MULTI-REPLICATE

JANUARY 16, 2010 - 15:38 — GINO D

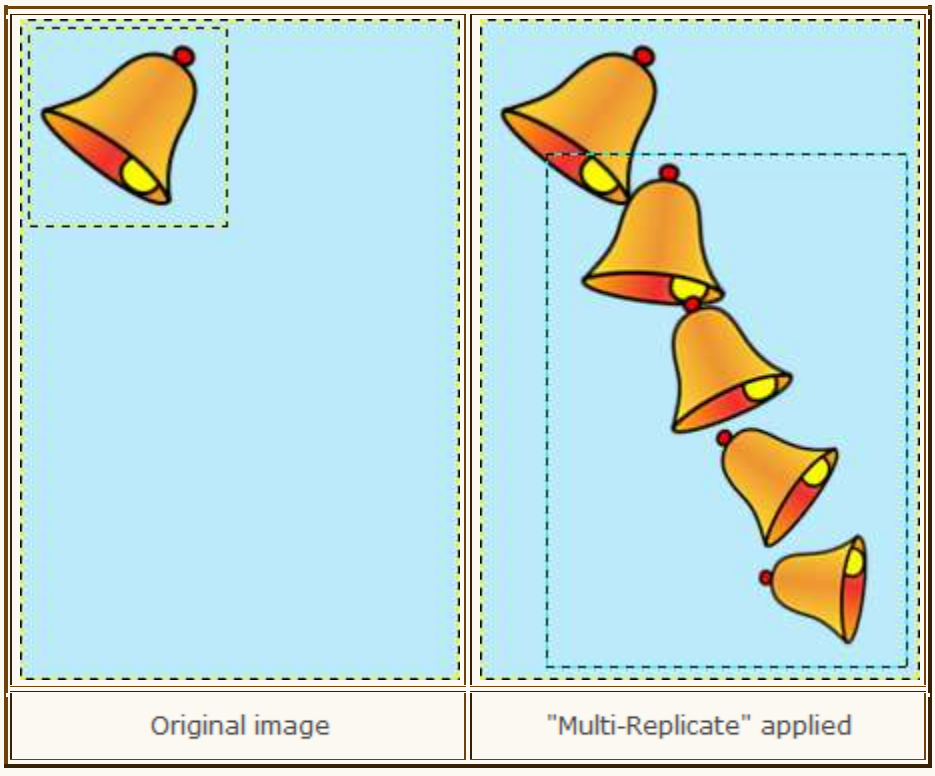
Attachment	Size
multi-replicate.zip	5.24 KB

GINO D'S GIMP SCRIPTS:

https://sites.google.com/site/ginodonig/gimp-scripts

OVERVIEW

This script is a powerful tool designed to duplicate layers and channels in advanced mode.

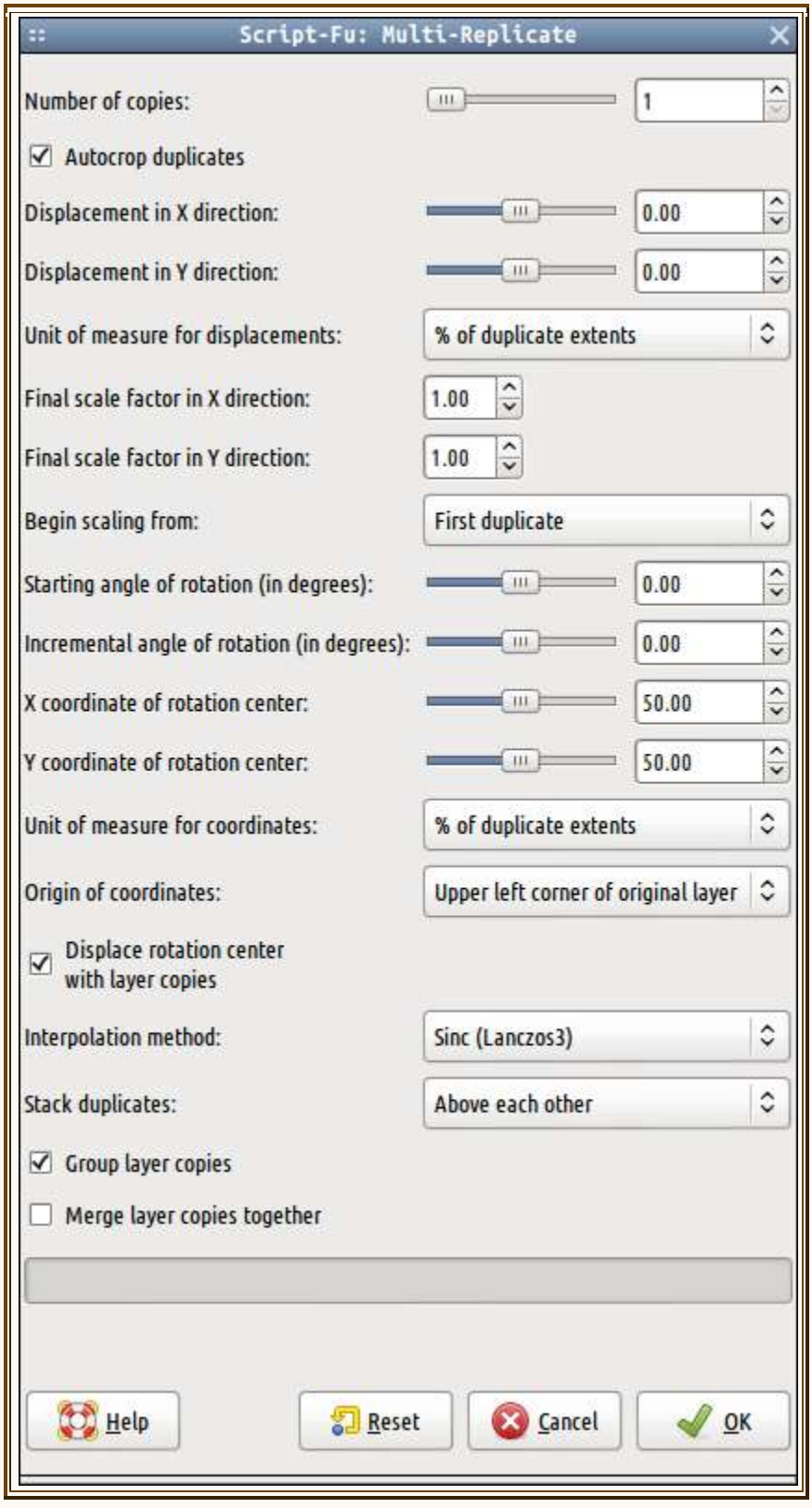


It basically generates multiple copies of the active drawable into the current image, giving the possibility of spacing them along the horizontal and vertical directions.

Furthermore, if the original drawable is a layer, the copies can be consecutively scaled and rotated, as well as conveniently combined inside the image, by putting them in a new layer group or merging them together. When enabling all of the transformations provided by the script, they will be applied to each duplicate in the following order: autocropping, displacement, scaling, rotation. Lastly, when this script is called from within another script, it outputs a vector whose elements are the identifiers of the generated duplicates.

Once installed, you can launch this script from the image menubar through "**Edit -> Multi-Replicate...**".
It is also possible to access the script through the Layer local pop-menu or the Channel context menu, by right-clicking on the thumbnail of the specified layer or channel inside the relevant dialog.

OPTIONS


Script-Fu: Multi-Replicate
Number of copies:
1
Autocrop duplicates
Displacement in X direction:
0.00
Displacement in Y direction:
0.00
Unit of measure for displacements:
% of duplicate extents
Final scale factor in X direction:
1.00
Final scale factor in Y direction:
1.00
Begin scaling from:
First duplicate
Starting angle of rotation (in degrees):
0.00
Incremental angle of rotation (in degrees):
0.00
X coordinate of rotation center:
50.00
Y coordinate of rotation center:
50.00
Unit of measure for coordinates:
% of duplicate extents
Origin of coordinates:
Upper left corner of original layer
Displace rotation center with layer copies
Interpolation method:
Sinc (Lanczos3)
Stack duplicates:
Above each other
Group layer copies
Merge layer copies together
Help
Reset
Cancel
OK

Number of copies

Defines the number of duplicates to generate.

Values can range from 1 to 64.

Autocrop duplicates

Checking this box will cause the layer copies to be automatically cropped before any transformation, by removing the borders that are fully transparent

Displacement in X direction / Displacement in Y direction

Sets the amount by which each duplicate will be horizontally/vertically shifted relative to the previous one before any scaling and rotation. This option also affects the first duplicate, that will be shifted by the same length relative to the original drawable.

Values can range from -4096 to 4096.

Unit of measure for displacements

% OF DUPLICATE EXTENTS: the horizontal/vertical displacement is expressed as a percentage of the width/height of the current duplicate, by referring to its autocropped version if the “Autocrop duplicates” checkbox is enabled.

% OF SCALED DUPLICATE EXTENTS: the horizontal/vertical displacement is expressed as a percentage of the width/height that the current (and possibly autocropped) duplicate will take after being scaled and before being rotated.

% OF IMAGE EXTENTS: the horizontal/vertical displacement is expressed as a percentage of the width/height of the current image.

Pixel: the displacements are expressed in pixels.

Final scale factor in X direction / Final scale factor in Y direction

Determines the scale factor by which to enlarge or reduce (before any rotation) the last duplicate with respect to the original layer in horizontal/vertical direction. When the number of copies is greater than two, the width/height of each duplicate will be increased or decreased, relative to the width/height of the preceding layer, by a constant length increment, until reaching the maximum or minimum horizontal/vertical dimension at the last layer copy.

Values vary within a range of 0.25 to 4.

Begin scaling from

Allows you to choose whether to start scaling the layer copies as from the first duplicated (inclusive) or as from the second duplicate (inclusive, if any).

Starting angle of rotation (in degrees)

Specifies the angle through which the first duplicate will be rotated relative to the original layer.

Values can range from -180 to 180, where positive values correspond to clockwise rotations and negative values correspond to counterclockwise rotations.

Incremental angle of rotation (in degrees)

Specifies the fixed angular increment through which each layer copy following the first one will be rotated relative to the previous duplicate.

Values can range from -180 to 180, where positive values correspond to clockwise rotations and negative values correspond to counterclockwise rotations.

X coordinate of rotation center / Y coordinate of rotation center

Specifies the horizontal/vertical coordinate of the center around which the layer copies will rotate, as the horizontal/vertical distance from the origin selected in the "Origin of coordinates" option.

Values vary within a range of -262144 to 262144.

Unit of measure for coordinates

% OF DUPLICATE EXTENTS: the horizontal/vertical coordinate of the rotation center is expressed as a percentage of the width/height of the current duplicate, by referring to its autocropped version if the "Autocrop duplicates" checkbox is enabled.

% OF SCALED DUPLICATE EXTENTS: the horizontal/vertical coordinate of the rotation center is expressed as a percentage of the width/height taken by the current (and possibly autocropped) duplicate after being scaled.

% OF IMAGE EXTENTS: the horizontal/vertical coordinate of the rotation center is expressed as a percentage of the width/height of the current image.

Pixel: the coordinates of the rotation center are expressed in pixels.

Origin of coordinates

Lets you select the origin from which the coordinates of the rotation center of each layer copy are measured.

The available origins are: UPPER LEFT CORNER OF ORIGINAL LAYER, UPPER LEFT CORNER OF IMAGE.

Displace rotation center with layer copies

When this box is checked, the rotation center will be shifted together with the layer copies, meaning that its horizontal and vertical coordinates will be progressively increased from time to time by the values specified, respectively, with the "Displacement in X direction" and "Displacement in Y direction" options.

Interpolation method

Lets you select the method of interpolation to use for transforming the layer copies.

The available methods are: LANCZOS, CUBIC, LINEAR, NONE.

Stack duplicates

Allows you to choose whether to arrange the copies from bottom to top (ABOVE EACH OTHER) or from top to bottom (BELOW EACH OTHER) in either the Layer or Channel Stack, so that each duplicate will appear, respectively, in front of or behind the previous one.

Group layer copies

When this checkbox is activated, the layer copies will be put into a new layer group.

Merge layer copies together

When this checkbox is activated, the layer copies will be eventually merged into a single layer.

Code License: GNU GPL V3

Tags:

- replicate
- transform
- drawable
- duplication

GIMP Version: 2.8

Scripting Engine: Script-Fu