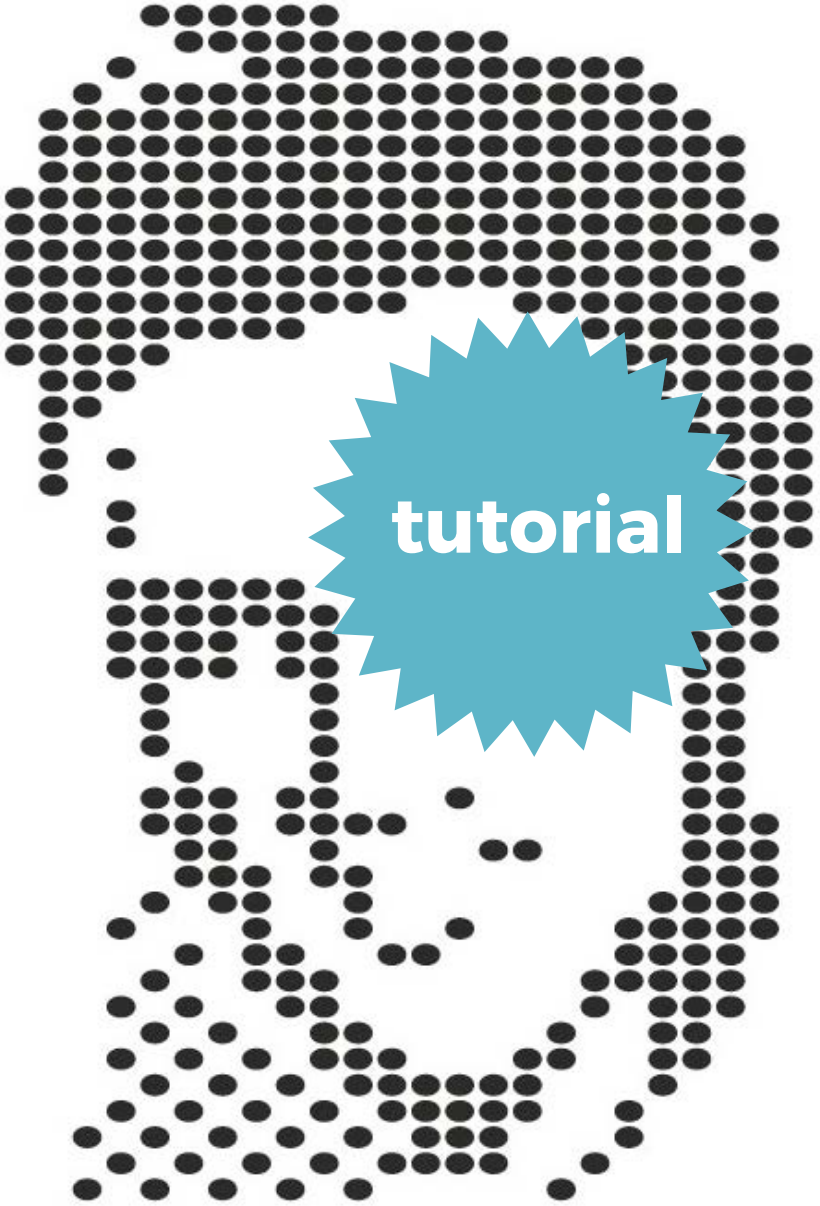
How to edit a picture with Gimp for Oknitme software

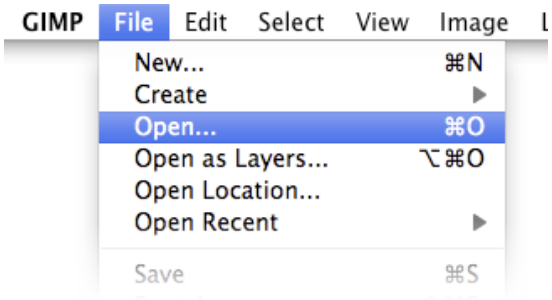


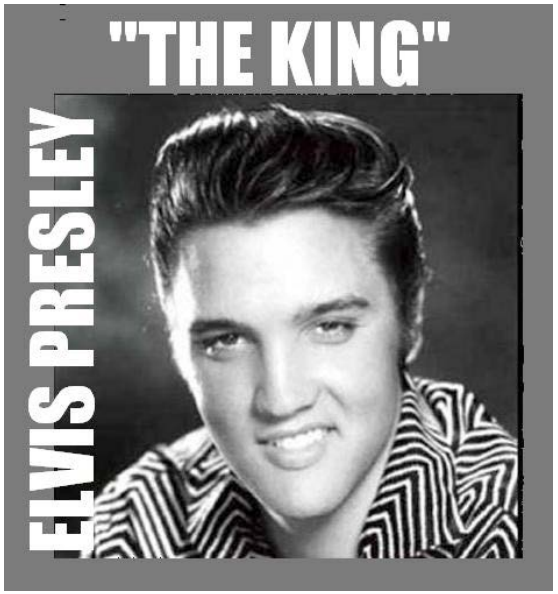
ENG
LISH

2 Foto editing Gimp

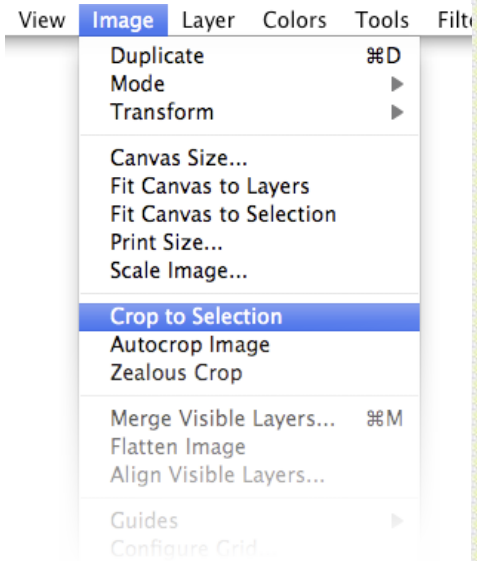
Open and crop

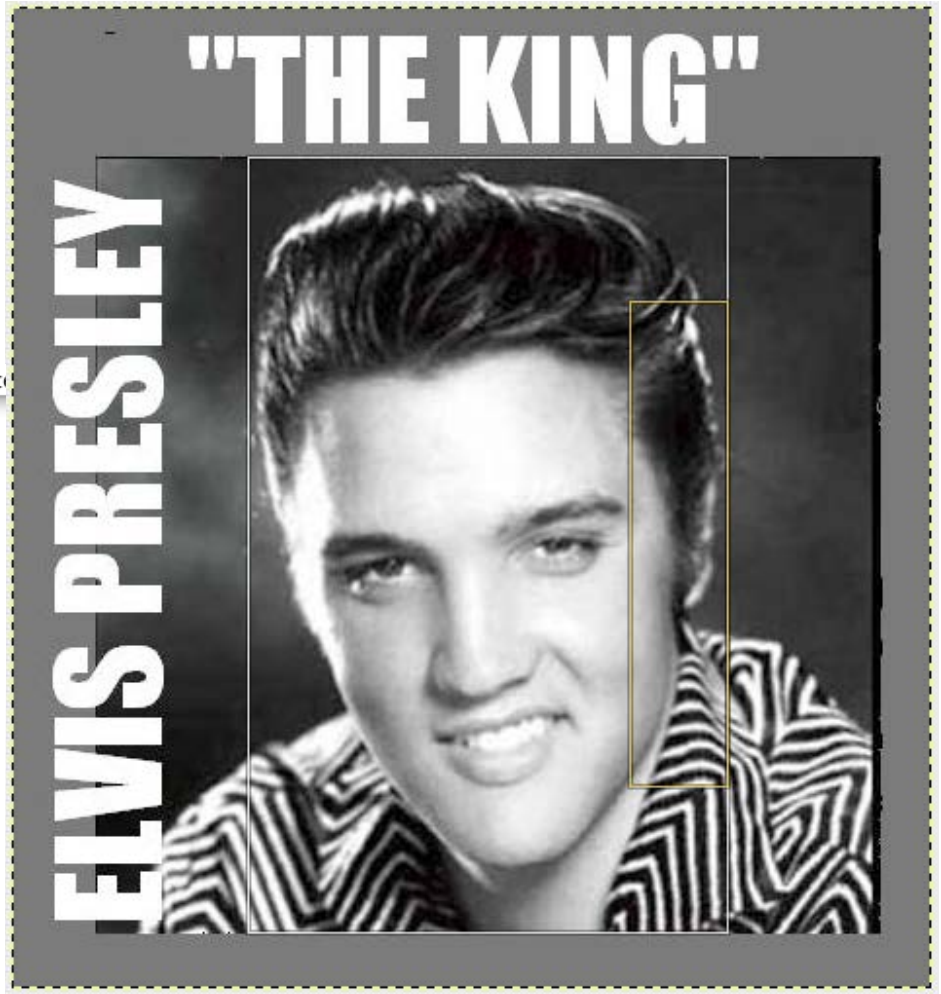
Open your image from the
File menu > Open



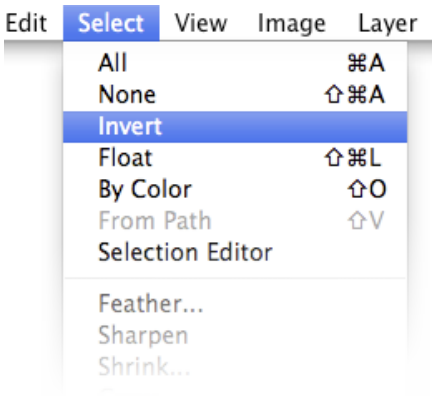


Crop the image excluding what you don't need with
Rectangular selection tool and the command in the
Image menu > Crop to selection





3 Photo editing Gimp

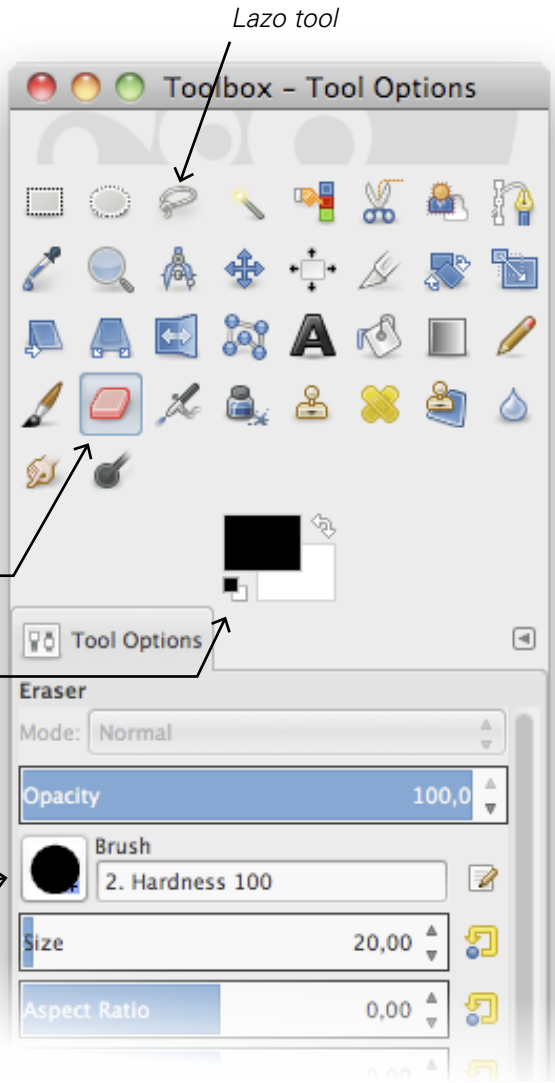


How can you select and clip at the best? Follow this tutorial on Youtube
click here

Clipping

Use *Eraser* tool to delete directly what you don't need, without select.
Or select the image quickly with the *Lazo* tool…

… then use the command *Selection menu > Inverse* to switch the selection from foreground to background and fill the selected area with white color from the *Edit menu > Fill with BG Color (background color)*

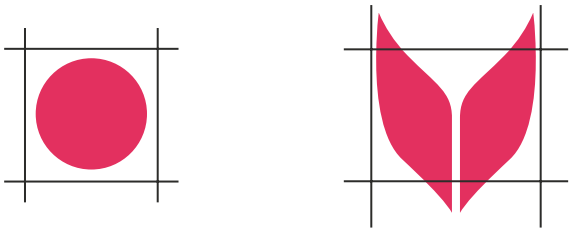


Eraser

Be sure to have *Black* in foreground and *White* in background, otherwise click the angle arrows to switch

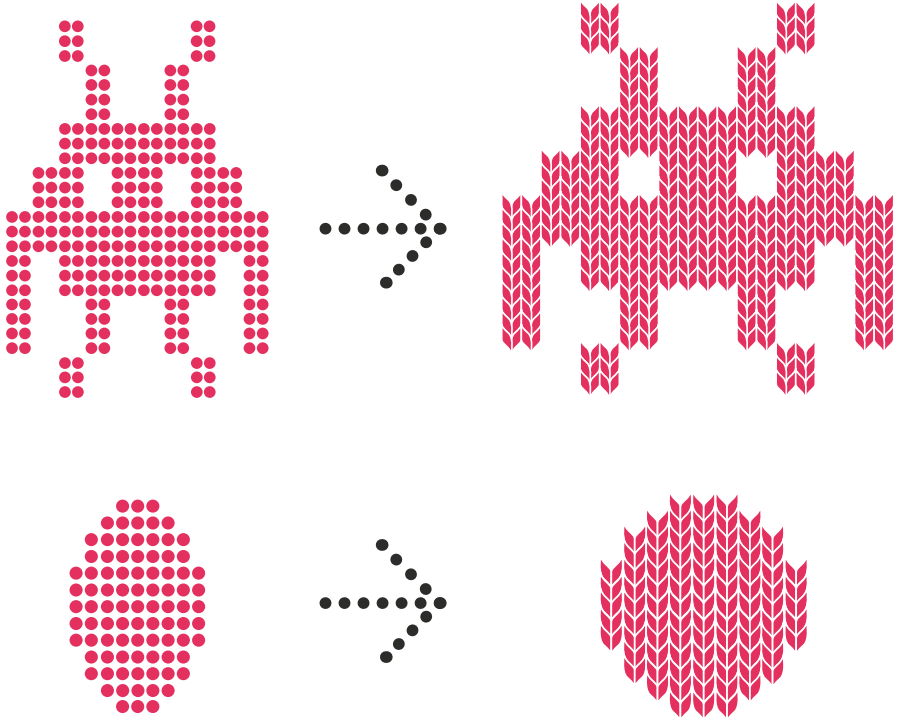
Choose the correct size of your brush and hard edges

Grids



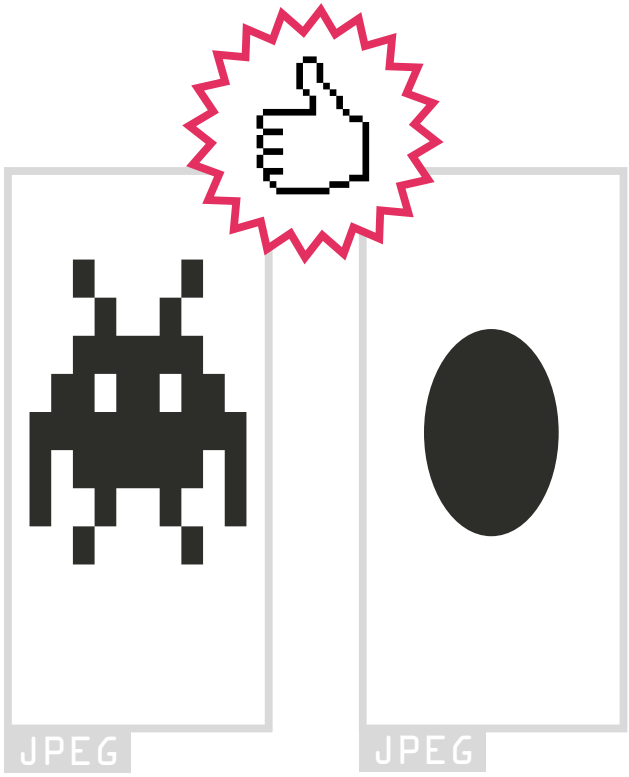
If you take a look at the shapes: the grid of the punchcard has a squared shape but the knitted fabric knit is rectangular.

In order to obtain a proportional illustration on the knitted fabric, we'll have to shrink the width of the drawing before feeding it to Oknitme software.



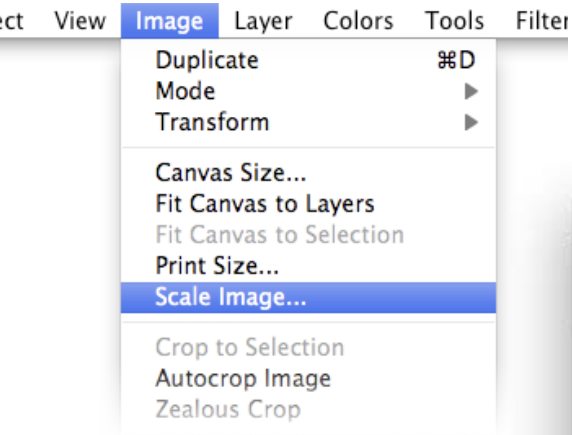
The correct image should be horizontally reduced by 75-85% circa (depending on the thickness of yarn and tension of machine).

Once you knit the jaquard image using the punchacard, the illustration will reach correct proportions.



5 Photo editing Gimp

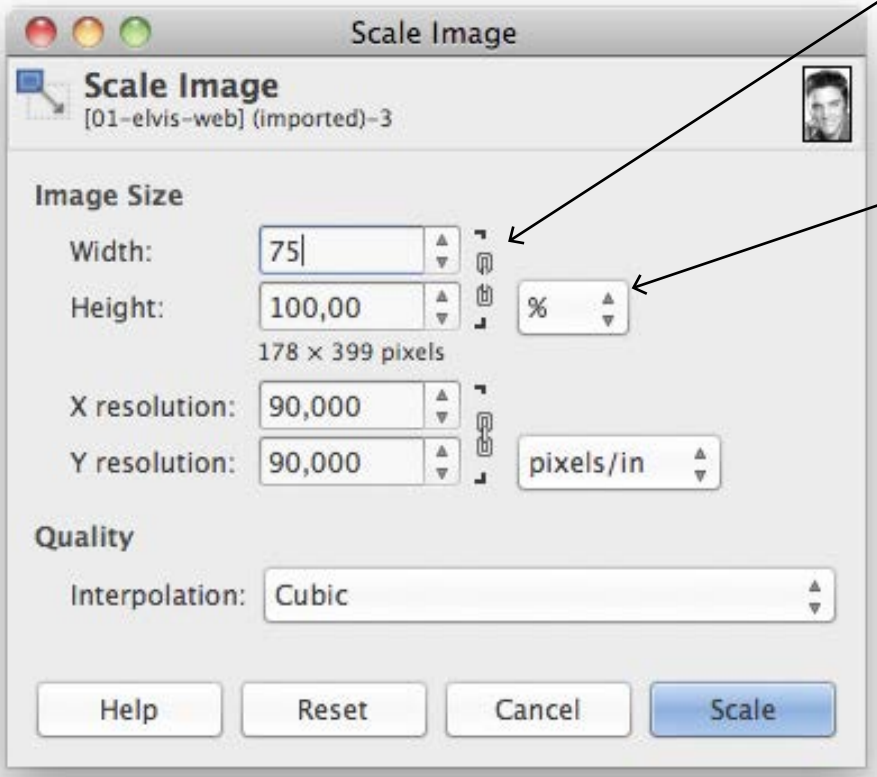
Shrink imge by changing proportion

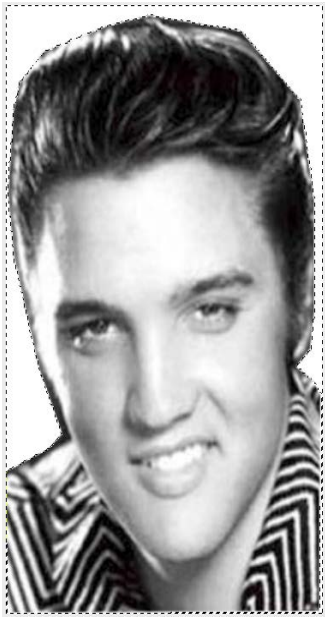


Change size and proportions by chosing from *Image menu > Scale image…*

Click on the chain to release the proportions between Width and Height

Choose the percent mode here and input in the Width field about 75-85% (Height stays at 100%)





6 Photo editing Gimp

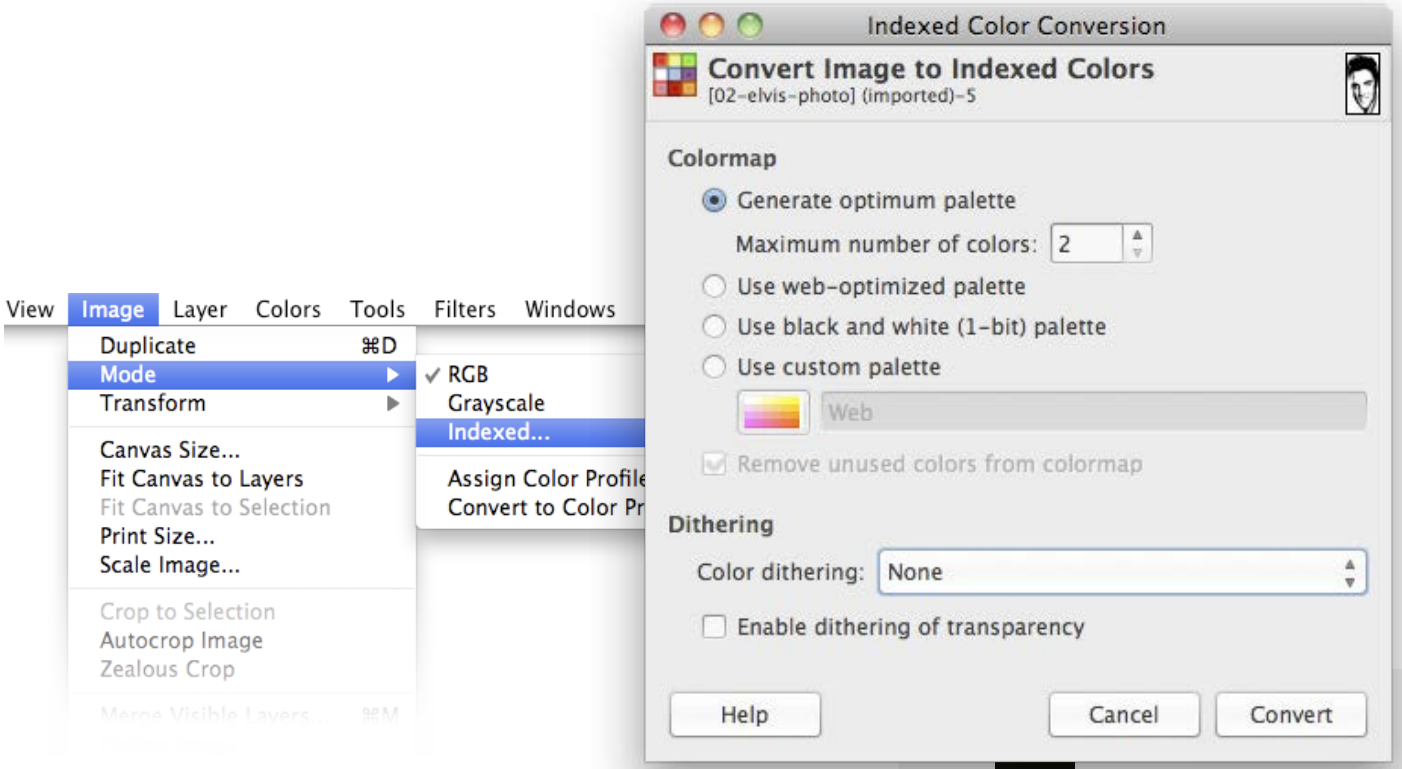
Contrast

Contrast the picture using the *Colors menu > Brightness and Contrast*

Edit the values of lights and shades moving the bars, until you reach an image with low levels of grey

7 Photo editing Gimp

Convert to Indexed



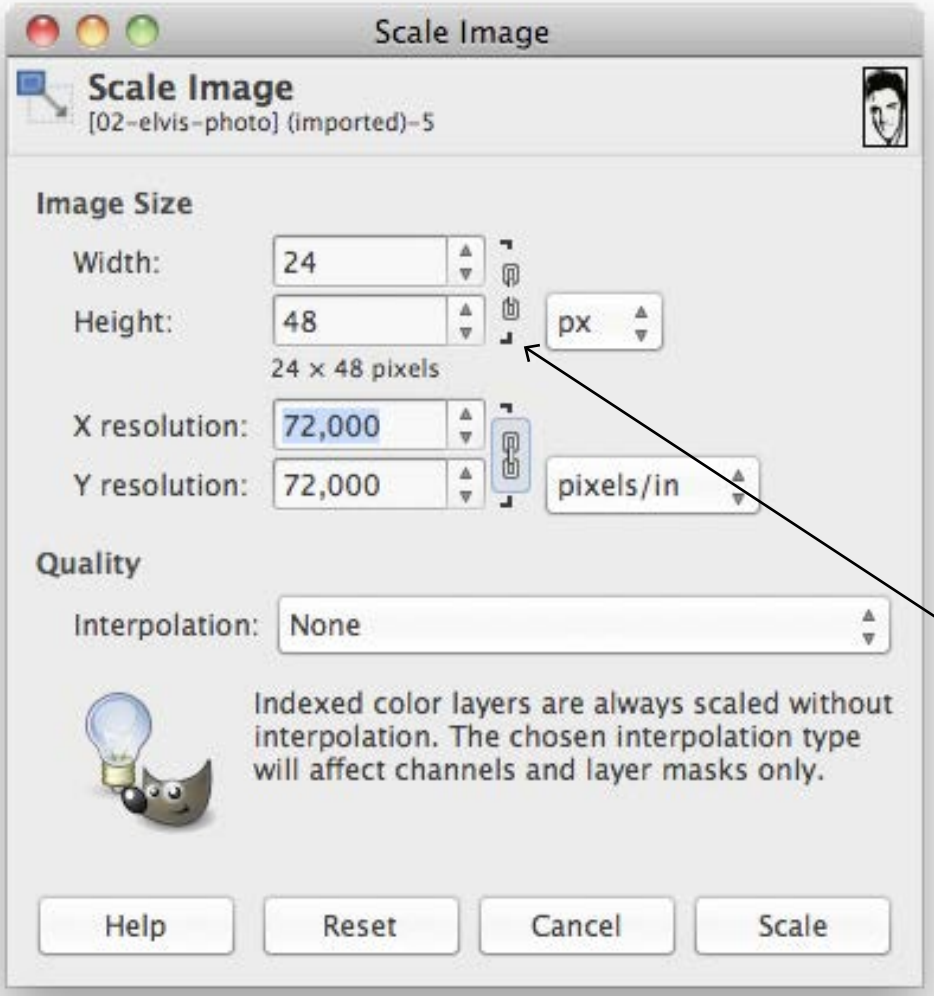
Change image mode by choosing *Image menu > Mode > Indexed…*

…and input 2 colours (black and white) in the *Optimum palette* or choose *Use black and white (1-bit) palette*

With this command Grey scale or other RGB shade pixels will disappear

8 Photo editing Gimp

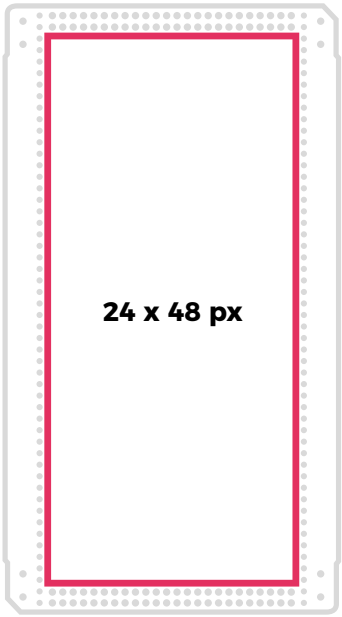
Scale image

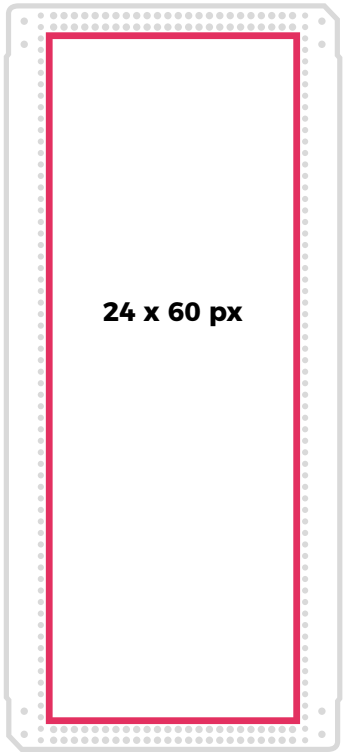


In the *Image menu > Scale image*

resize image to fit the size of the punch card: input 24 pixel (stitches) for width, and 48 or 60 px (rows) for height

Click on the chain to release the proportions between width and heigh

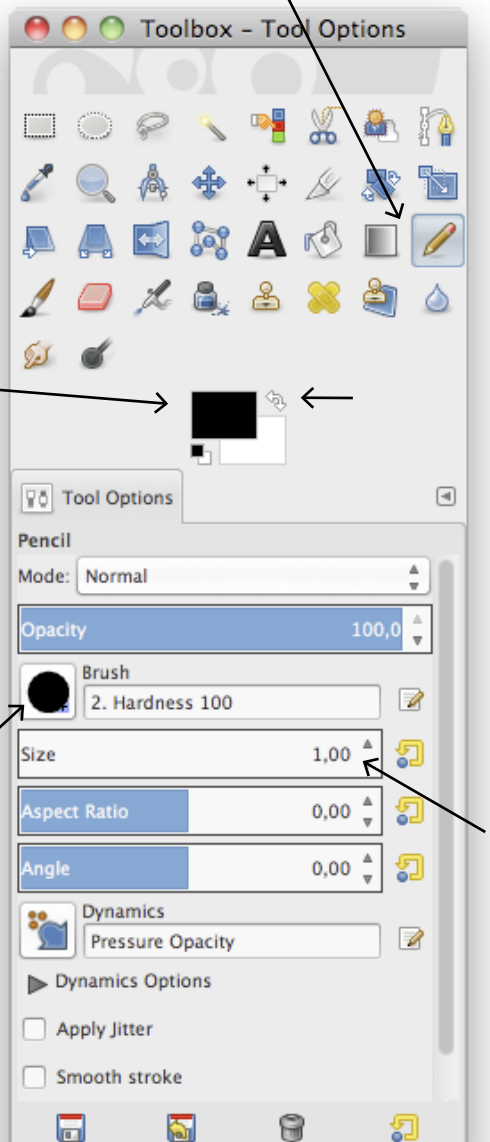




9 Photo editing Gimp

Pencil tool

Edit your image pixel-by-pixel with *Pencil tool*

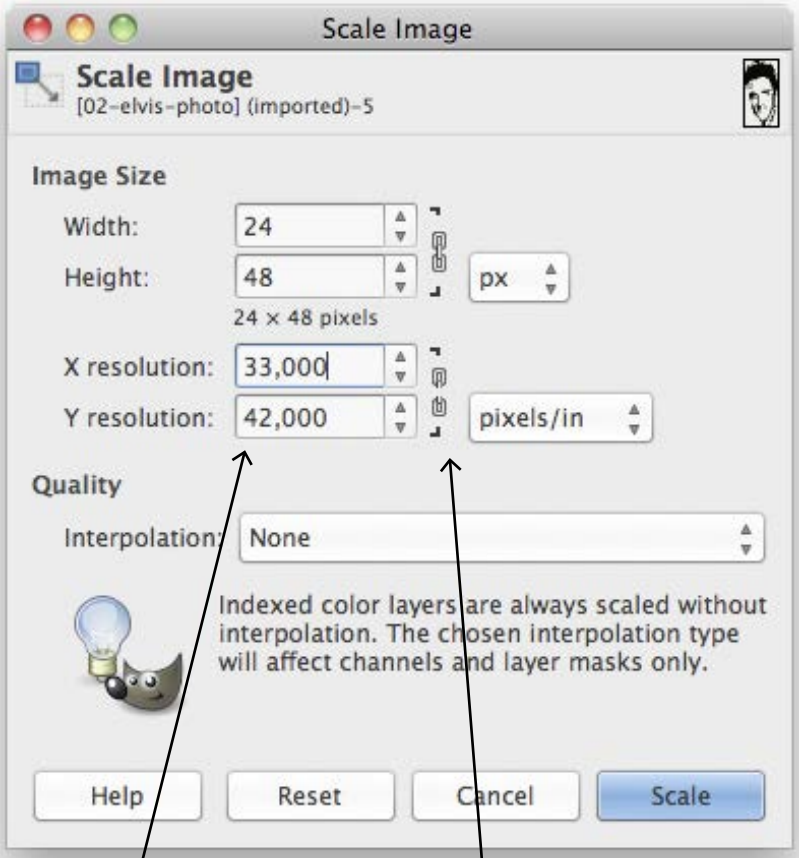


pencil tool uses the foreground colour, so switch colors by clicking on the angle arrows

choose the brush with crisp edges

enter 1 (px)

10 Photo editing
Gimp



In *Resolution* fields write the values of your knitting gauge sample: for eg here I entered 33(X) and 42(Y) because I have 33 sts for 42 rs, in 10 cm (4 in)

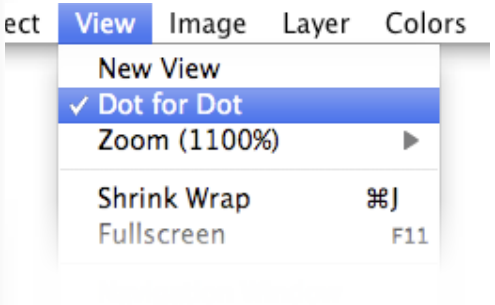
Click on the chain to release the proportions between width and heigh

Rectangular pixels

If you want verify your project, you can change pixels from squared shape to rectangular.
This step is just a mode to visualize your image, that you can activate or de-activate with the command *Dot for dot* in the *View menu*. Actually Gimp will export an image with squared pixels, correct to be processed with Oknitme software:

in the *Image menu > Scale image (Resolution fields),* write the width and the heigh of your knitted swatch (or the proportion between width and heigh)

then in the *View menu,* uncheck the command *Dot for dot:* now pixels have a rectangular shape

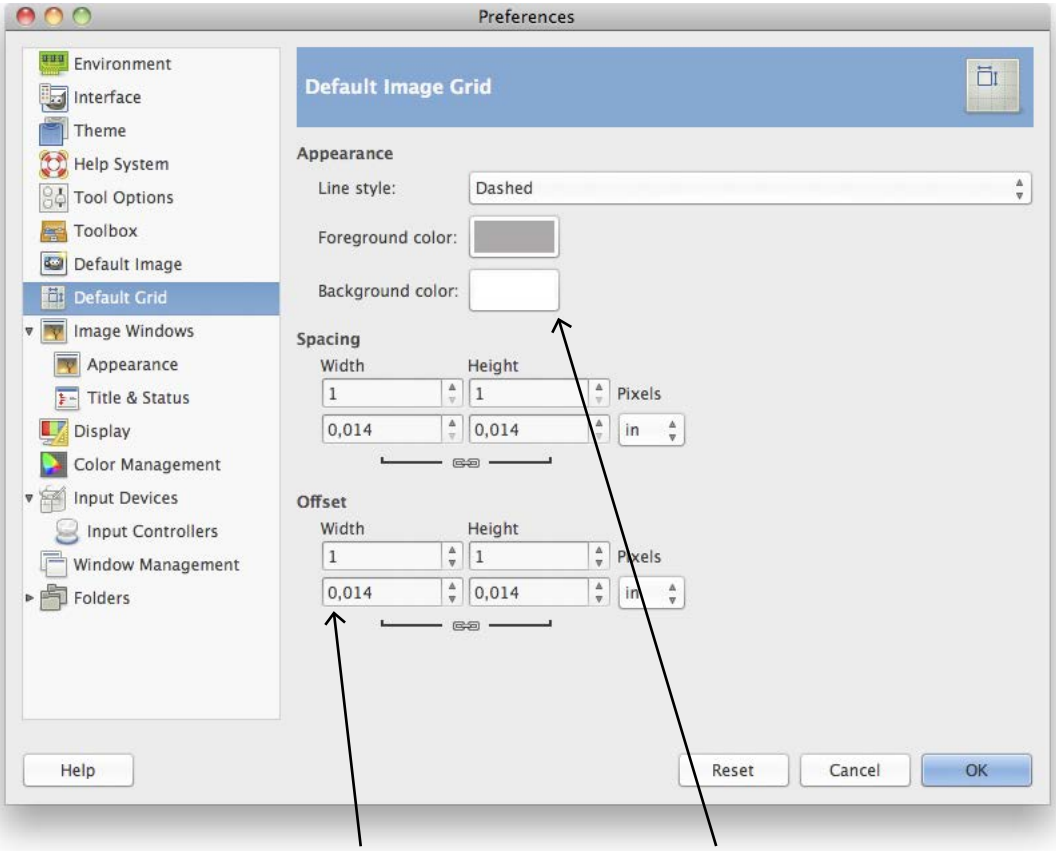


11 Photo editing Gimp

View grid

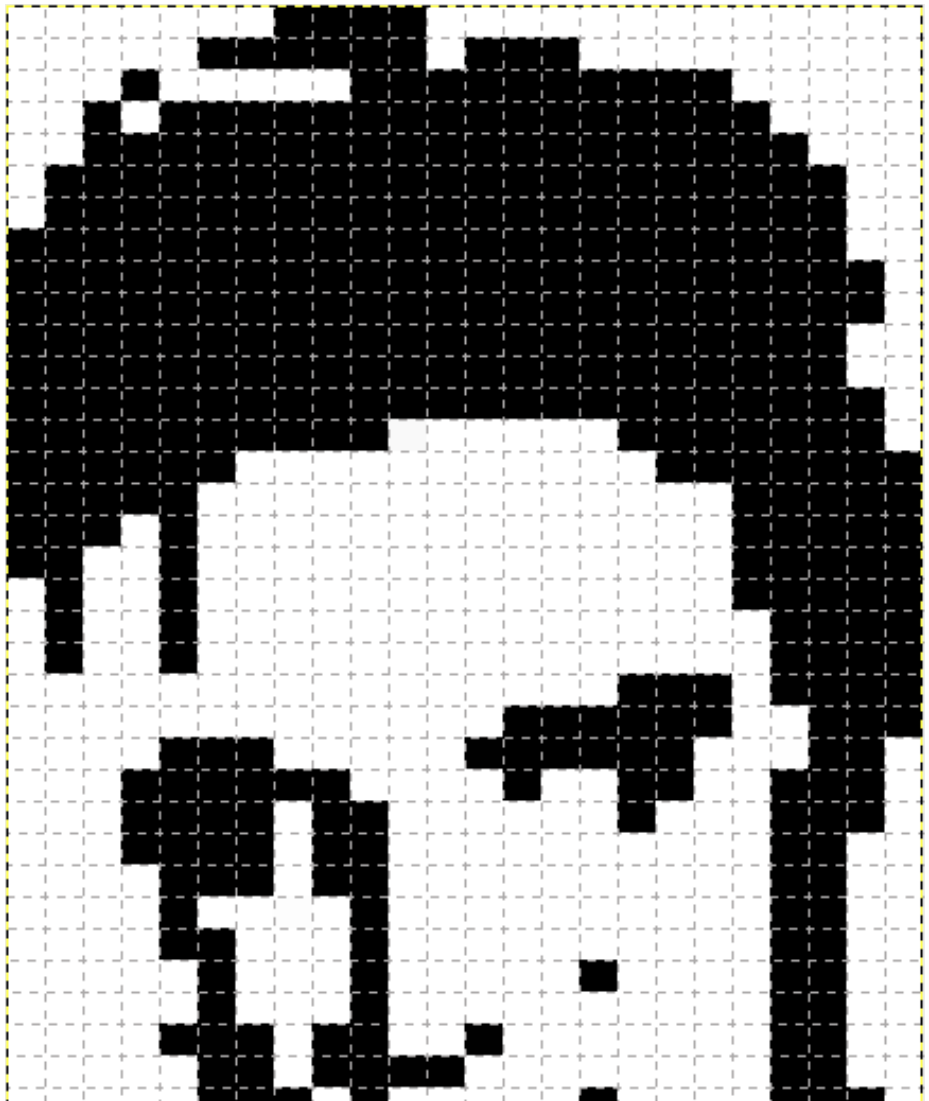
You can better count pixels displaying the *Grid* in the *View menu*. You can also change the Grid viewing mode from *Gimp menu > Preferences*. In the left column click on *Default grid* and change the values as we suggest

In some versions of Gimp, you need restart the software to view the changes of the Preferences panel



enter 1 px in Spacing and Offset fields

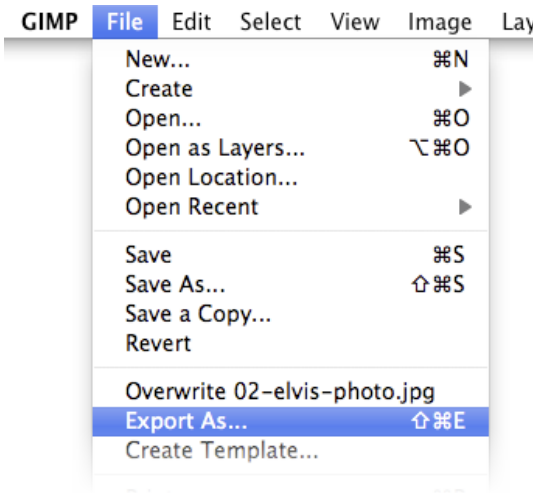
click in these two fields to change color of dash lines as we suggest (grey and white)

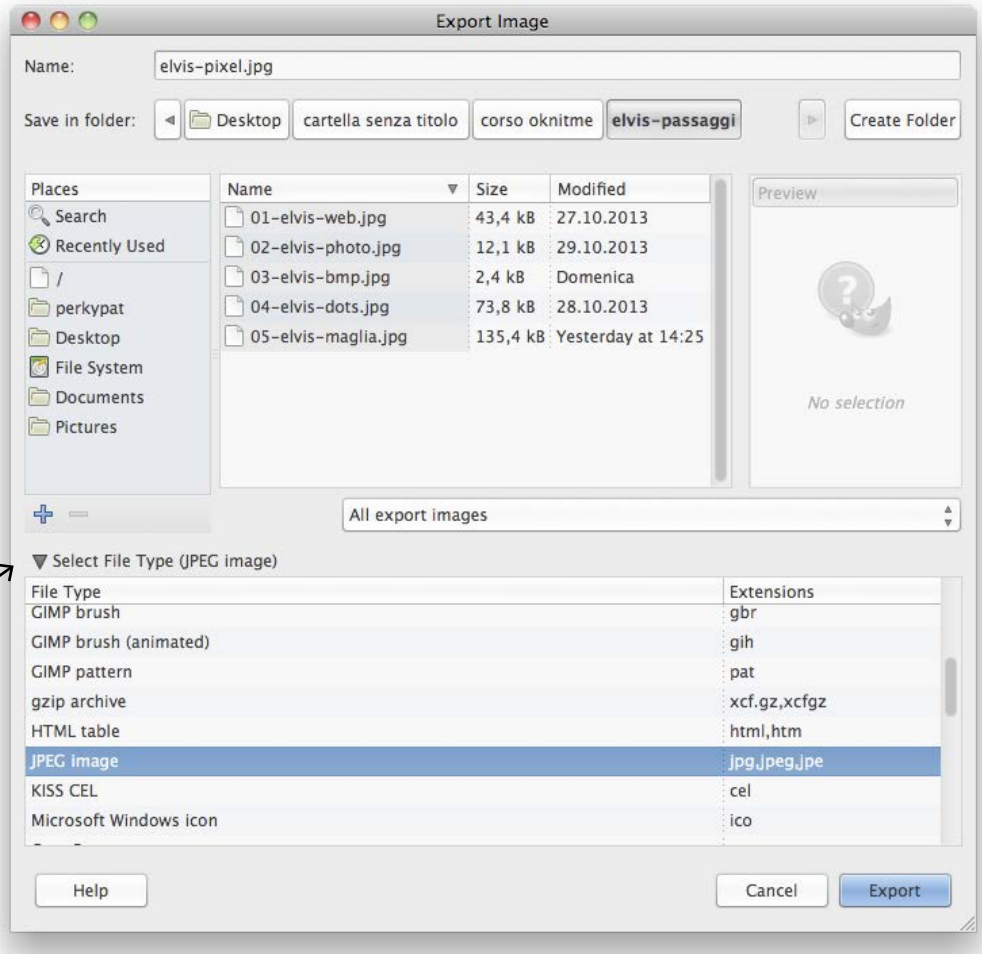


12 Photo editing Gimp

Export as

When you are happy of the results, you're ready to save the image in *File menu > Export as…*
and choose JPEG o PNG format



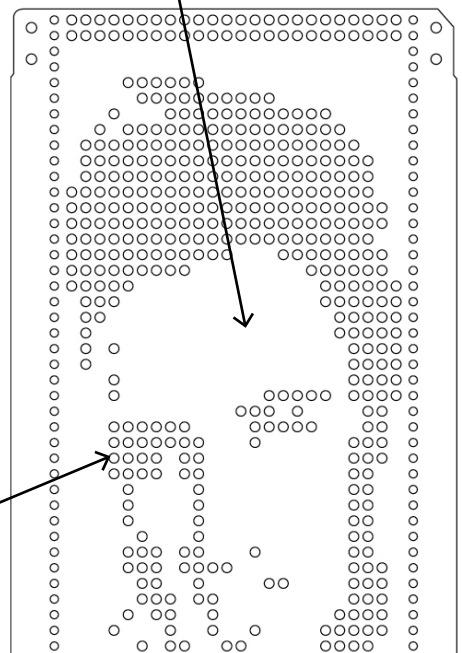


Open the menu and choose the destination format, JPEG or PNG

Remember that white pixels correspond to full spaces in punch card, so white will be the main/ background color in the knitted fabric. Black pixels (holes in punch card) will be the second/contrast color in the knitted fabric.

If you prefer, you can switch main-to-contrast color before Export and quickly obtain a negative image with the command: *Colors menu > Invert*

main yarn/white pixels

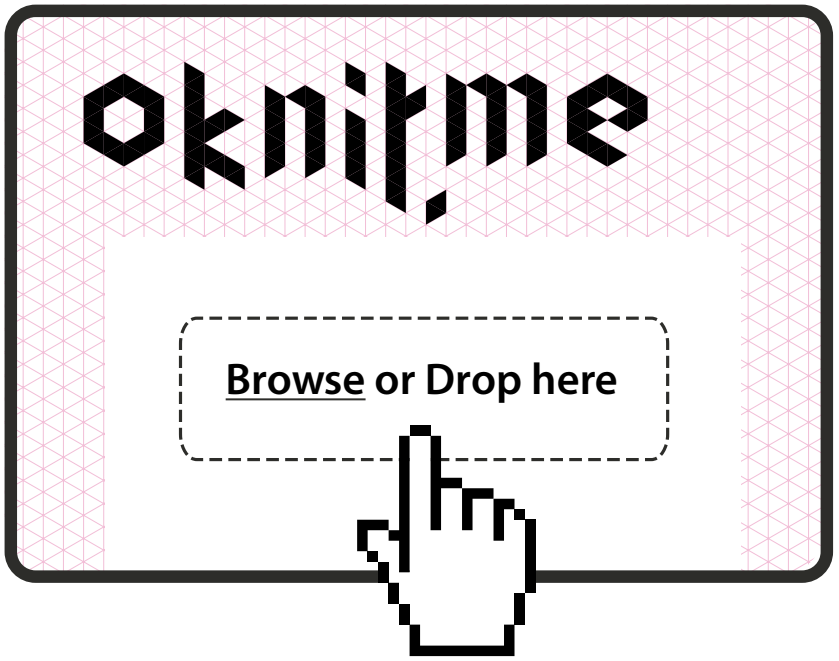


contrast yarn/ black pixels

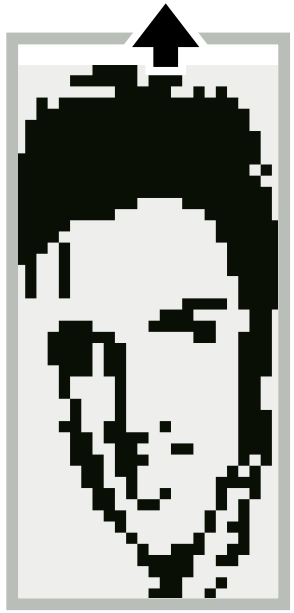
13 Oknitme

Upload image

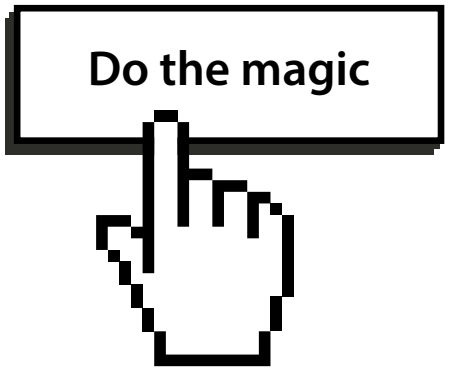
http://oknit.me

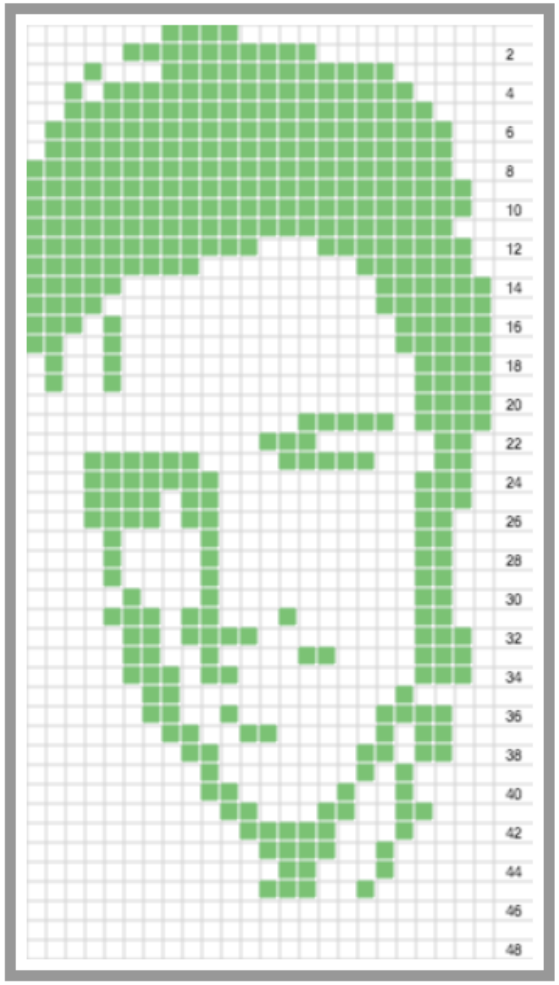


Upload your image from Oknitme home-page using *Browse here* (or drag and drop on the dotted box)

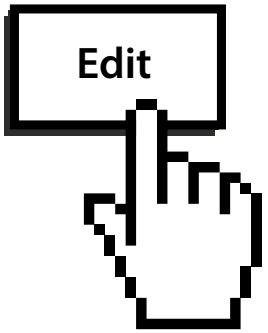


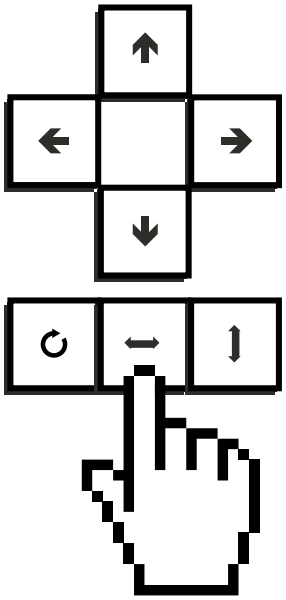
Push the *Do the magic* button to see the transformation.
The image becomes a squared grid





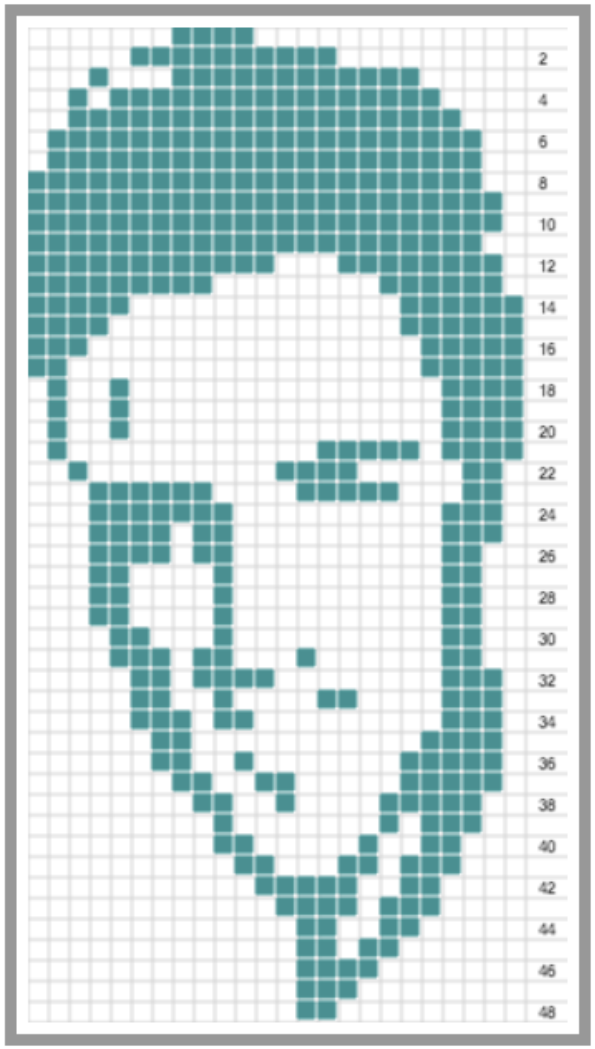
Edit

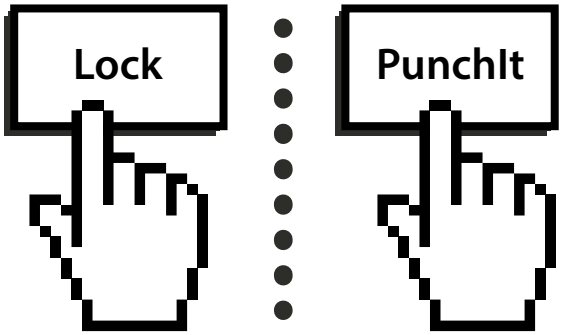




If you want to make some changes, you can edit the grid pressing on *Edit:*

you can add or delete dots or move, rotate e reflect the whole image

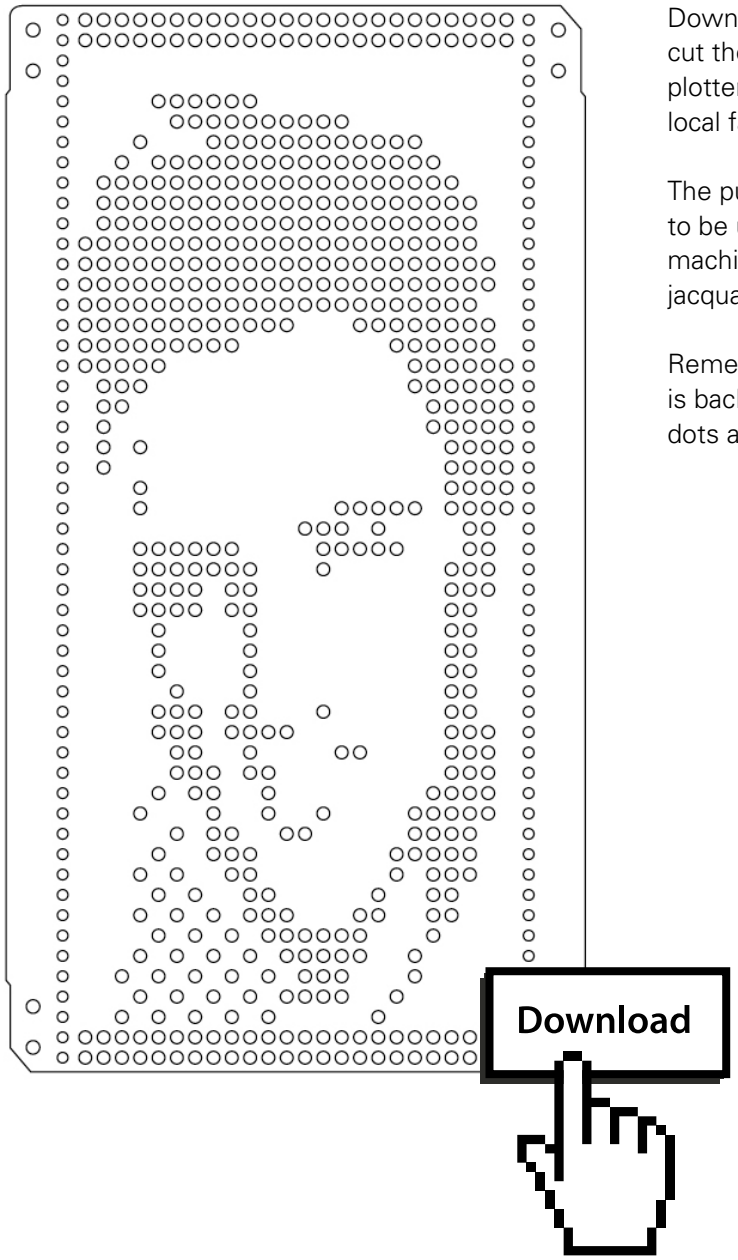




When you are happy with it, save it with the *Lock button* and click on *Punch-it* to create the digital punchcard

15 Oknitme

Download, cut, knit



Download the SVG and cut the punchcard using a plotter or lasercut in your local fablab

The punchcard is ready to be used on the knitting machine to create a jacquard piece

Remember that the plain is background color and dots are contrast color

a workshop by Claudia Scarpa
perkypics.tumblr.com
ratatatata-milano.tumblr.com

at WeMake
via Stefanardo da Vimercate 27/5
20128 Milano
www.wemake.cc