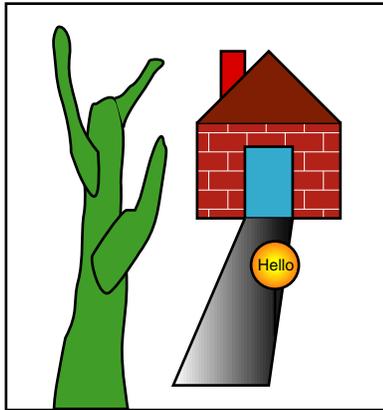
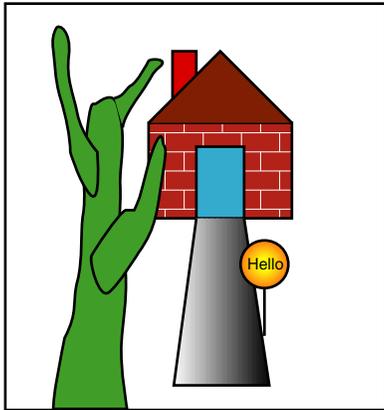


THE STEREO WINDOW

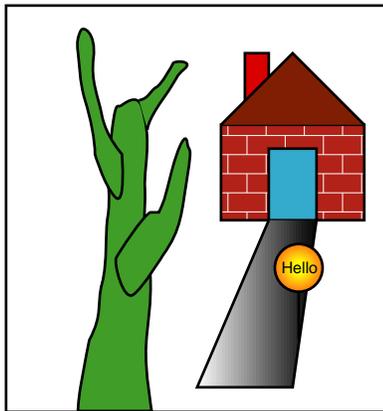
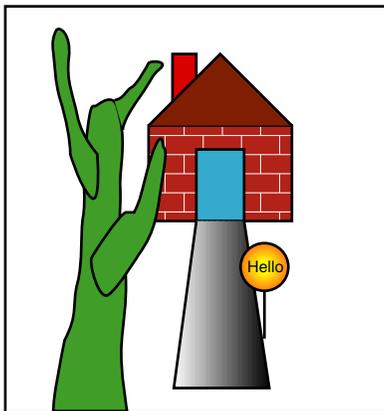
The stereo window is the spatial boundary of the picture through which the stereoscopic image is seen. It is possible to set this window at any plane we choose, for example the same as the closest object in the scene, in front of the scene or way inside it. The three stereo pictures below show these three examples. Although most stereo images are set in such a way that the closest object in the scene is at the stereo window plane, sometimes the scene is deep inside and sometimes parts of the scene protrude on purpose in front of the window. When the latter is done carefully and deliberately some interesting effects can be achieved, but when done in error, the result is visually disturbing.



a b

b'

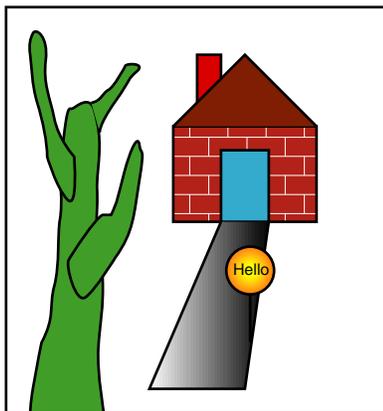
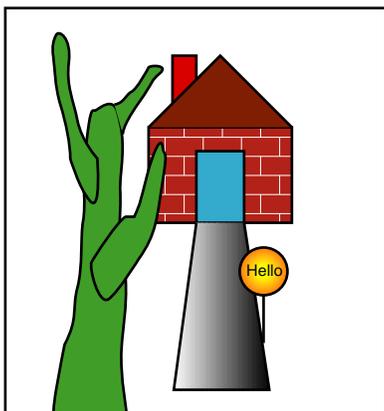
This stereo picture shows the tree and the front of the path, **at** the stereo window and all other elements **behind** the window. Notice that $a = a'$ and $b = b'$. The conclusion we can draw is that when the closest object in the picture on the left chip is the same distance from the left edge of that picture as is the distance from the same point on the right chip to the left edge of that chip, than this object is **at** the stereo window and nothing comes through.



a b

b'

Here all objects are placed **behind** the window. Notice that a' is longer than a and b' is longer than b . The second conclusion we can draw is that when the closest object of the right chip has more room to the left edge of that chip than its corresponding point on the left chip, than all objects will be placed **behind** the stereo window. Also notice that objects touching the frame, as the bottom of the tree, look natural.



a b

b'

In this example, the tree, the front of the path and the sign come through the stereo window. The conclusion we draw here is that when the distance a' is shorter than a and b' is shorter than b these objects will come through the window. Objects touching the frame, as the tree, will not look natural but those that don't touch the frame, as the path and the sign will float in space and create an effect that sometime may be desirable albeit not always logical.