

# LIGHT AND VOLUMES

Our aim is to create a volume effect using color gradients, from dark hues to light ones, mimicking one or more light sources.

Volume modeling is a critical step when creating sprites or scenery items, and is undoubtedly one difference between slapdash homebrew games and the rest.

For those who've got a traditional animation background : exaggeration is the key.

For those who don't, one of the principles of animation is that if you faithfully reproduce real movements, the character will appear to be limping (French touch). Conversely, by exaggerating movements in the cycle, the final look will be more adapted to the media. This is the same thing here. We don't have many pixels, so you shouldn't hesitate to enhance light and color contrasts. Personally, at first I was afraid of going too far, and therefore the result looked tame...

In the following example, I'll draw a 36x36 pixels sphere :

First, I create the outline :

Then I choose a color, which will be the one made darker or lighter :

At first, I add a dark area, then a light one :

Which get blended progressively :

To finalize the sphere, the black outline will be redrawn using a similar color to the dominant one.  
Note that this outline is not always needed.



The result now looks 3D-ish. Still, the final sphere would benefit from additional detail.

More complex stuff can be thought of, like in this example using an off-center light, and more careful use of colors.

