

# Image Editing

in general and GraphicConverter in particular

From the viewpoint of a self-taught amateur

# Bitmap & Vector Images

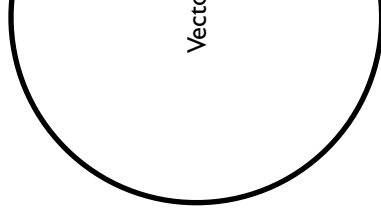
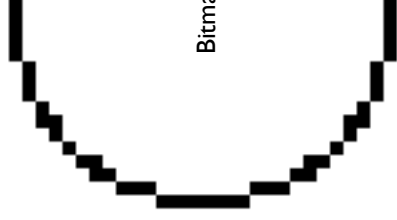
Our focus is **bitmap** - digital cameras & scanners

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Bitmap Images are made of tiny colored pixels

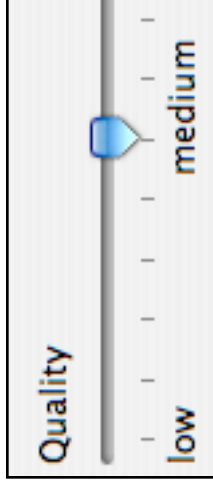
Vector images (drawings) comprise groups of “mathematical” objects

- No jaggies when magnified
- Illustrator, Intaglio, EazyDraw, AWW
- Fonts are vector objects



# Bitmap Formats

- Photoshop (PSD) — supports layers
- TIFF, PICT, BMP — uncompressed, large file
- JPEG, GIF, PNG — compressed, lossy
- file size versus image quality
- Many less common formats



# JPEG Compression



High compression 4.3 K



Medium compression 8.2 K



Uncompressed TIFF

# Where do they come from?

- Digital cameras
- Scanners
- The Internet
- Screen capture (Shift-Cmd-4)
- Painting programs

# Common Operations

and some programs

- Download from camera  
Image Capture, iPhoto, GraphicConverter
- Organize, Rename, Tag, Find  
iPhoto, GraphicConverter
- **Edit**  
iPhoto, Photoshop, GraphicConverter,
- Slide show  
iPhoto, GraphicConverter, Galerie (HTML)
- Email, upload to web  
iPhoto, GraphicConverter
- Print  
iPhoto, Photoshop, GraphicConverter,

# Software for serious users \$\$

Photoshop CS3 (PSD) — \$626 (Amazon)

Comprehensive set of features

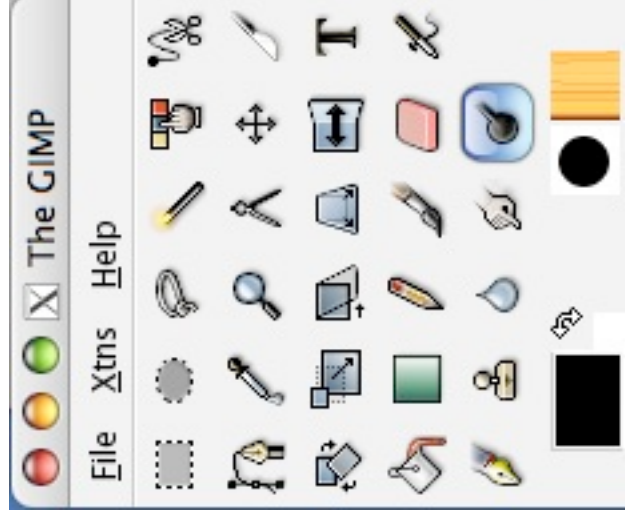
Aperture 1.5 — \$300

Image management and processing for professional photographers — High-end iPhoto

Adobe Lightroom — \$300

Gimp — Free, requires X11

- Supports PSD layers
- Not Mac-like



# Software for the casual user

More affordable

- **iPhoto — \$80 (iLife bundle) or free**
- **Preview (limited; Leopard will offer more) — free**
- **Photoshop Elements 4 — \$79 (Amazon)**
- **GraphicConverter 6 — \$35 shareware**



# Photoshop Clones?

I'm overwhelmed

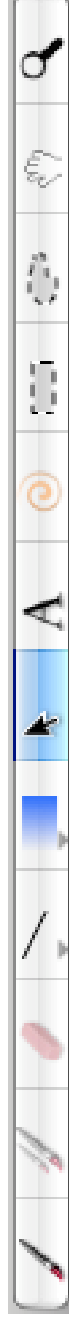
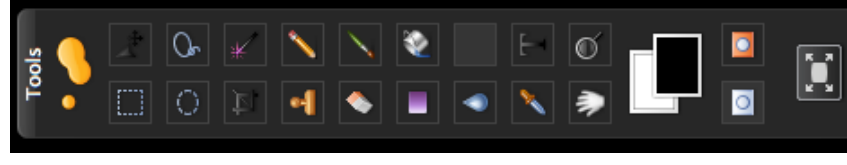
- **Compositor — \$35**

free trials available

- **Pixelmator — \$59**

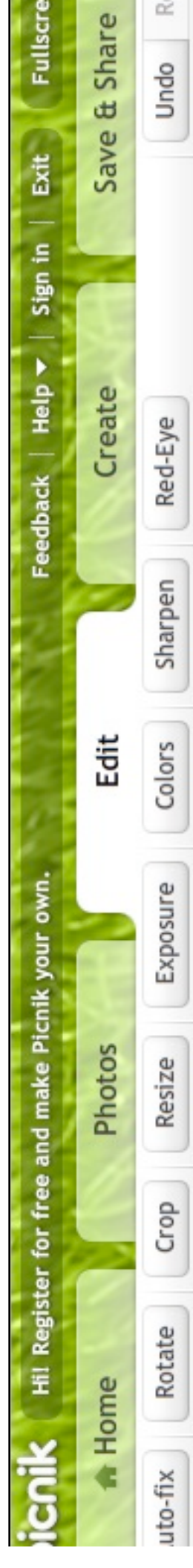
- **Live Quartz — Free**

Supports PSD Layers; Lots of effects



# Online Editing — Picnik

A growing trend is on-line applications, e.g. Google spreadsheet, word



- [www.picnik.com](http://www.picnik.com) — edit photos on-line
- Free. A premium account is \$25/yr
- Open, edit and save to disk.
- Open and save to Flickr (photo sharing)
- Save to many commercial photo sites,

# Mini Programs



Quick editing without hauling out the heavy artillery

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EasyCrop & SnapNDrag; free/\$12

Drag-N-Scale; free — resize files/folders

ImageWell — Crop, rotate, balloons; free/\$15

ThumbsUp — make thumbnails; free

Galerie — HTML slideshows; free

QuickImage contextual menu; free →



# Typical Editing Tasks

- Crop, rotate, unskew, levels
- Resize, change resolution, file type, color depth, quality/compression
- Brightness, contrast, gamma, hue, saturation, sharpness
- Save for web or email

# Workflow – Speed

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Important when plowing through a lot of pictures

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iPhoto archives and catalogs.  
Editing is quick, but limited.

Aperture and Lightroom archive, catalog & edit images quickly.

GraphicConverter

- Express Image Enhancement
- Image Browser

# GraphicConverter



It's been around for many years

Started life as a file converter

Opens, saves, converts  
hundreds of formats

It's regularly updated

Many image editing functions  
have been added

✓ All available

.D  
8BIM – Photoshop (2.0)  
AFP (TIFF Variant)  
ALIAS pix  
AMBER ARR  
Analyze .hdr+.img  
ANI – Animated NeoChrom  
Animated Cursor  
Apple Preferred (Iigs)  
ART – First Publisher  
ASCII  
Atari Portfolio Bitmap  
B3D – Maxon  
BioRad  
BLD (MegaPaint)  
BLP  
BMP/RLE – Windows-, OS/  
BSB/KAP  
BUM (Poser)  
CAL5/CCITT4  
CAM – Casio QV-10/100  
Canon CRW  
CGM – Computer Graphics  
Chyron Liberty Paint  
CLP – Windows Clipboard  
csource  
CT – Scitex  
CUR  
CVC – Calamus

# GraphicConverter

- Compliments Photoshop/Elements
- Does many things extremely well
- Opens/Saves in hundreds of formats
- Transparency (GIF, PNG)
- Versatile file browser and slide show
- Fast, batch operations
- Doesn't do other things at all. e.g. spot edit

# Common Tasks

- Download from camera or scanner
- Catalog & organize images
- Quickly browse photo collections
- Drag a folder onto GC icon
- Slide shows on the Mac & for the web





# BROWSE

Drag a photo folder onto the GC

Orion/Users/hagenhenke/Pictures/2006/02 Februar/18 Wüste/Wüste/

Batch: No Batch  
Format: TIFF (\*.TIF;\*.TIFF)  
Options...

Back Forward Open Rotate left Rotate right Slideshow Catalog... E-Mail... Other Make Preview

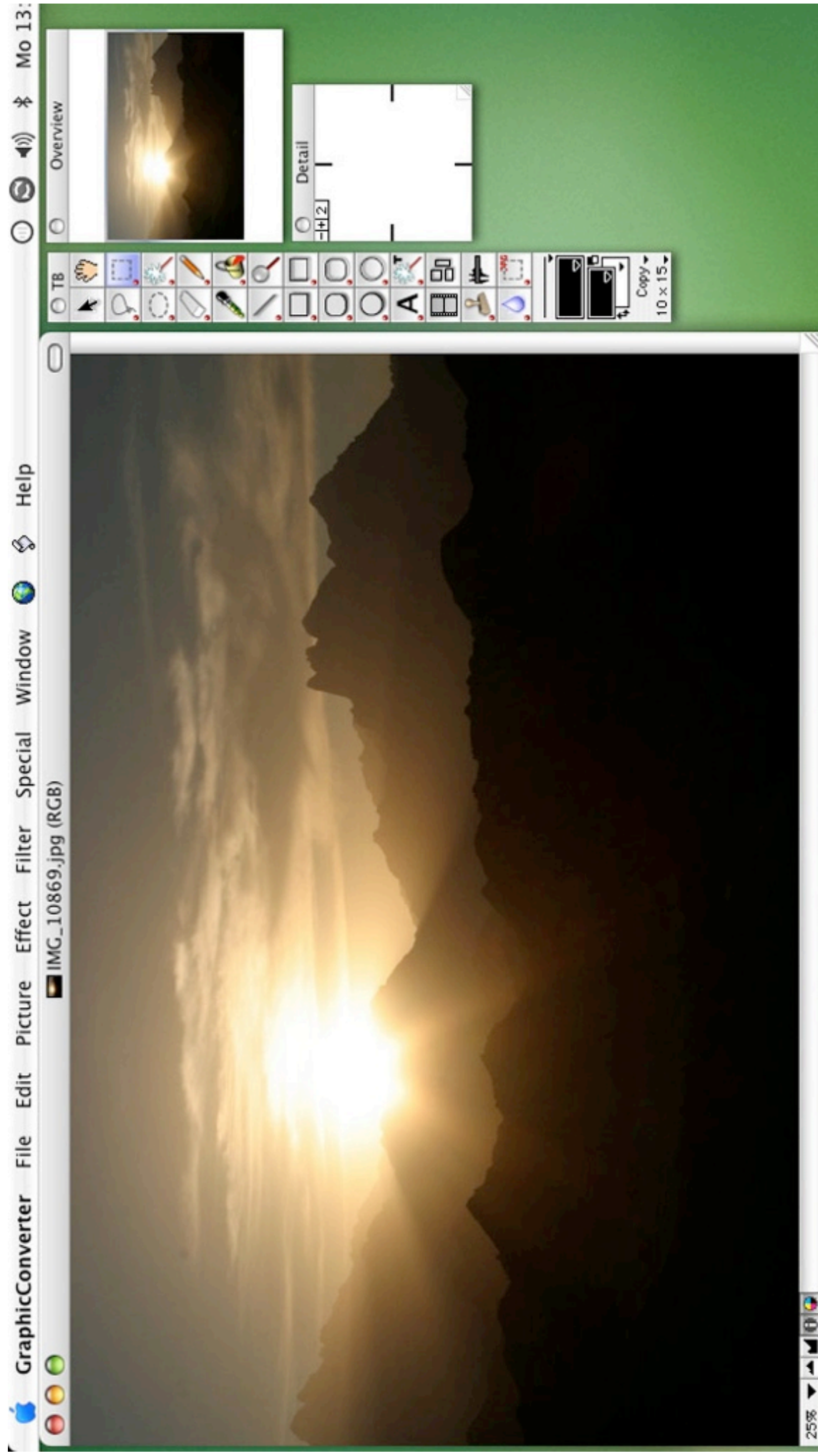
hagenhenke  
Desktop  
Documents  
DVDs  
Library  
Movies  
Music  
Pictures

2002  
2003  
2004  
2005  
2006  
01 Januar  
02 Februar  
05 Schnee Loki  
15-16 Ägypten  
18 Wüste  
Originale  
Wüste  
19 Suftan Sallman  
20 Hurghada  
21 Hotel  
22 Hagen & Tom  
23 Strand  
24 U-Boot Bude  
25 Kinderdisco  
28 Fasching

IMG\_10846.jpg 2.3MB 18.02.2006  
IMG\_10851.jpg 4.1MB 18.02.2006  
IMG\_10852.jpg 2.9MB 18.02.2006  
IMG\_10854.jpg 3.6MB 18.02.2006  
IMG\_10855.jpg 3.9MB 18.02.2006  
IMG\_10856.jpg 4.1MB 18.02.2006  
IMG\_10859.jpg 2.6MB 18.02.2006  
IMG\_10858.jpg 3.8MB 18.02.2006

Name: IMG\_10859.jpg  
Size: 3036x1994 pixel (6.1 Megapixel)  
Resolution: 180,0x180,0ppi  
Colors: 16.7 Mill. Colors (RGB, 32 Bit)  
Frames:  
Memory:  
File Format: JPEG/JFIF  
File Length: 2.5MB  
Compression: 1:2  
Req. Time: 0.2s  
Make: Canon  
Model: Canon EOS 300D DIGITAL  
Orientation of image: 1  
X resolution: 180.0 ppi (pixel per inch)  
Y resolution: 180.0 ppi (pixel per inch)  
Resolution unit: inch  
File date and time: 2006:02:18 16:40:20  
Y and C positionings: centered  
-- Exif IFD --  
Exposure time: 1/200 s  
F number: 20.0  
ISO speed rating: 400  
Exif version: 0221  
Date and time of original da...: 2006:02:18 16:40:20  
Date and time of digital da...: 2006:02:18 16:40:20  
Meaning of each compone...: YCbCr  
Image compression mode: 3.0  
Shutter speed: 7.6 APEX = 1/200 s  
Aperture: 8.6 APEX = F20.0  
Exposure bias: 0.0  
Maximum lens aperture: 3.6 APEX = F3.5

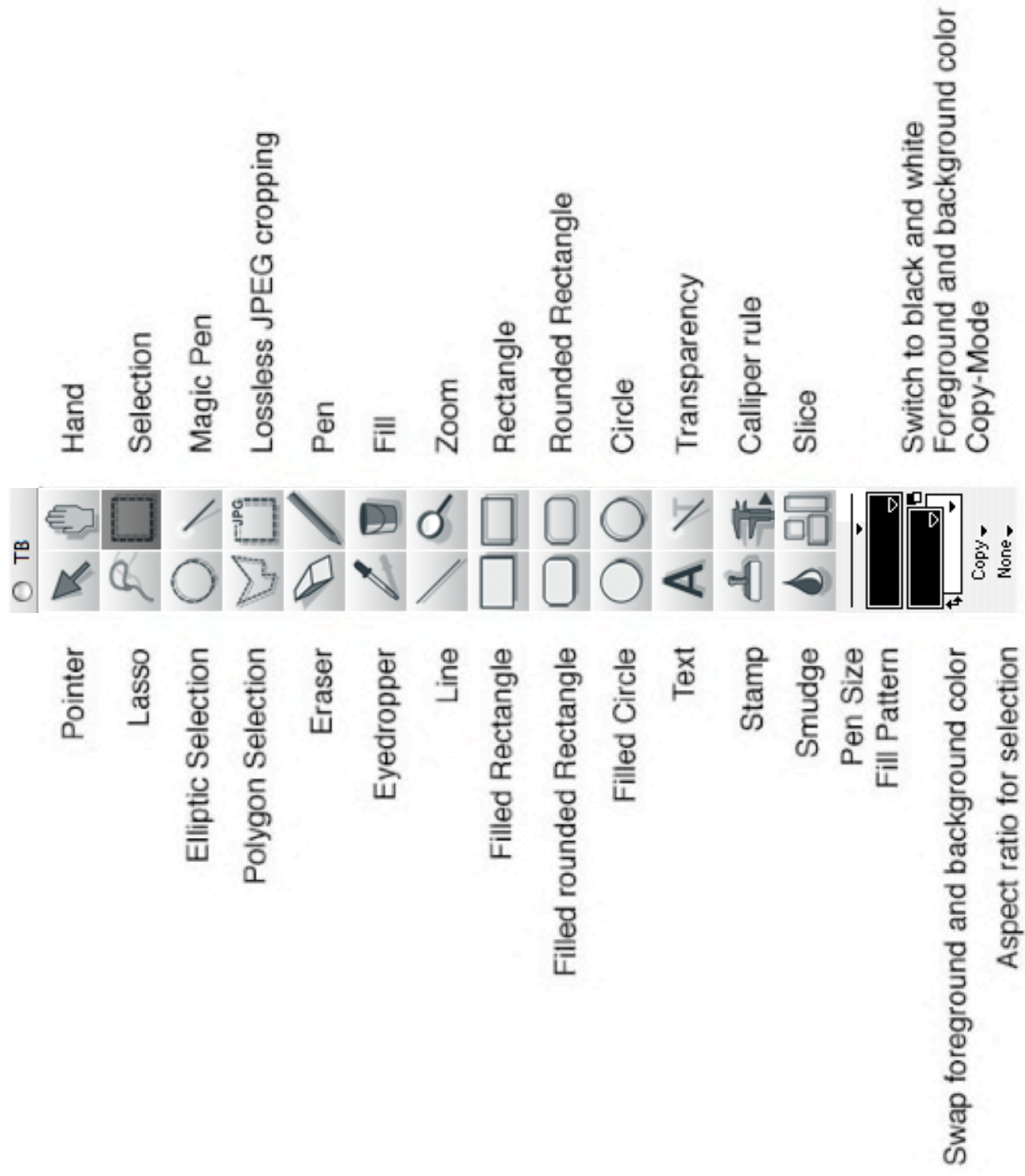
# Basic Editing



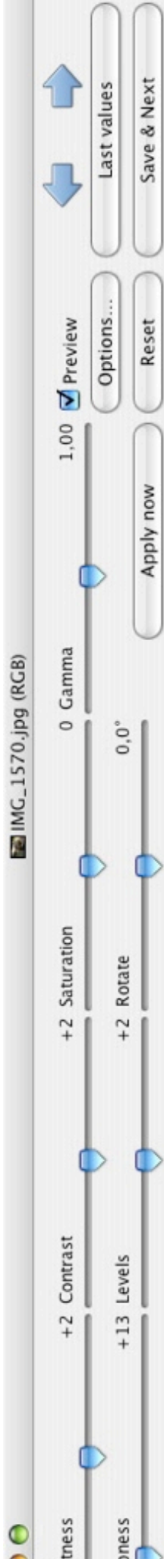
Information

Image	EXIF	XMP	Comment
<b>Size:</b> 3072x2048 pixel (6,3 Megapixel) ▼			
<b>Resolution:</b> 180,0x180,0ppi			
<b>Colors:</b> 16.7 Mill. Colors (RGB, 32 Bit)			
<b>Frames:</b>			
<b>Memory:</b> 24,0MB			

# GC Editing Tools



# Express Image Enhancement

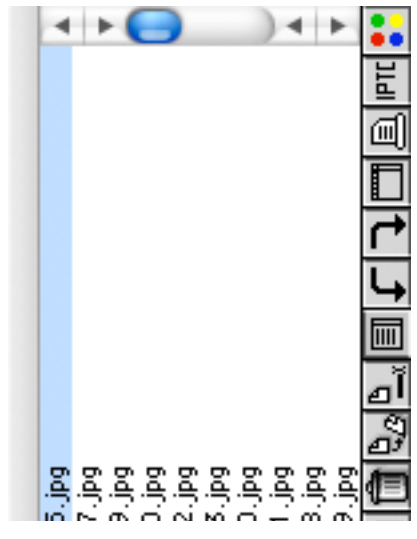


# Slide Show

File path →



Slide List



Tools →



# Batch Processing Example

- 2000 pictures on a CD for family/friends.
- Scale width from 2500 to 640 pixels  
35-in 9-in  
Landscape-Portrait done separately
- Apply auto-levels
- Sharpen 14%
- Save as JPEG, Quality = 50

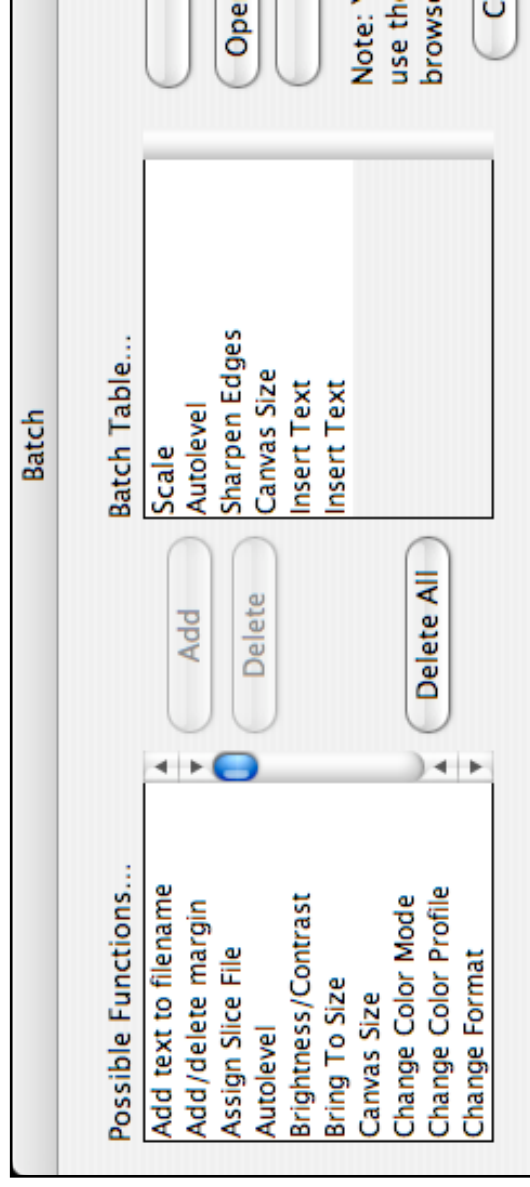
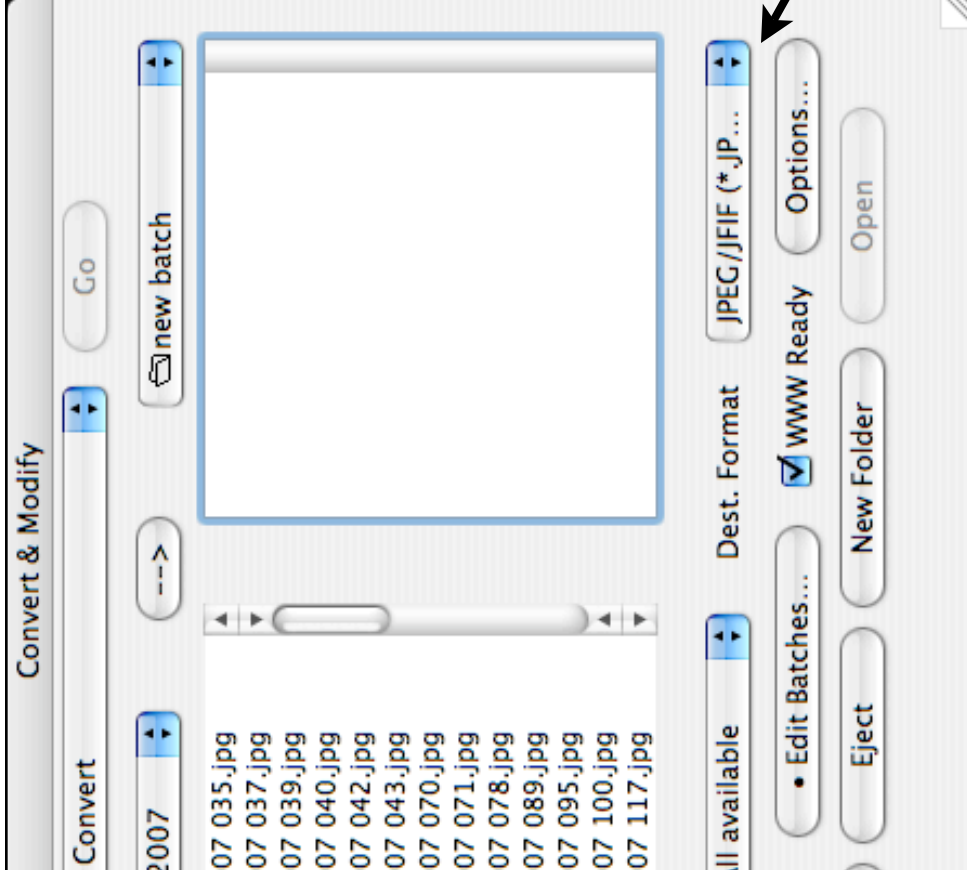


- Add 25 pixels of white to the bottom
- Insert creation date/time bottom left
- Insert file name bottom right

# Batch Operation in GIMP

s to be modified

How they are modified



- Scale to 640 wide
- Auto level and sharpen
- Add white strip at bottom
- Insert Data/Time left & file name
- Save for web as JPEG with quality

**On to the Demos**