

HG presentation

Photo Restoration techniques

1. What are we going to do?
 - 1.1. First half:
 - 1.1.1. basic steps for the restoration of an antique or damaged photo
 - 1.1.2. some photoshop tips and techniques by way of a few tangents
 - 1.1.3. may be new for some people or may be old hat maybe some basic techniques and some slightly more advanced tricks
 - 1.1.4. All techniques should work in PS and up to CS4, I don't think I am using anything that is specific to CS4
 - 1.2. Second half:
 - 1.2.1. colourizing technique
 - 1.2.2. removing and replacing items within a photo
2. Notes can be found on my website at www.wesmoredigital.ca and follow the link for HG presentation
3. Scanning
 - 3.1. Scan at high res
 - 3.1.1. 300dpi for most 600dpi if enlargement is needed or extensive damage repair.
 - 3.2. scan the entire photo including border etc.
 - 3.3. Scan an original and an adjusted
 - 3.4. Make basic levels adjustments in scanner software
 - 3.4.1. Scanner will deliver adjusted photo with smooth histogram
 - 3.4.2. With no adjustments in scanner you will end up with a combed histogram in PS following adjustments thereby degrading the quality of the photo
 - 3.5. no cropping, no sharpening, no grain correction, no nothing!
4. Save as logical file name with "original" and save another version (save as) with "edited".
5. Set up a workspace "f" to cycle through full screen etc. cmd-K to set up preferences regarding cursors and cycling through tools. Set up palettes and save a workspace. "H" for hand tool. Turn off shift to change tools.
 - 5.1. mention what a palette is?
 - 5.2. mention where the keyboard shortcuts can be found (beside various menu items)
6. eight steps for restoration
 - 6.1. straighten lines
 - 6.2. crop
 - 6.3. repair damage
 - 6.4. colour/exposure correct
 - 6.5. tone (if needed)
 - 6.6. resize for output
 - 6.7. sharpen
 - 6.8. print
7. eight steps for restoration
 - 7.1. straighten lines **SPEAK BRIEFLY**
 - 7.1.1. crop tool
 - 7.1.2. rulers and guides, cmd-r for rulers and pull guides down from the rulers for reference line

- 7.1.3. cmd-' for grid
- 7.1.4. select all and free transform
- 7.1.5. warp, perspective, lens correction, distort
- 7.2. crop **SPEAK BRIEFLY**
 - 7.2.1. remove border
 - 7.2.2. remove extensively damaged portions to speed restoration and potentially improve composition**
 - 7.2.3. check with "client" to see what they actually want before you start cropping
 - 7.2.4. cropping may depend on frame size more than original print.
- 7.3. repair damage
 - 7.3.1. cracks/tears
 - 7.3.1.1. spot healing brush tool, healing brush tool, clone stamp
 - 7.3.1.2. careful near edges of pic or near edges of high contrast areas
 - 7.3.1.3. Clone or repair on new layer or duplicate layer, not on original
 - 7.3.2. spots
 - 7.3.2.1. spot healing brush tool, healing brush tool, clone stamp
 - 7.3.2.2. blur, mask and reveal mask
 - 7.3.2.3. maintain sharpness in important areas, i.e., face, building detail, etc.
 - 7.3.2.4. larger areas can be blurred
 - 7.3.3. texture
 - 7.3.3.1. surface blur tool, move pic down one px, over one px,
 - 7.3.4. new layers, masking, blending in
 - 7.3.5. using vignetting to your advantage
 - 7.3.6. add grain to even out corrections from cloning
 - 7.3.6.1. new layer
 - 7.3.6.2. fill with 100% grey set to overlay
 - 7.3.6.3. add noise at an appropriate amount
 - 7.3.6.4. gaussian blur about 1px
- 7.4. colour/exposure correct
 - 7.4.1. duplicate, filter: average, switch blend mode to colour, create new colour layer from sampled colour and negate a and b of LAB colours...
 - 7.4.2. layer mask use with curves
 - 7.4.3. always *try* auto adjust and see what happens then move to use eyedroppers in levels and in curves
- 7.5. tone
 - 7.5.1. sample from elsewhere on the *original* photo
 - 7.5.2. add colour layer (blend mode: colour) with sampled tone
 - 7.5.3. adjust opacity for desired effect
- 7.6. resize for output
 - 7.6.1. 300 dpi in *most* cases
- 7.7. sharpen
 - 7.7.1. selective sharpening—*almost* always
- 7.8. print

colourizing

- 7.9. Use restoration techniques to tidy and clean and restore original picture before colourizing
 - 7.9.1. setting up layers/groups for colourizing
 - 7.9.1.1. new colour layer
 - 7.9.1.2. set blend mode to colour
 - 7.9.1.3. set mask to conceal
 - 7.9.1.4. record as an action
 - 7.9.2. download hair and skin colours from <http://www.retouchpro.com/pages/colors.html> to add to swatches palette
 - 7.9.3. preserve certain colours in your colours palette
 - 7.9.4. Use groups for different components: individual people, background elements etc.
 - 7.9.5. start masking
 - 7.9.5.1. appropriate sized brush soft edge but can be hard depending on the area being masked
 - 7.9.5.2. using full colours and 100% opacity makes it easier to see masking results
 - 7.9.5.3. 100% opacity and set default colours b&w
 - 7.9.5.4. use “d” for default colours and “x” to switch back and forth for white or black as foreground colour
 - 7.9.6. refining masks
 - 7.9.6.1. zooming in to refine masks use cmd+ and cmd- to quickly zoom in and out also using cmd-space to select zoom area, use the hand tool “H” or space bar to move around.
 - 7.9.7. opacity can be refined depending on the look you are trying to achieve: Definitely refine it!
 - 7.9.8. mask can also be refined by using less opacity on the brush when painting on the mask
 - 7.9.9. refining colours
 - 7.9.9.1. research, ask client, colour reference, online, library etc.
8. Advantages: colours very easily changed via opacity or actual colour picker

Adding/Removing parts of a photo

- 8.1. Figure out what you need removed and/or added
- 8.2. Look carefully as some things may surprise you
- 8.3. copy/paste to new layers with rough selection
 - 8.3.1. selection not important as you are going to be masking anyway
- 8.4. use masks
- 8.5. clone in new body parts from opposite side of body
- 8.6. use parts from other pics

Resources

Books:

Photoshop Restoration & Retouching Third Edition, Katrin Eismann with Wayne Palmer

Photoshop Masking & Compositing, Katrin Eismann

skin: The Complete Guide to Digitally Lighting, Photographing, and Retouching Faces and Bodies, Lee Varis

Photo Retouching and Restoration for Dummies, Julie Adair King

Web Resources:

www.retouchpro.com

www.retouchpro.com/pages/colors (hair and skin sample swatches)