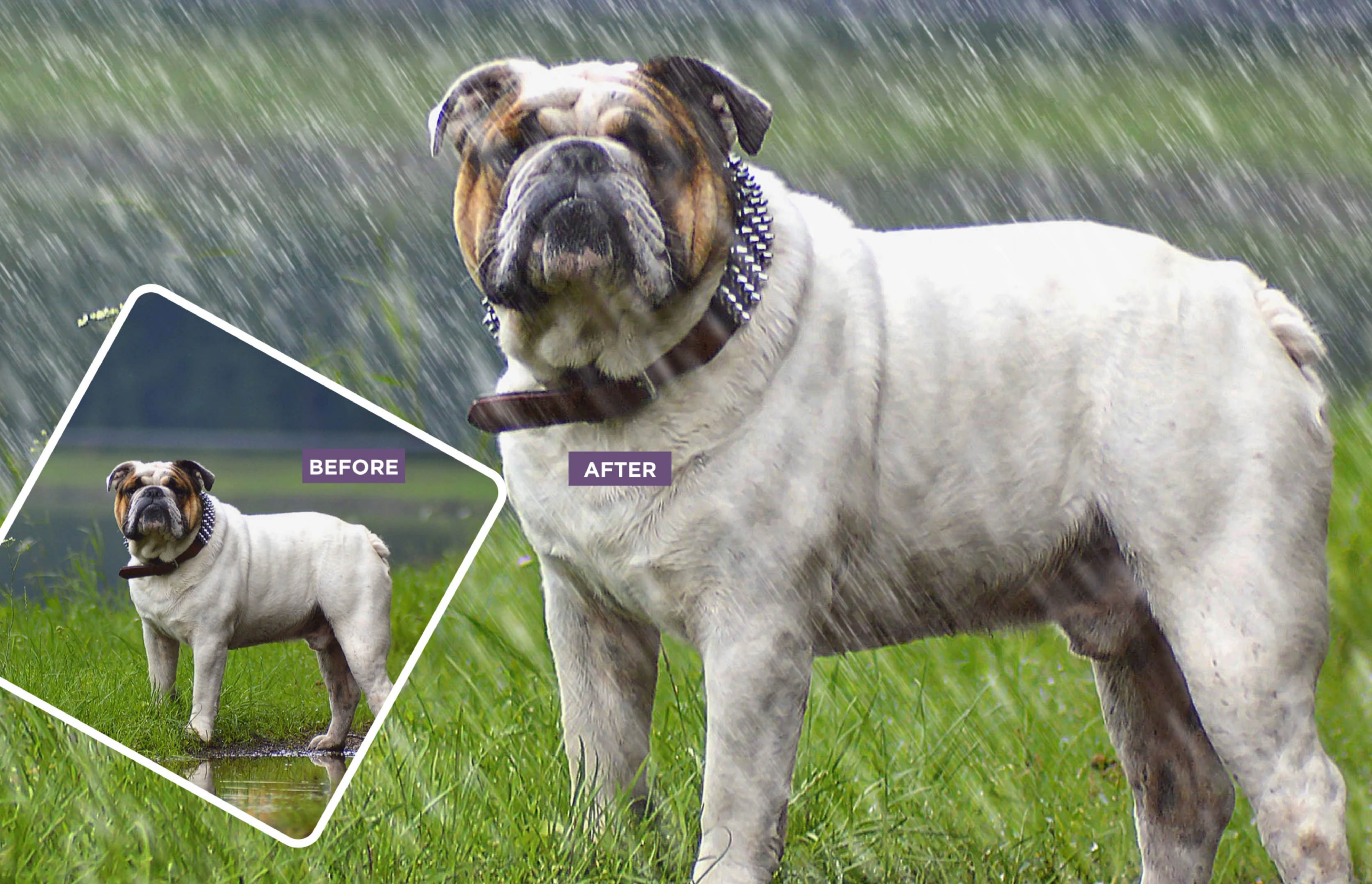


29 With that your Dodge and Burn project is completed. You have applied some very focussed brightness and contrast adjustments to bring out more detail and create a more dramatic looking image.

30 You can choose to flatten the image, by going to File > Save As (Shift + Cmd + S) to create a new file under a new name, or save the document in its layered form as a Photoshop compatible PSD file.



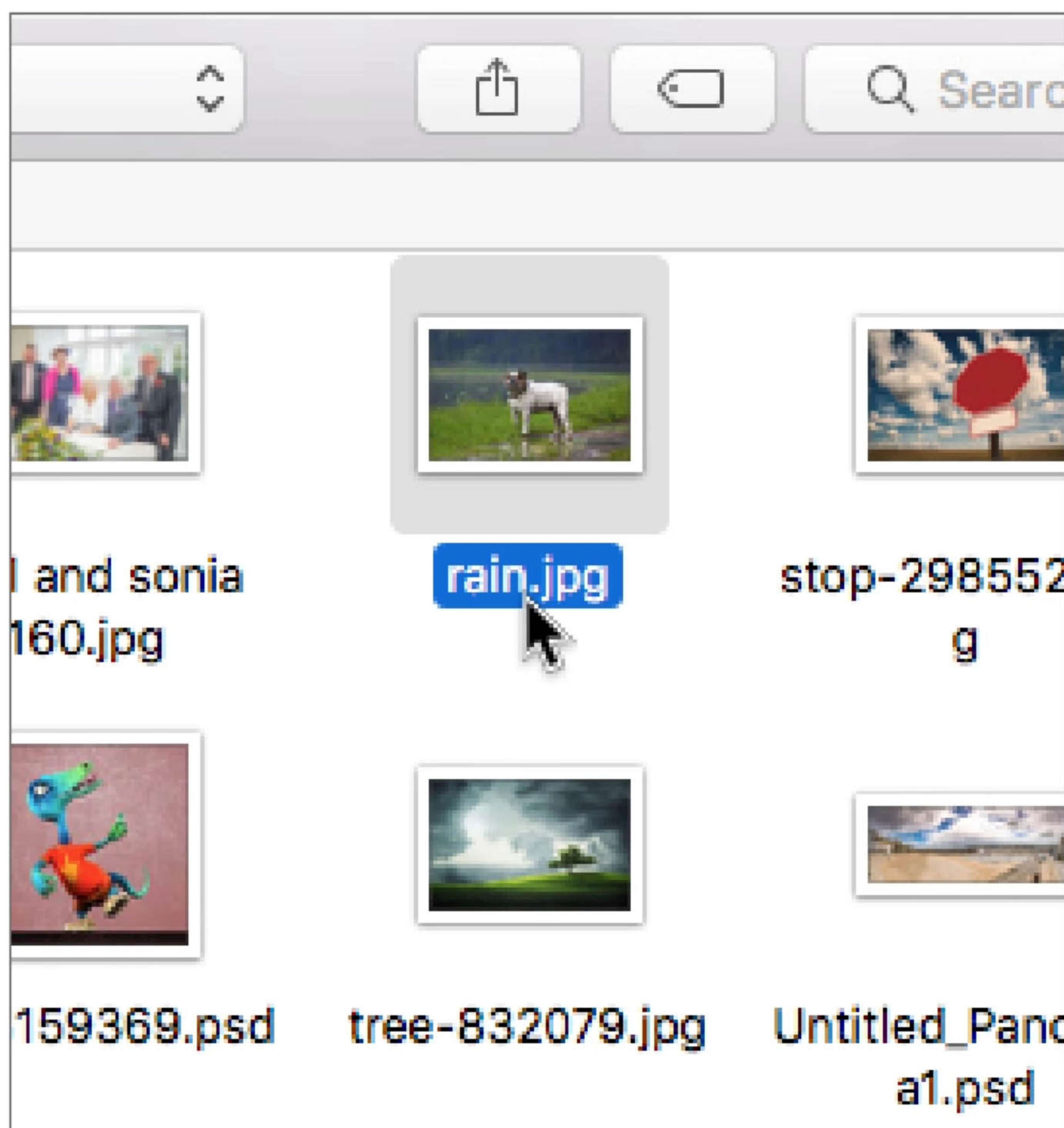
How to Add Rain to a Photo



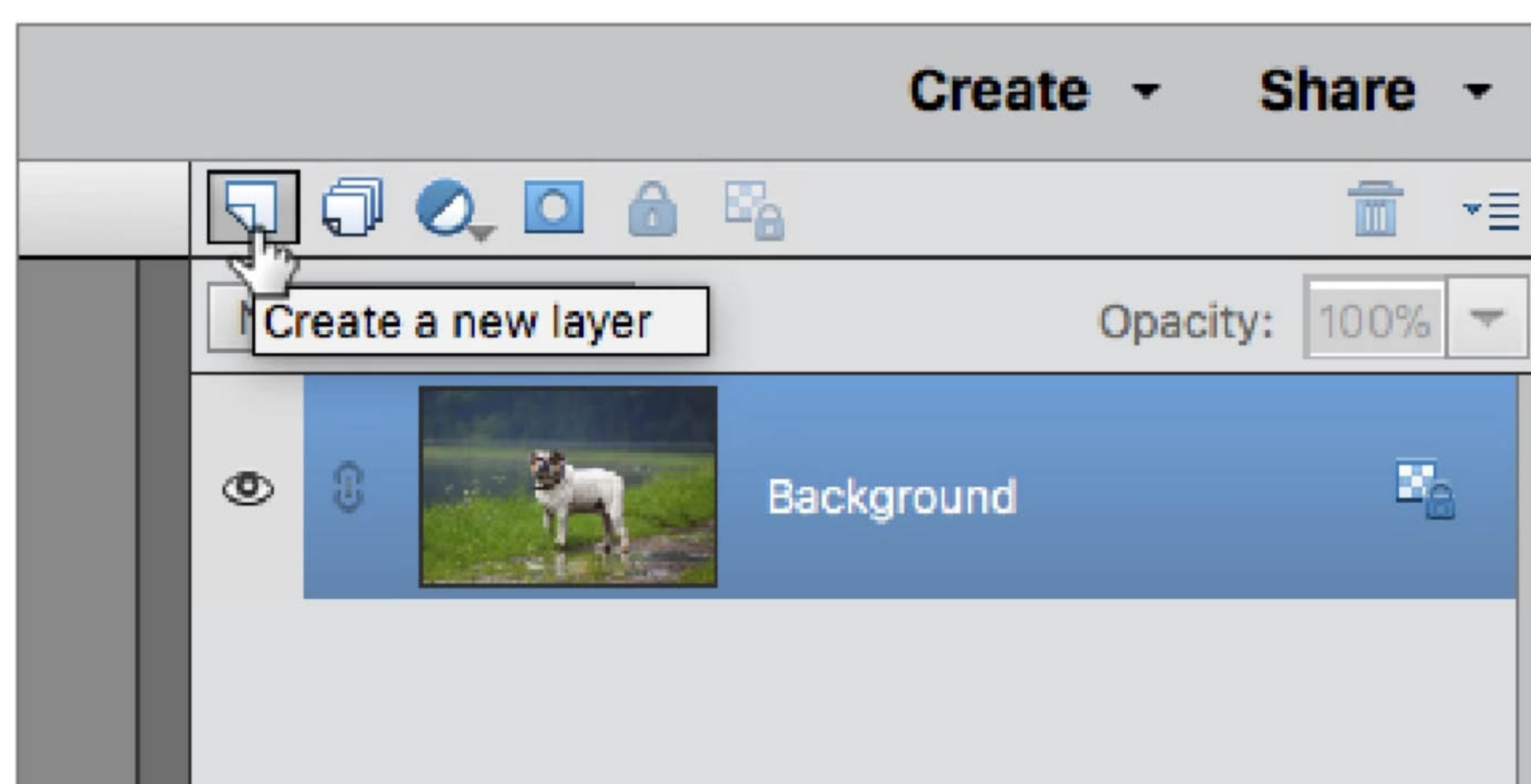
BEFORE

AFTER

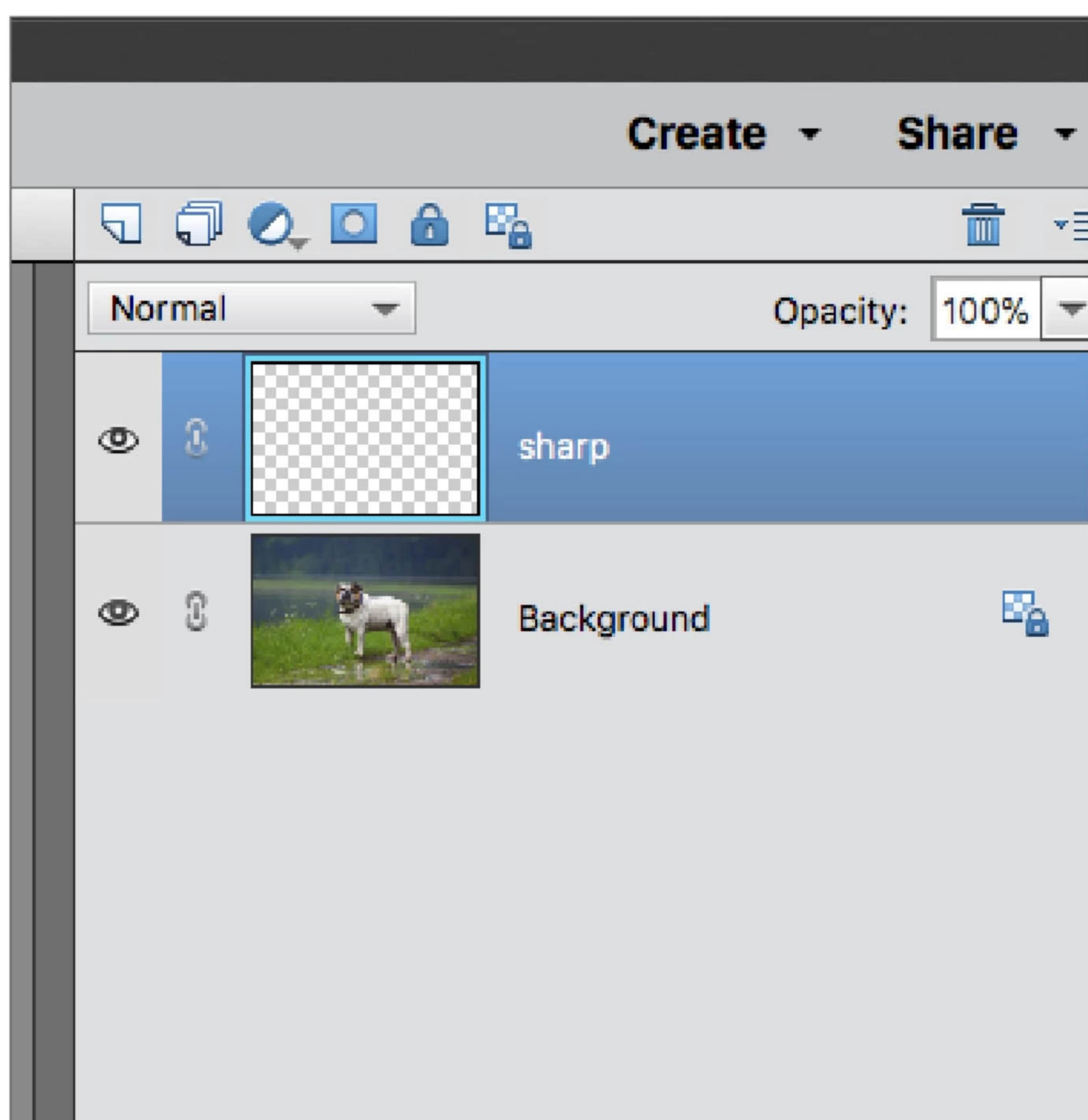
Rain is great, as long as you're not caught out in it without your umbrella. It is certainly a favourite of cinema to add a more brooding feel to a shot. If you've ever seen films like *Seven* and the Ridley Scott sci-fi classic *Blade Runner*, you can see that rain is treated almost like a character in its own right. In this tutorial we are going to show you how you can make your own rain and take your images to a different level. We have an example shot of a dog looking very unimpressed by being out in wet conditions. The photo was taken during a lull in the rain, but perhaps the rain can be started up again, to make the dog even more grumpy.



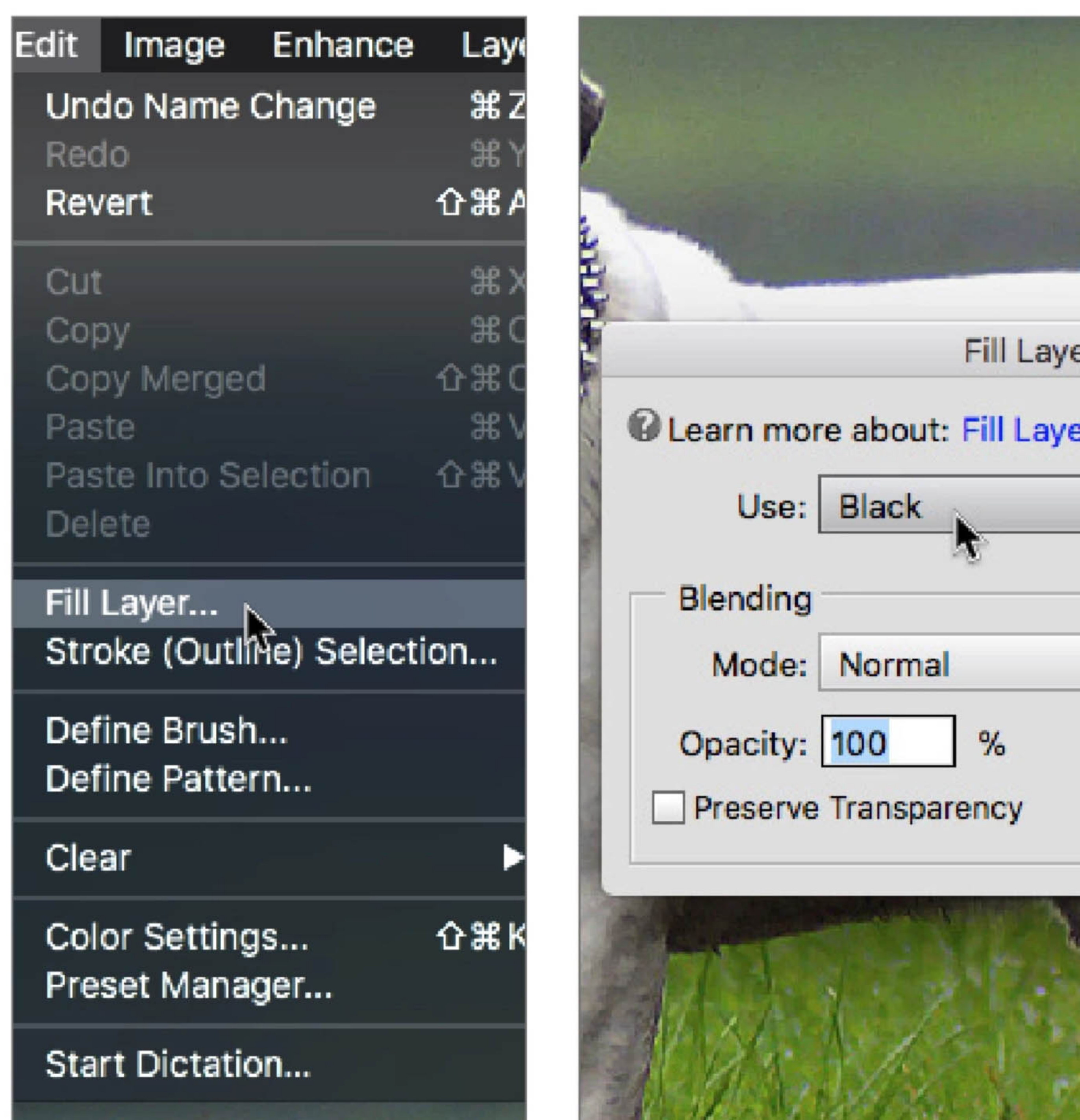
1 The process starts, as ever, by going to File > Open and navigating to where your image is kept. Highlight your image and press Open or double-click it to open it in Elements. Our example dog image opens up ready for a good downpour.



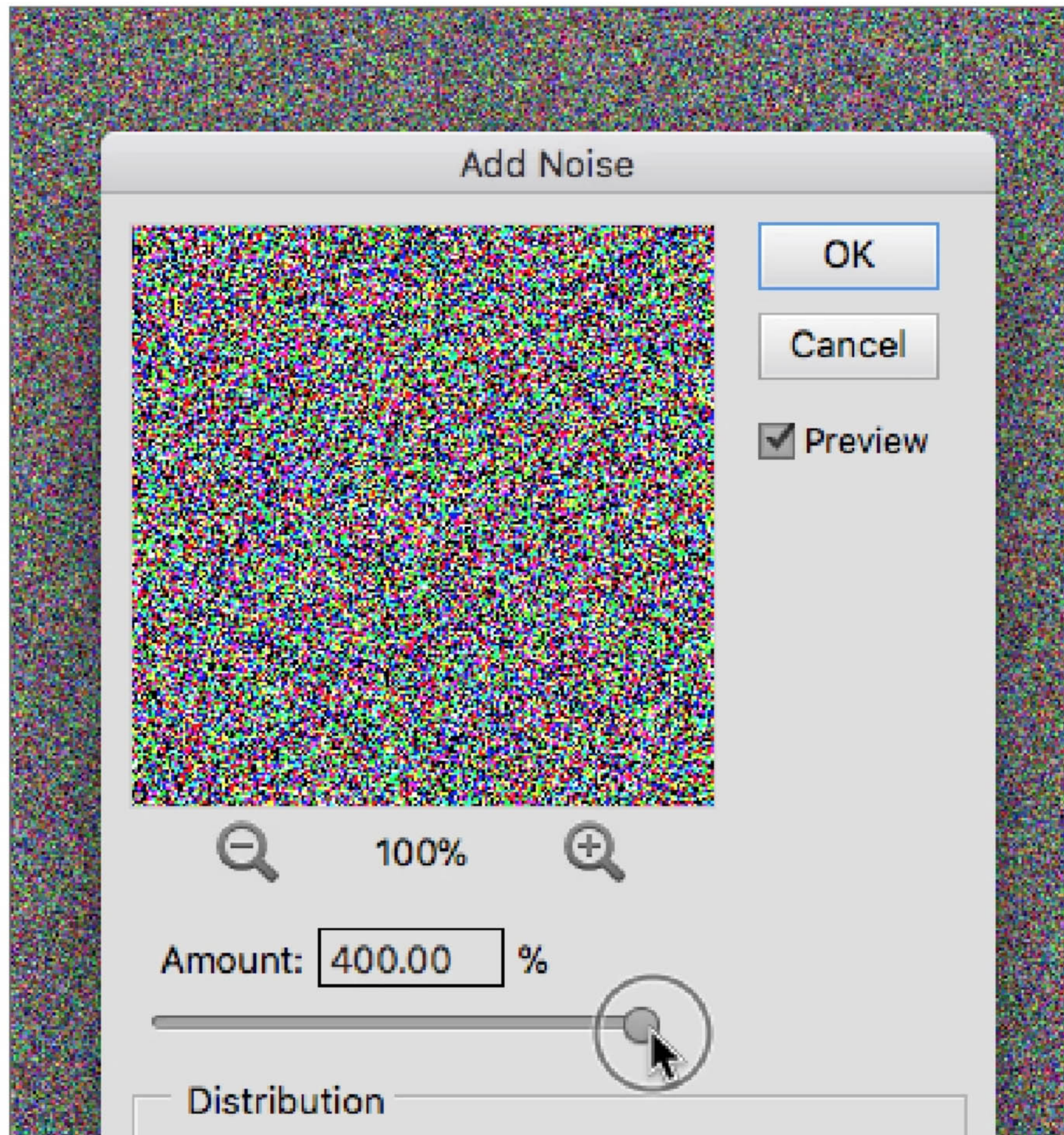
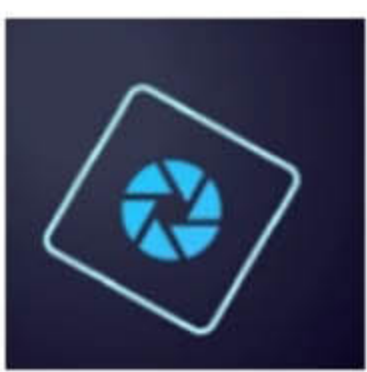
2 You will be creating two layers of rain. One will contain smaller drops which will appear to be further from the viewer. The second layer will be much closer to the viewer and be blurred. To begin, go to the layer options panel and click on Create A New Layer.



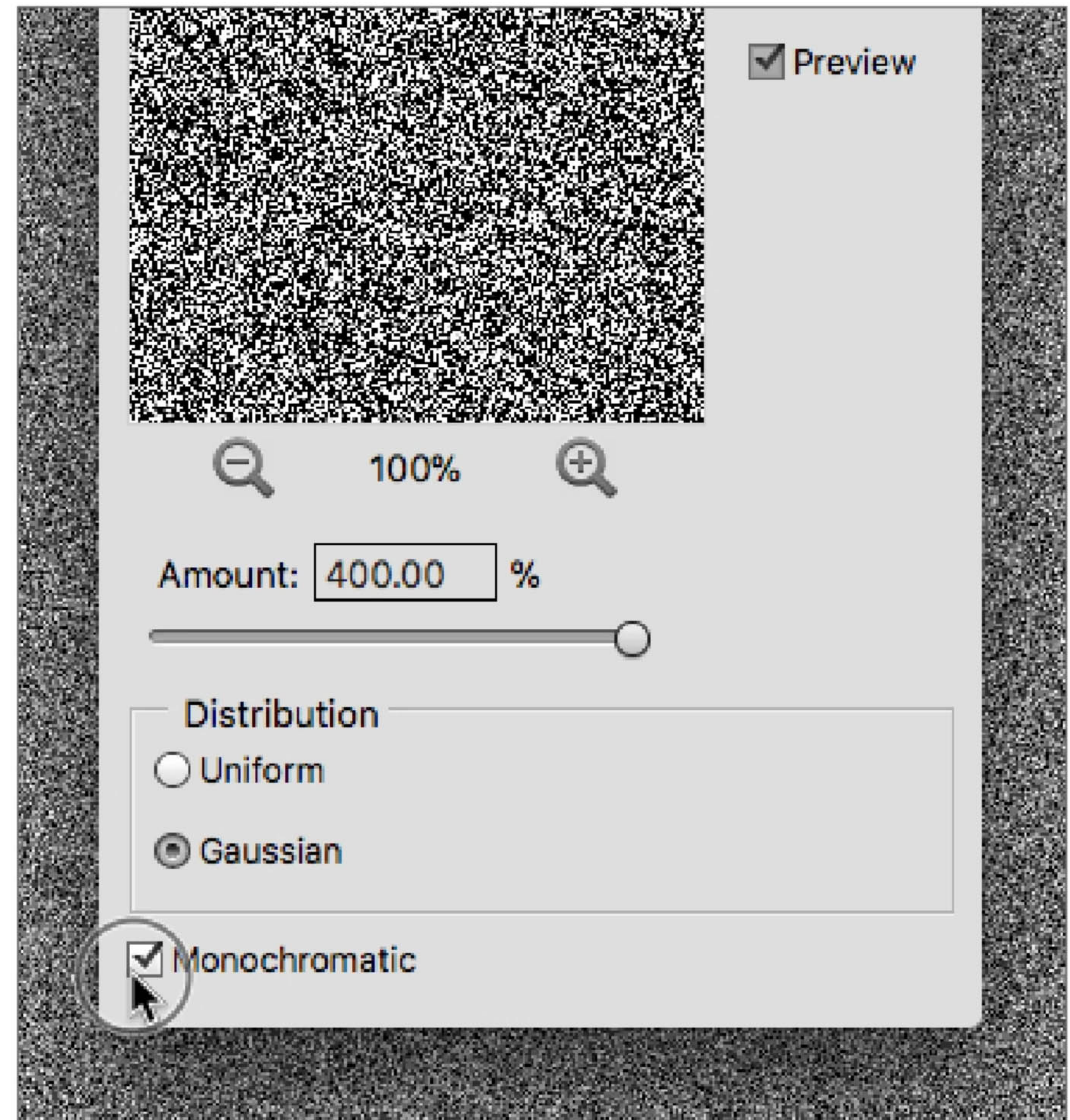
3 A new layer will be added above the main image on the 'Background' layer. Name this new layer 'sharp'. You can use this layer to add the first of the rain effects by creating small, sharp, drops. Make sure the 'sharp' layer is active.



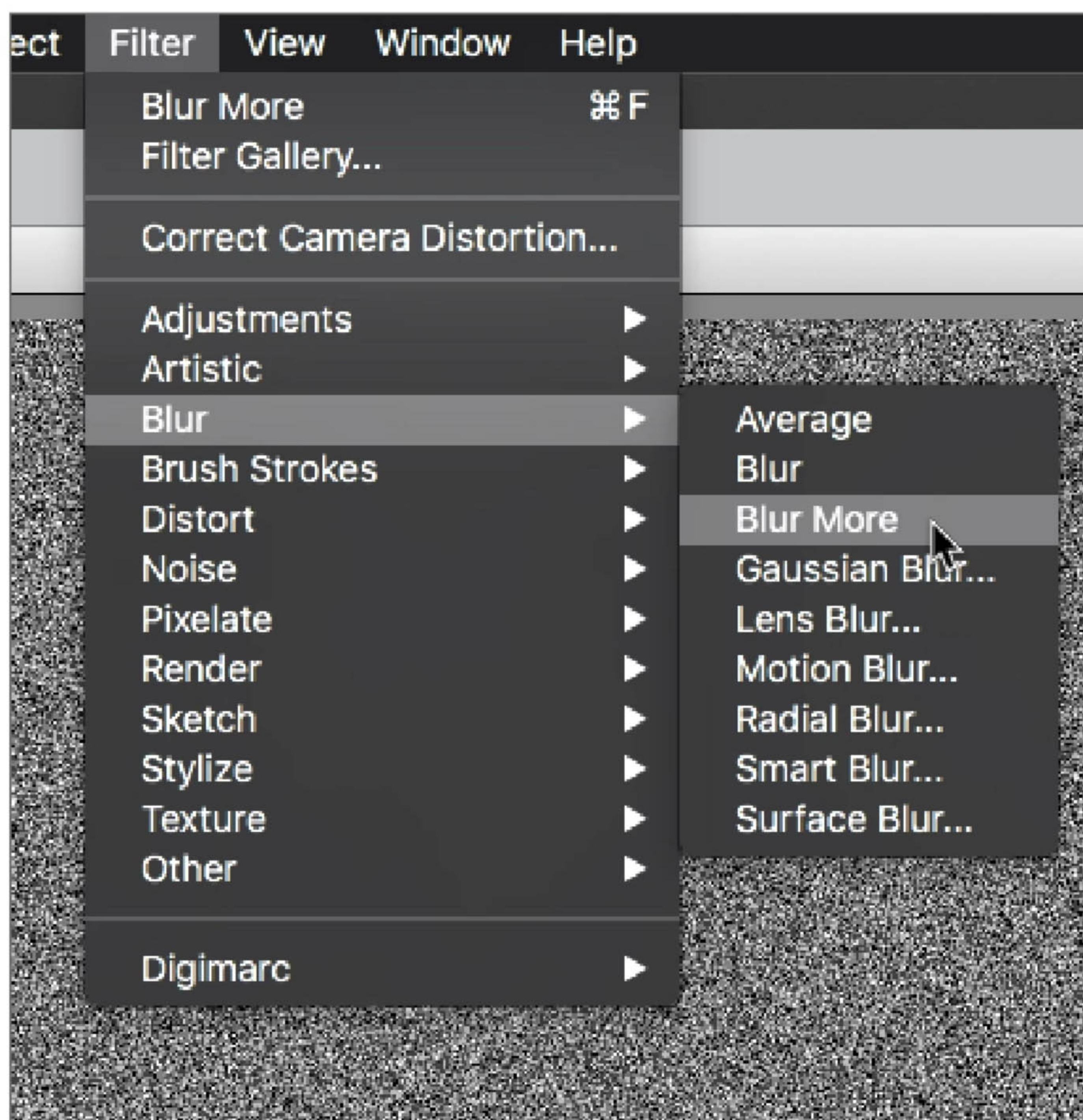
4 Go to Edit > Fill Layer to open the fill option panel. In the Use section, choose Black as the fill colour. Make sure Blending Mode is Normal, Opacity is 100% and that the Preserve Transparency box is unticked. The 'sharp' layer will be filled solid black, obscuring the dog for a moment.



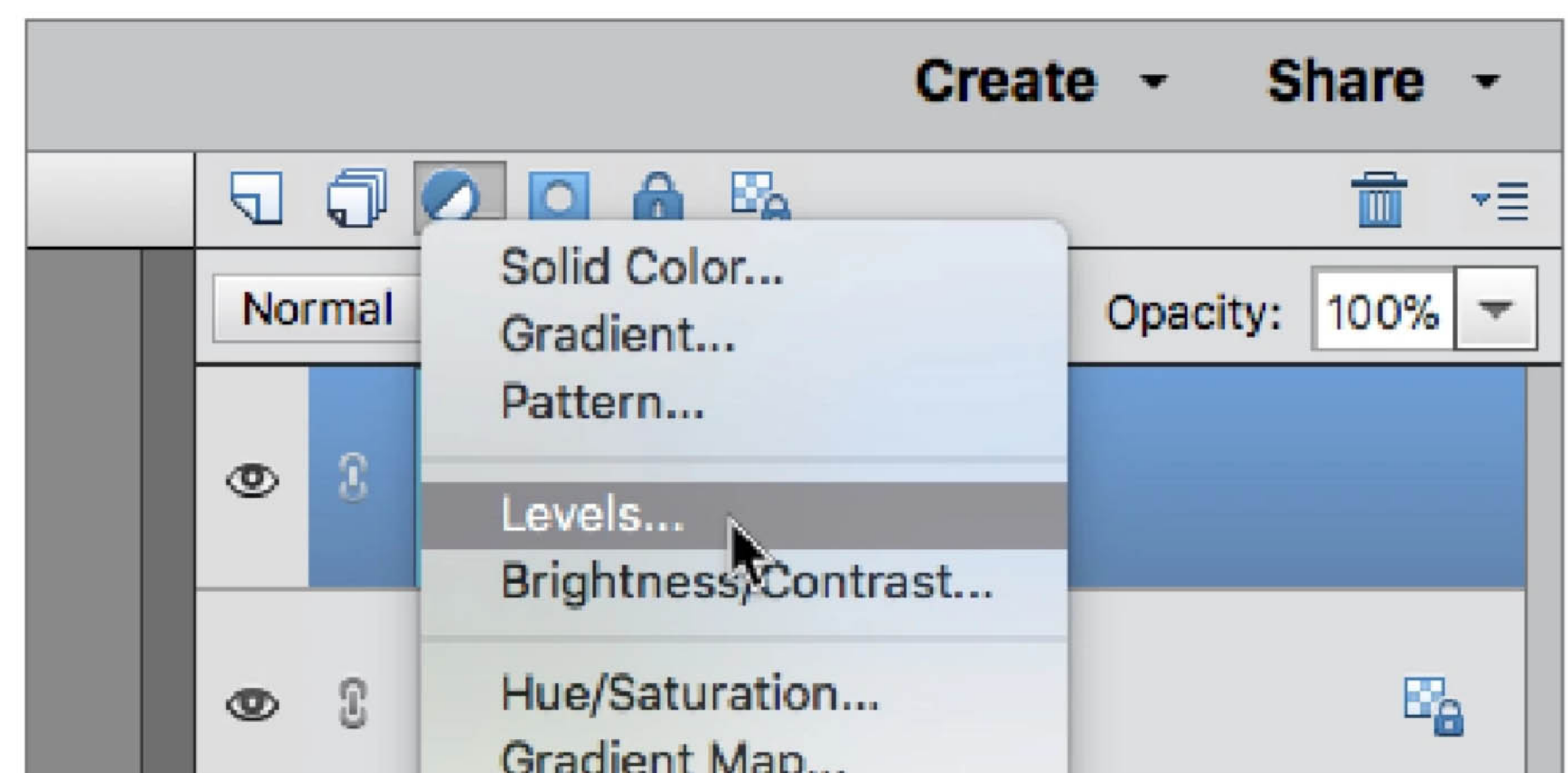
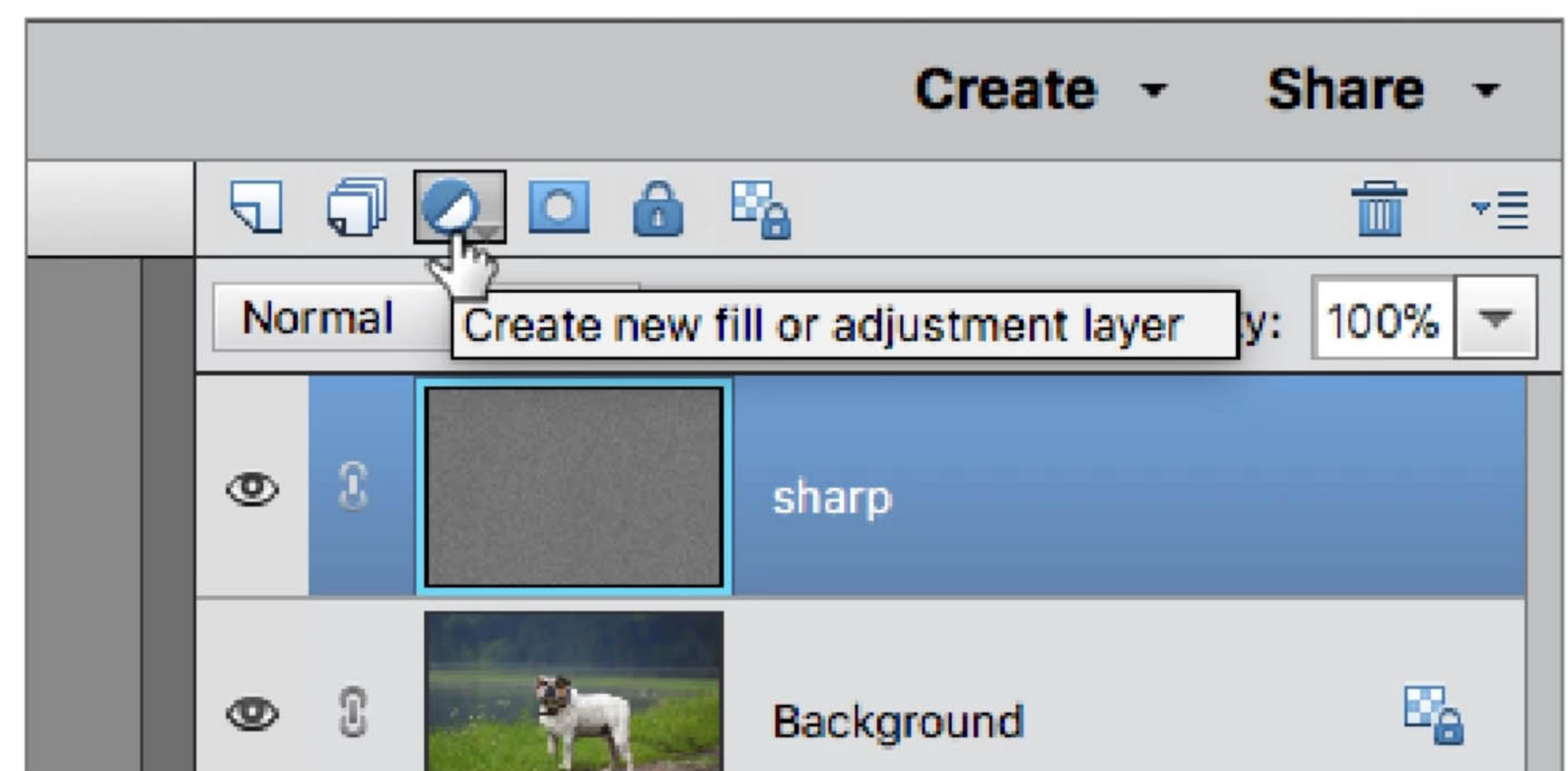
5 Now you need to create some raindrops. Go to Filter > Noise > Add Noise to open the Add Noise panel. You have a couple of options to adjust to give you the correct kind of rain elements. First, you need to make the Amount 400%, which is the maximum Amount you can add.



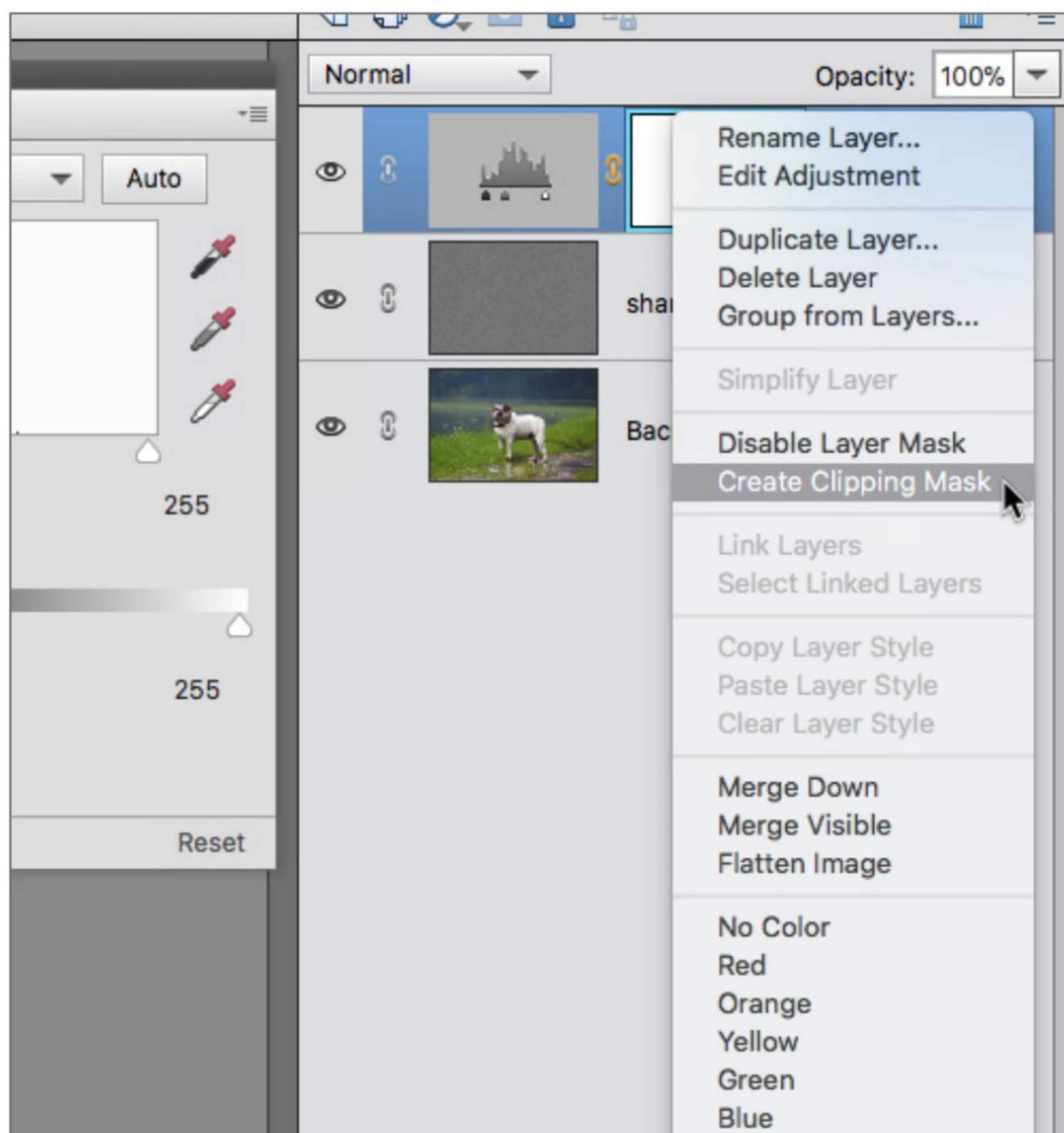
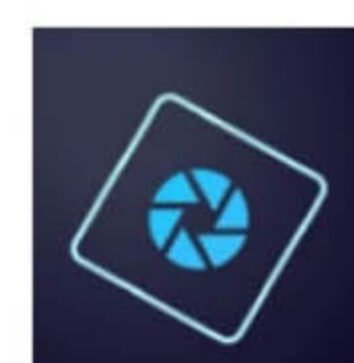
6 By default, the Distribution value is set at Uniform. You need something a bit more random, so click the Gaussian button instead. You might notice that the noise has a lot of colour in it. We need to remove that by checking the Monochromatic button at the bottom of the panel. Click OK to proceed.



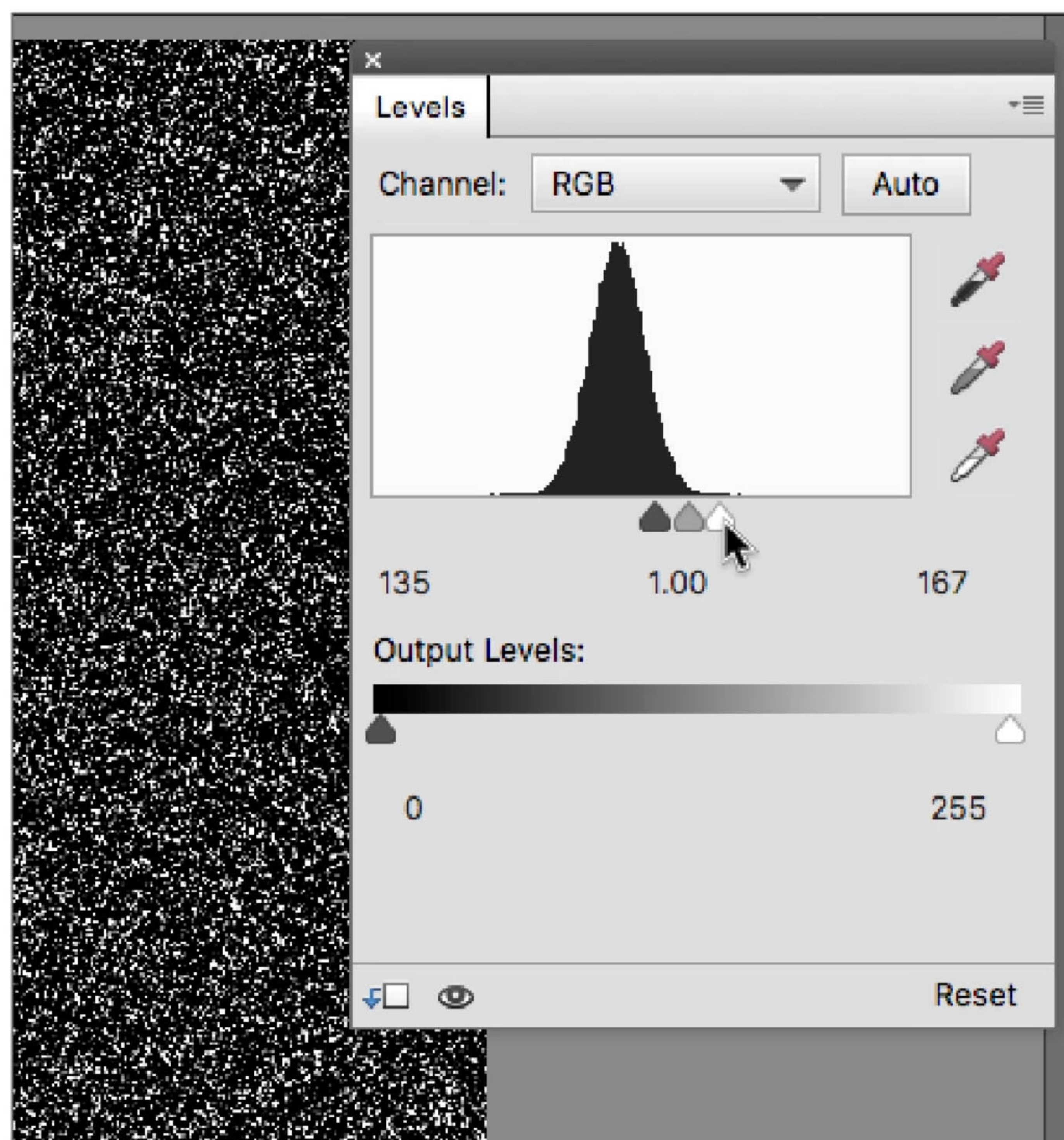
7 In order to create the rain particles, the noise on the 'sharp' layer needs to be blurred slightly. Go to Filter > Blur > Blur More. This adds a small, predefined amount of blur to the noise to soften it slightly.



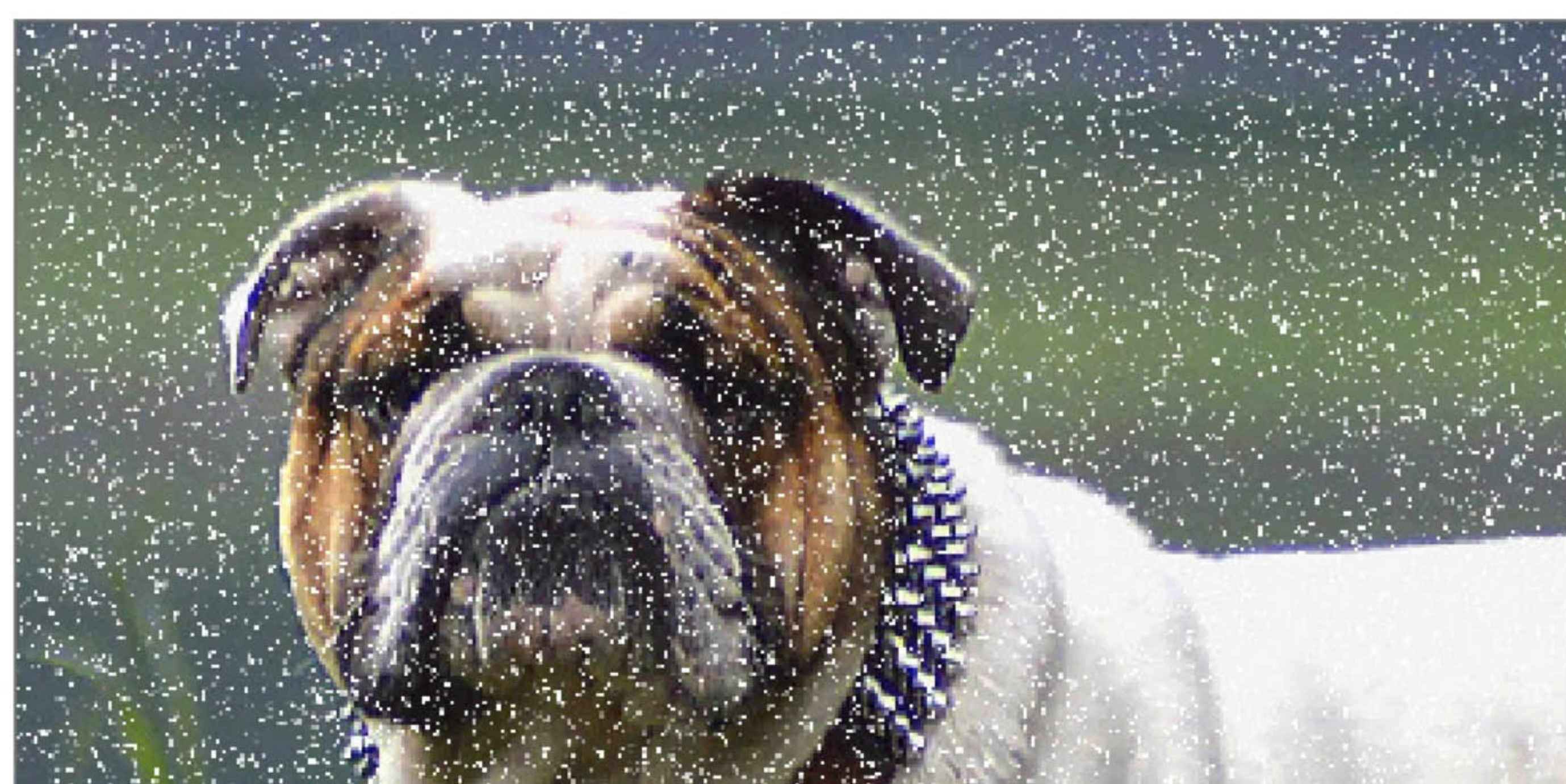
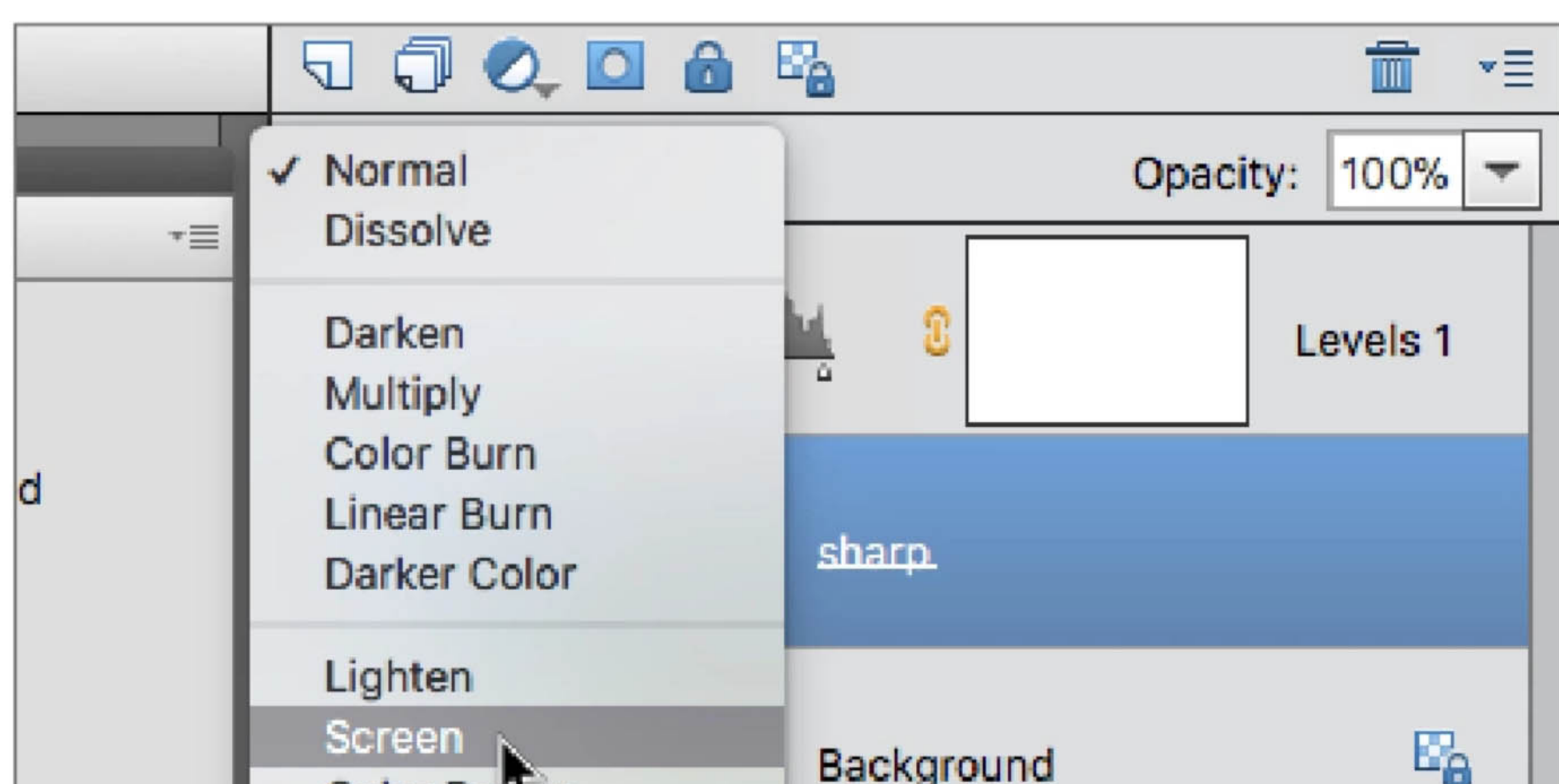
8 The noise doesn't look very much like rain at the moment but if you go to the layer options panel and click on the Create New Fill Or Adjustment Layer and select Levels, you can adjust the contrast to make something that looks more like individual drops.



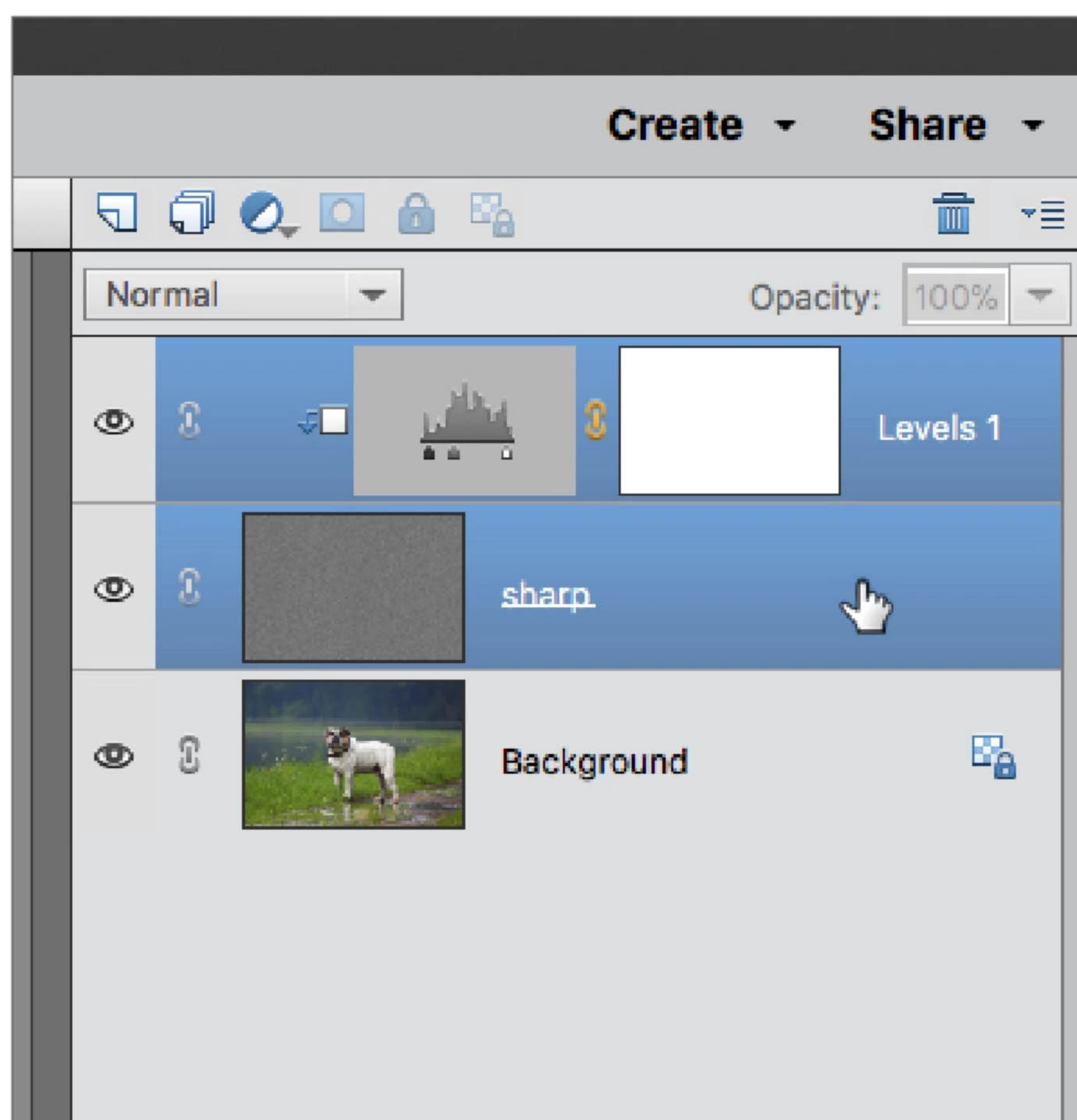
9 A 'Levels 1' adjustment layer will be added. To make sure the adjustment only affects the 'sharp' layer, right click 'levels 1' and choose Create Clipping Mask from the menu. This means the adjustment will only affect the layer below to which it is now clipped.



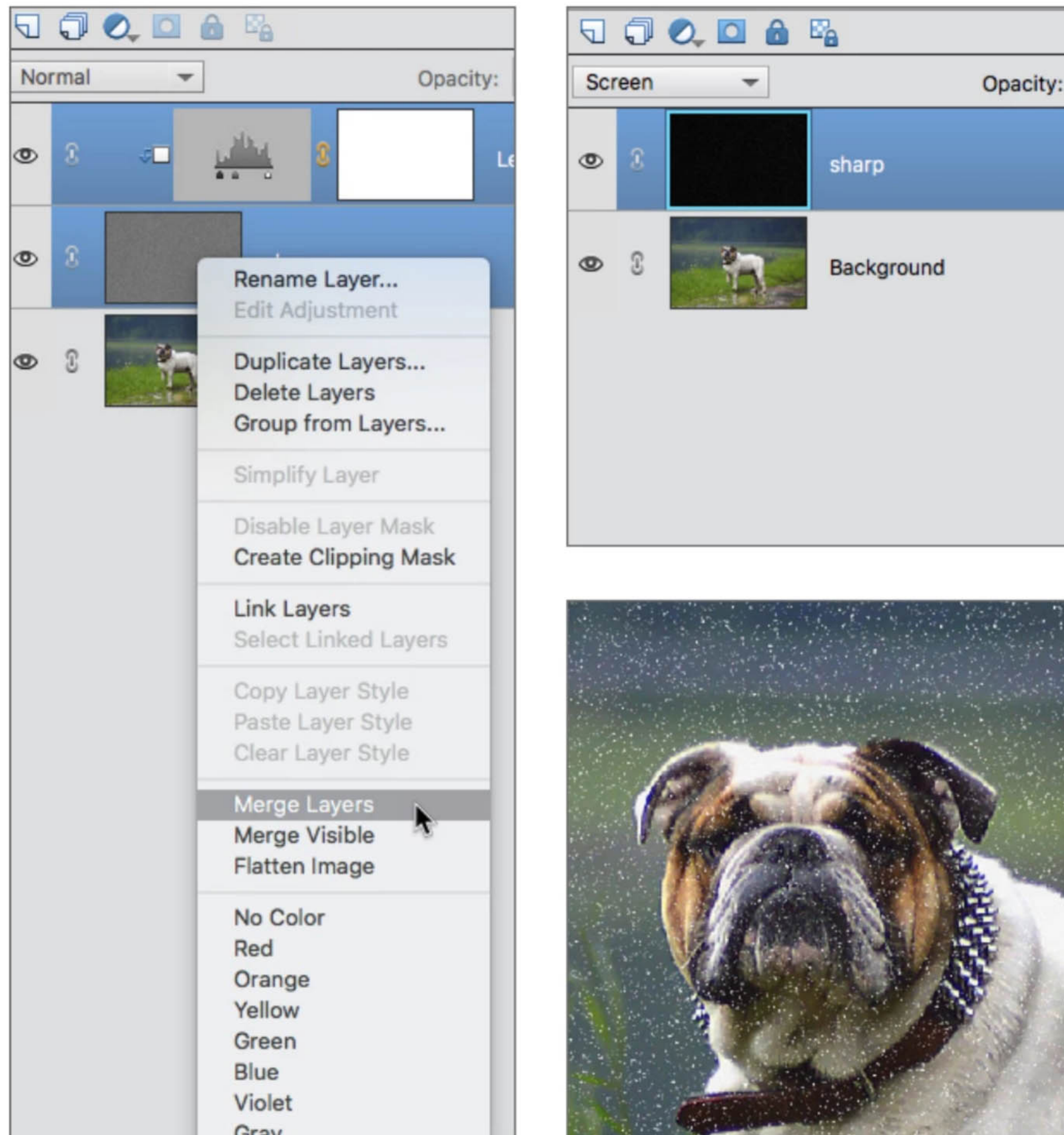
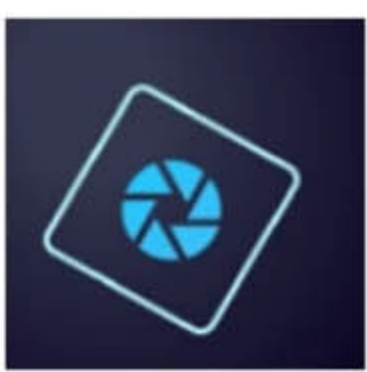
10 The Levels dialog panel will open when the layer is created. If you push the Shadows and Highlights sliders closer to each other, you will see the effect you're having on the noise in the 'sharp' layer. You need to adjust the sliders so the blurred noise separates out into small particles.



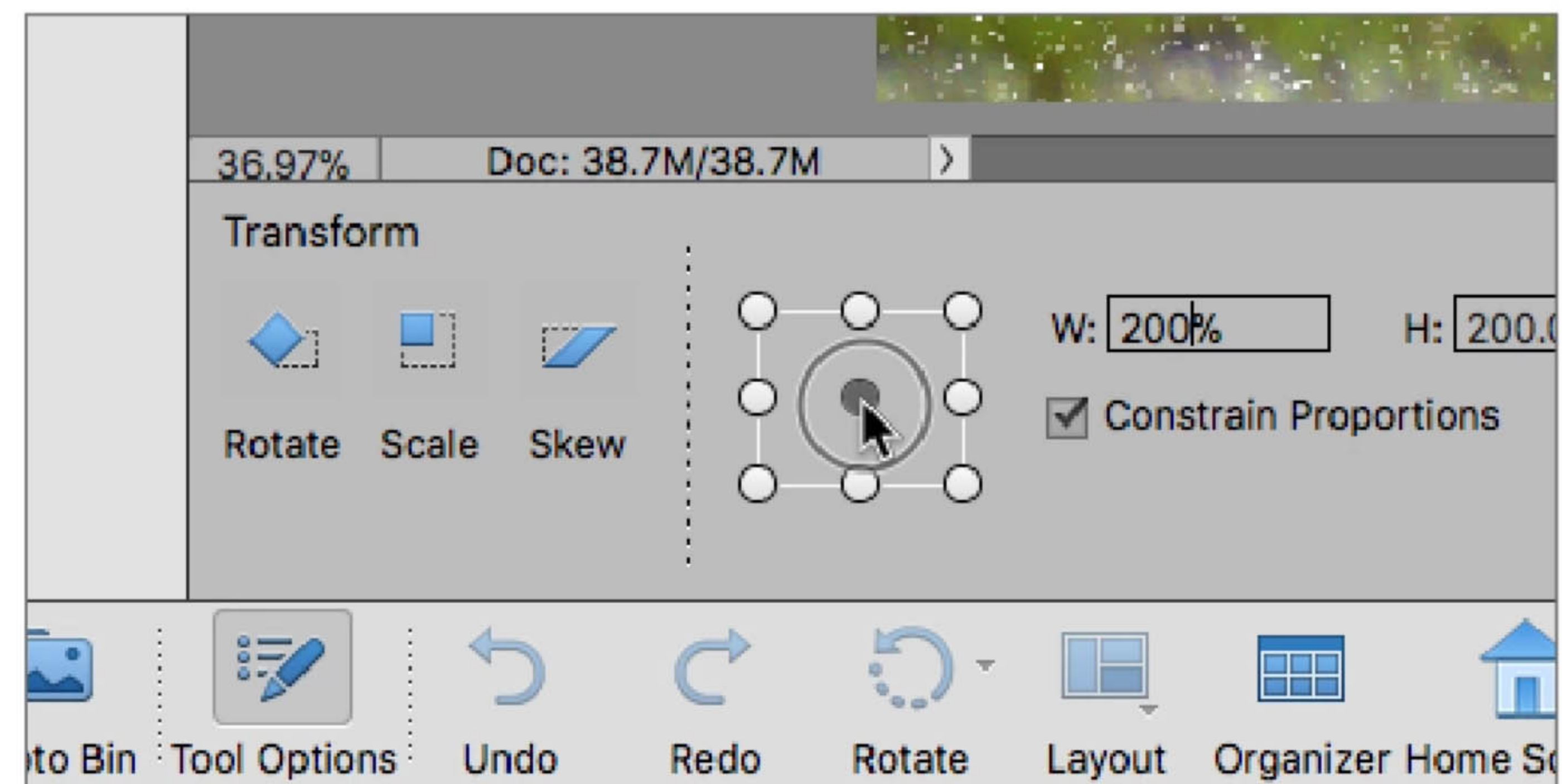
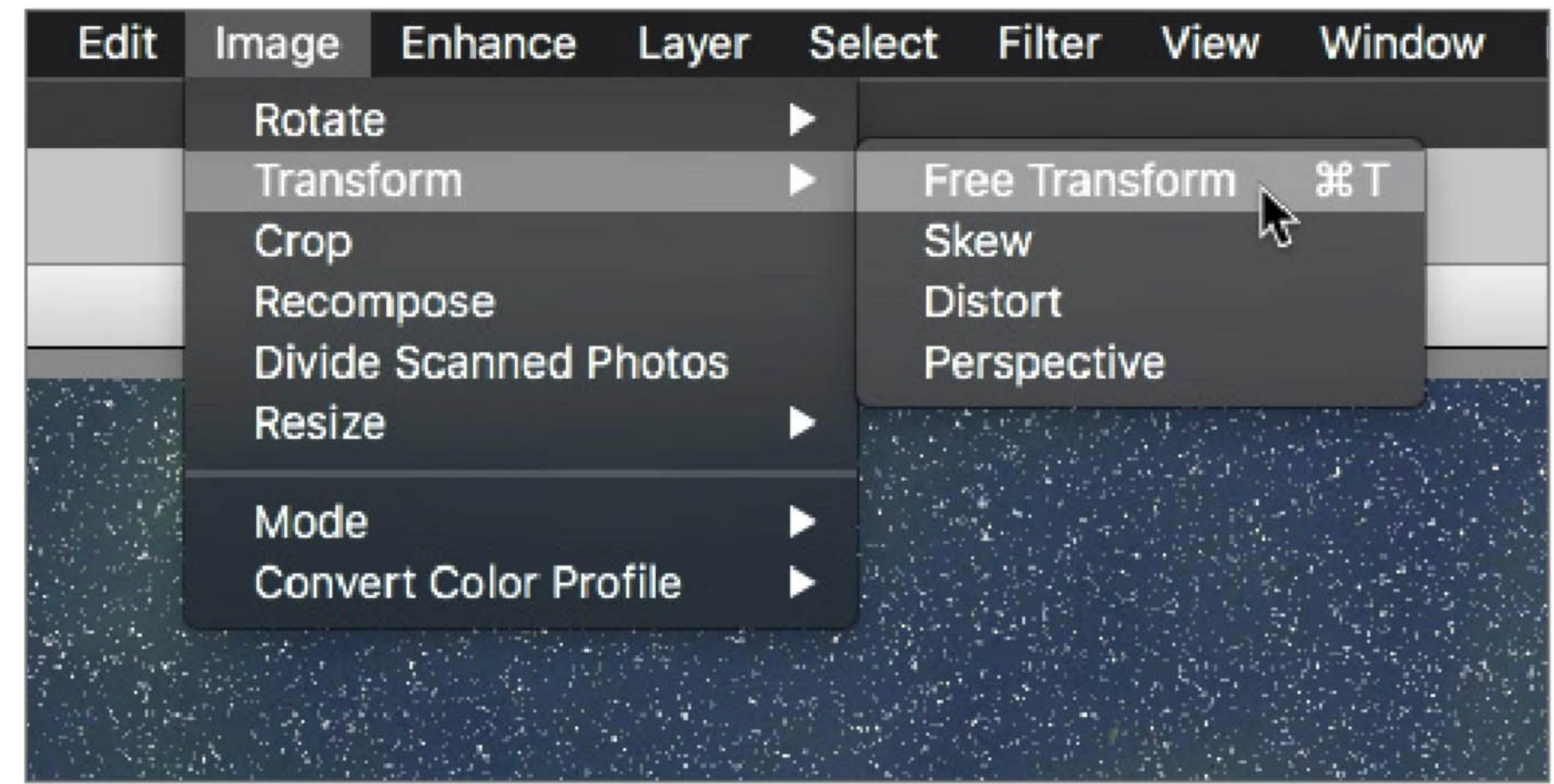
11 When you have the adjustment as you like it, click on the 'sharp' layer to make it active and then go to the Blend Mode options button and choose Screen as the blend. When you do this, only areas that are brighter than 50% grey will be seen in the image.



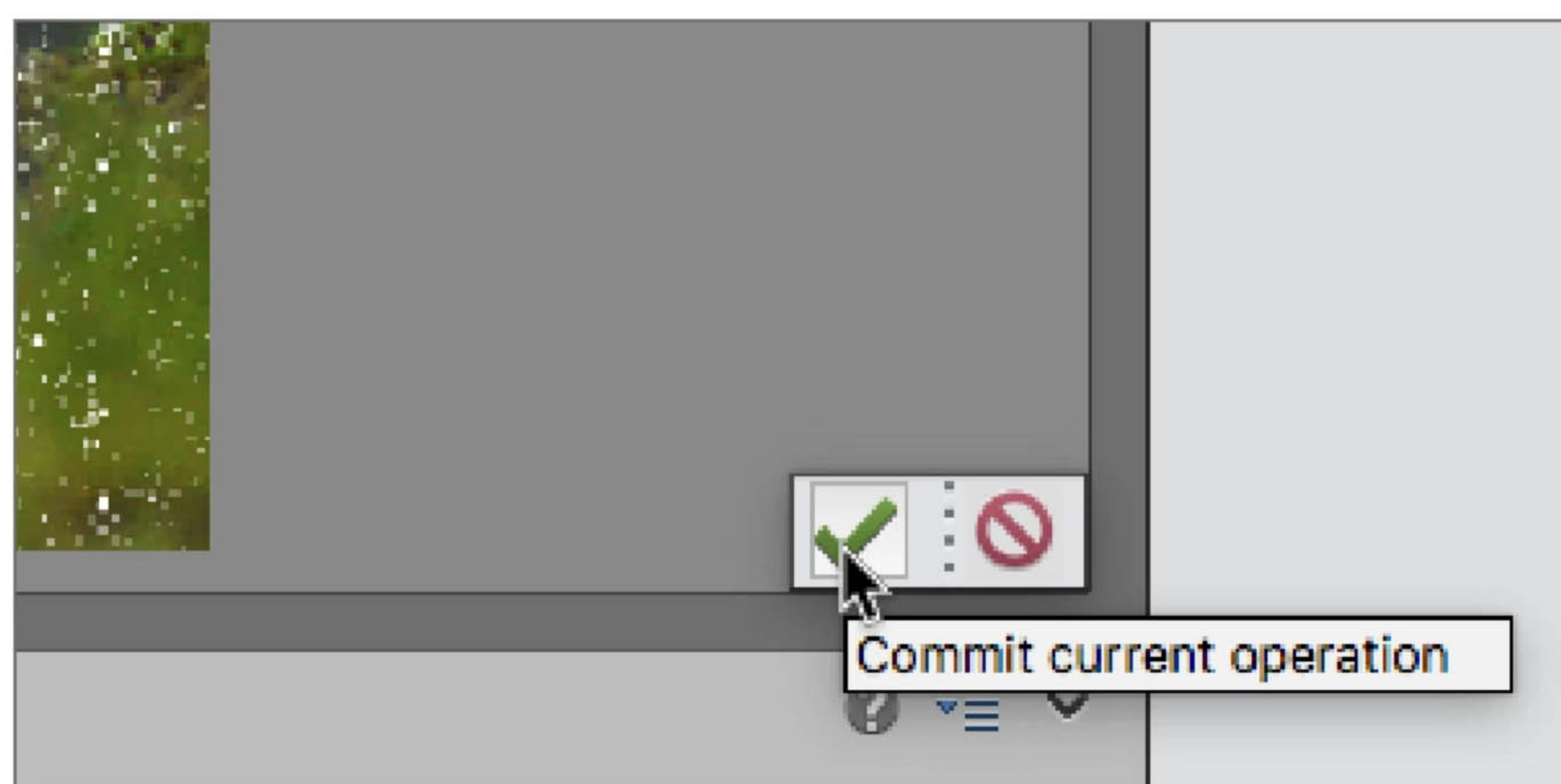
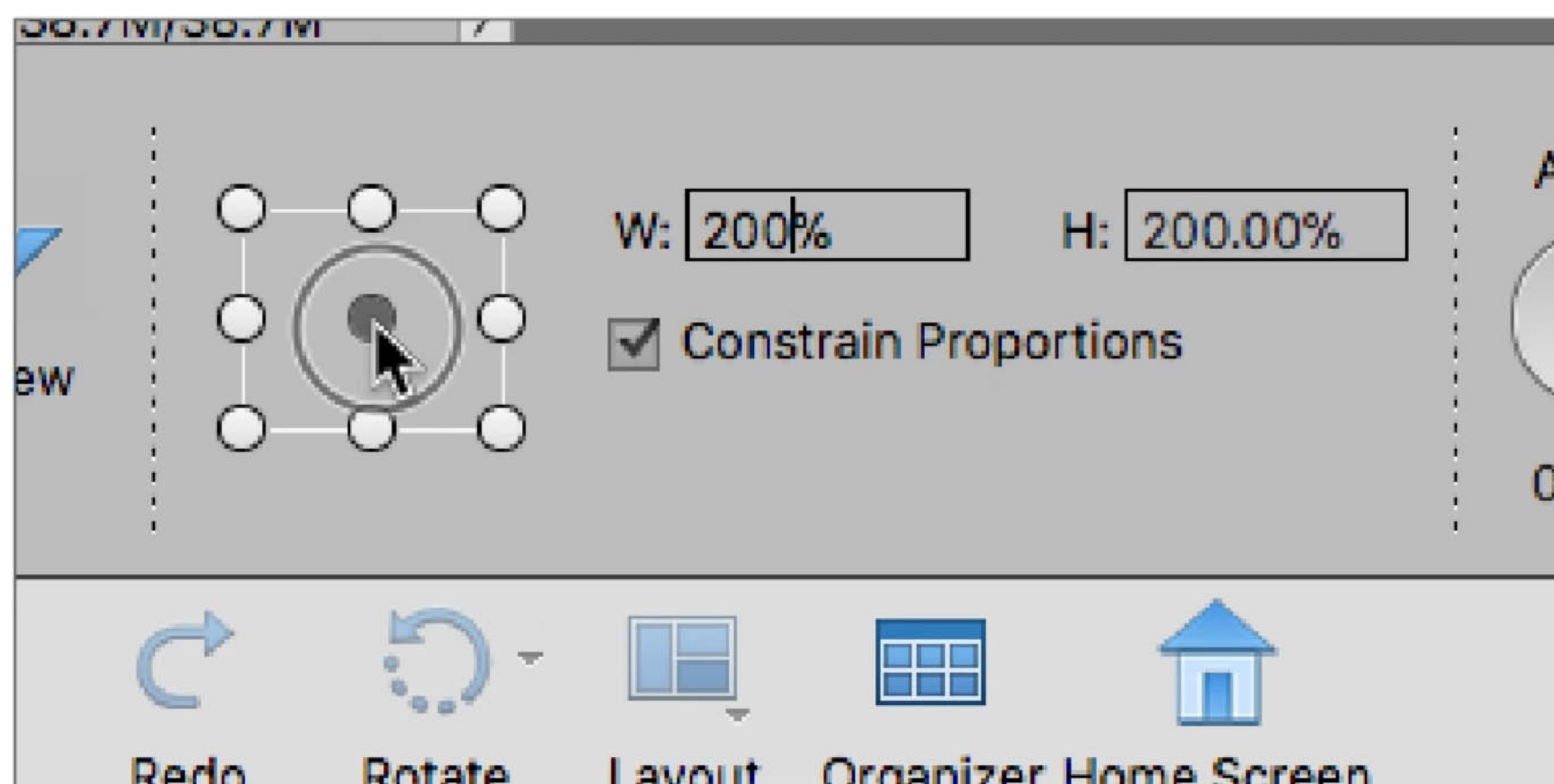
12 You can continue to make further adjustments to the levels and when you are ready, press the shift key and click both the 'Levels 1' layer and the 'sharp' layer in order to select them both at once. Both layers should be highlighted in blue.



13 Right-click on these selected layers and choose Merge Layers from the menu to merge them into one layer. When combined, the layer will default back to a Normal Blend Mode so you will need to go back in and change that back to the Screen Blend Mode again.



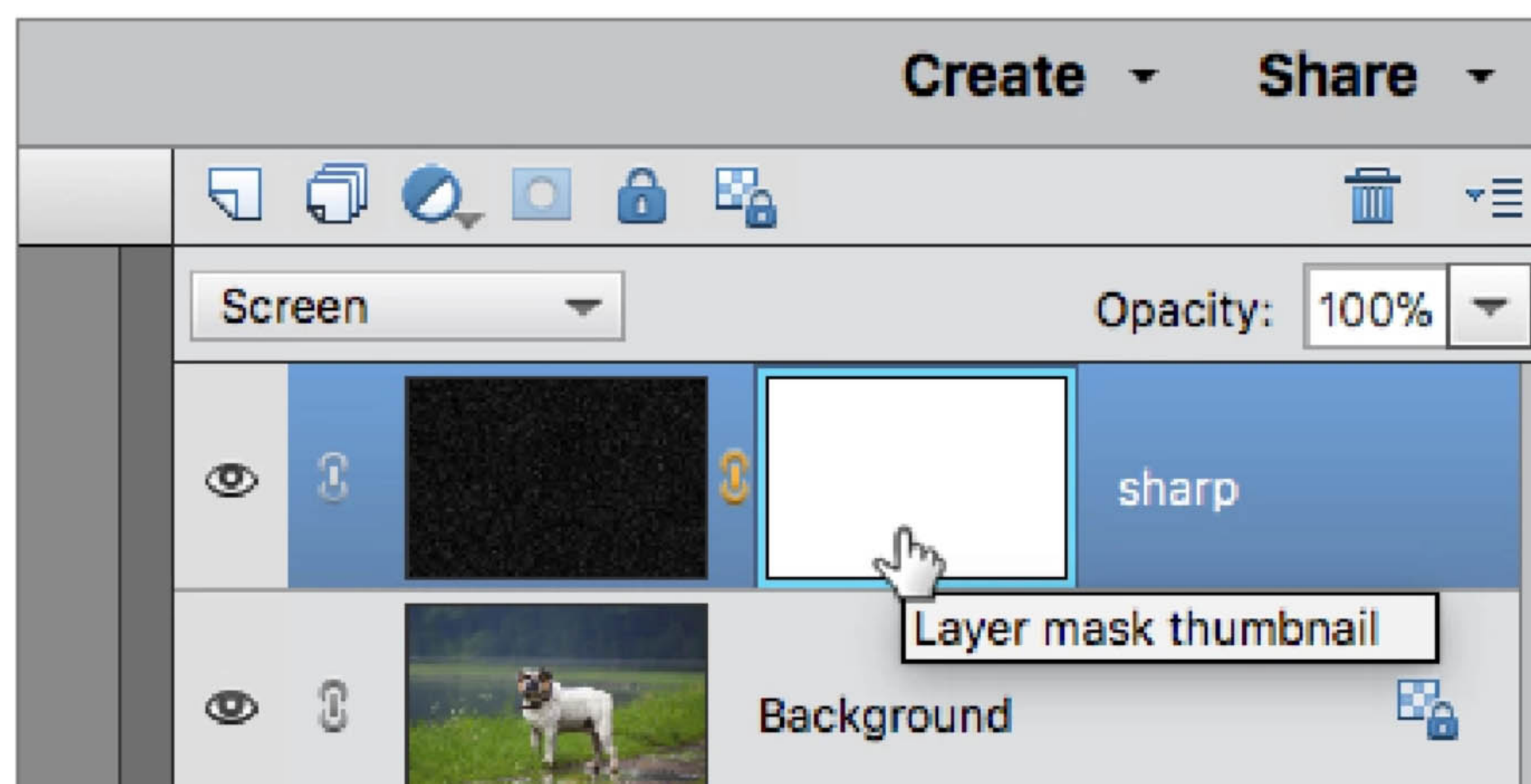
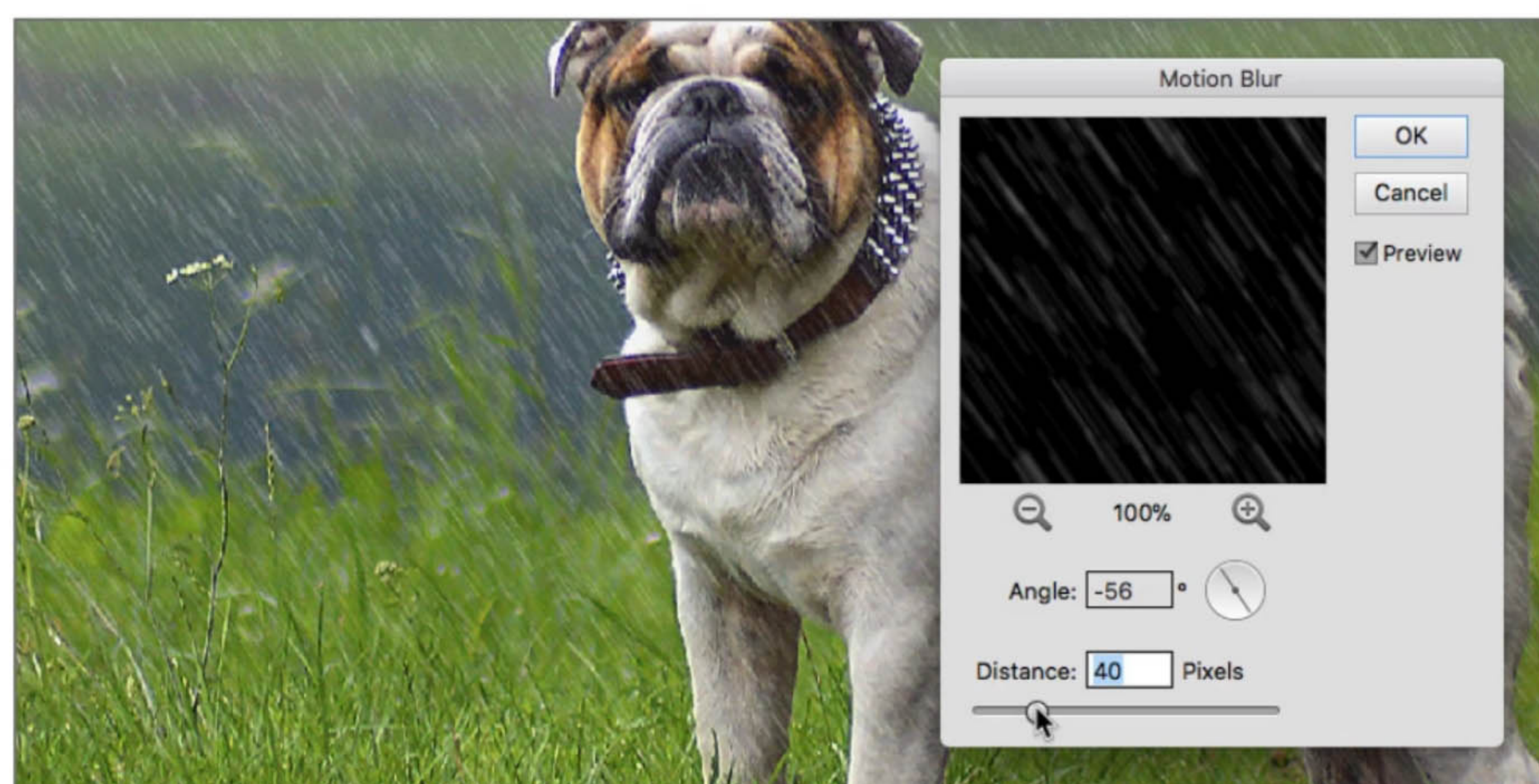
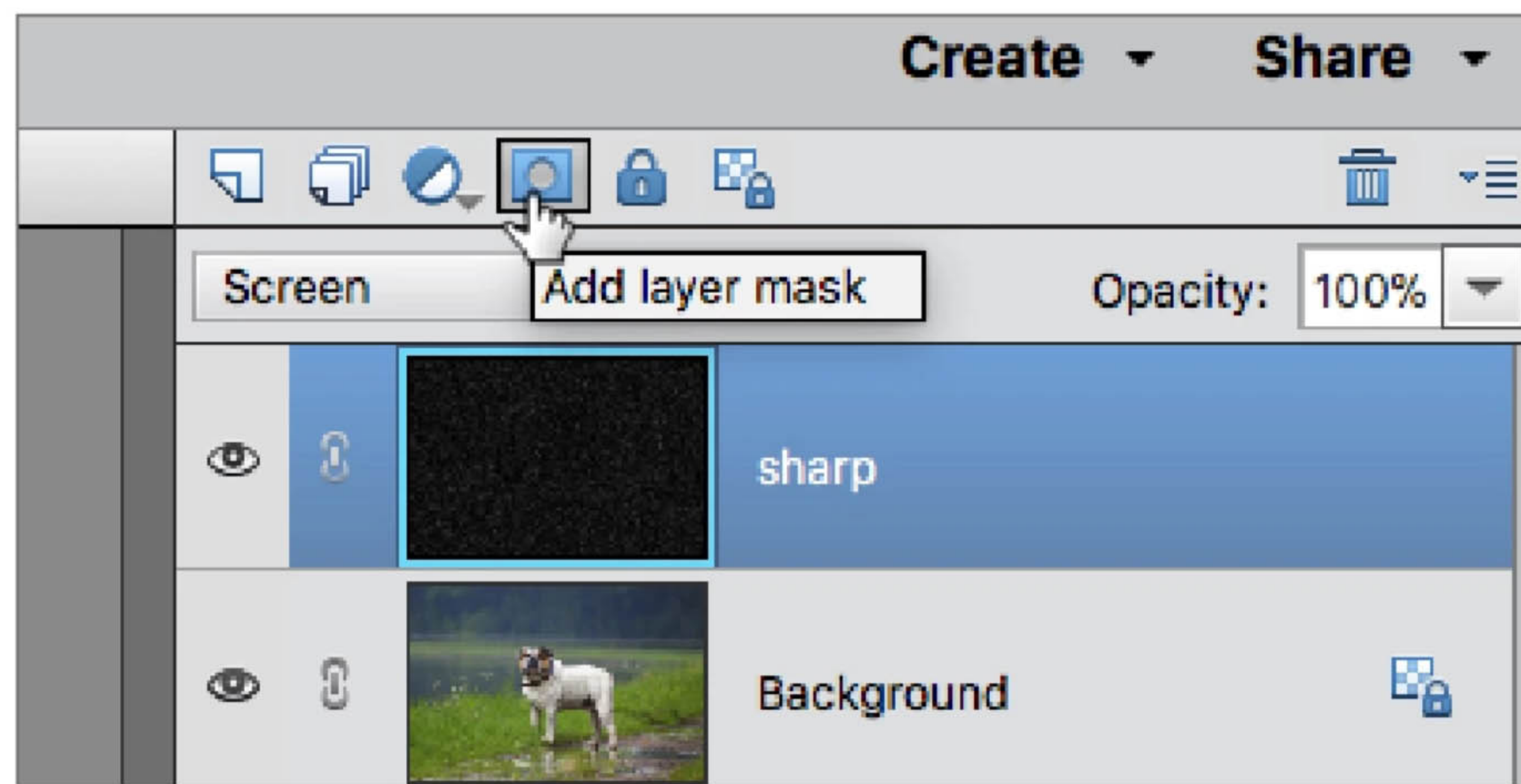
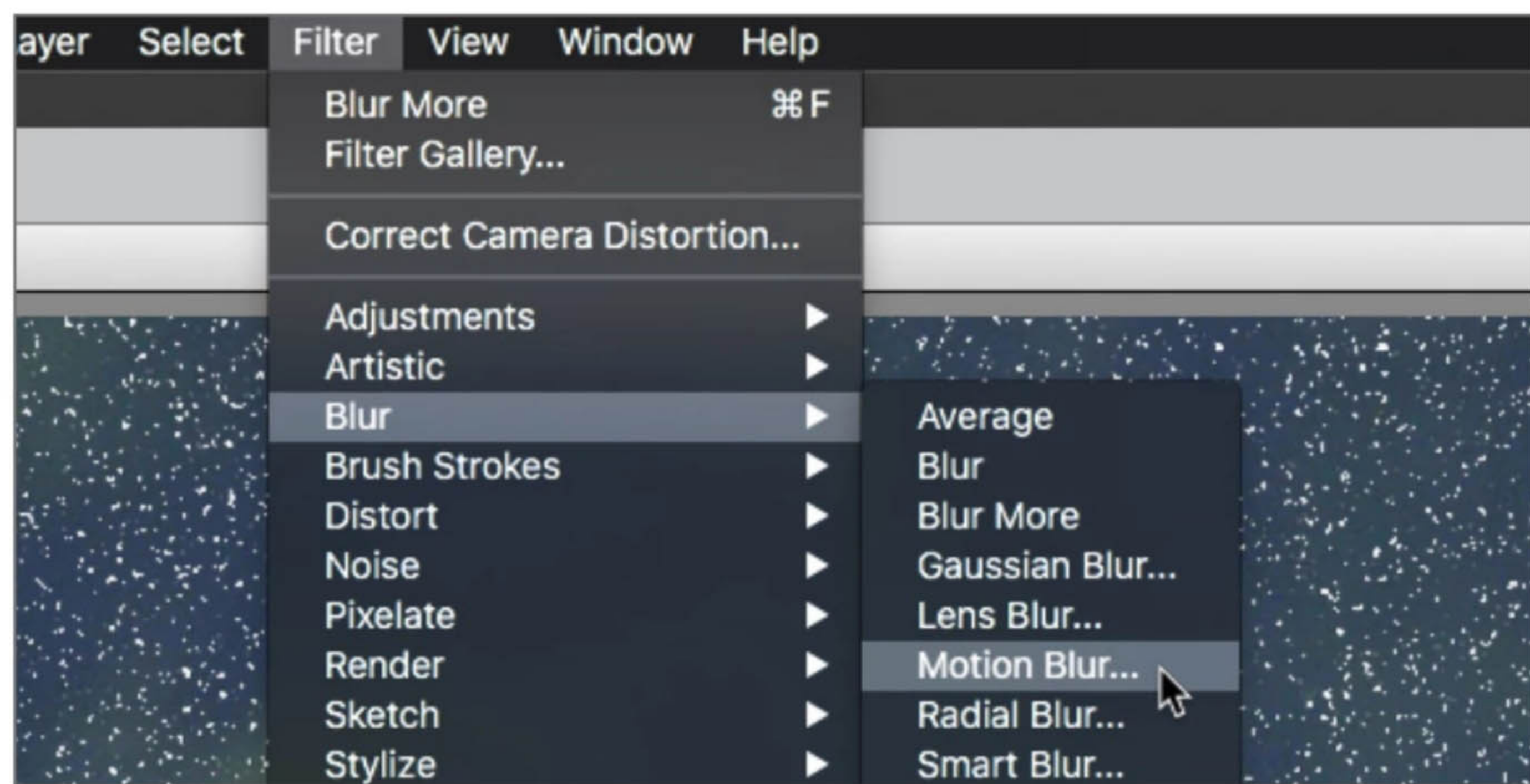
14 At the moment, the rain particles look a little small. You need to make them quite prominent so you can scale the contents of the 'sharp' layer. Go to Image > Transform > Free Transform (Cmd + T). This tool gives you various options for the scaling of the layer contents.



15 In the tool options panel, you will see the transform options. You just want to be able to scale it from its centre. Make sure the centre point of the Reference Point Location is clicked and in the width and height boxes enter a value of 200%. Press the green tick to commit the changes.

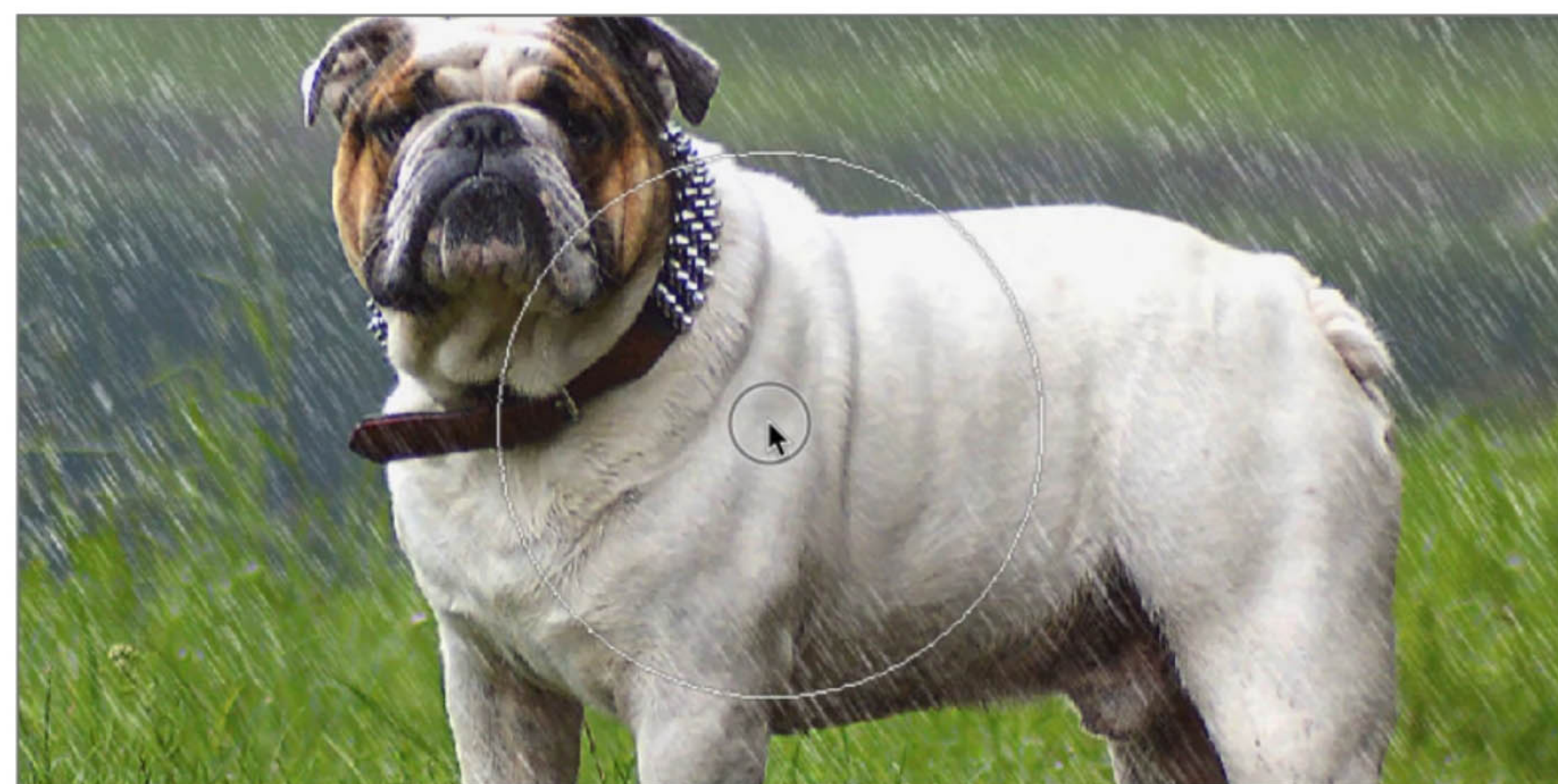
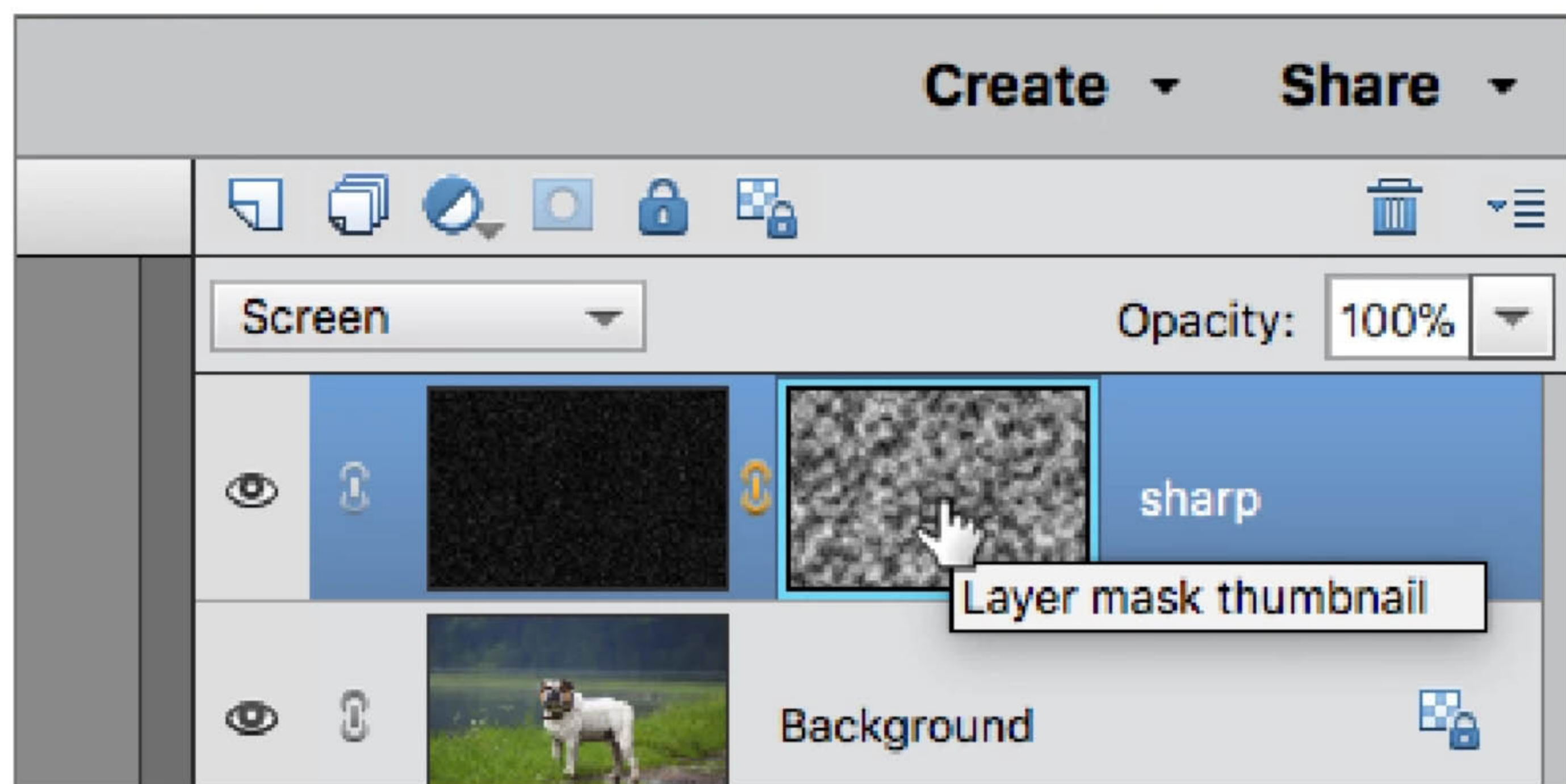
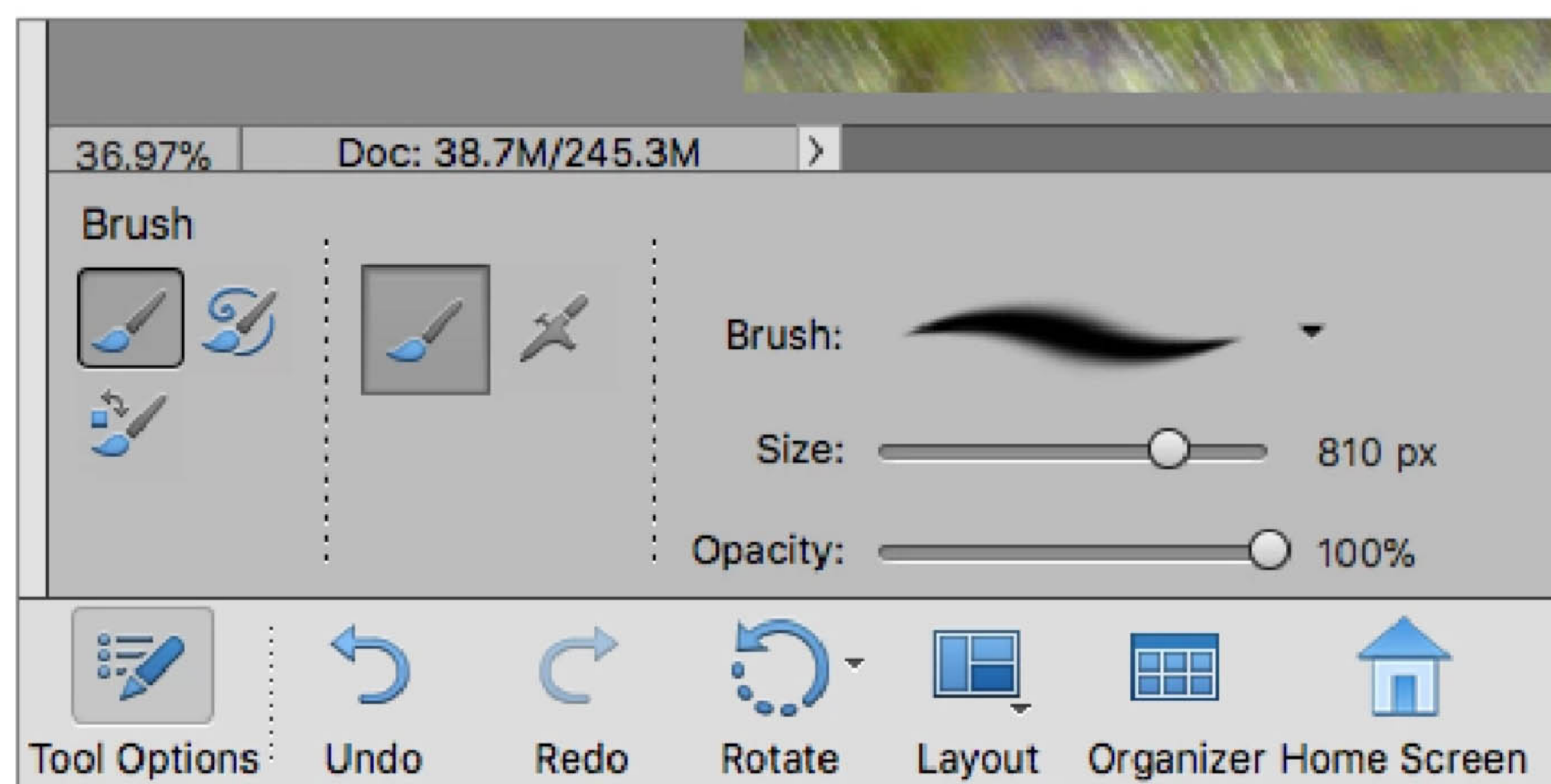
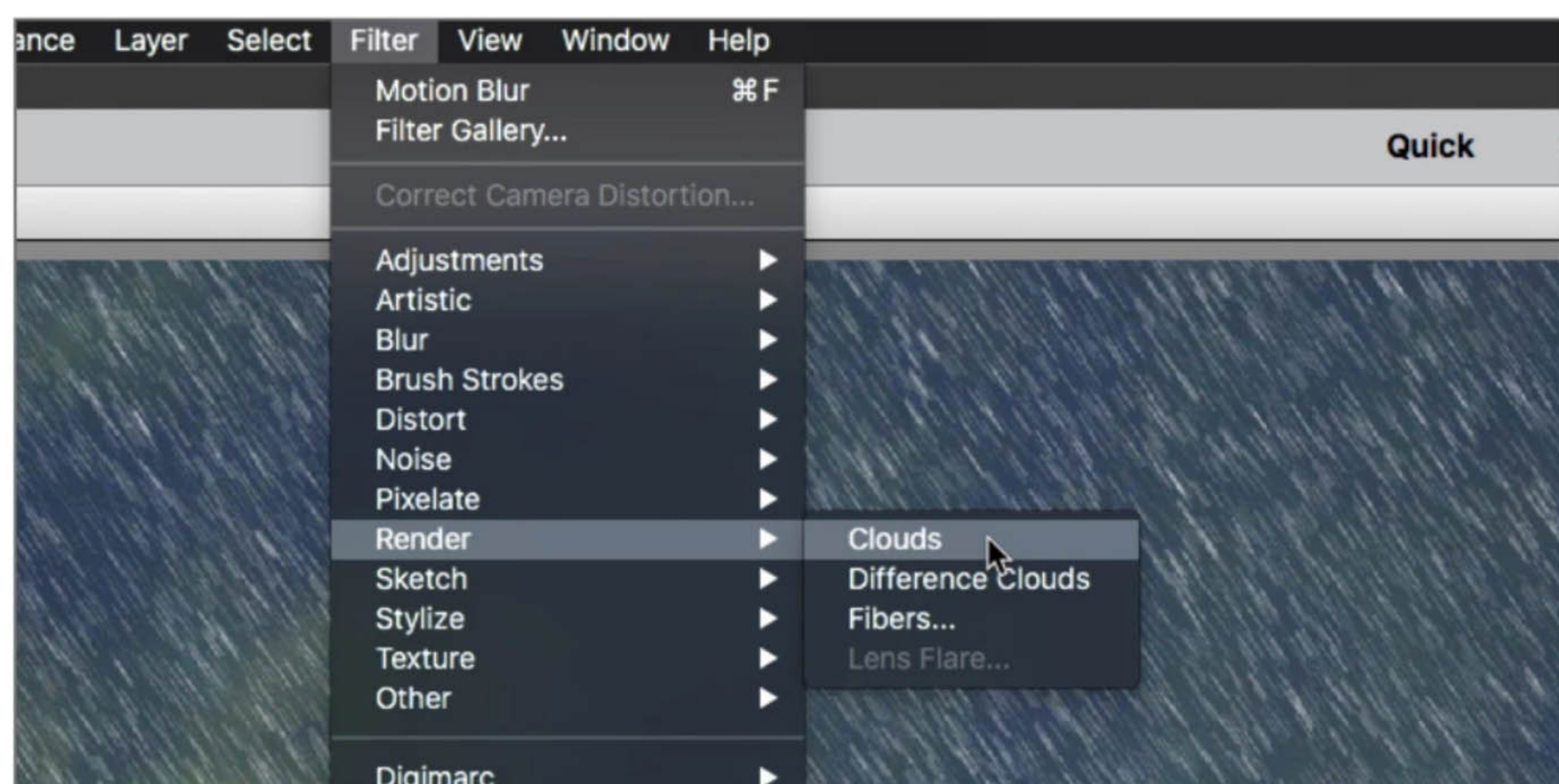


16 This will scale the contents of the 'sharp' layer by 200%, making the raindrops much more visible. At the moment though, they look like they are frozen in place. You need to be able to add a little movement to suggest actual rainfall.



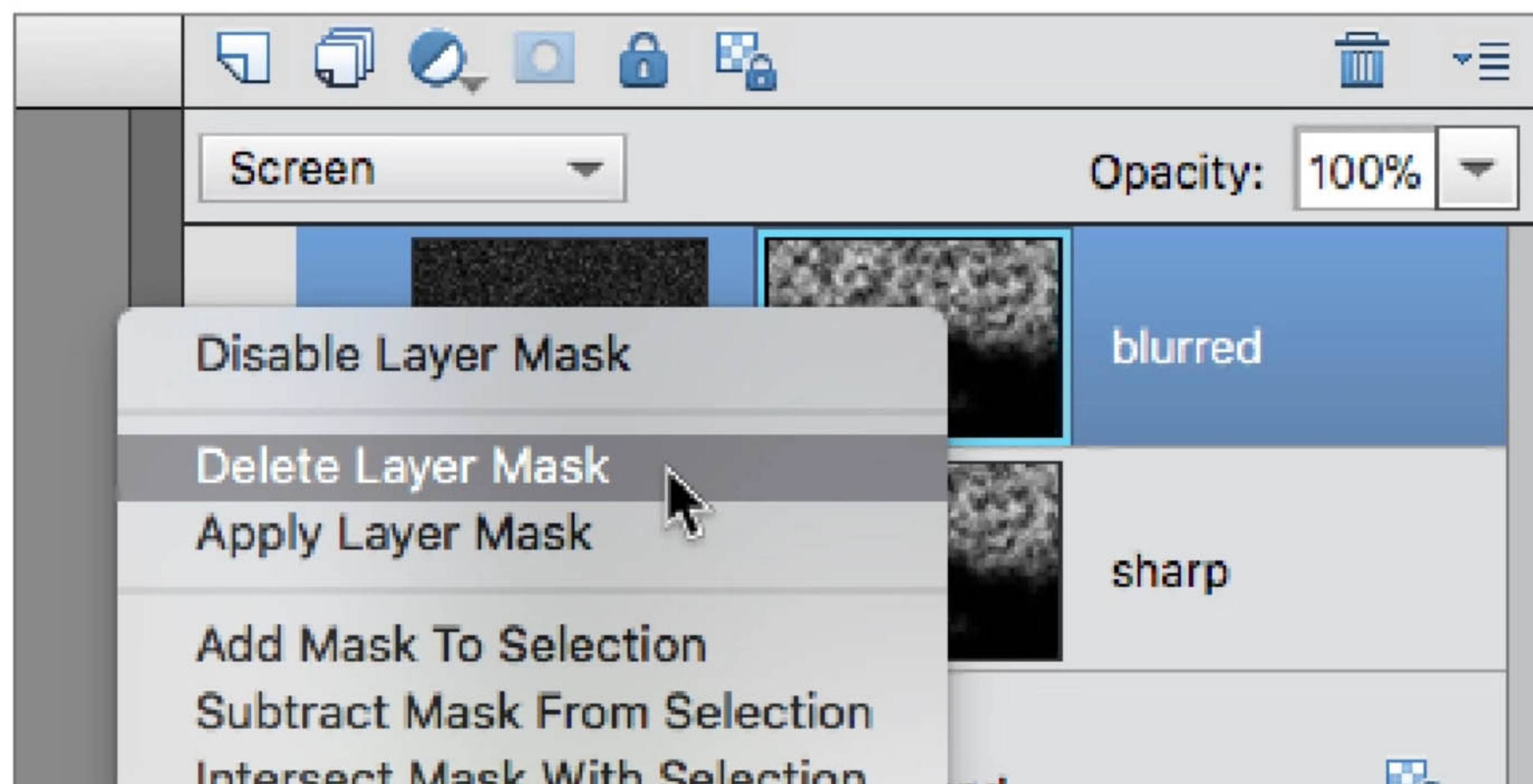
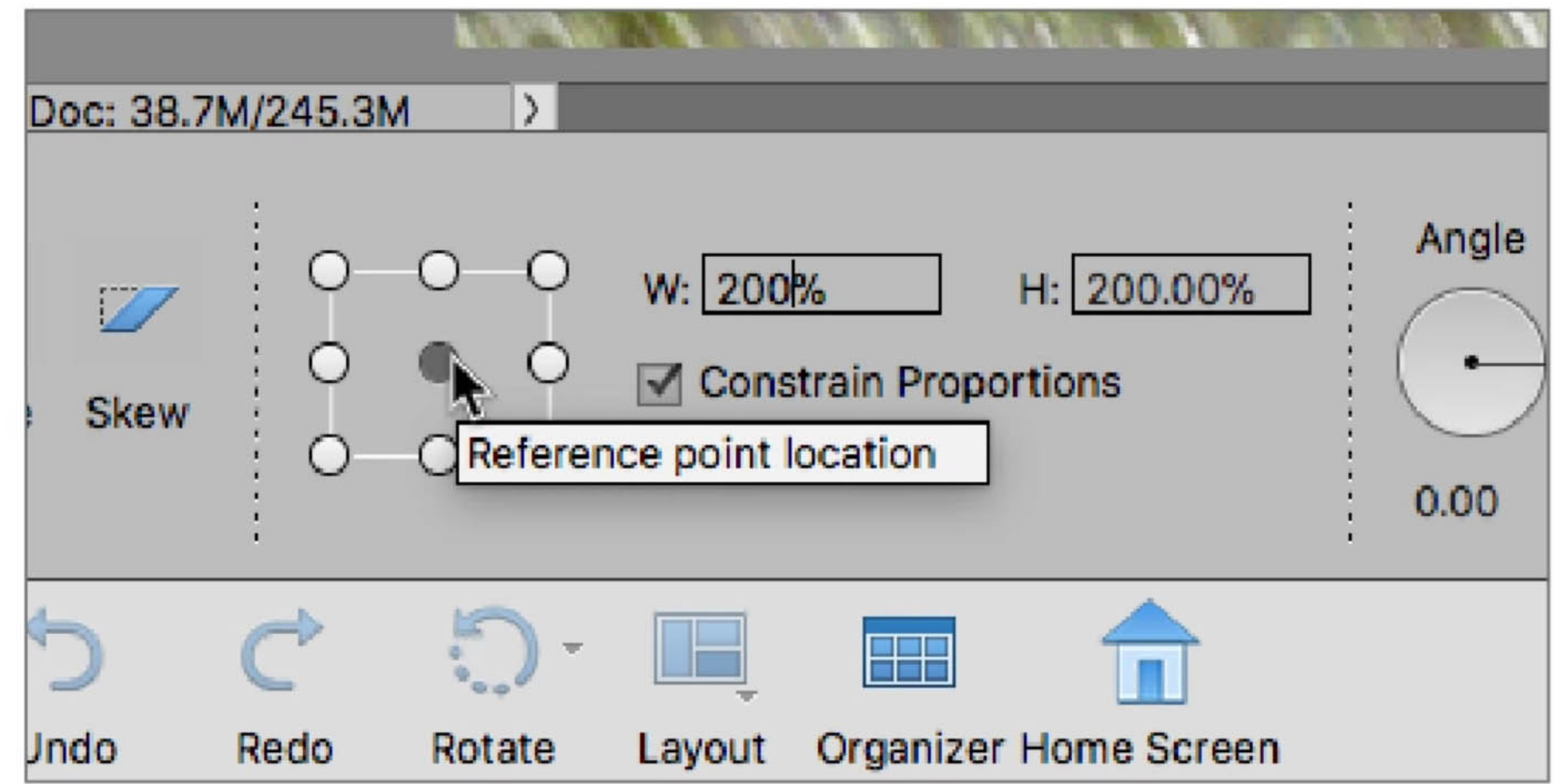
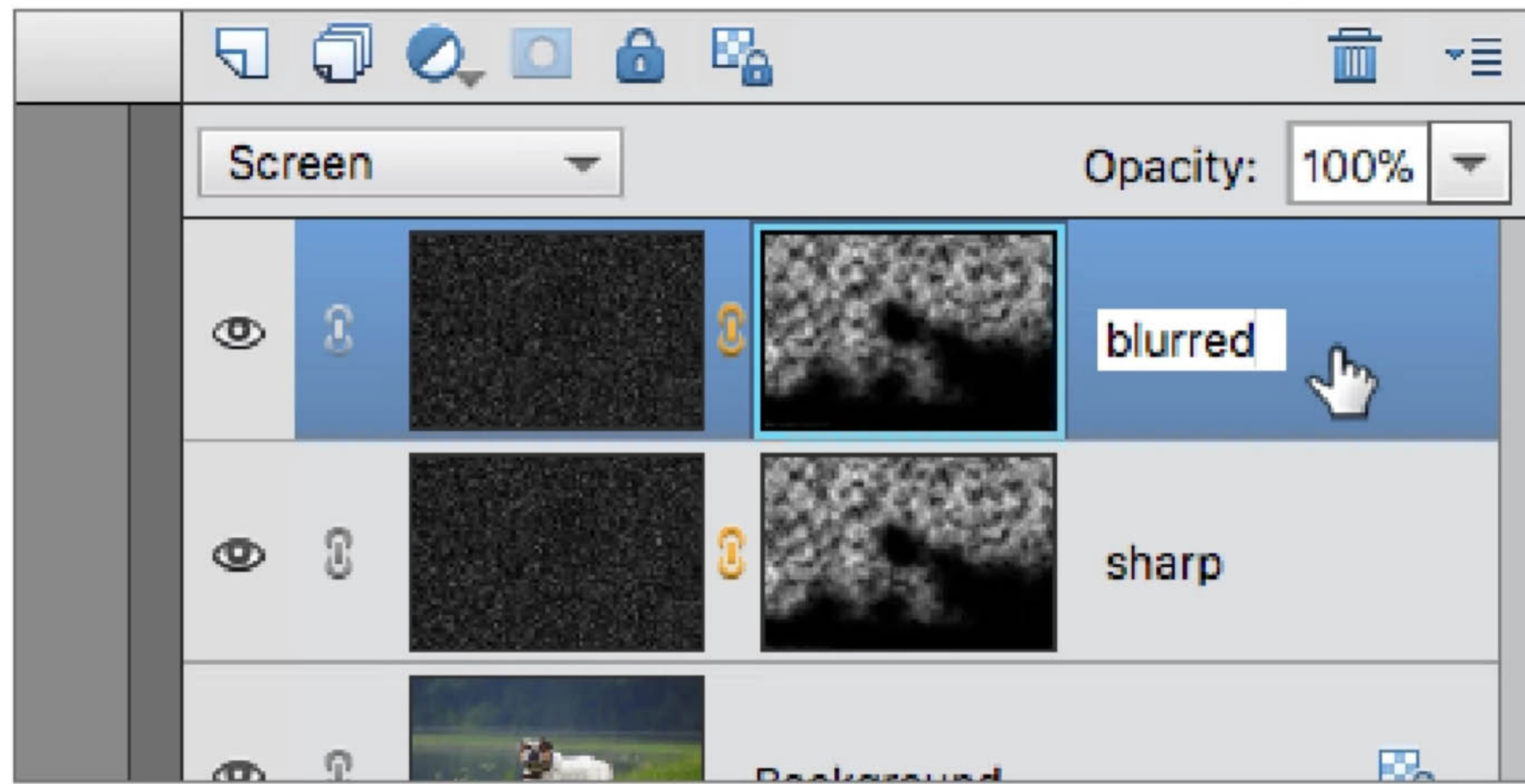
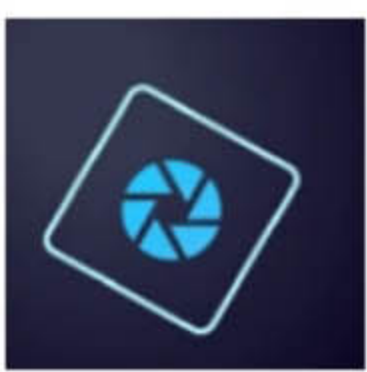
17 Go to Filter > Blur > Motion Blur to call up the dialog panel. Rather than the rain falling vertically, make the Angle about -56° and the Distance about 40 pixels. Smaller numbers mean the rain looks quite light and larger numbers give the impression of heavy rain falling quickly. Click OK when ready.

18 Keep the 'sharp' layer active and go to the layer options panel and choose Add Layer Mask to do just that. Click on the layer mask thumbnail (it will highlight with a blue border) and then go to Filter > Render > Clouds.



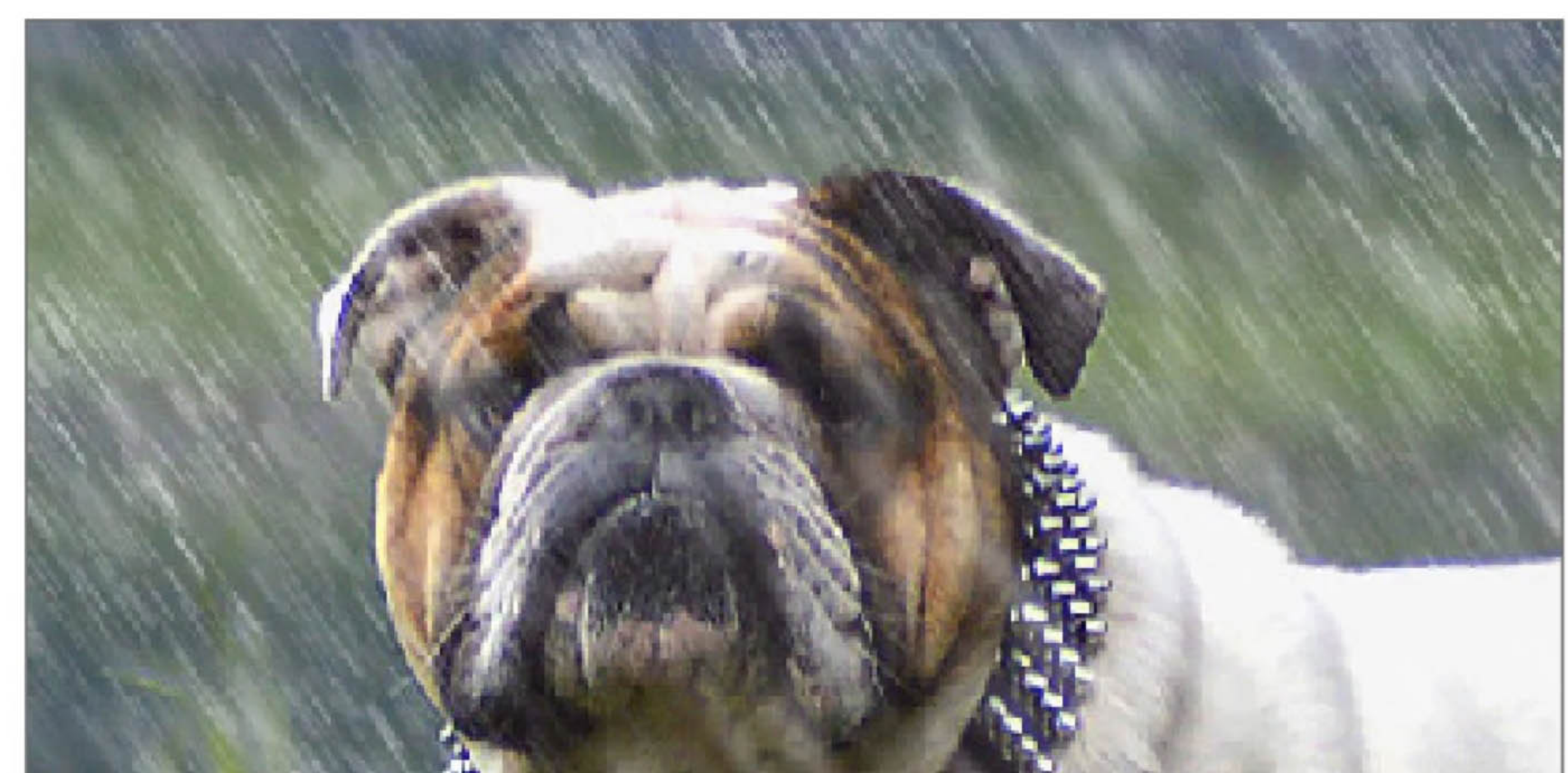
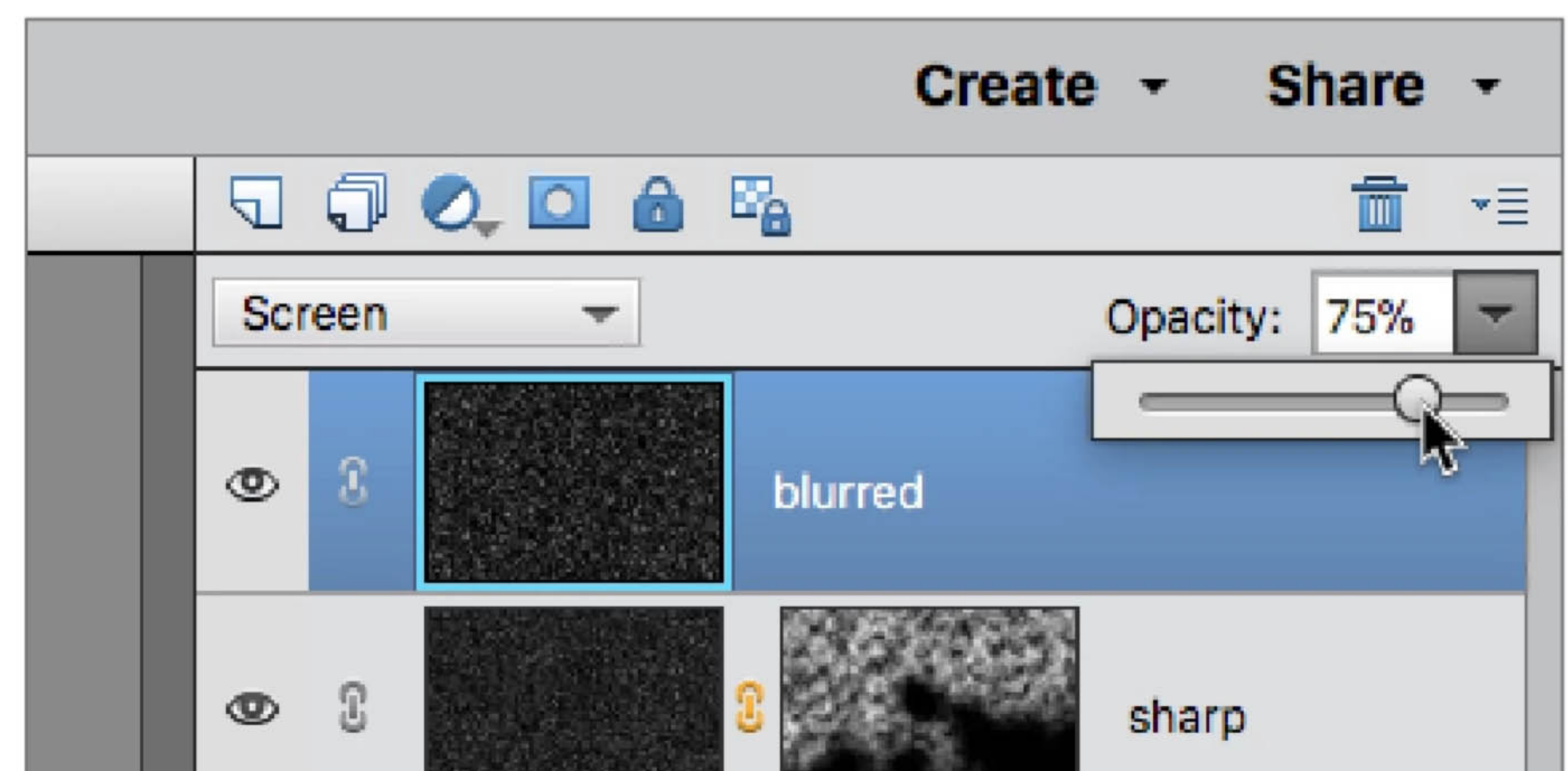
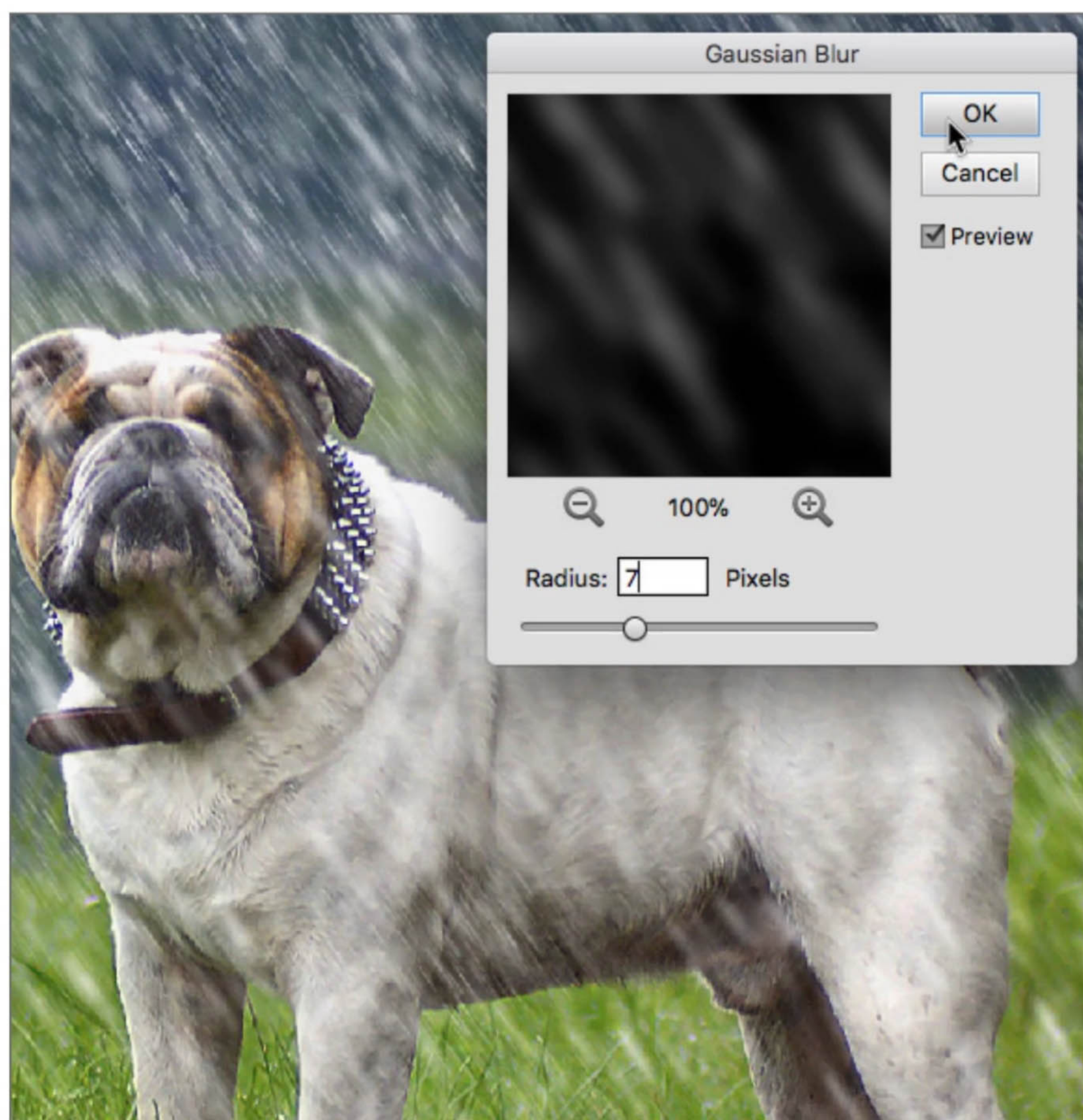
19 A mottled cloud-like pattern will be added to the layer mask. It is randomly comprised of black and white clouds. This random mask makes the rain appear a little more random too, since various areas are being concealed or revealed in differing intensities.

20 Keep the layer mask active and go to the toolbar and chose the Brush Tool (B). Set the foreground colour to black and the Size to about 800 pixels. Start to paint black on the layer mask over the dog and the immediate foreground to give the illusion that the rain is behind the dog.



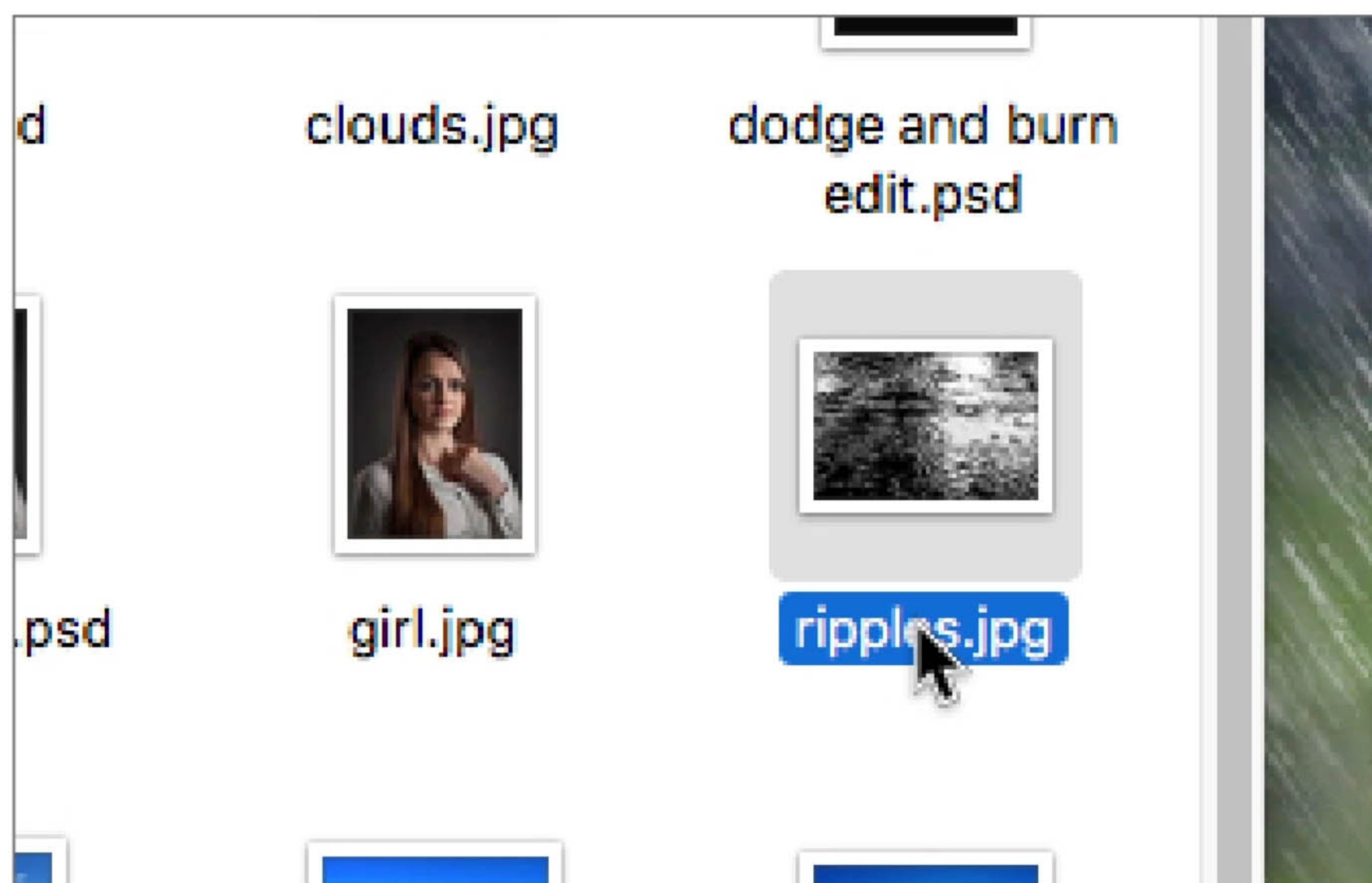
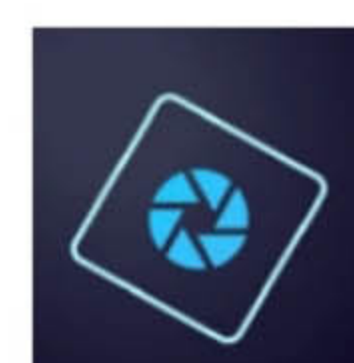
21 Now, you need the blurred rain for the foreground. With the 'sharp' layer active press Cmd + J to create a duplicate of that layer. Rename it 'blurred'. Right-click the layer mask and choose Delete Layer Mask as you won't need it for this layer.

22 Since this layer will need to appear even closer to the viewer, it needs to be scaled. Use the method you used with the first layer and scale it another 200% from its centre and press the green tick to commit those changes when ready.

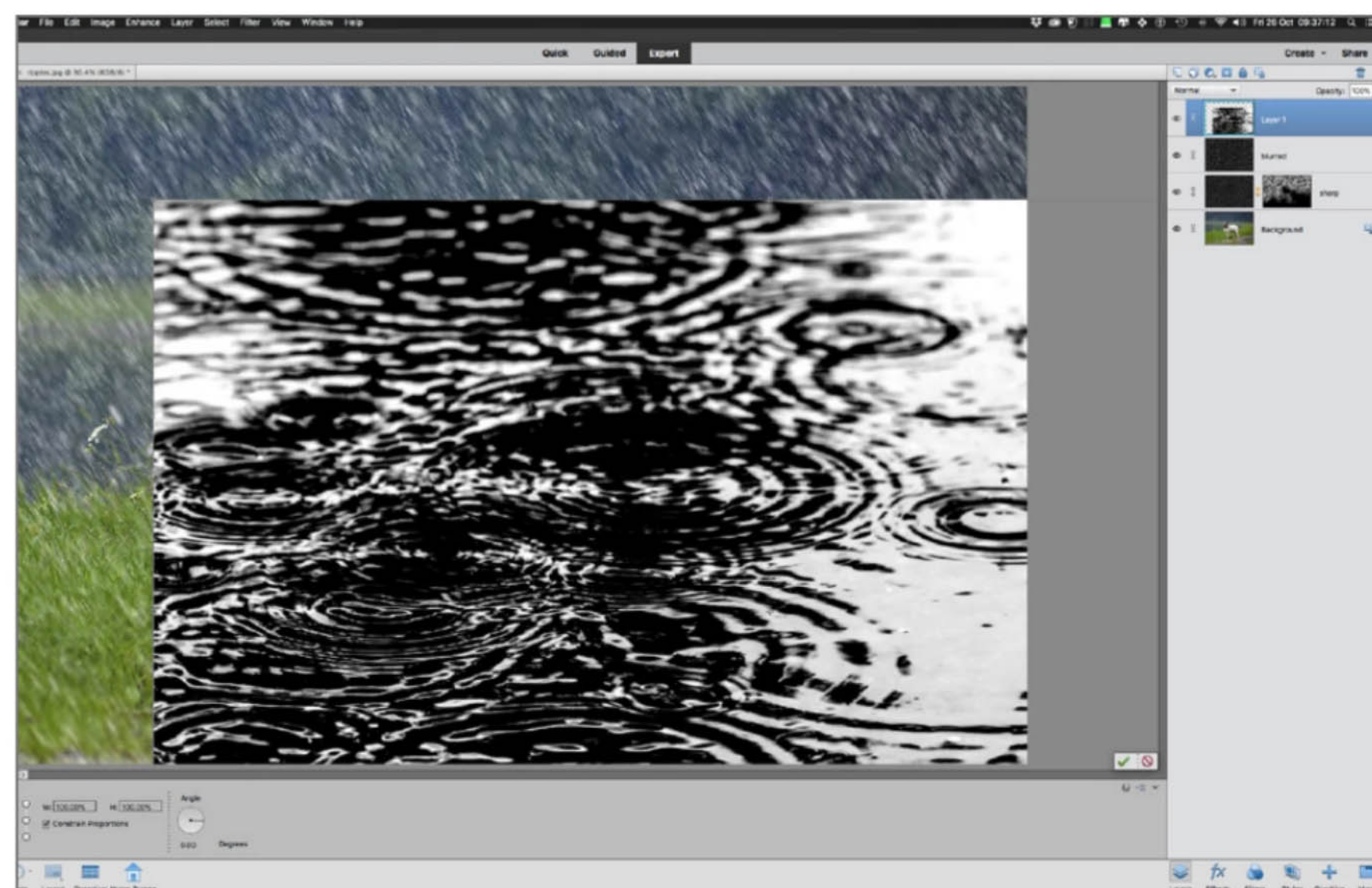


23 Make sure the 'blurred' layer is now active and go to Filter > Blur > Gaussian Blur to open the blur panel. You want to make the foreground rain look blurred like it is very close to the camera. Entering a Radius of about 7 pixels will blur just enough to create a sense of depth.

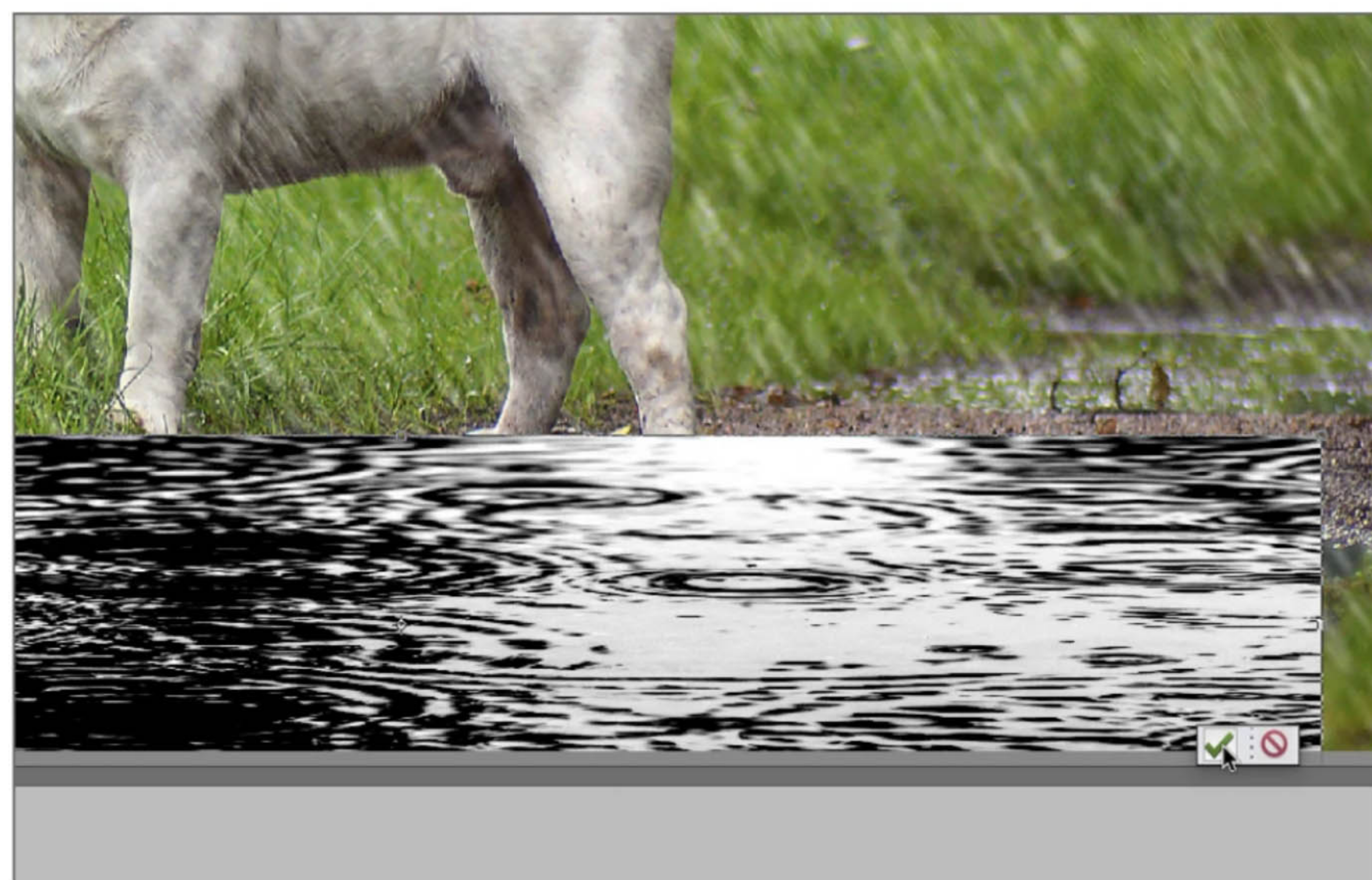
24 If the foreground rain looks a little too intrusive, you can always go to the Opacity slider and make its opacity about 75% to lessen its visual impact. Now the dog really looks like he has something to be grumpy about. You could call that done but there's one little extra thing to do.



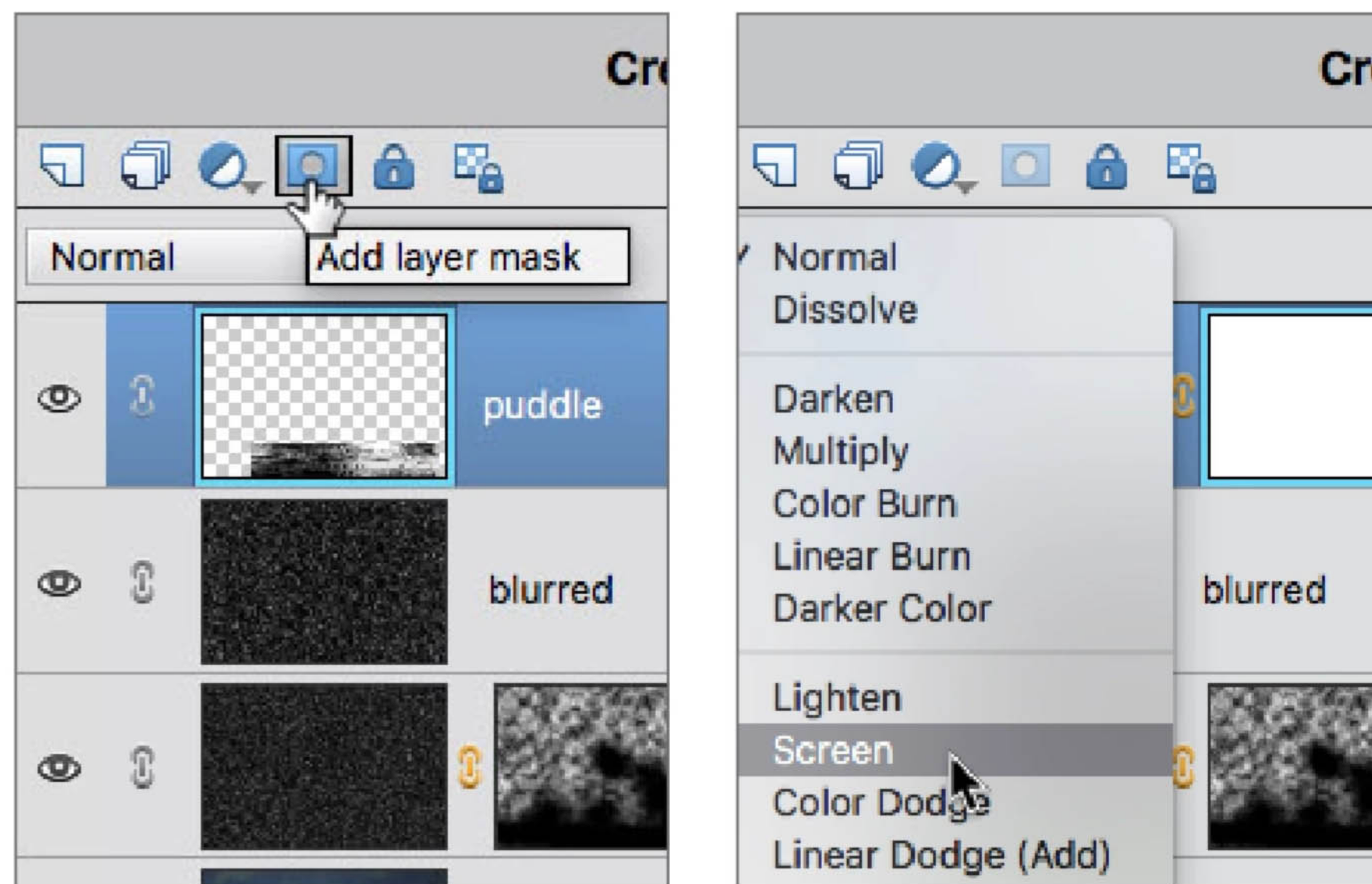
25 We wanted to make the puddle directly under the dog look a little more like there was rain falling in it and used another image to help with that. After going to File > Open, we navigated to where a puddle image with ripples was stored and opened it in a document of its own.



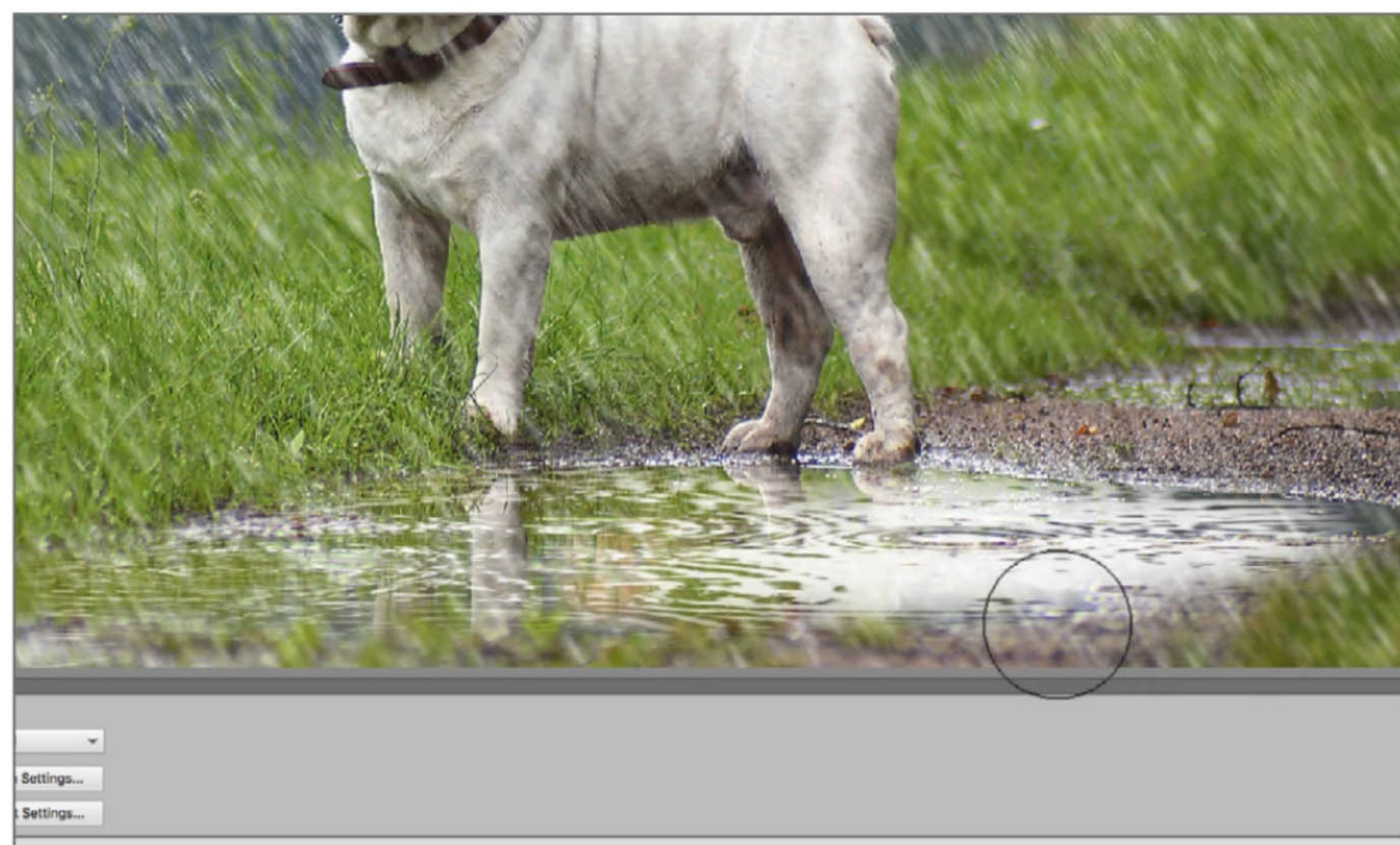
26 Press Cmd + A to select all pixels of the ripples image and then press Cmd + C to copy it. Then go back to the main document and press Cmd + V to paste the copied pixels onto a new layer of its own.



27 You can press Cmd + T to use the Free Transform Tool to drag the puddles image control point around to make it fit over the puddle beneath the dog. You can compress the image vertically to help match the ripples to the perspective of the main image. Press the green tick to commit the changes.



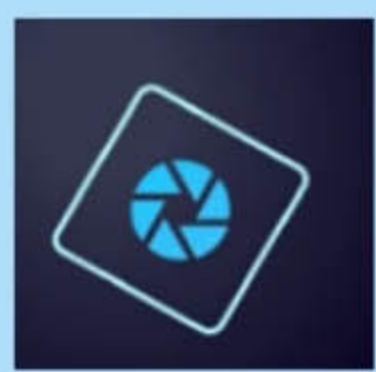
28 At the moment the ripples of the second puddle image look very out of place. Go to the layer options panel and click Add Layer Mask to add a mask to the puddle image. Now go to the Blend Mode button and choose Screen from the menu. This blends the rippled puddle image into the layers below.



29 You can rename this new layer 'puddle'. Make sure the layer mask is active. Choose a large soft black brush and start to paint out areas where the rippled puddle should not be seen. The end result of the masking should look like the example shown.



30 If this additional effect looks a little too much for the image, you can always reduce the Opacity setting to about 70%. Now the grumpy dog looks like he has been caught in the middle of a downpour and probably wants to get home to a nice warm fire.



Glossary

For your reference, we have listed many of the terms you'll encounter as you become more experienced with photo editing.

Active layer

The layer currently selected in the Layers panel.

Adjustment layer

A layer that lets you apply colour and tonal adjustments to your image without permanently changing pixel values. Use adjustment layers to experiment with colour and colour tones. You can think of an adjustment layer as a veil through which the underlying layers are seen.

Adobe Bridge

Bridge is a browser application produced by Adobe Systems as part of the Creative Suite and is usually installed alongside Photoshop. Its main function is as the file management hub of the Creative Suite. It can be used to open, manage, rate and rename files as well as edit their metadata.

Adobe RGB

The RGB colour space profile by Adobe Systems, Incorporated. It provides a large gamut of colours.

Aliasing

The jagged effect seen at the edges of diagonal lines, arcs and so on, caused by pixels lining up in a sawtooth pattern.

Alpha channels

These are masks which let you manipulate, isolate and protect specific parts of your images.

Anti-aliasing

The smoothing of jagged edges in digital images by averaging the colours of the pixels at a boundary.

Artefact

Any unexpected and undesired change to a digital image caused by incorrect settings or faulty processing. Examples include blooming, moire, sharpening and noise.

Aspect ratio

The ratio of an image's width to its height. It is used to determine how an image fits on a page or monitor.

Background layer

The bottommost layer in an image, usually containing the image data. The Background layer is always locked. If you want to change its stacking order, blending mode or opacity, you must first convert it to a regular layer.

Backlight

Light coming from a source behind the photographed subject.

Batch processing

Performing one or more automated tasks to a selected group of files at the same time.

Bit depth

The number of colours used to represent a pixel in an image. A 1-bit image is black and white, an 8-bit image can have 256 colours or shades of grey and a 16-bit image can have 65,536 colours.

Bitmap image

An image consisting of rows and columns of pixels in computer memory; also called a raster image. Bitmap file formats include BMP, GIF, JPEG, PSD, PICT and TIFF.

Bits per channel

Determines how many tones each colour channel can contain.

Black Point

In image editing, the black point is a tonal adjustment that sets the point at which the deepest shadow detail in the histogram is clipped to black.

Blending mode

A feature that controls how pixels in an image are affected by a painting or editing tool. The blend colour is applied to the base colour to produce a new colour, the result colour. When applied to layers, a blending mode determines how the pixels in a layer blend with pixels in layers beneath it.

Brush preset

A brush with preset settings for size, thickness and so on. Photoshop includes several brush presets for you to choose from and you can create a large number of your own presets as well.

Burning

The selective darkening of part of an image.

Camera raw format

A format describing data exactly as it is captured by a camera sensor, with no in-camera processing applied.

Canvas

The workspace around an existing image, within the image window. Layer data may lie outside the canvas but it will be clipped to the canvas when the image is flattened. You can change the size and colour of the canvas.

Channel

A term for describing the colour data in an image. A black and white greyscale image has one channel, an RGB image has three and a CMYK image has four. Ordinarily, a channel describes either red, green or blue, which are blended to create all colours.

Clarity

Found in Adobe Camera Raw. It behaves like an intelligent version

of Contrast and only alters contrast within the middle tones of your image.

Clipboard

The temporary holding area for data stored with the Cut or Copy commands.

Clipping

The loss of either highlight or shadow details when tone information is forced to pure white or black.

Clone

To paint with the Clone Stamp tool. You must set a sampling point on the active layer before you paint with the Clone Stamp tool.

CMYK

Cyan, magenta, yellow and black are the inks most printers use to produce colour images. Photoshop includes full support for CMYK mode.

Colour cast

An unwanted or unexpected colour shift in a photo. For example, a photo taken indoors without a camera flash may have too much yellow.

Colour channels

The component colours from which all colours in an image are created. Usually refers to red, green and blue (RGB).

Colour depth

Measures how much colour information is available to display or print each pixel in an image. Greater colour depth means more available colours and more accurate colour representation in the digital image.

Colour management

A system used to achieve consistent colour as an image travels from one device to another; for example, from camera to computer or computer to printer.

Colour temperature

The degree of heat, in degrees Kelvin, that an object would have to absorb before it glowed in a certain colour. Each colour is associated with a colour temperature, as are various kinds of light.

Compression

A technique that reduces the file size of bitmap images.

Cropping

Trimming a portion of an image to improve its composition or to create a frame around it.

Dithering

The approximation of an unavailable colour through the use of two or more available colours.

DNG (Digital Negative)

An open standard file format developed by Adobe Systems that provides an alternative to proprietary camera raw files.

Dodging

The selective lightening of any part of an image.

Dots per inch (dpi)

A measure of printer resolution. High dpi settings produce prints with fine detail. Used for monitors too.

Duotone

A two colour greyscale file that uses two custom inks.

EPS

Encapsulated PostScript. A file format used to save images that will be used in illustration and page layout programs.

EXIF

Exchangeable Image File Format. A standard for simplifying the exchange of data between cameras and software. The data may include camera model, date and time the photo was taken, camera settings, shutter speed and so on.

Exposure

A measure of the amount of light in which a photo was taken. Underexposed digital photos are too dark, overexposed ones, too light.

Feathering

The softening of an edge of a selection.

File Format

The structure of how information is encoded in a computer file. File formats are designed to store specific types of information, such as JPEG and TIFF for image or raster data, AI for vector data and PDF for document exchange.

Fill layer

A type of layer that contains a solid colour, a pattern or a gradient as an interchangeable attribute.

Filters

Use filters to clean up or retouch your photos and apply special art effects that give your image a different appearance

Flattening

Merging of all visible layers into the Background layer to reduce file size.

Font

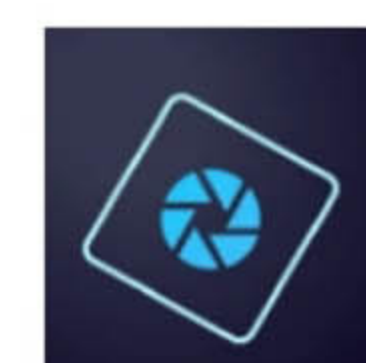
A set of letters, numbers

Gamut

The range of colour that a device can reproduce.

Gaussian blur

A softening effect applied through



a bell-shaped distribution of tones and colours.

Gradient

Any of several methods for achieving a smooth transition between two adjacent colours, which also include black and white.

Greyscale

A single channel image that includes only black, white and shades of grey. Depending on the bit depth, greyscale images can reproduce a number of shades of grey.

Halftone

A monochrome image made up of variably sized dots simulating the shades of grey in a photograph. It is used for reproducing photographs on PostScript printers and printing presses.

HDR (High Dynamic Range)

A process that combines multiple exposure variations of an image to achieve a dynamic range exceeding that of a single exposure.

Highlight and shadow

The lightest and darkest colours in an image.

Histogram

A bar chart showing the distribution of the pixel values in a digital image. The horizontal axis represents levels from 0 (darkest) to lightest (255) and the vertical axis represents the numbers of pixels at each level.

Hue

The colour reflected from or transmitted through an object. In common use, hue is the property that allows a colour to be distinguished as red, blue, yellow and so on.

ICC

International Colour Consortium. ICC device profiles are the industry standard for reproducing colours accurately across devices such as scanners, monitors and printers.

Image cache

A section of hard disk space used as virtual memory. The image cache speeds the on-screen redraw of high-resolution images.

Image mode

The colour mode of an image, such as Greyscale or RGB.

Indexed colour

A colour that is rendered by using a pixel value as an index to a panel of 256 or fewer colours.

JPEG

Joint Photographic Experts Group. A committee of experts that develop algorithms for compressing computer image files. Can be any graphic file to which a JPEG algorithm is applied. JPEG is the format generally used to share photographs over the web.

JPEG compression

A lossy compression technique that reduces image data and file size.

Layer

A mechanism for overlaying and combining multiple images. Layers are like transparent sheets of glass that you can stack and rearrange. In addition to ordinary image layers, there are special kinds of layers.

Layer group

A collection of layers saved with a Photoshop image.

Layer mask

A protected area in an adjustment layer. Areas below the mask cannot be edited.

Levels

Functionality for adjusting colour and tone. With a Levels adjustment, you can set shadow and highlight values to use a full tonal range, adjust middle tones only, correct colour casts, and so on.

Locked layer

A layer in the Layers panel that has the lock icon applied. No changes can be made to a locked layer. A Background layer is always locked.

Megapixel

A term used to describe digital camera resolution, 1 megapixel equals one million pixels.

Midtone

An area that falls between the brightest highlight and the darkest shadow.

Moire

A wavy striped pattern in an image, resembling the pattern of watered silk. Moire can be an artefact caused by a camera's inability to capture the detail in an image.

Noise

An artefact caused by interference or camera error. Noise is often seen as stray pixels of unexpected colour or a generally "grainy" appearance. Certain compression techniques can amplify noise.

Opacity

The amount something blocks light. You can change the opacity of layers, filters and effects so that more (or less) of the underlying image shows through.

Overexposure

An overexposed image results from too much light being allowed to fall onto the camera sensor.

Panorama

A broad view of a subject, usually a landscape, made by overlapping individual shots as they are taken and then merging them to form one wide image.

Perspective

The angle or level from which a photograph is taken, the camera-eye view.

Pixel

The basic, rectangular unit of data that a digital image consists of. The edges of pixels can produce a sawtooth pattern unless anti-aliasing is used.

Pixel dimensions

The number of pixels along the width and height of an image. This is a measure of the amount of image data in the photo, not its physical size when printed or displayed on a monitor.

Pixels per inch (ppi)

A measure of image resolution stored in a camera or computer file. High ppi settings produce photographs with fine detail and large file size.

Plug-in

A software application or module that provides extended and specific functionality from within a larger host application.

PostScript

A language by Adobe that describes the appearance of text, graphic

shapes and sampled images on printed or displayed pages.

Preset

A preset is an action that can be applied to an image or group of images. You save a group of editing settings such as colour balance, brightness, contrast and saturation, which can then be applied to your selected photos.

PSD

The native uncompressed file format of Adobe Photoshop and Photoshop Elements, based on the TIFF standard.

Quick mask

A mask channel created in Quick Mask mode in Photoshop

Raw Files

A Raw file is the unprocessed data captured by a digital camera sensor. In most cases, cameras write Raw files using a proprietary file format. Raw files give the photographer the advantage of managing image processing during post-production rather than letting the camera make the processing decisions, as happens when shooting in JPEG format.

Red eye

The reflection of the camera flash from the retina of a photographed subject, resulting in a red dot in the subject's eye. You can eliminate it automatically when you import images or by using the Red Eye Removal tool.

Resample

To change the resolution of an image by changing its pixel dimensions. Downsampling decreases the number of pixels and upsampling increases the number of pixels.

Resolution

A measure of the clarity and sharpness of an image. In digital images, it is measured in pixels per inch.

RGB

A model for representing colours on a computer display. Red, green, and blue (RGB) are combined in different proportions to represent any colour.

Rule of Thirds

If you divide an image into three equal sections both vertically and horizontally, where the lines intersect is commonly regarded as good placement for the subjects in your photos.

Sample

To select a colour with the eyedropper in order to use it with a drawing or painting tool.

Saturation

The purity, or strength, of a colour. A fully saturated colour contains no grey at all.

Selection

A part of an image selected for manipulation of any kind, duplication in a layer, colour correction, deletion, rotation and so on.

Shadow Detail

Refers to the amount of detail that can be seen in the darkest areas of a photograph.

Sharpening

In photo-editing programs, any functionality that enhances the details at the edges of photographed objects and people.

Skewing

Deviation of the content of an image

from a vertical or horizontal axis. Skewing can be a camera effect or an intentionally applied effect.

Smoothing

A technique for averaging the values of neighbouring pixels to reduce contrast and create a soft, blurry effect.

Split Toning

This option lets you alter the colour of the shadow and highlight areas of your images. For example, you can add a blue colour cast to the darkest areas of your photo but make the brightest areas of the same image more orange.

Stroke

An outline round an image or part of an image, or the characteristics of the lines created with one of the painting or drawing tools, especially brushes.

Swatches

Preset colours that you can choose from in the Colour Swatches panel.

Thumbnail Image

A small, low resolution image preview used on the web to link to a high resolution version of the file.

TIFF

Tagged Image File Format. A digital image format widely used for images that are to be printed or published. TIFF images can be compressed losslessly.

Transform

To scale, shrink, enlarge, skew, distort, rotate or change the perspective of a layer, selection or shape.

Transparency

In digital photography, the functionality that supports transparent areas in an image or image layer. Certain image formats do not support transparency.

Underexposure

An underexposed image results from too little light being allowed to fall onto the camera sensor.

Unsharp mask

A technique that sharpens details in an image by increasing the contrast between light and dark areas. The name originates from traditional photography, where contrast is increased by adding a slightly blurred negative over the original.

Vibrance

Vibrance is a form of intelligent Saturation. As you increase the Vibrance in an image, only the middle tones of your image are altered first.

Vignetting

An effect where the edges of an image fade out.

Warping

A distortion of an image, often text, to conform to a variety of shapes. For instance, a line of text can be warped in the shape of an arc or wave.

White balance

A function that compensates for the different rendering of identical colours under different sources of light: incandescent, fluorescent, sunlight and so on.

White point

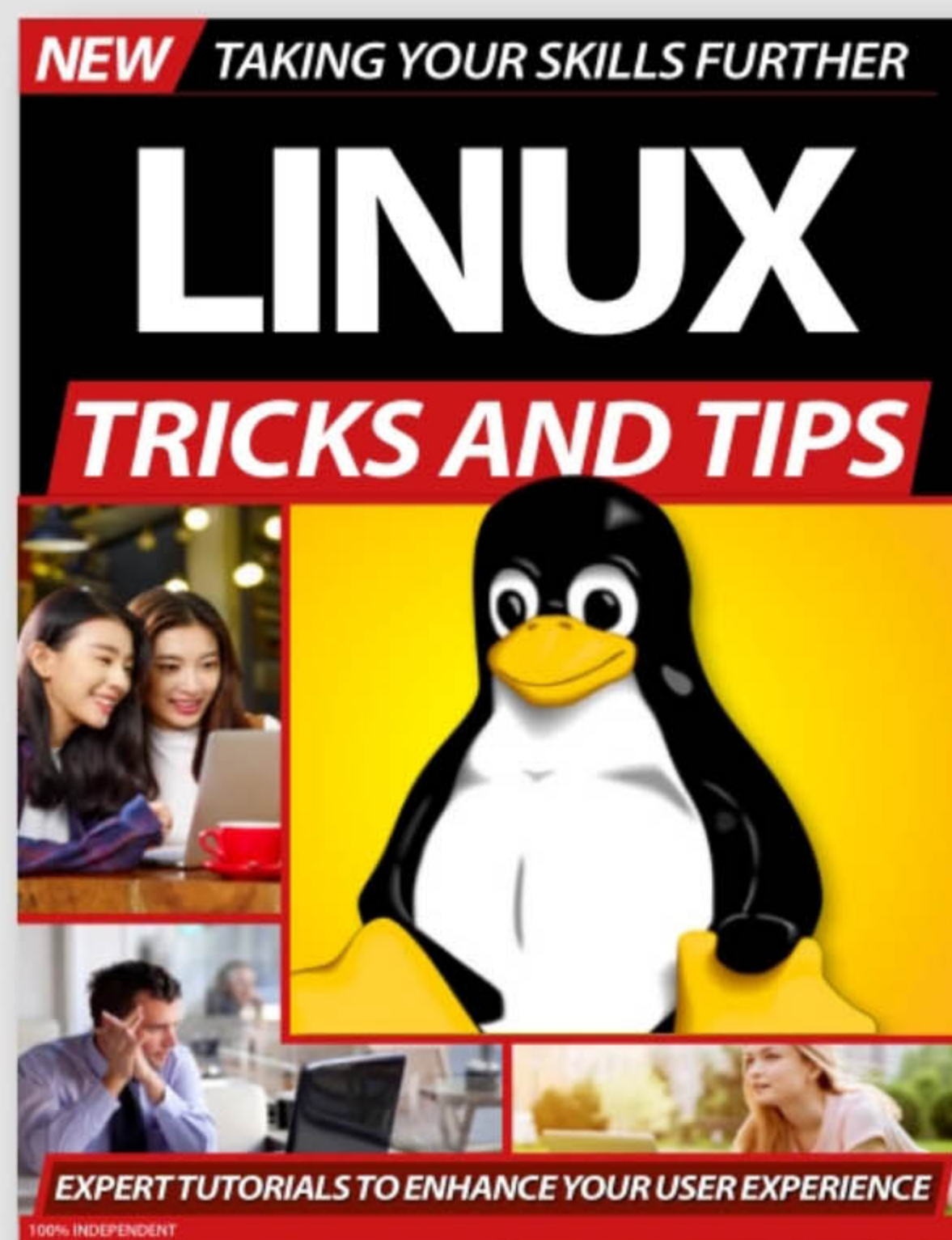
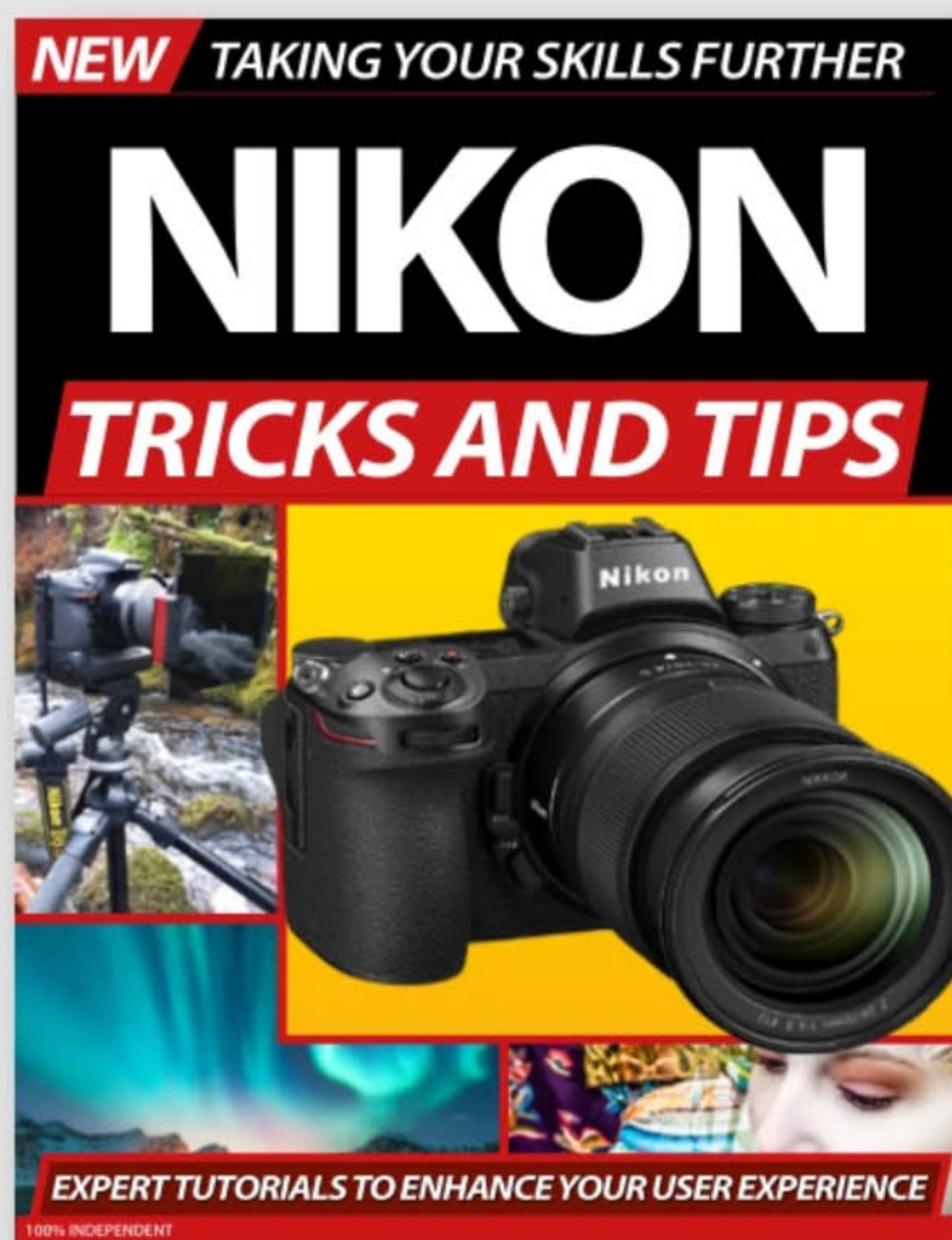
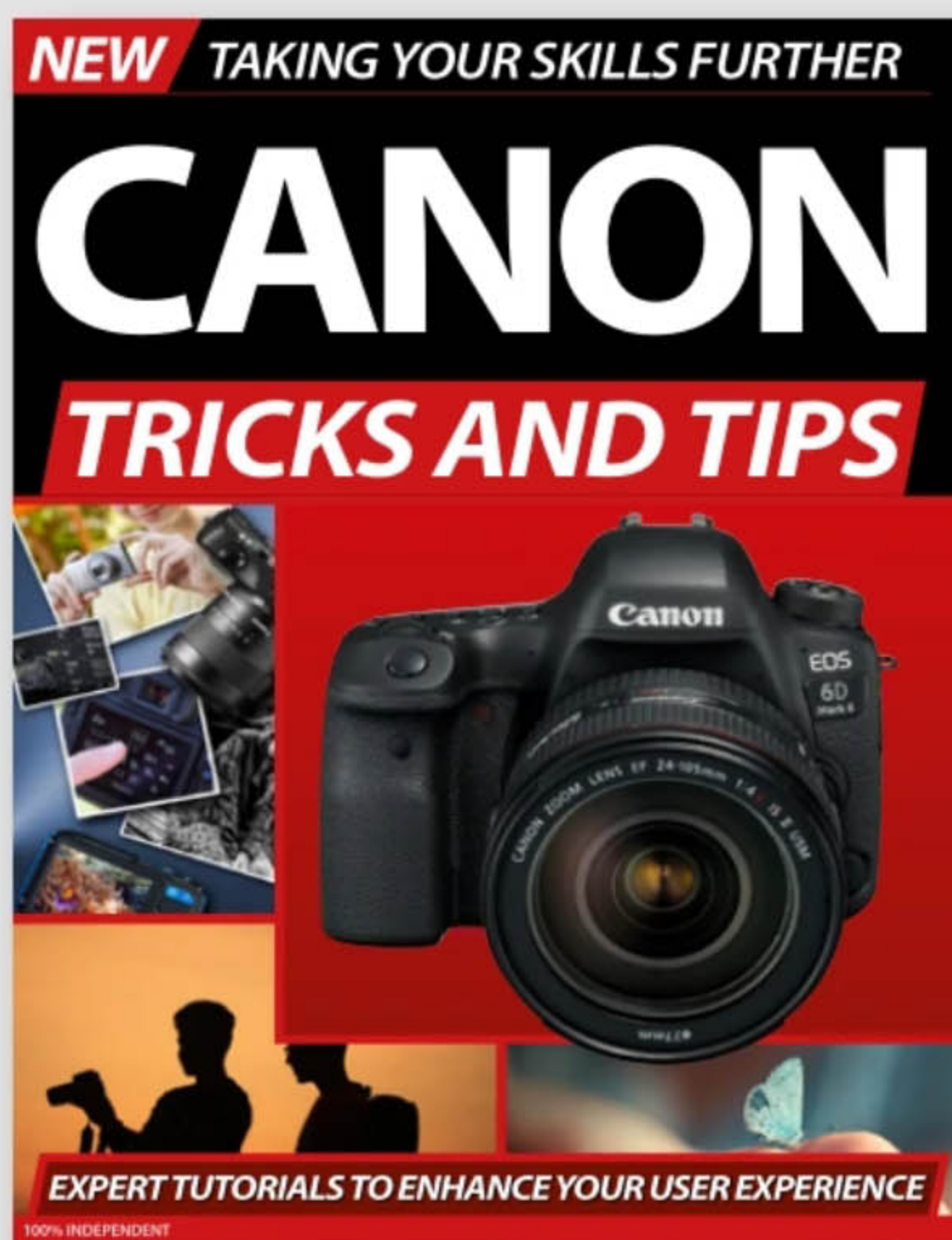
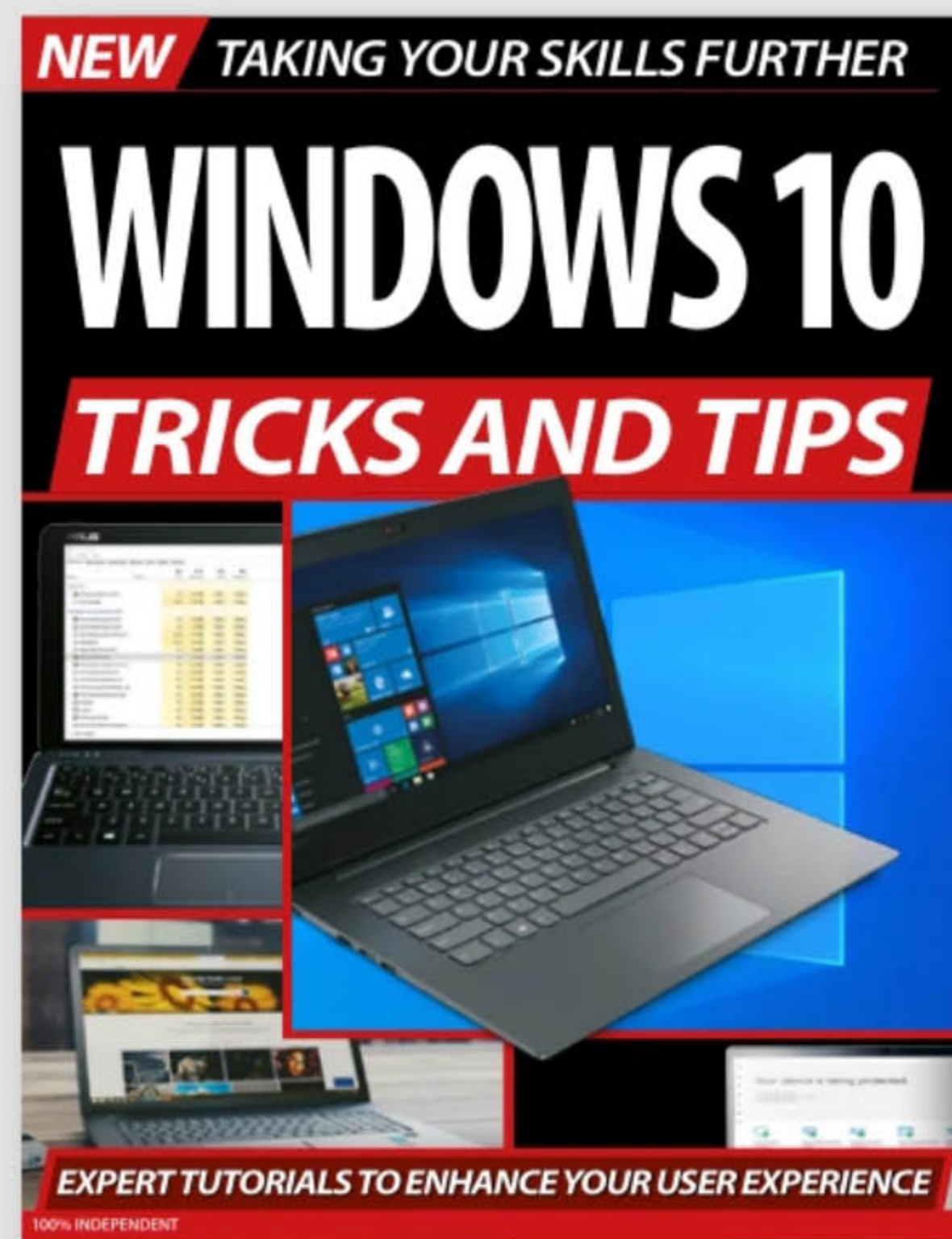
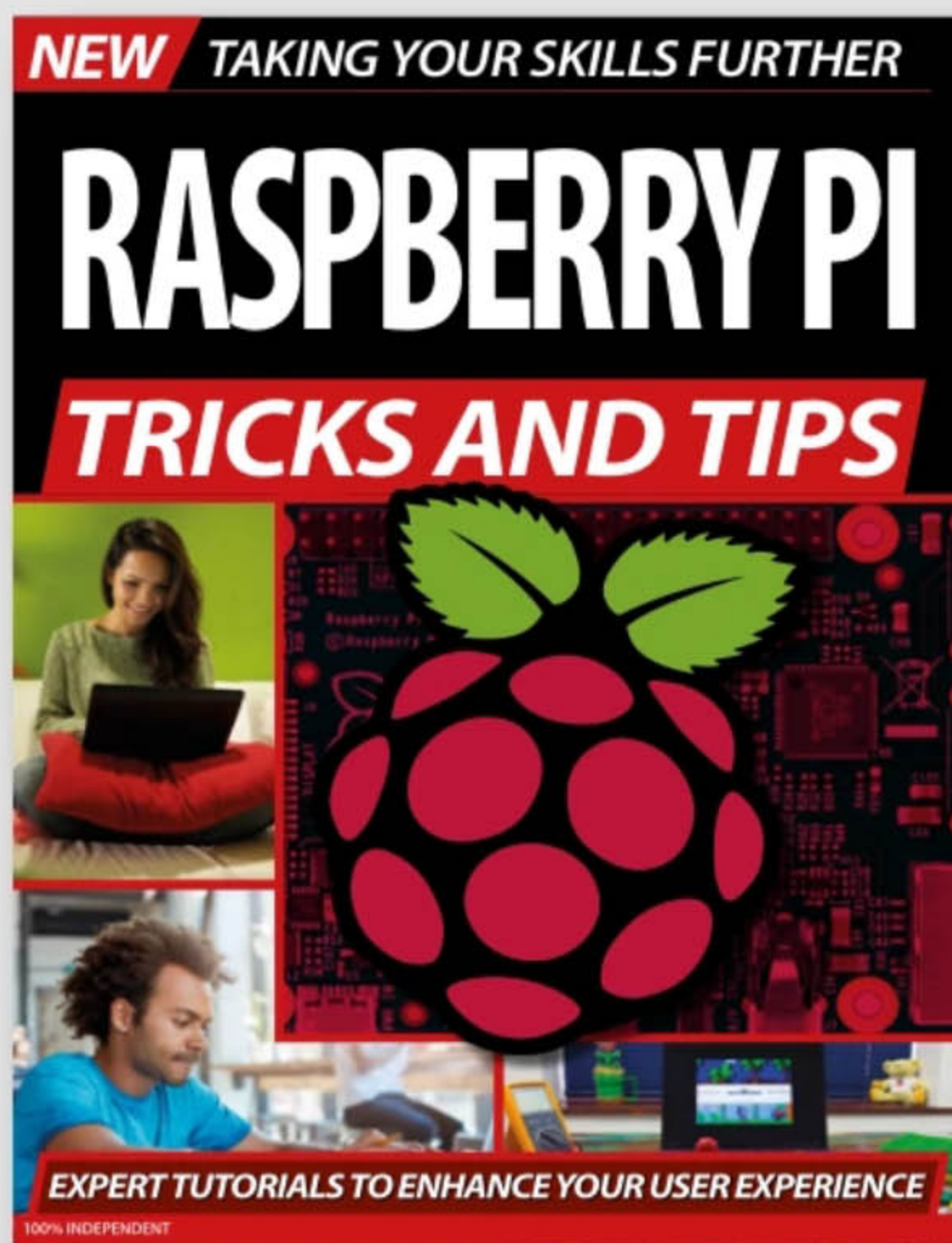
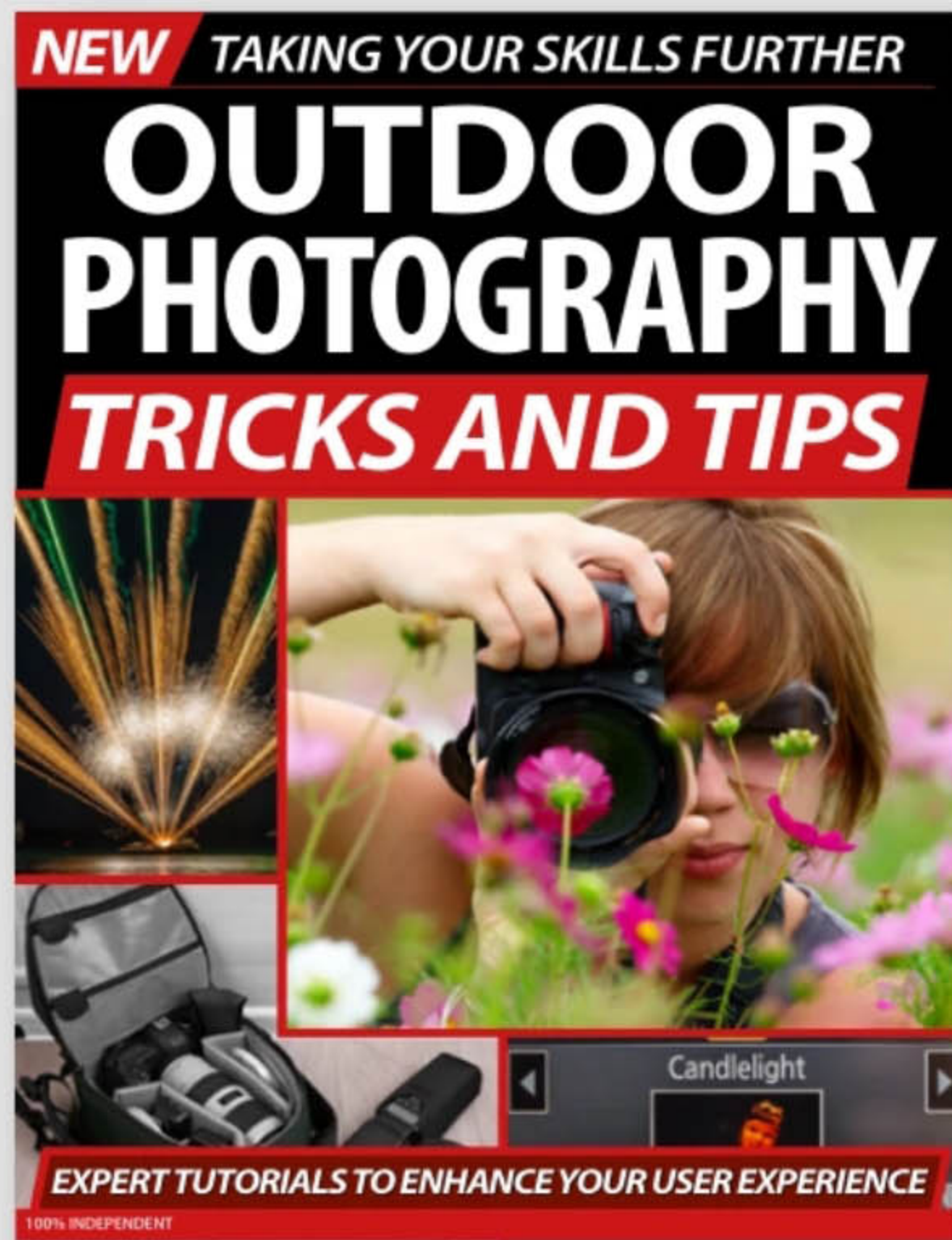
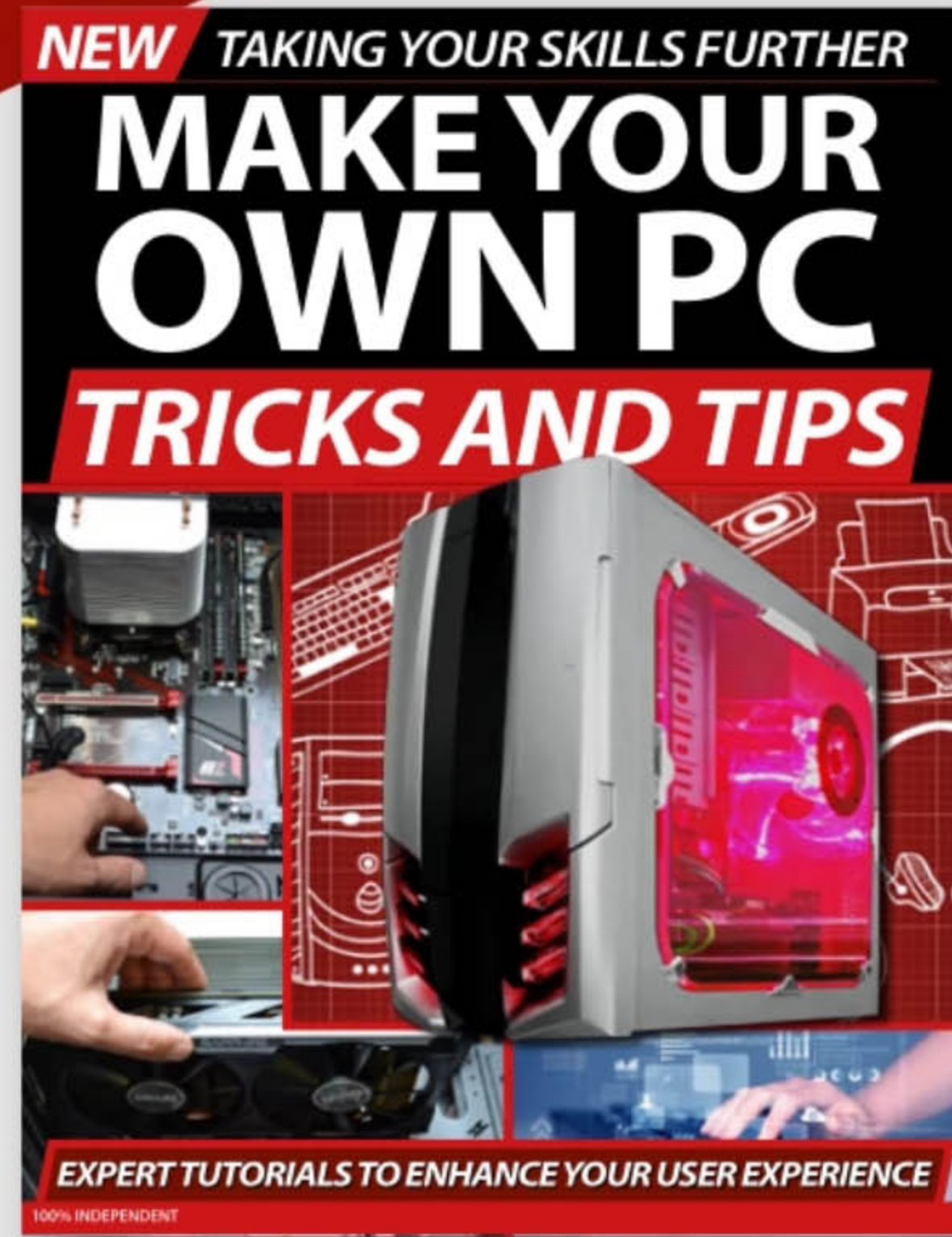
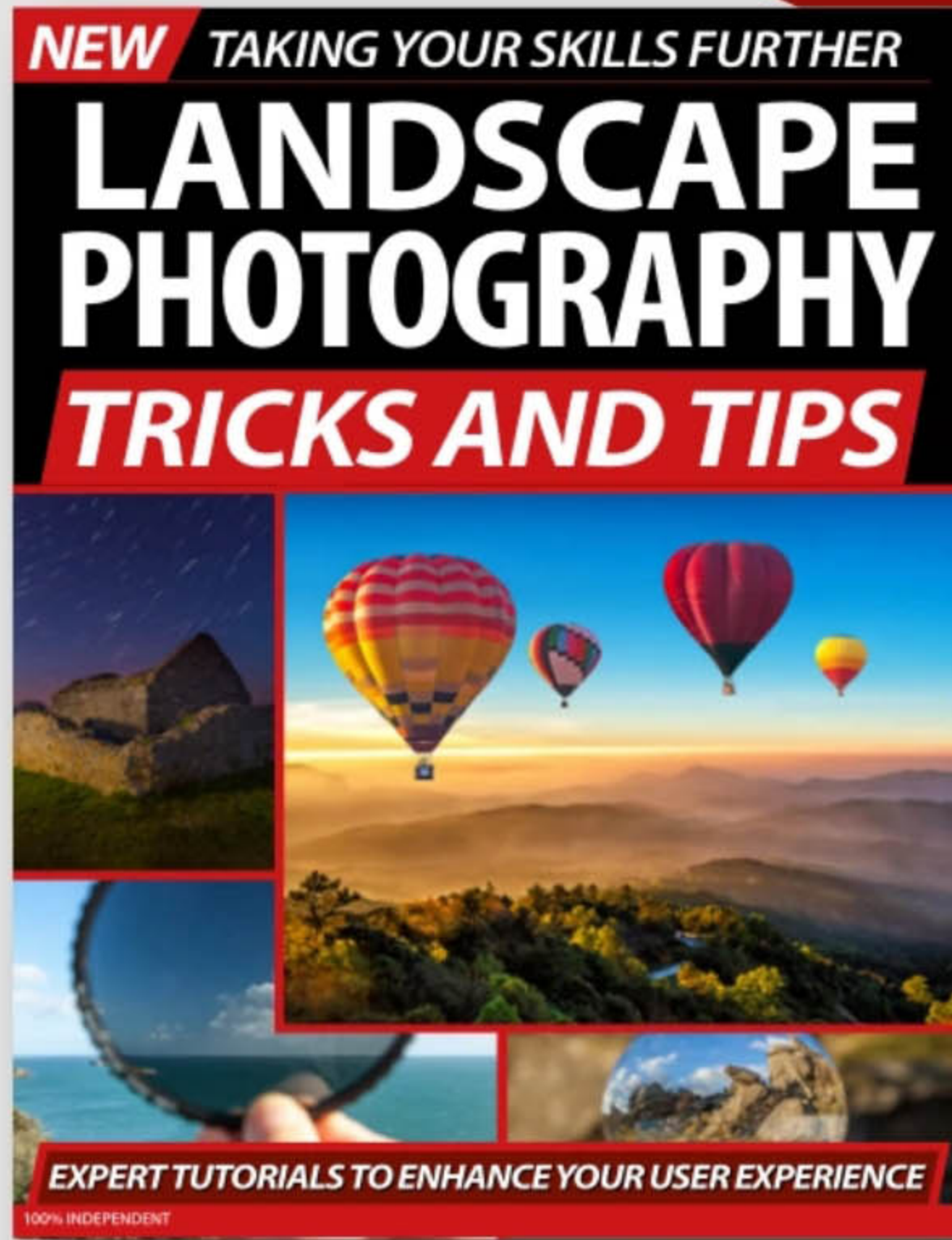
A reference point used to represent white. This reference point is used to calculate all other colours in the image.

Congratulations, we have reached the end of your latest tech adventure. With help from our team of tech experts, you have been able to answer all your questions, grow in confidence and ultimately master any issues you had. You can now proudly proclaim that you are getting the absolute best from your latest choice from the ever changing world of consumer technology and software.

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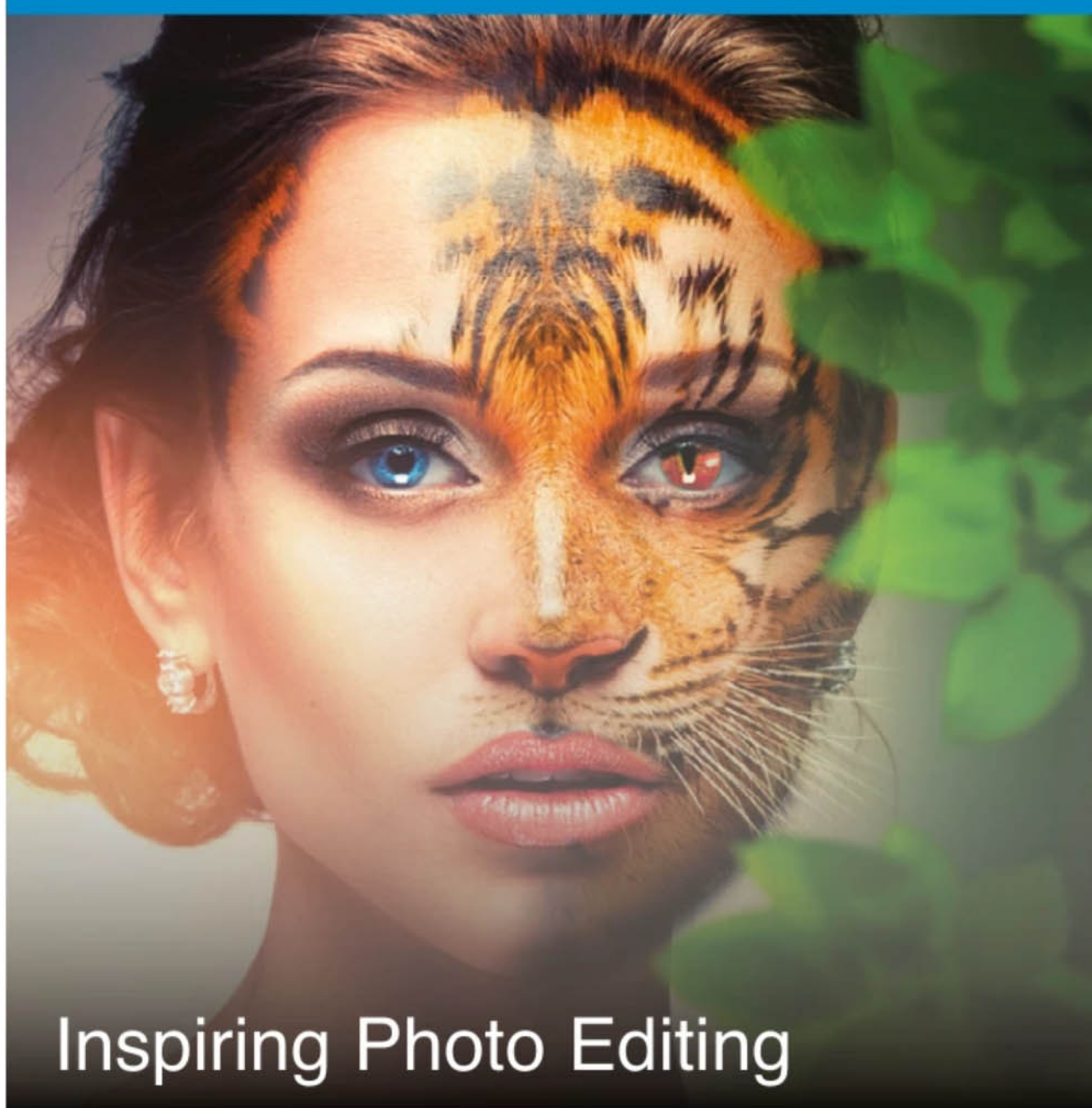
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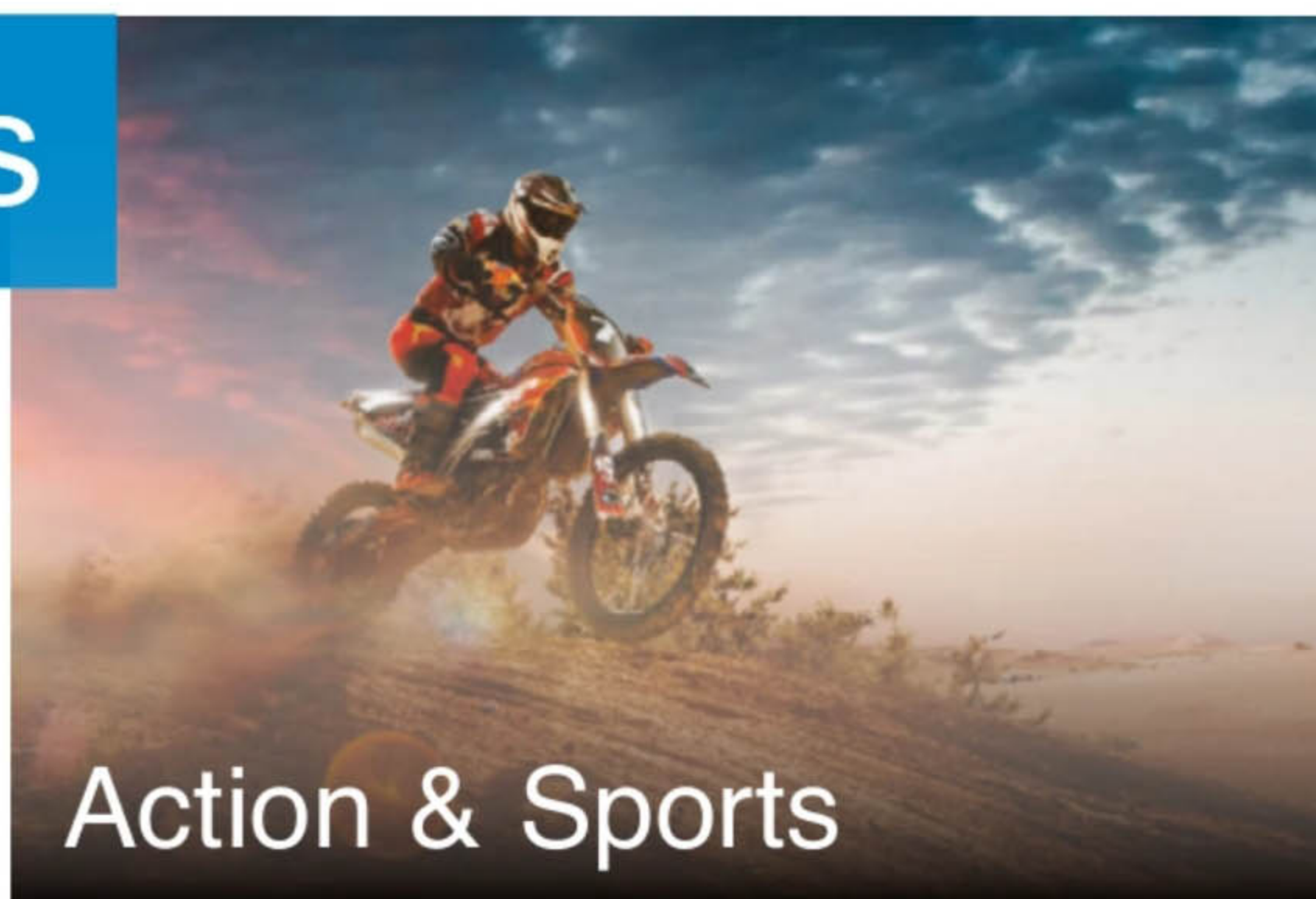
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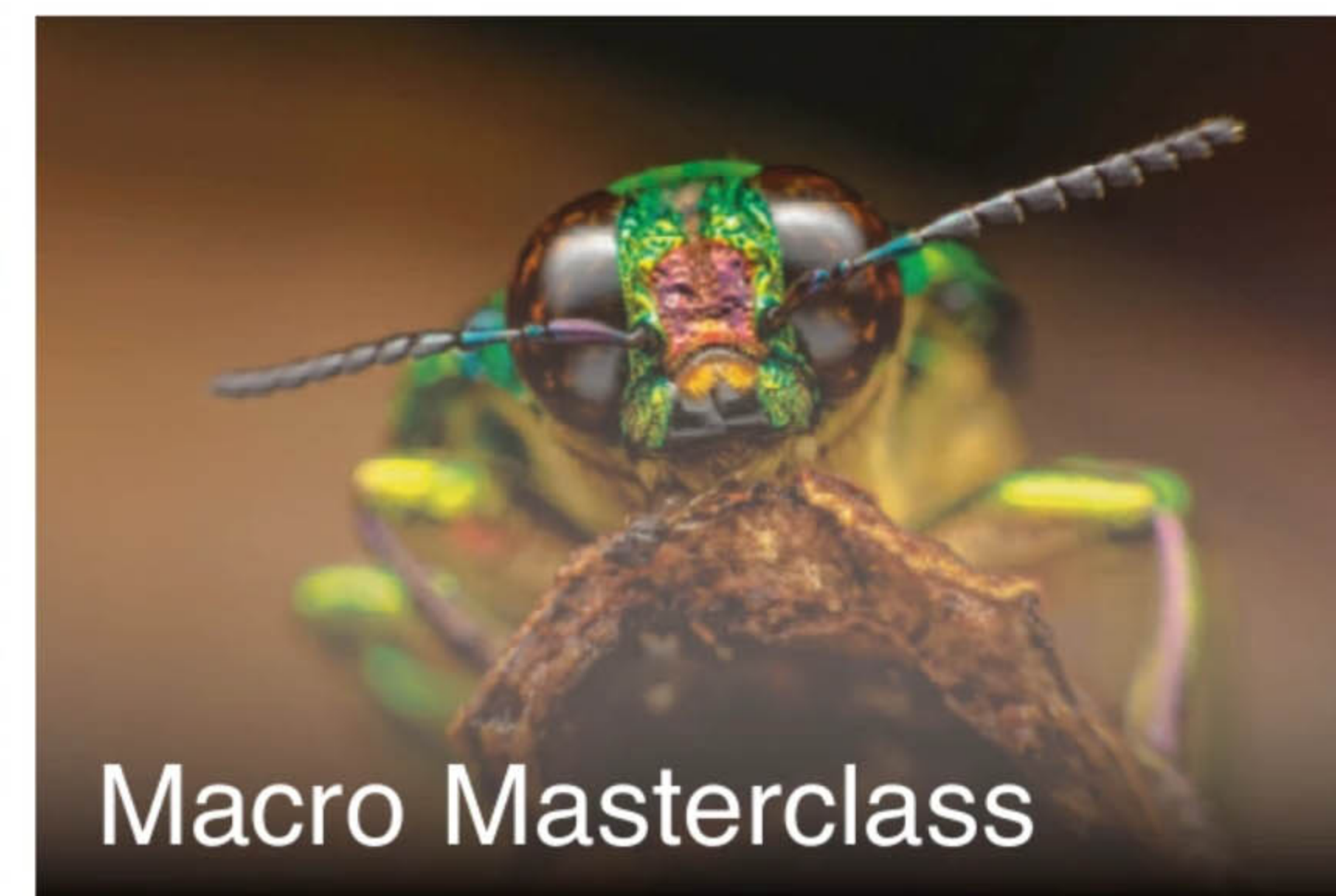
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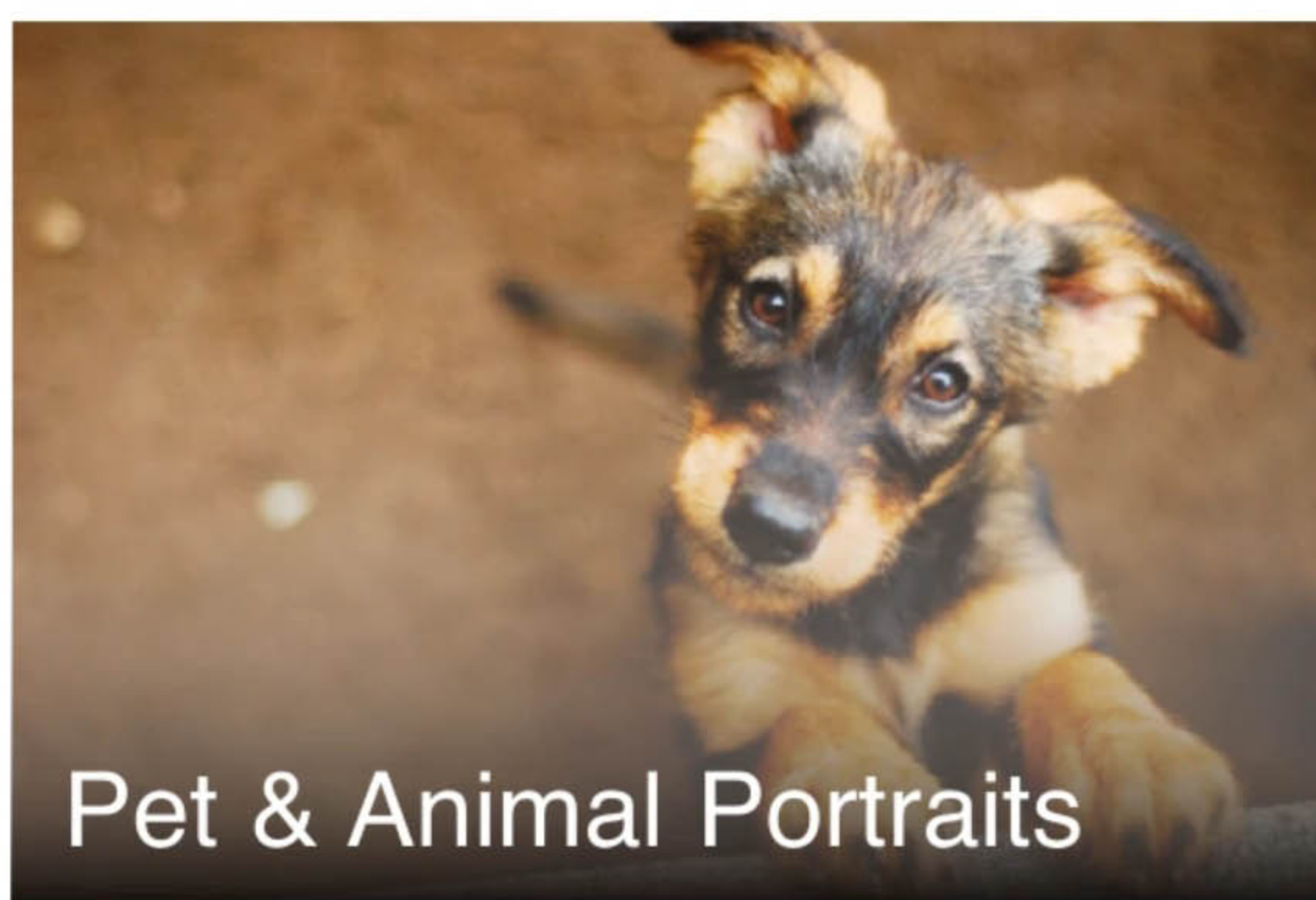
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