



Introduktion till Photoshop

Staffan Romberger srom@csc.kth.se
efter Gustav Taxén

DH2640 Grafik och interaktionsprogrammering VT 2008

Photoshop

- One of the world's best known image retouching applications
- Current version is **Photoshop CS2**, **CS3** is coming
- 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 (korrektion)
- Restoration (lagning)
- Retouching (förbättring)
- Special effects and distortion (effekter)
- Creative tool (skapande)

Tablet vs. mouse



A4 size ~5.500 SEK

Selection tools Markeringsverktyg

Markeringsverktyg		Flyttverktyg
Marquee tools		Move tool
Lassoverktyg		Trollstav
Lasso tools		Magic Wand
Beskärningsverktyg		Segmenteringsverktyg
Crop tool		Slice tools

Målning Paint tools

Färgspruta Airbrush tool			Pensel Paintbrush tools
Stämpelverktyg Stamp tools			Händelsepensel History brush tools
Raderverktyg Eraser tools			Övertoning, färgbuk Gradient, paint bucket
Smet-, oskärpe-, skärpeverktyg Smudge, blur, sharpen			Skugga, Efterbelys, Svampa Dodge, burn, sponge

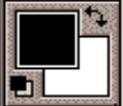
Vektorgrafik Vector drawing tools

Ban-, Direktmarkerare Path component tools Banverktyg Path drawing tools		Textverktyg Type text tool Formverktyg Vector shapes
---	---	---

Other tools

Anteckningar Notes, audio annotation Handverktyg Hand tool		Pipett, linjal Eyedropper, color sampler, measure Zoomverktyg Zoom tool
---	---	---

Color swatch

Förgrunds-färg Foreground color		Skifta för- och bakgrund Swap foreground/background
Återställ Restore default		Bakgrunds-färg Background color

Edit modes

Standardläge Standard mode		Snabbmaskläge Quick mask mode
-------------------------------	---	----------------------------------

Screen modes

Standardskärm Standard screen mode		Helskärm Fullscreen
Helskärm med menyrad Fullscreen with menu		

Navigation / info

Gråvärde/RGB-värden
Grayscale / RGB
value

Markörposition
Cursor position



CMYK-värden
CMYK value

Markeringens bredd och höjd
Width / height of marquee

Use (control-(kommando)-click) color sampler tool (pipetten) to sample more than one position at a time.

Färg/Färgrutor/Stilar 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.

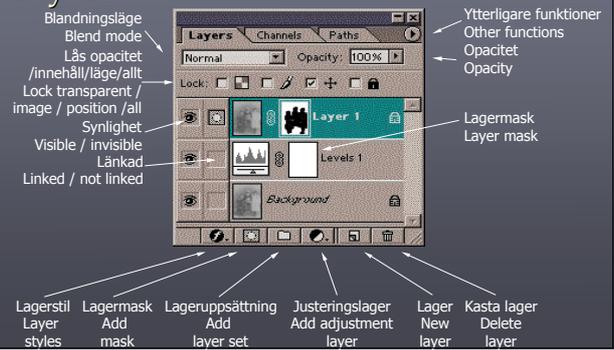
Händelser History



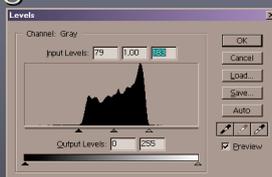
Use snapshots (fixering) to store important points of progress: makes it simple to go back to them later if necessary.

Use history brush (händelsepenseln) to selectively return to a snapshot.

Lager Layers



Nivåer Improving tone

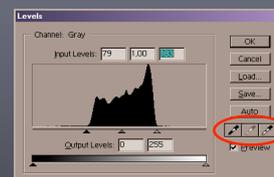


Making use of the most important range of values in the image.

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

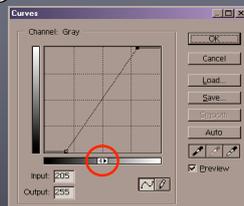
Then use midpoint slider to lighten / darken the image.

Nivåer 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.

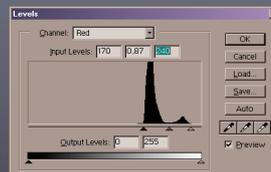
Kurvor Improving tone



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

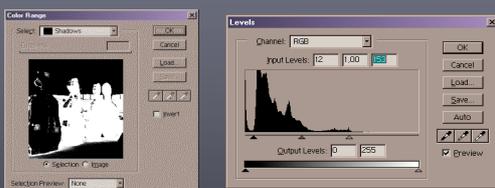
Click the arrows to choose between working with dot percentages or tonal values.

Korrigerera kanaler separat Combining tonal corrections



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

Lokal tonkorrektion Tonal corrections on selected areas



Adjustment layers (justeringslager) 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.

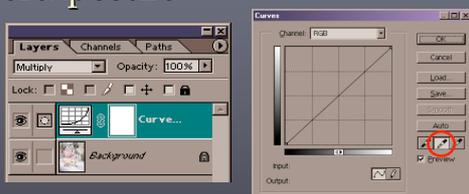
Lokal tonkorrektion Tonal corrections on selected areas



You can also use a layer mask (lagermask) 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.

Överexponering Overexposure



Adding a curves or levels adjustment layer, leaving it unmodified and then experimenting with the blend modes (blandningslägen) 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.

Variationer 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 (Bild-Justeringar-Variationer)** 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!

Ersätt färg Replacing colors



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

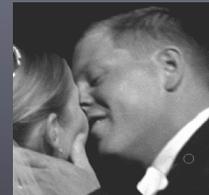
Choose **Image → Adjust → Replace Color...** (**Bild-Justeringar-Ersätt färg...**) and use the eyedroppers to drag over the areas with the shades of color you want to replace. Then increase fuzziness (luddet) to include the rest. Use the Transform (Ersättning) sliders to change into the new color.

Kanaler Using channels



Sometimes, one of the channels hold 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 couples 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 (Blanda kanaler) adjustment layer instead and check the monochrome box. That gives you control to interpret the image!

Kolorering 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.

Geometriska transformationer



Man kan förändra perspektivet t.ex. med **Redigera>Omforma fritt**.

Geometriska transformationer Body shape retouching



You can use the transformation tools or the liquify filter (**Image → Liquify... Filter-Gör flytande...**) 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 (Täck över) 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.

Snabbmask 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.



Filter-Extrahera 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.

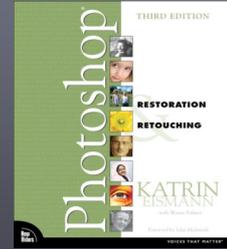
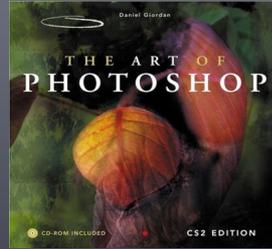
Press OK when done.

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.
Nigel French: **Photoshop unmasked**, Adobe Press, 2007.