An Introduction to Photoshop

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Photoshop

- One of the world's best known image retouching applications
- Current version is **Photoshop CS2**
- Mainly for manipulating pixel-based images, but some vector drawing tools as well
- Lightweight version: **Photoshop Elements**
- **Adobe Illustrator** is the natural complement to Photoshop for illustrations

Competitors

- **The GIMP**,
  http://www.gimp.org
- **Macromedia Fireworks**,
  http://www.macromedia.com/
- **Corel Paint Shop Pro**,
  http://www.corel.com/
- **Ulead PhotoImpact**,
  http://www.ulead.com/
- **Autodesk Sketchbook Pro**,
  http://www.autodesk.com

Main uses

- Correction
- Restoration
- Retouching
- Special effects and distortion
- Creative tool

Tablet vs. mouse

A4 size ~5.500 SEK

Selection tools

Marquee tools

Move tool

Lasso tools

Magic Wand

Crop tool

Slice tools

Paint tools

Airbrush tool
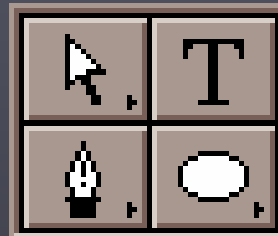
Stamp tools

Eraser tools

Smudge, blur, sharpen

Paintbrush tools

History brush tools

Gradient, paint bucket

Dodge, burn, sponge

Vector drawing tools

Path component tools

Type text tool

Path drawing tools

Vector shapes
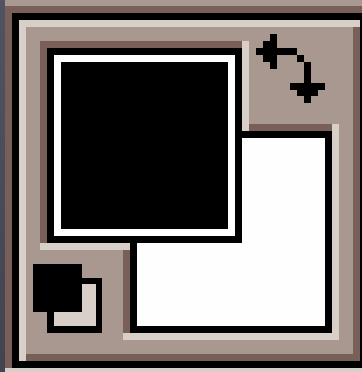
Other tools

Notes, audio annotation

Hand tool

Eyedropper,
color sampler, measure

Zoom tool

Color swatch

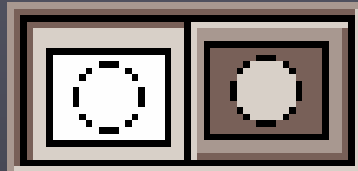Foreground color

Restore default

Swap foreground/background
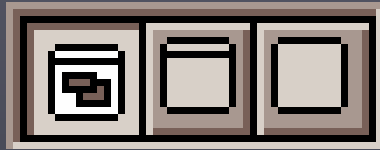
Background color

Edit modes

Standard mode Quick mask mode
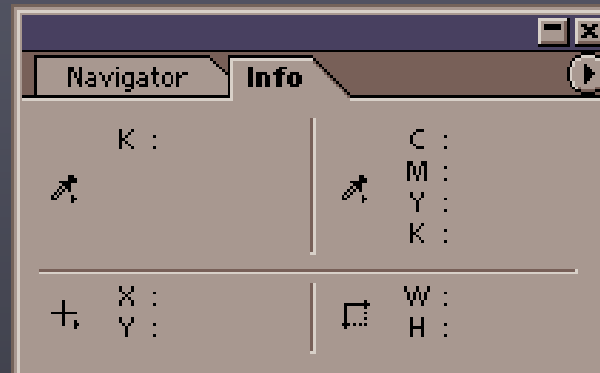
Screen modes

Standard screen mode Fullscreen

Fullscreen with menu

Navigation / info

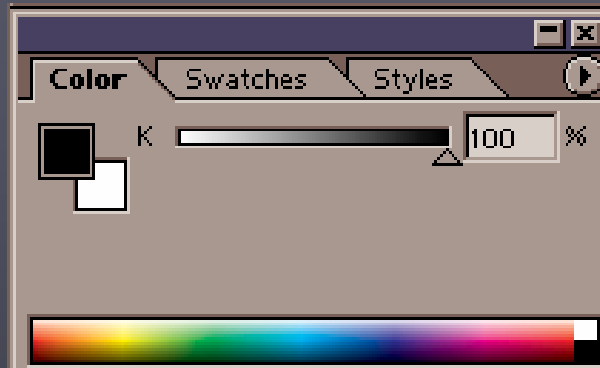Grayscale / RGB value

Cursor position

CMYK value

Width / height of marquee

Use color sampler tool to sample more than one position at a time.

Color / swatches / styles

You can also double-click on foreground / background color in
tool palette to open up color selection dialog.

Swatches is used to save colors you use often.

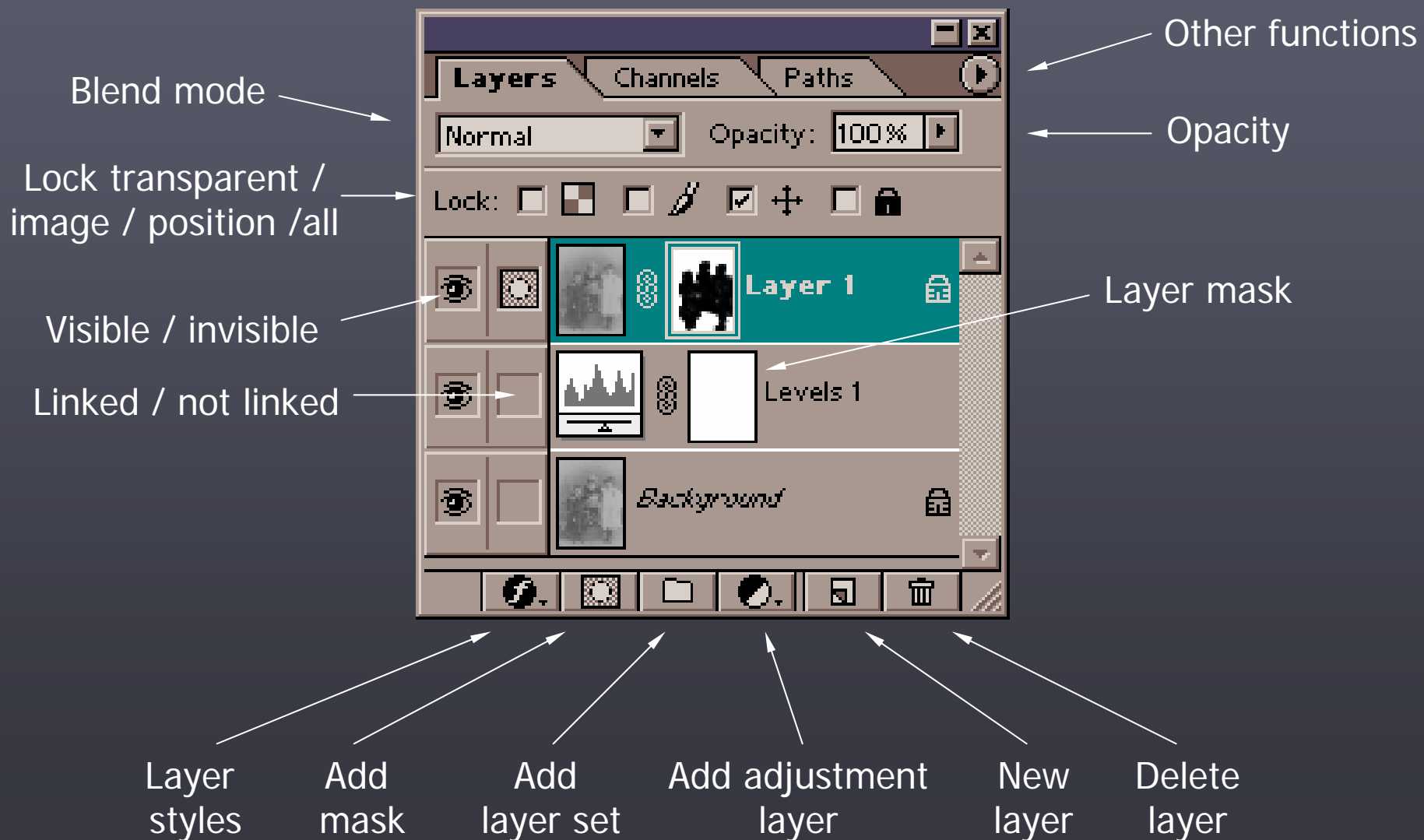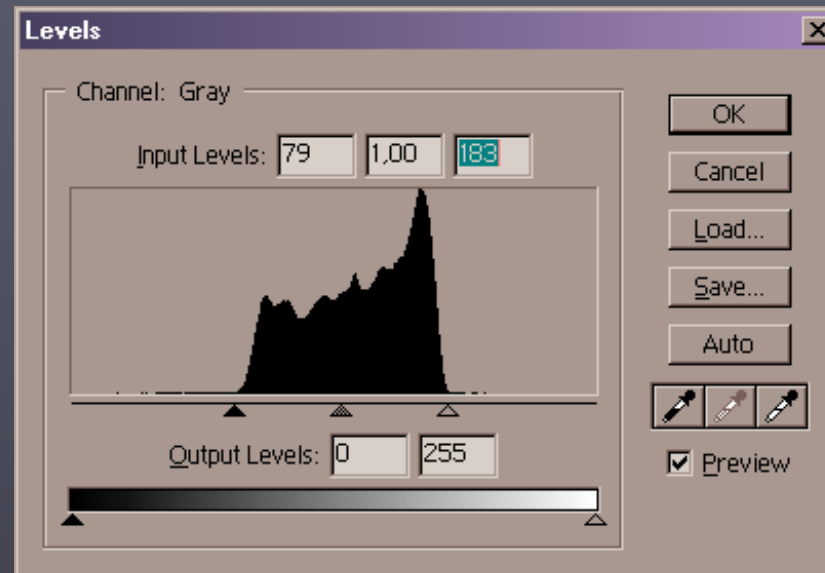Styles apply a pre-defined style to the active layer.

History

Use snapshots to store important points of progress:
makes it simple to go back to them later if necessary.

Use history brush to selectively return to a snapshot.

Layers

Other functions

Blend mode

Opacity

Lock transparent / image / position /all

Layer mask

Visible / invisible

Linked / not linked

Layer styles

Add mask

Add layer set

Add adjustment layer
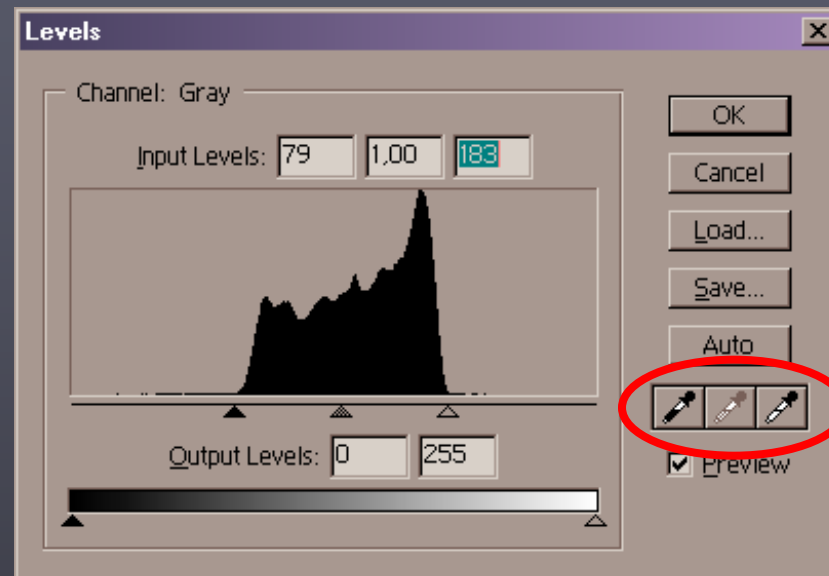
New layer

Delete layer

Improving tone

Making use of the most important range of
values in the image.

Forcing the tonal range of the image to the
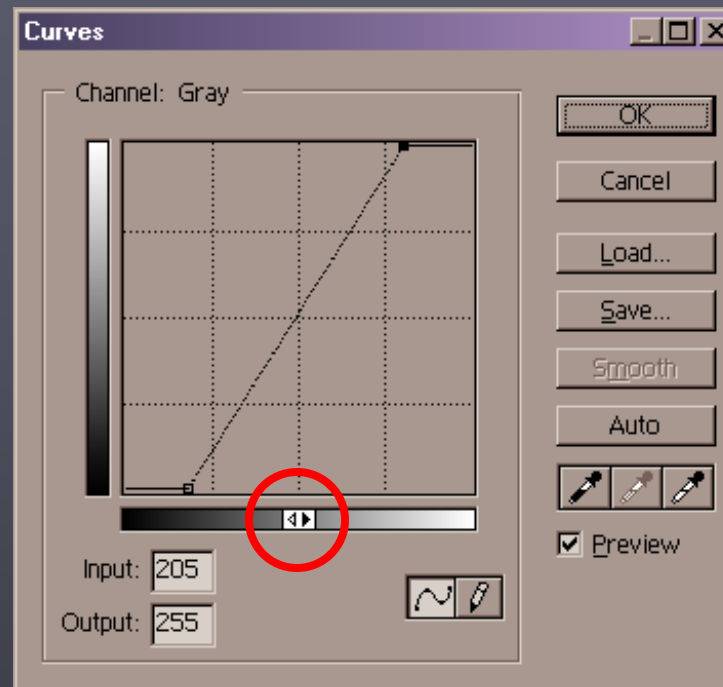range where there is information improves contrast.

Then use midpoint slider to lighten / darken the image.

Improving tone

You can also use eyedroppers to select points in the image that correspond to white, black, and mid-tone to set the sliders automatically.
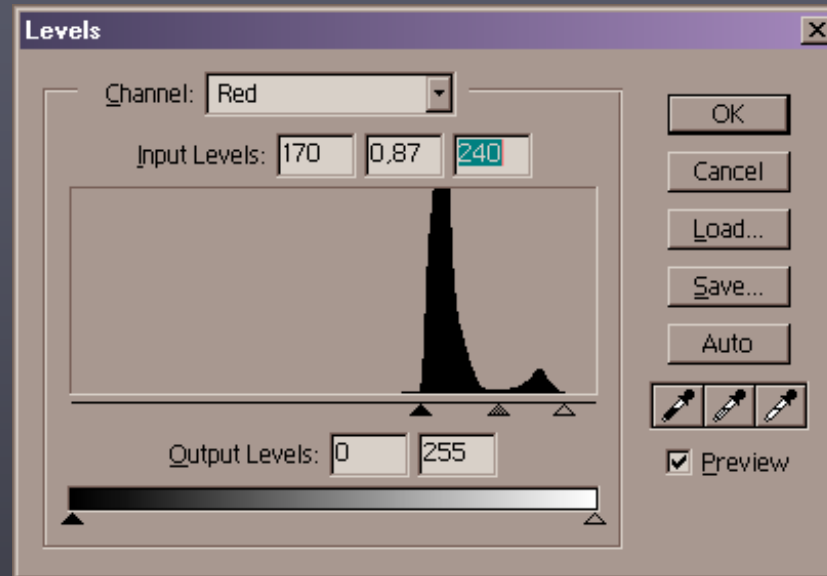
Improving tone

The curves dialog gives you more flexibility.
Control-click in image to add a control point
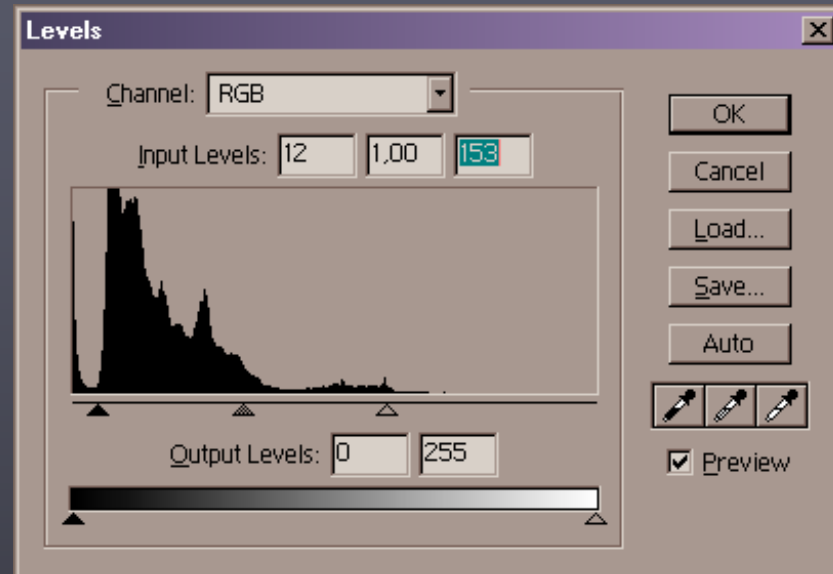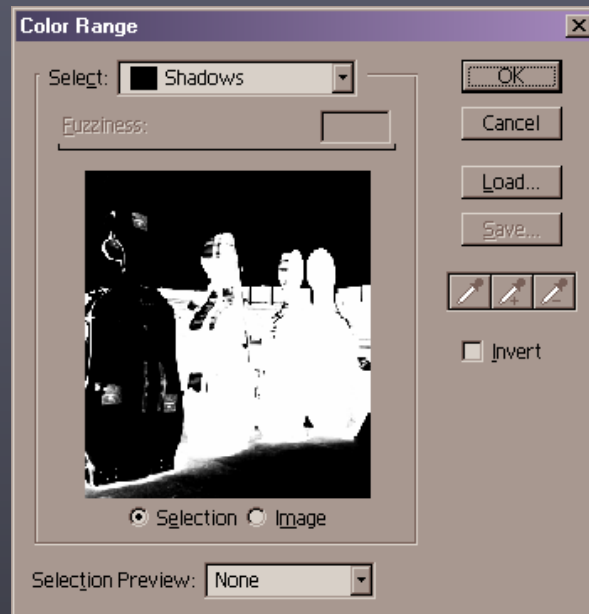corresponding to the color at the cursor.

Click the arrows to choose between working with
dot percentages or tonal values.

Combining tonal corrections

Sometimes it is better to set the levels of the
RGB layers individually.

Tonal corrections on selected areas

Adjustment layers apply to selected areas only (if there is a selection).
You can use **Select → Color Range** to select the shadows, for example, and
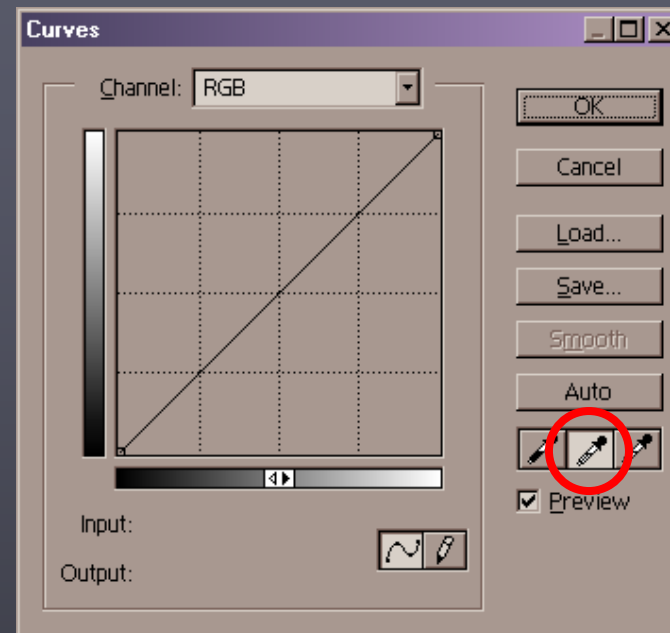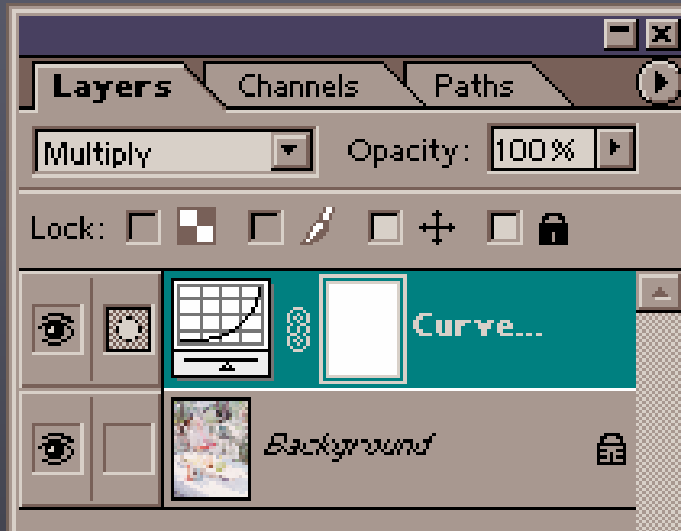use a Levels Adjustment Layer to improve contrast in the dark regions.

Tonal corrections on selected areas

You can also use a layer mask to modify the area of influence of an adjustment layer.

You can start with a black mask and then use the gradient tool (foreground to transparent) to quickly add areas of influence.

Overexposure

Adding a curves or levels adjustment layer, leaving it unmodified and then experimenting with the blend modes can salvage overexposed images. You can use the gray point eyedropper in the curves dialog to remove any undesired color shift. Experiment with opacity to decrease the effect. Copying the adjustment layer increases the effect.

Color correction using variations

First, identify the color cast. Color cast is most easily spotted in areas that are supposed to be white.

Then, select **Adjust → Variations** to open the Variations dialog. Select images that are the opposite of the color cast.
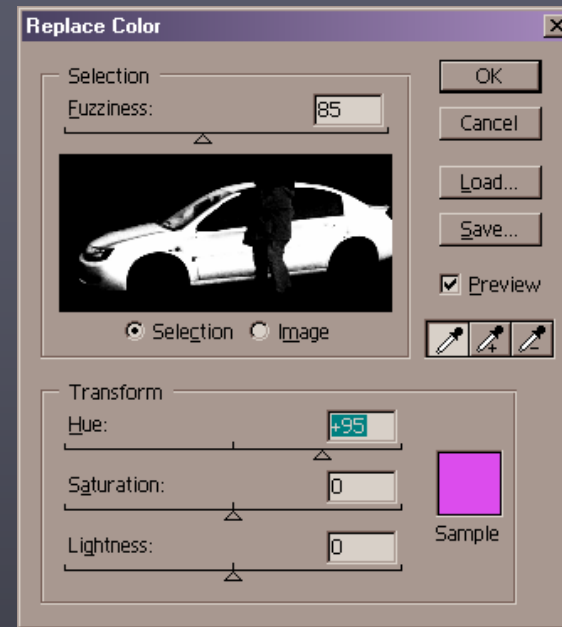
Subtle corrections
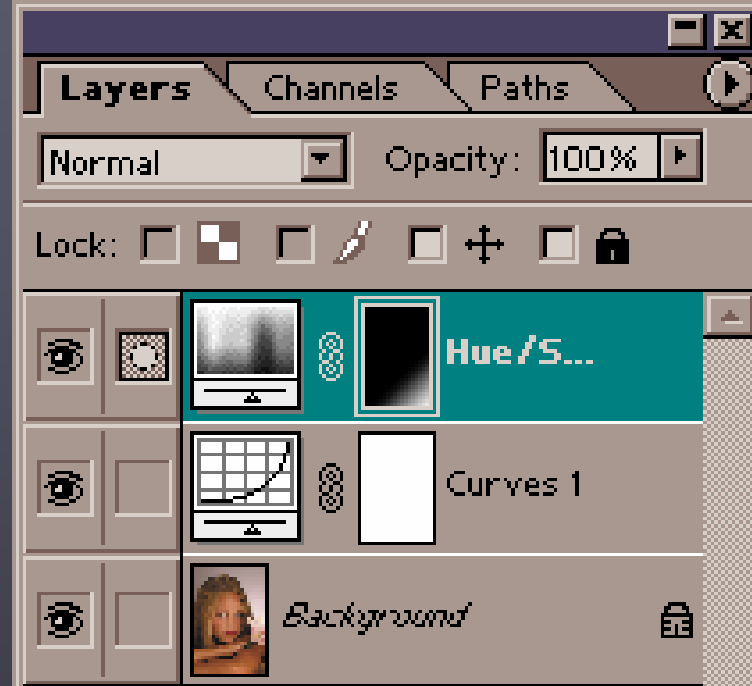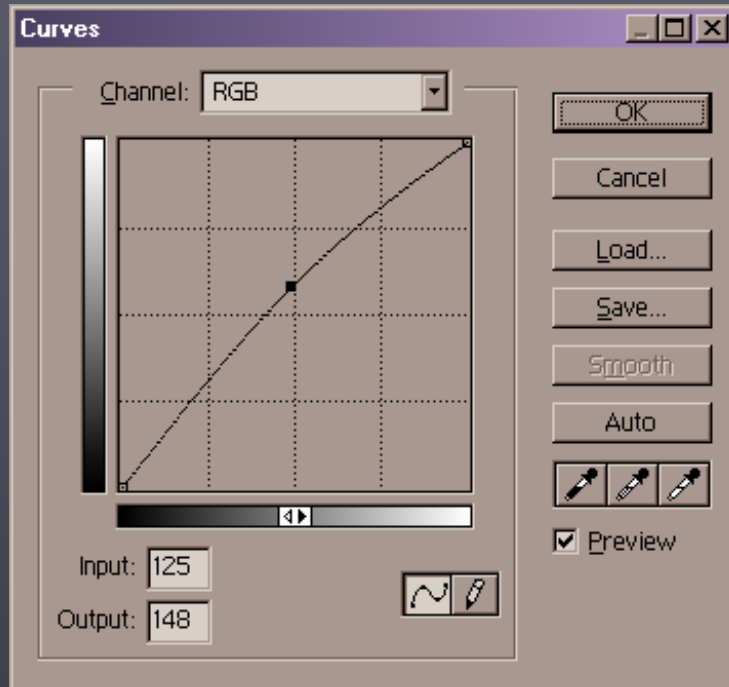
Often, small corrections is all that is necessary.

The key is gaining enough experience so that
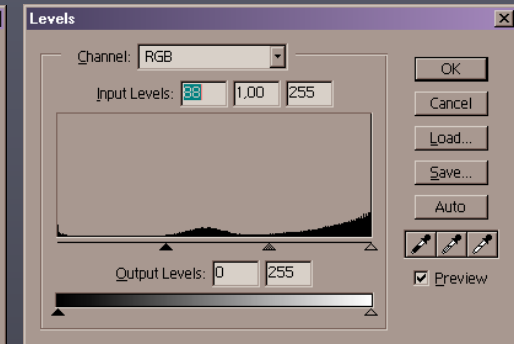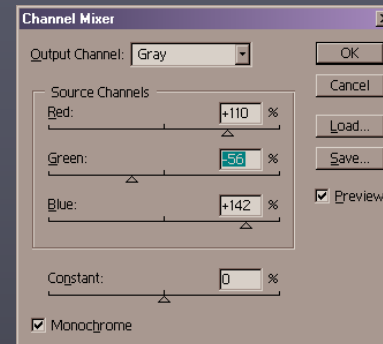you can identify the problem!

Replacing colors

Use the marquee to make a rough selection of the area you want to replace.

Choose **Image** → **Adjust** → **Replace Color…** and use the eyedroppers to drag over the areas with the shades of color you want to replace. Then increase fuzziness to include the rest. Use the Transform sliders to change into the new color.

Using channels

Sometimes, one of the channels holds more information than the others. In this case, the blue channel isolates the text best and can be isolated through a Channel Mixer adjustment layer. Use a Levels adjustment layer to isolate the text even further. Adding a pattern layer (with multiply as blend mode) replaces the lost texture. Then mask away all bleed-through text.

Retouching using transforms

In this image, we can move the couple closer together by selecting the groom, moving him and refine the transition by using a layer mask.

Color to black-and-white

Don't use **Image → Mode → Grayscale** when turning a color image into black-and-white. Use a Channel Mixer adjustment layer instead and check the monochrome box. That gives you control to interpret the image!

Multicolor toning
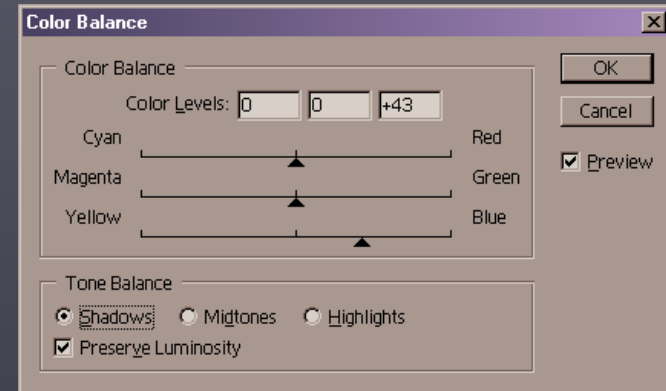
You can use a Color Balance adjustment layer to set different color tints for shadows and highlights in a black-and-white image.

Body shape retouching

You can use the transformation tools or the liquify filter
(**Image → Liquify...**) to "improve" body shape.

Using filters

You can completely change the character of an image by using filters, layers and masks.

Using filters

Another example: "Beauty Glow".
Use **Filter → Other → High Pass...** to isolate edges. Then select
Image → Adjust → Desaturate to remove all color information.
Change blend mode to overlay to combine layers into a too-sharp image.
Now invert the high pass layer and use a
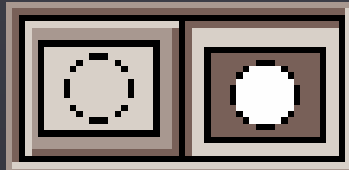layer mask to bring eyes etc. back into focus.

Extracting features: Quick mask

Activate quick mask and paint a mask using any tool.

Deselect to create a selection based on the mask.

Use **Select → Inverse** if you want to invert the selection.

Extracting features: Extract tool

Use **Image** → **Extract** to open the Extract dialog box. Paint around the edges of the object (use smart highlighting if possible), then fill the interior using the fill tool.

Press Preview to see the result.

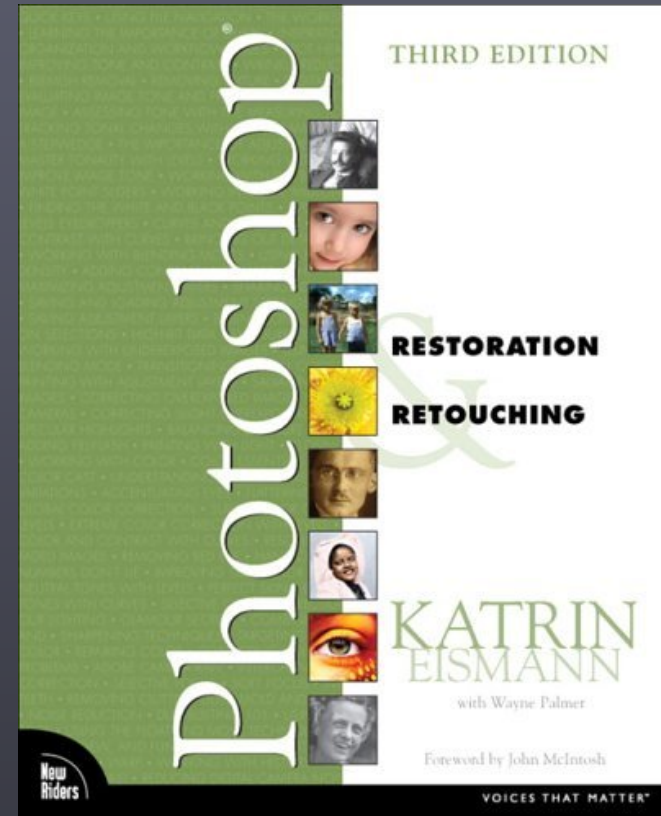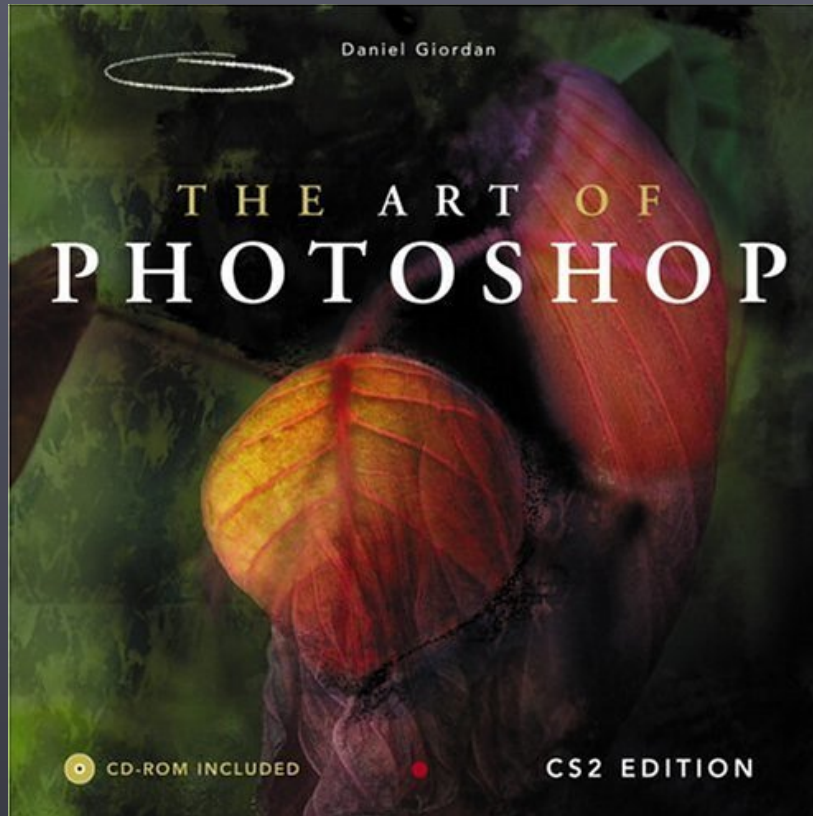Use the Edge Cleanup and Edge Touchup tools to improve the edge.

Press OK when done.

Montage

Combining images, transforms, filters, extracted features, …
Be creative – no rules apply!

Books

Daniel Giordan, **The Art of Photoshop**, SAMS Publishing, 2006.
Katrin Eismann, **Photoshop Restoration and Retouching**, New Riders, 2006.