epiCentre

Photoshop
Halftone for Print

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All print processes are binary; which means there is either ink or no ink, you cannot have more or less ink to create tonal variation. In order to create images with tonal variation printers use a technique called halftone printing. A halftone splits an image into a grid of dots; by varying the size of each dot the optical illusion of tonal variation is created. The following handout describes how to give a monotone digital image a halftone screen for screenprinting or lithography.
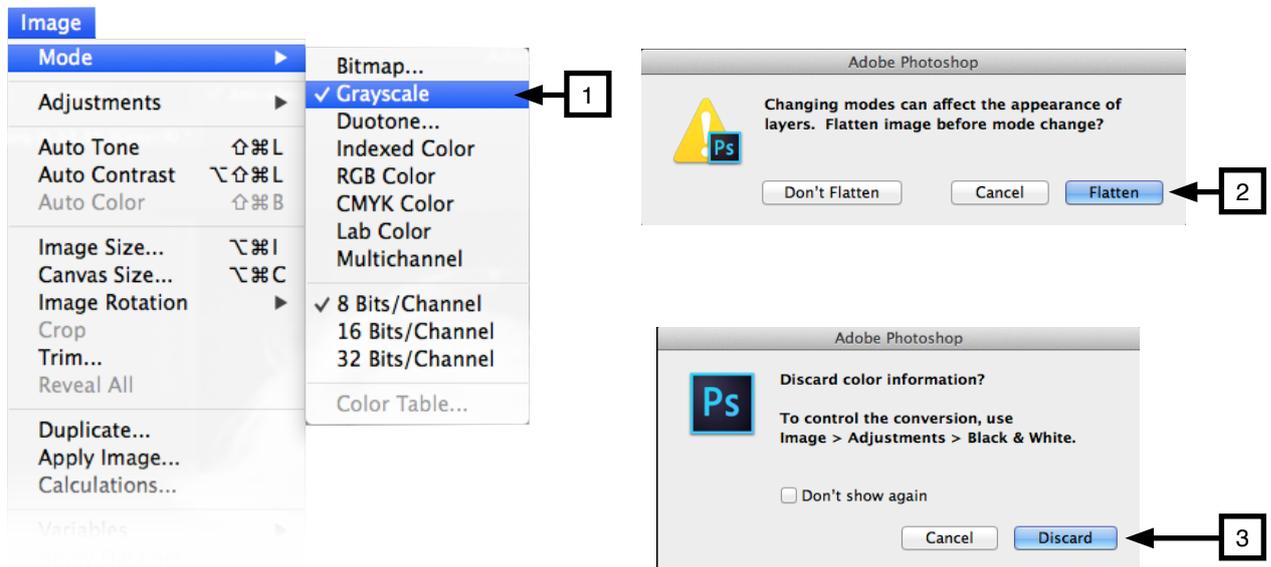
Stage 1 Open your file in Photoshop

1. Click on the Ps icon in the dock to launch Photoshop
2. File > Open...
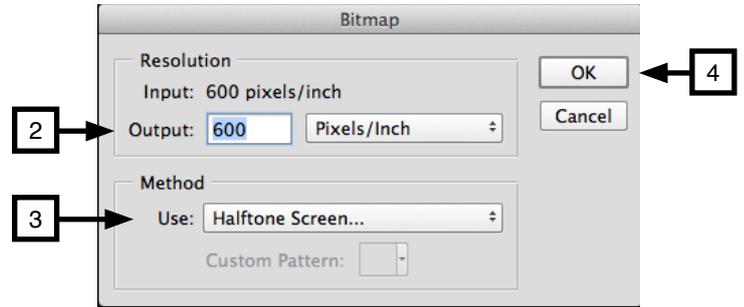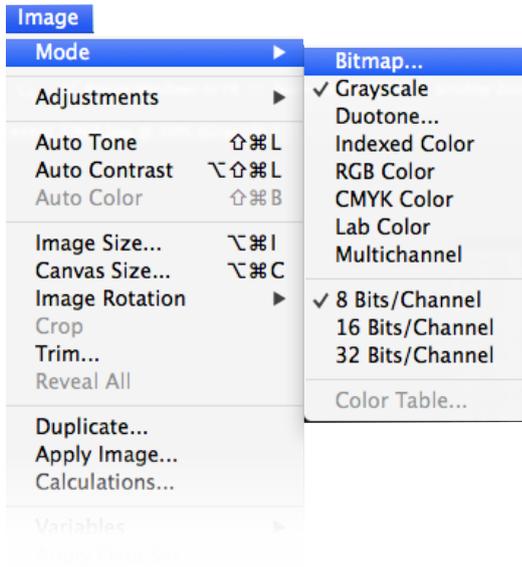3. Navigate to your file and click Open
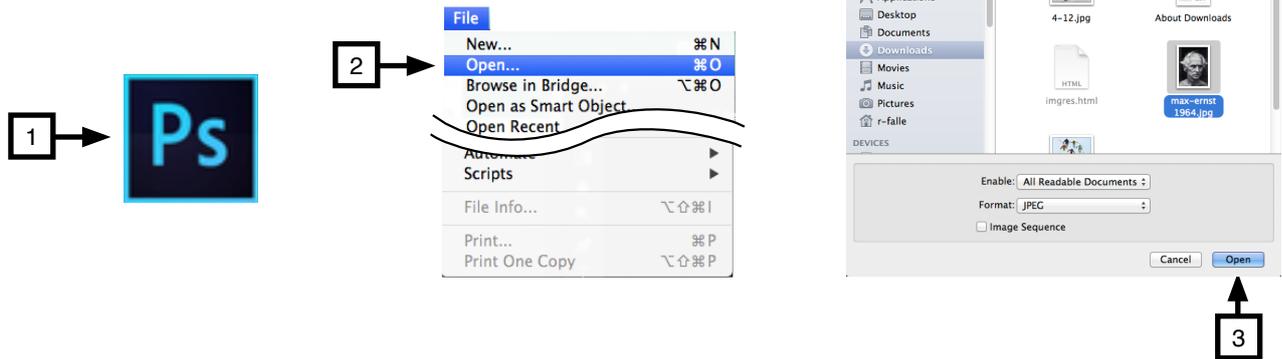
Stage 1 Convert your image to Grayscale

1. Image > Mode > Grayscale
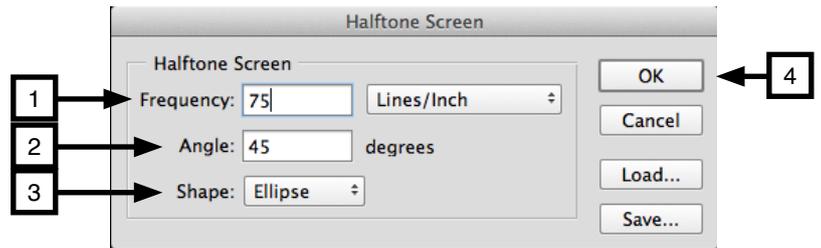2. Click Flatten (if asked)
3. Click Discard

1. Image > Mode > Bitmap
2. Set output to 600 Pixels/Inch
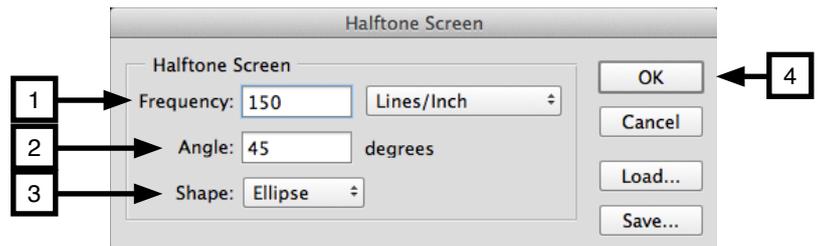3. Method Use: Halftone Screen...
4. Click OK

For Screenprinting...

1. Set Frequency: 75 Lines/Inch
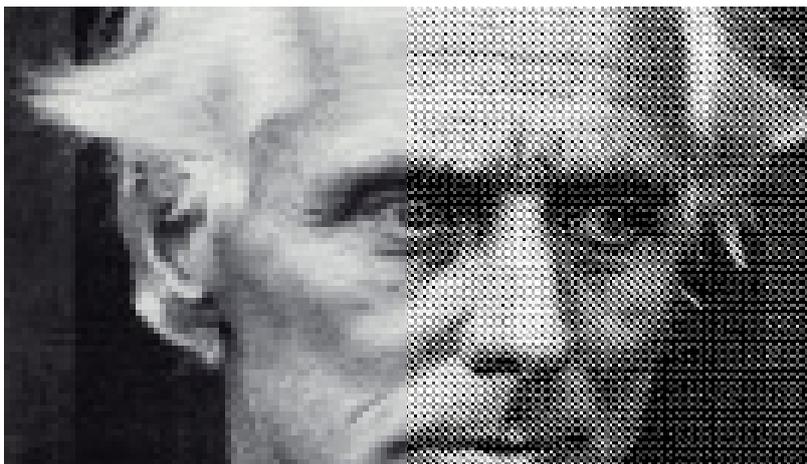2. Angle: 45 degrees
3. Shape: Ellipse
4. Click OK

For Lithography...

1. Set Frequency: 150 Lines/Inch
2. Angle: 45 degrees
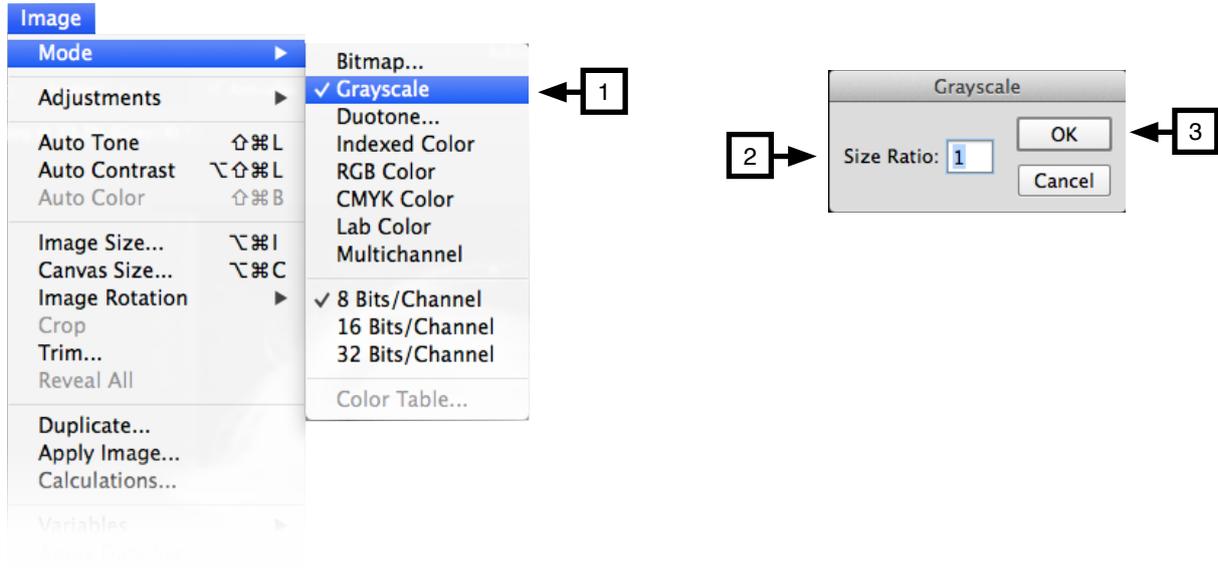3. Shape: Ellipse
4. Click OK

Without Halftone

With Halftone
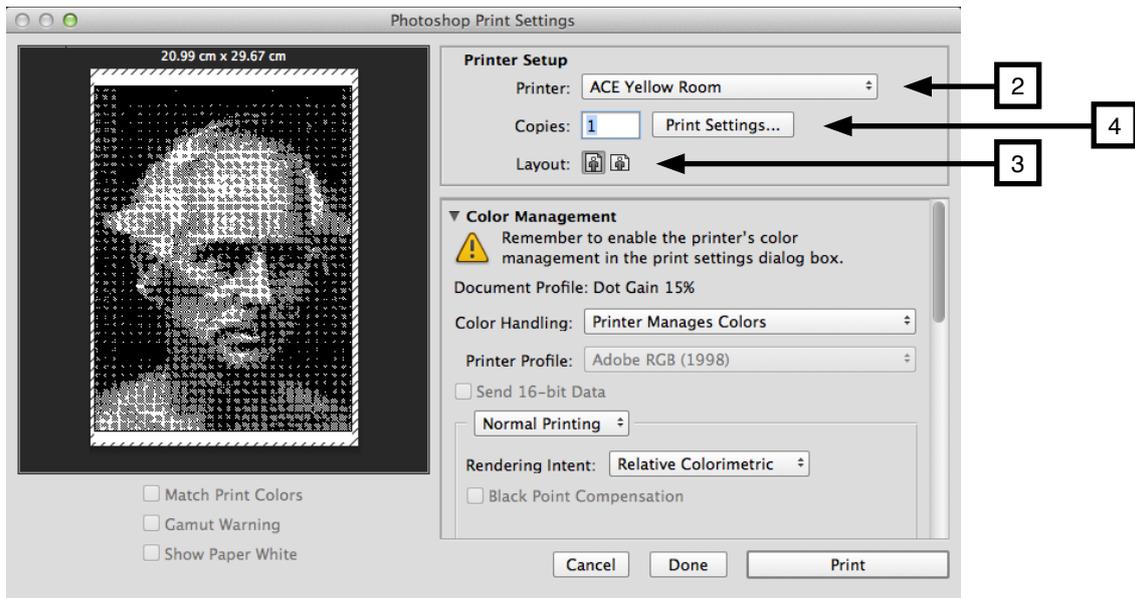(25lpi to show dots structure)

1. Image > Mode > Grayscale
2. Size Ratio 1
3. Click OK

You don't have to change your file back to Grayscale, but it will make it more compatible with other programs and printer drivers.

Stage 4 : Printing your image

1. File > Print
2. Choose a printer
3. Choose the Orientation
4. Click Print Settings...

5. Click on the Show Details button (you may not need to do this)
6. Set your paper size
7. Click on the Layout menu option and from the options choose Colour/Quality
8. Set printer resolution to 600
9. Set Econocode to Highest Quality
10. Click Save
11. Click Print