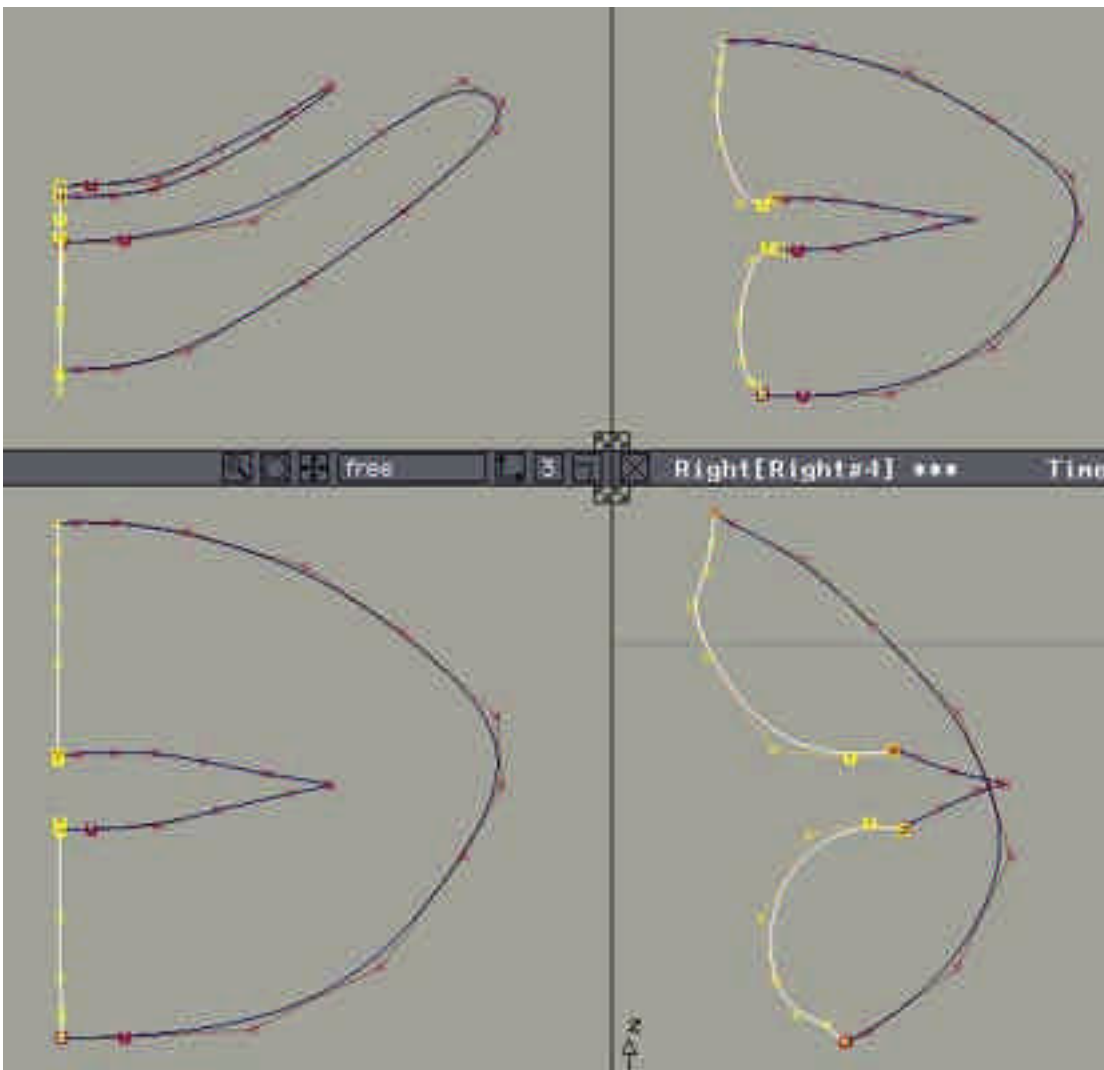


Creating the lips

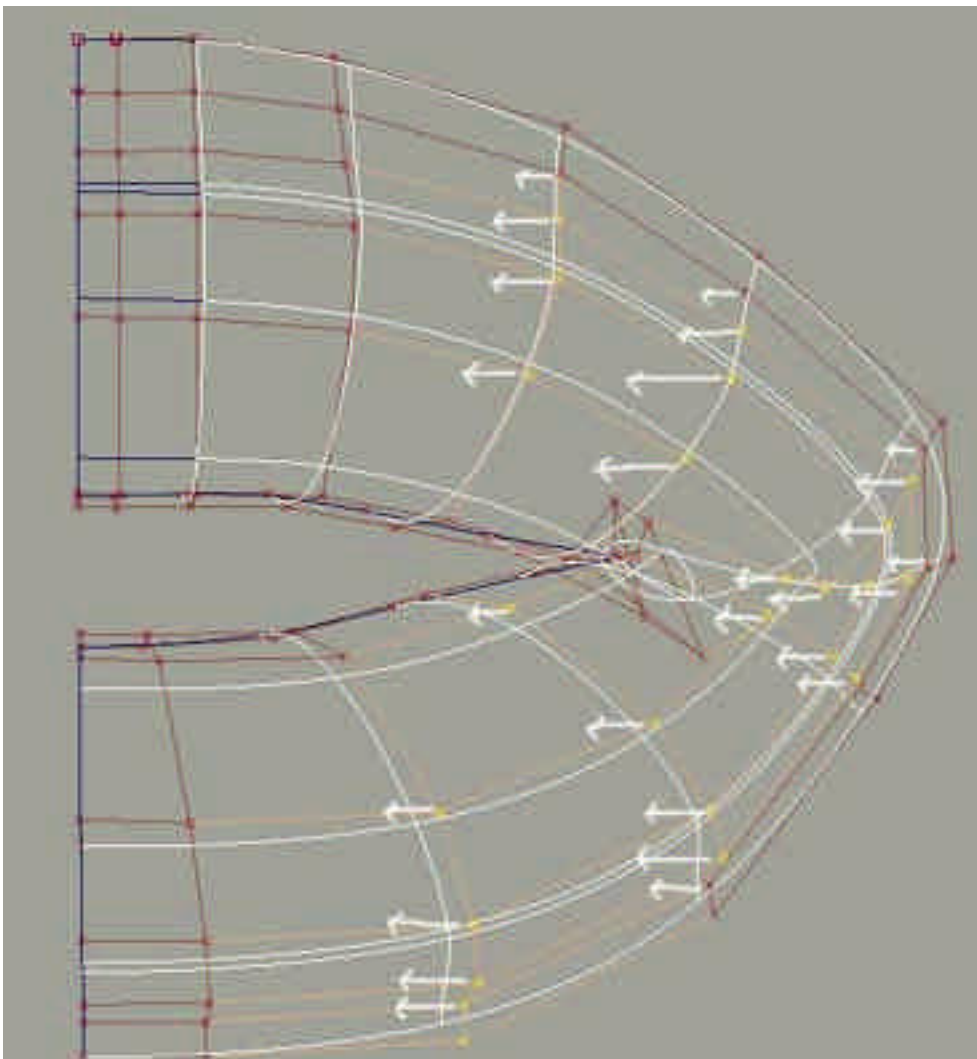
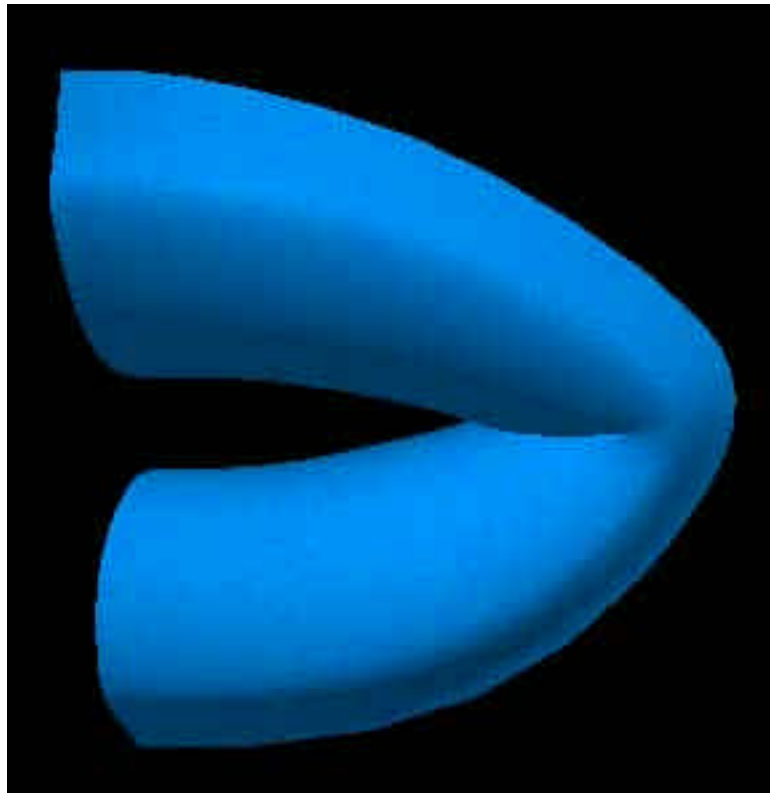
The lips can be built integrated into the head from the start, but I did them separately, it's easier.

They can be created by "skinning", or "bi-rail", with more than 2 generation-curves, or "revolve". But we have to make sure we'll be able to "attach" the lip surface to the face later, so we have to start by doing "duplicating curve" on the face-isoparm closest to the mouth, and then use that curve to build the lips.

I think the following is the best way: copy the curve you just copied, and adjust it to look like the inner one here. Draw the other two generation curves, cv-snapping them to the ends of the path curves. Use "bi-rail", with 2 generation curves, with rebuild turned off on everything and with "scale".

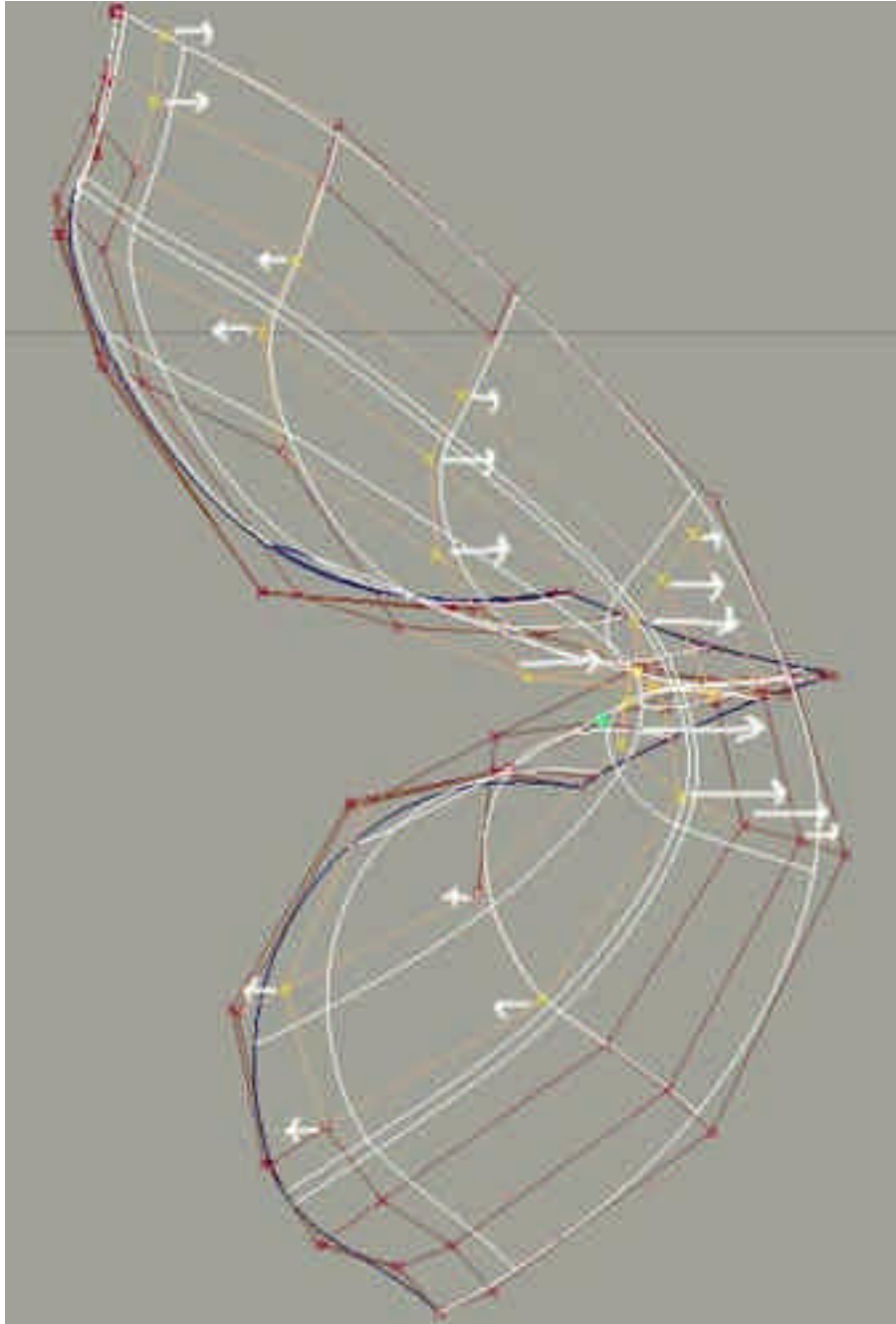


The resulting surface now looks like the screenshot at right - it's close, but no cigar.

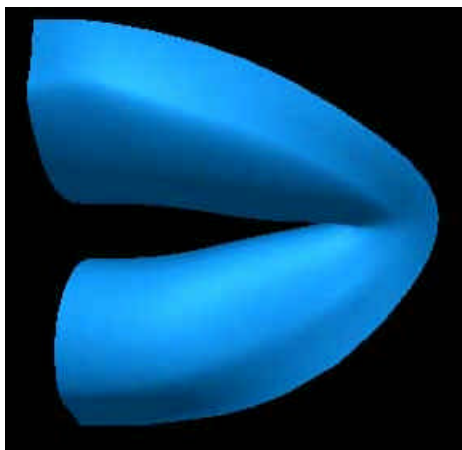
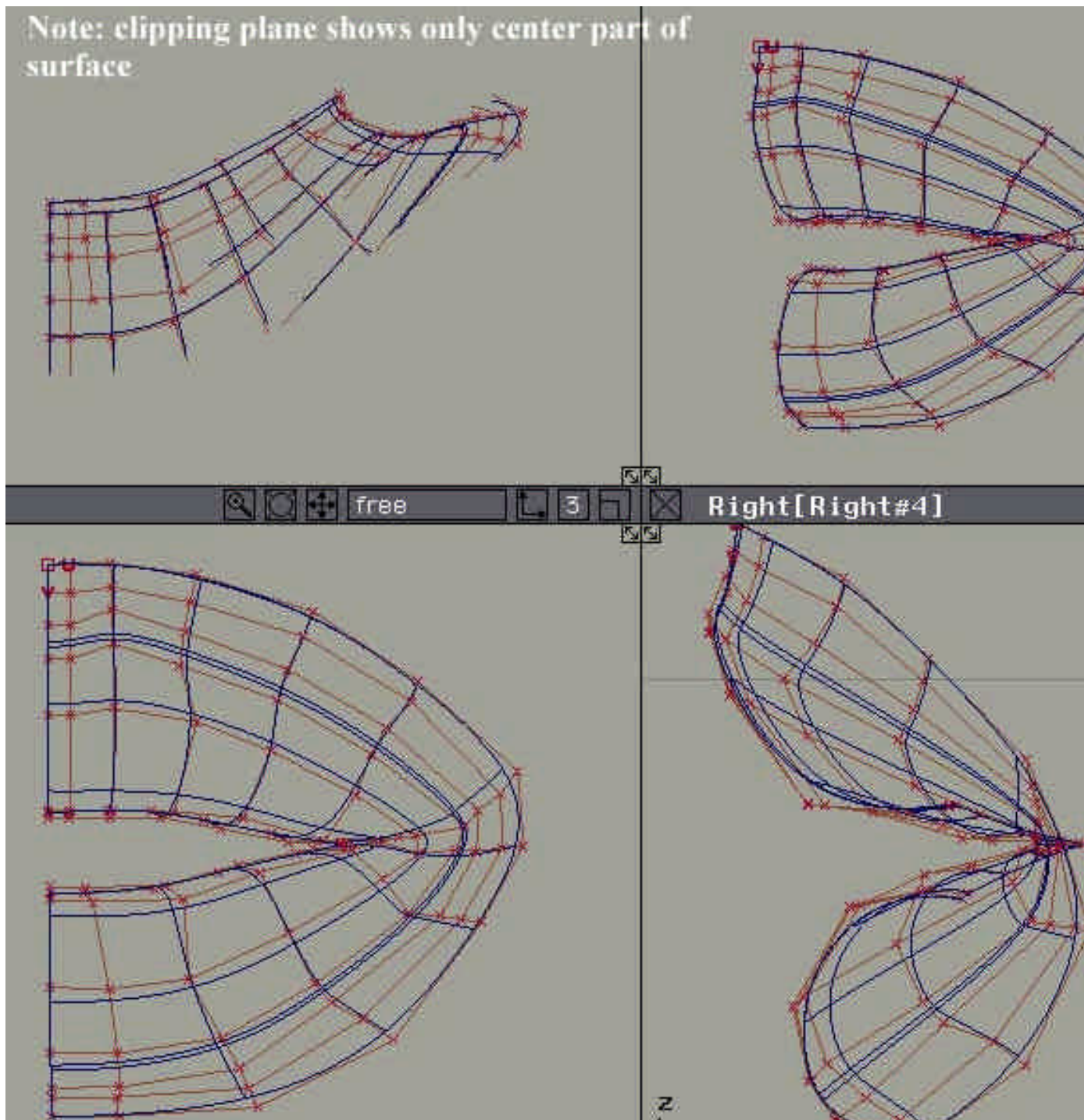


We have to pull these cv's (in the Front view - see screenshot at left) in the direction of the arrows (Hint - use the middle mouse button to constrain the movement) and in the Right view we pull these cv's in these directions (again with the middle mouse button). Also go to the Top view, adjust the clipping planes so you only see the center part of the surface and adjust it a bit more.

The screenshot below shows a Right view of the object and the directions that we will need to pull these cv's in also (again with the middle mouse button).



Note: clipping plane shows only center part of surface



The screenshots on this page show the now completed lip surface. Observe that in the screenshot above (the Top view) has been adjusted so that the clipping planes only allow you to see the centre part of the surface which makes editing much easier. The screenshot at left shows what the completed lip surface should look like when shaded.

Merging the lips to the face

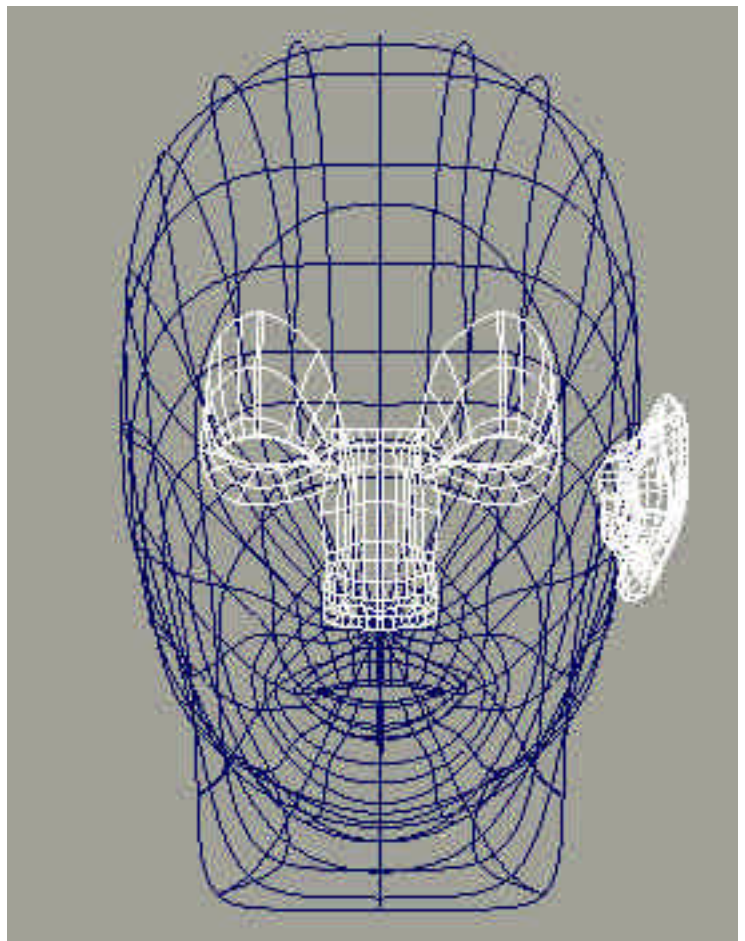


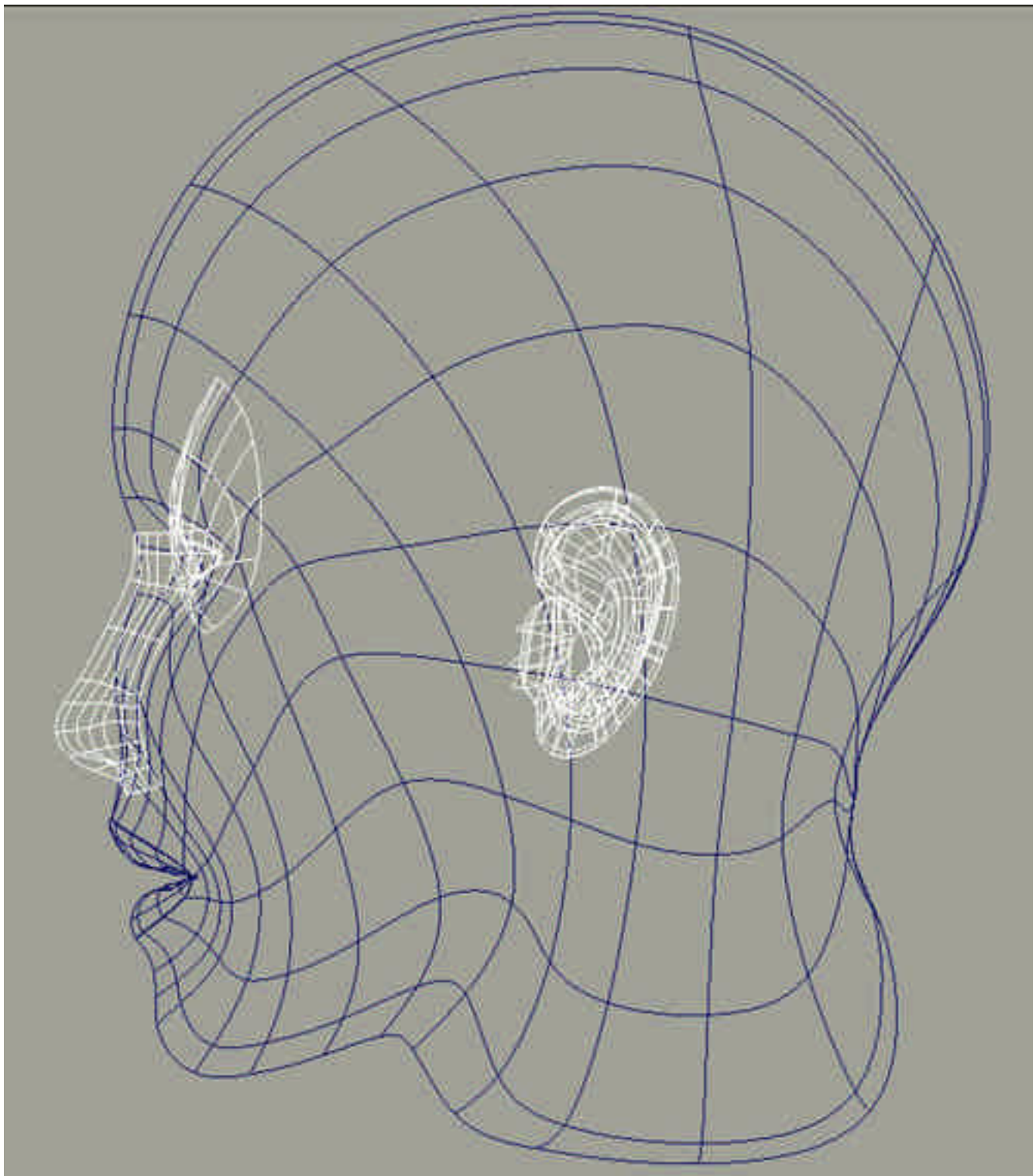
Next we can merge the lips to the face using "attach" with "insert cv's" off, and using "blend".

The result should look something like the screenshot at left. Not bad, but this still isn't good enough, so now we'll get into some heavy cv pushing again; mirror-copy the face as an instance like you did earlier, and edit away.

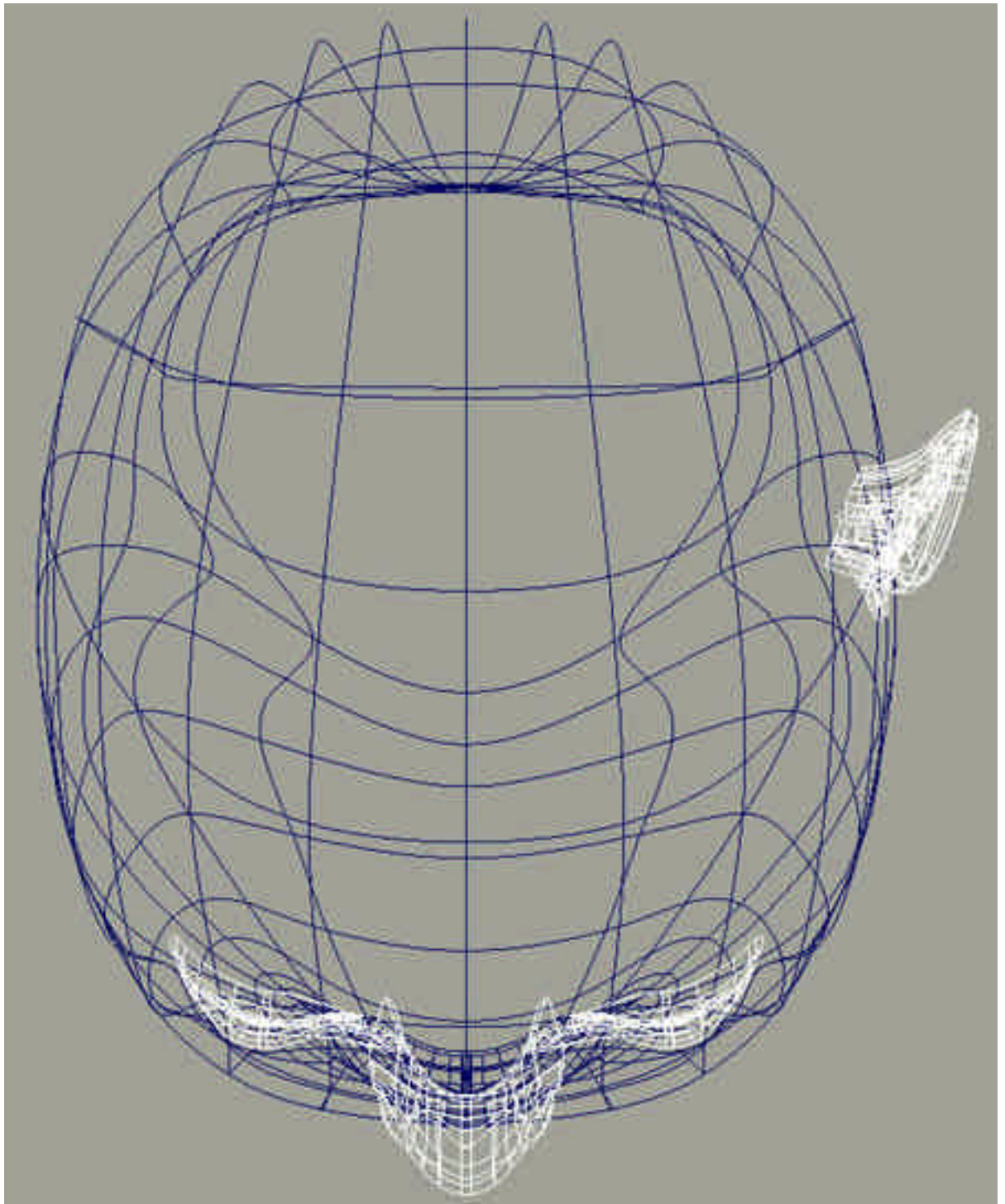
Unfortunately this is the hard part. Editing takes time, patience, and above all concentration, there is no "easy" way out. HINT -You can now place the eyelid, nose and ear, to help you edit the face. Instance-copy the eyelid and the half-nose like you did the half-face and use it for reference.

The (Front View) screenshot at right shows where you should locate the eyelid and nose surfaces on the head. Place them according to the screenshots shown on this and the following pages.





This is a side view screenshot showing the location of the nose, eyelid and ear surfaces on the head surface. Use this to help you establish the proper placement of these objects.



This is a top view screenshot showing the location of the nose, eyelid and ear surfaces on the head surface. Use this to help you establish the proper placement of these objects.



During the course of editing I make various changes to the facial surface. In the screenshot at left I've narrowed the chin, lowered the middle jaw-line a bit, and made the part of the jaws closest to the ears less prominent, also deepened the eye hollows a bit, pushed out the cheek-bone and the forward part of the temple, and smoothed the cheek (Note - the green object beneath the eyelid is the "blending" fillet described within the next chapter).

Eventually you should reach a point when you're fairly satisfied with the model, at least for the moment anyway!

Delete the instance of the face, then mirror-copy and merge ("attach-blend", "insert cv's" off) the 2 sides to get a real full head surface.

Lastly, we must trim holes in the head so that it's surface doesn't show in the corners of the eyes, nor (if you're picky) inside the ear cavity.

Notes

(This space has been left intentionally blank.)