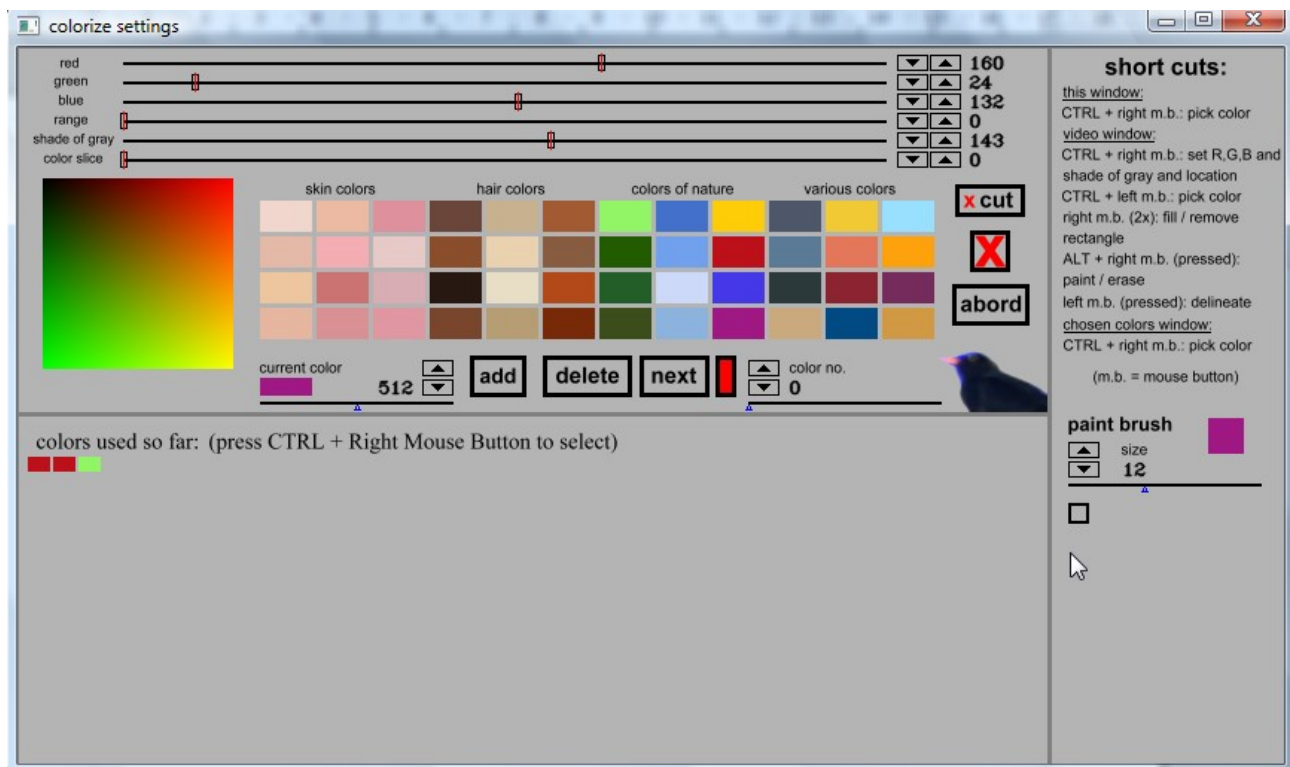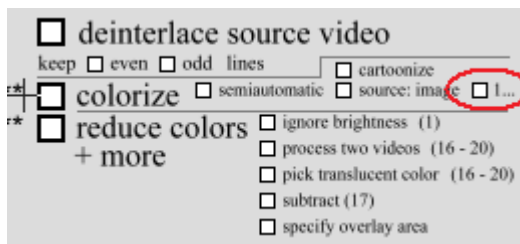# Semi- Automatic Colorizing

Besides automatic colorizing which is described in the **Special Effects** document (spect.pdf) you can also do it semi-automatically which means that you choose colors and respective areas manually for each frame while color-assigned areas are forwarded to every new frame. Since the forwarding is position based (the areas are not tracked) it will of course not always be accurate (except for static scenes) and you will have to select the areas anew. But Centertracker provides a wide range of tools which are explained hereafter to reduce the work quite a bit.

Choosing areas

If you want to select an area of a certain range of shades of gray and assign a color to it you do so by clicking in the desired location of the **video** window via the combination CTRL + right mouse button (m.b. = mouse button) and then adjust the **range** slider. You will notice that the value **shade of gray** in the color settings window has changed. To assign a color to the selected area you have several options: choose a color from a) the **video** window via CTRL + left m.b., b) the **chosen colors** window via CTRL + right m.b., c) from the pre-selected colors, the **color slice**s (apply resp. slider) in the **colorize settings** window or choose them manually by adjusting the **R, G, B** sliders. You can also pick colors from the **colors used so far**.

in the colorize settings window you see a number of buttons. With the **add** button you save the currend color-assigned area. If you want to assign areas manually with the paint brush or the rectangle option you also have to click this button *before*. With the **delete** button you delete already selected areas. To specify the area you use the slider **color no.** to the left of the blackbird. If there are many selected areas you need to know the number of the area you want to delete. You will find it in the **chosen colors** window. If you do not want to let the numbers appear in that window (for example if you intend to cartoonize the video) you have to check the little box **1...** in the starting screen:

When choosing areas it may happen that their borders exceed the desired limits. In this case you can use the cutter tool which will draw an (invisible) line between the adjacent areas so that the transgression beyond that line is prevented. To draw such a cut (delineate) you use the *pressed* left m.b. The result of that cut will appear instantly after you release the mouse button. You have to make sure though that the color does not *find its way through*. Thus the cut has to be sufficiently wide or you have to make several cuts. To undo the cut(s) you press the button **x cut**.

With the **paint brush** you can manually choose color-assigned areas via the combination **ALT + right m.b.**. To be able to use it you first have to choose a color (if you want to paint) and then click the **add** button. If you want to erase an already color-assigned area choosing a color is not necessary but you will only erase the last chosen color. The default setting for the paint brush is 'erase' visualized by the little **red square** on the right below the paint brush slider. Click it to set it to 'paint'. By adjusting the paint brush slider you can vary the size of the paint brush. To undo the last paint / erase event click the **red rectangle button** to the right of the next button.

If you want to paint/ erase a larger area you can also use the **rectangle** function via **two right clicks** (upper left and lower right corners or vice versa). To undo the last rectangle you click the red rectangle button to the right of the next button.

You may find that the brightness of the assigned color is too bright or too dark. In that case you can use the **current color** slider to adjust the brightness of the color. This is also a neat way to transform white people into colored people (see hands example on website).

Finally we have the big **X** button. This will undo <u>all</u> color-assignments.

If you are done with the current frame click the **next** button. If you want to cancel colorizing click the **abord** button and then the next button.

Cartoonize

you can also make a video from the chosen colors window. This will create a cartoonized version of your clip. Here it is useful to uncheck the little box **1...** (see above) to let the numbers disappear (which otherwise will also appear in the cartoonized clip).

<u>Warning:</u> It is recommended to cut your video into chunks and colorize each chunk. Later you reattach the colorized chunks. This is because in case of a computer crash or power failure all work (which can really take a couple of hours) will be lost. If you make small chunks only the current chunk would be lost. Later you can re-attach the chunks with VirtualDub.