

This is the PDF version of the video tutorial of the knife Ka-bar. This tutorial explain the main part of the modeling but if you want more details, it's better to watch the video on our official Youtube Channel: Shade3D Channel.

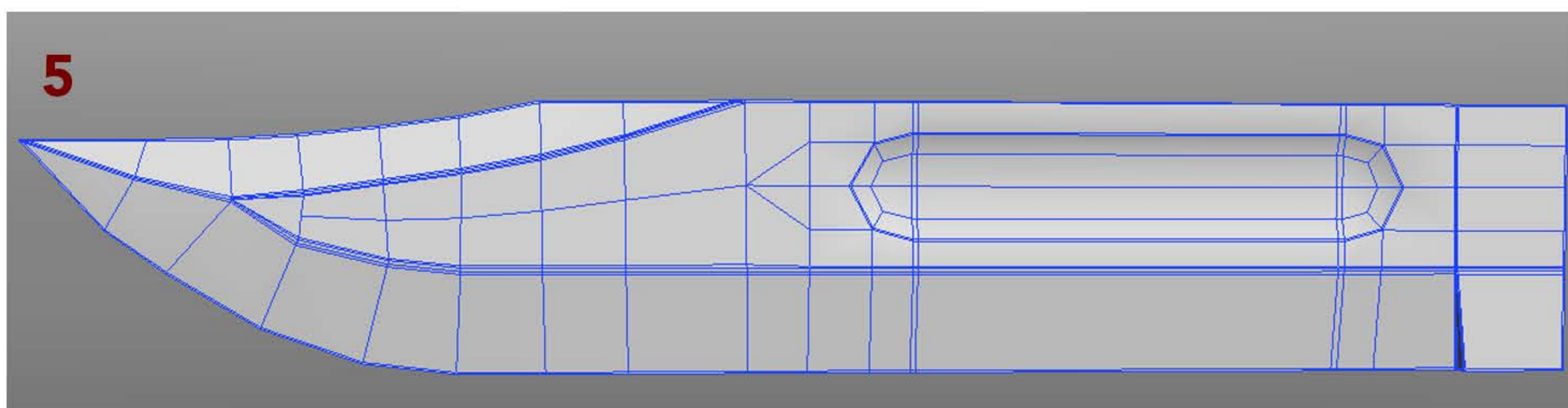
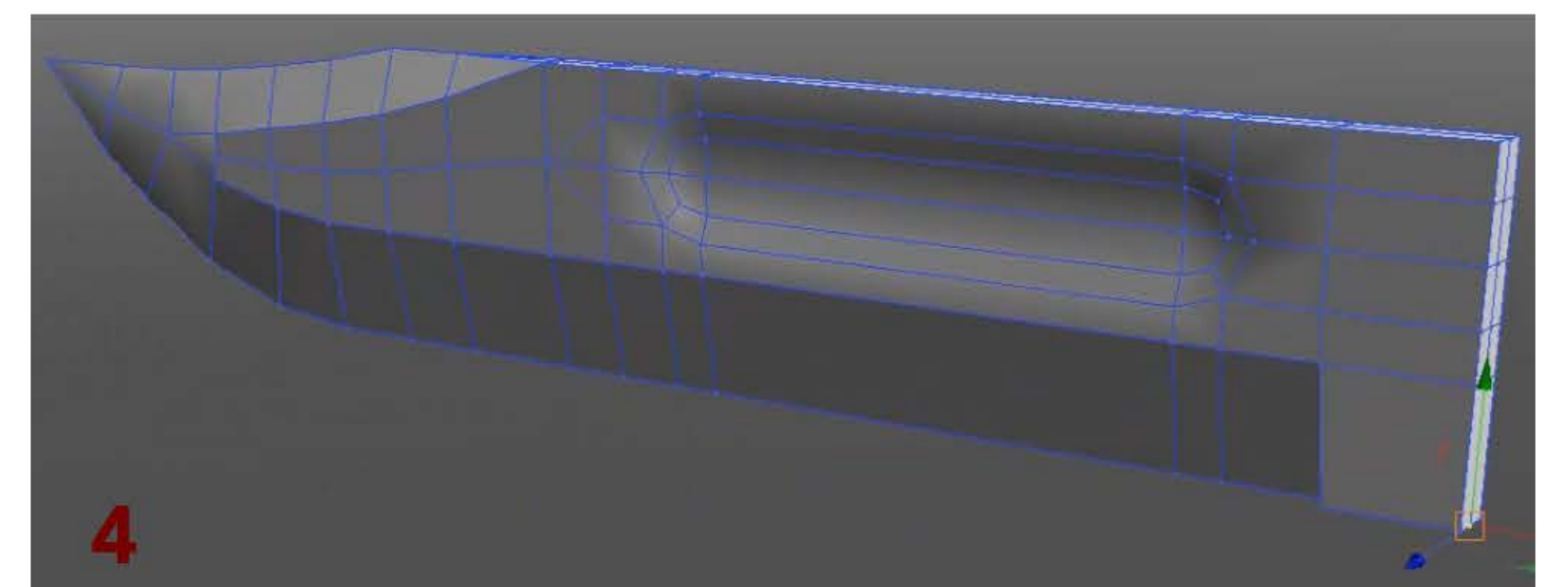
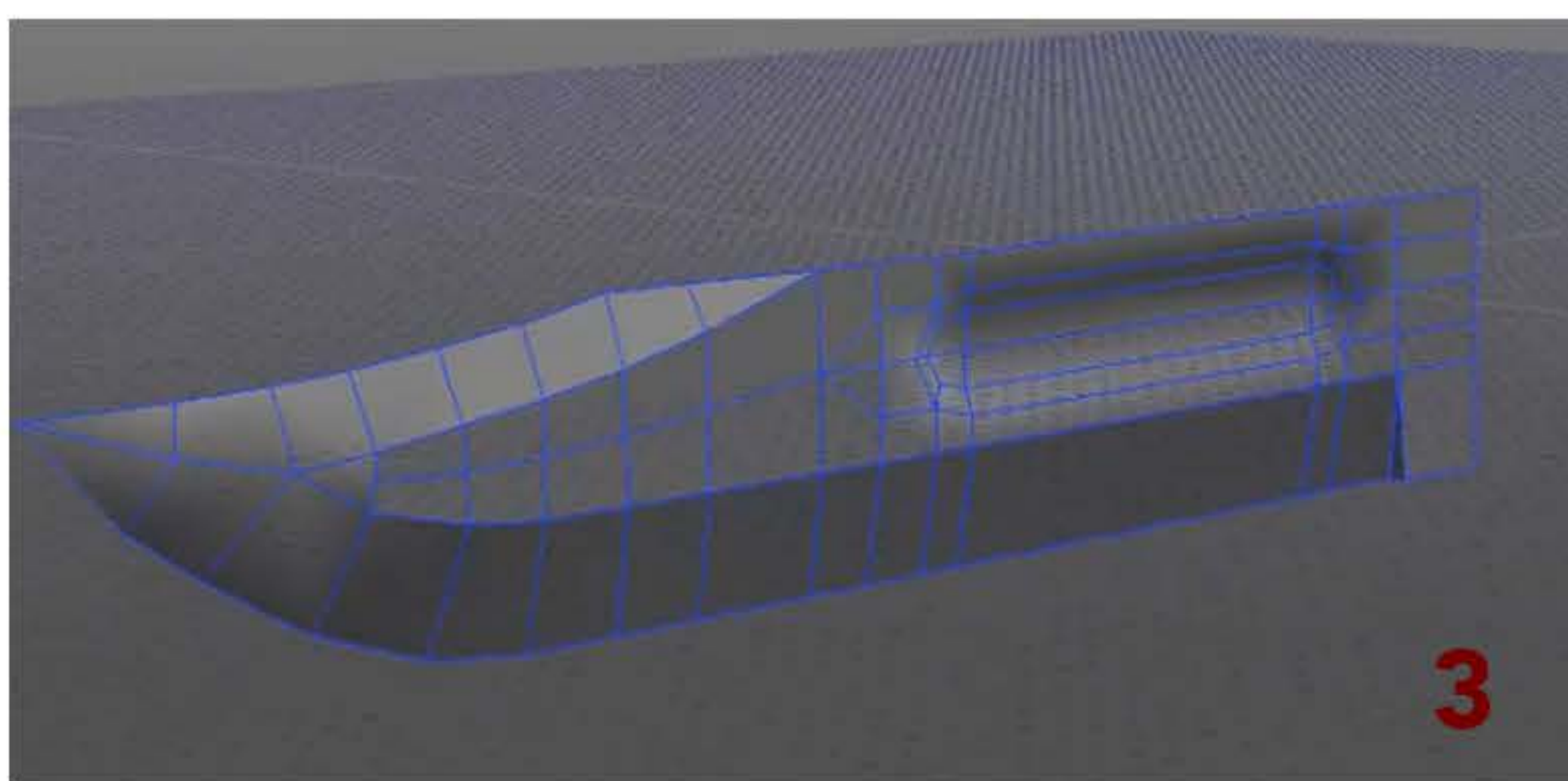
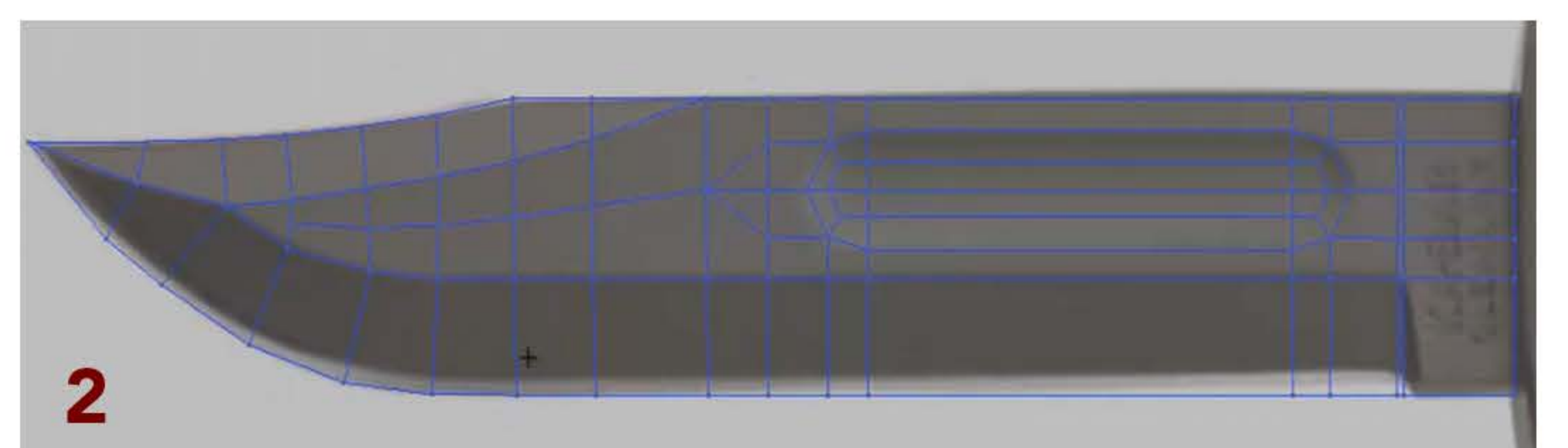
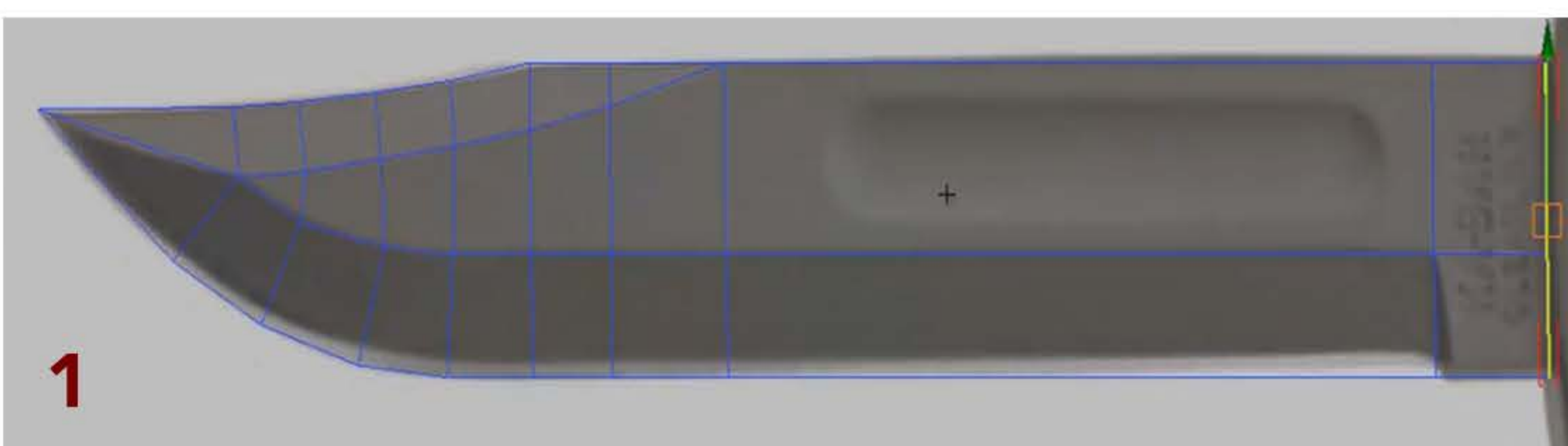
Modeling of a Ka-bar :

After gathering a few references for your knife, set a template image. This model is made of three part : the blade, the guard and the handle. I choose to do them one by one, but if you want, you can do a quick modeling of each part, and then add detail later. For an object like that, it's not really important. But if you are doing a big robot, or an automatic weapon (with a lot of different parts) it's better to do a rough version of each part before starting to detail them.

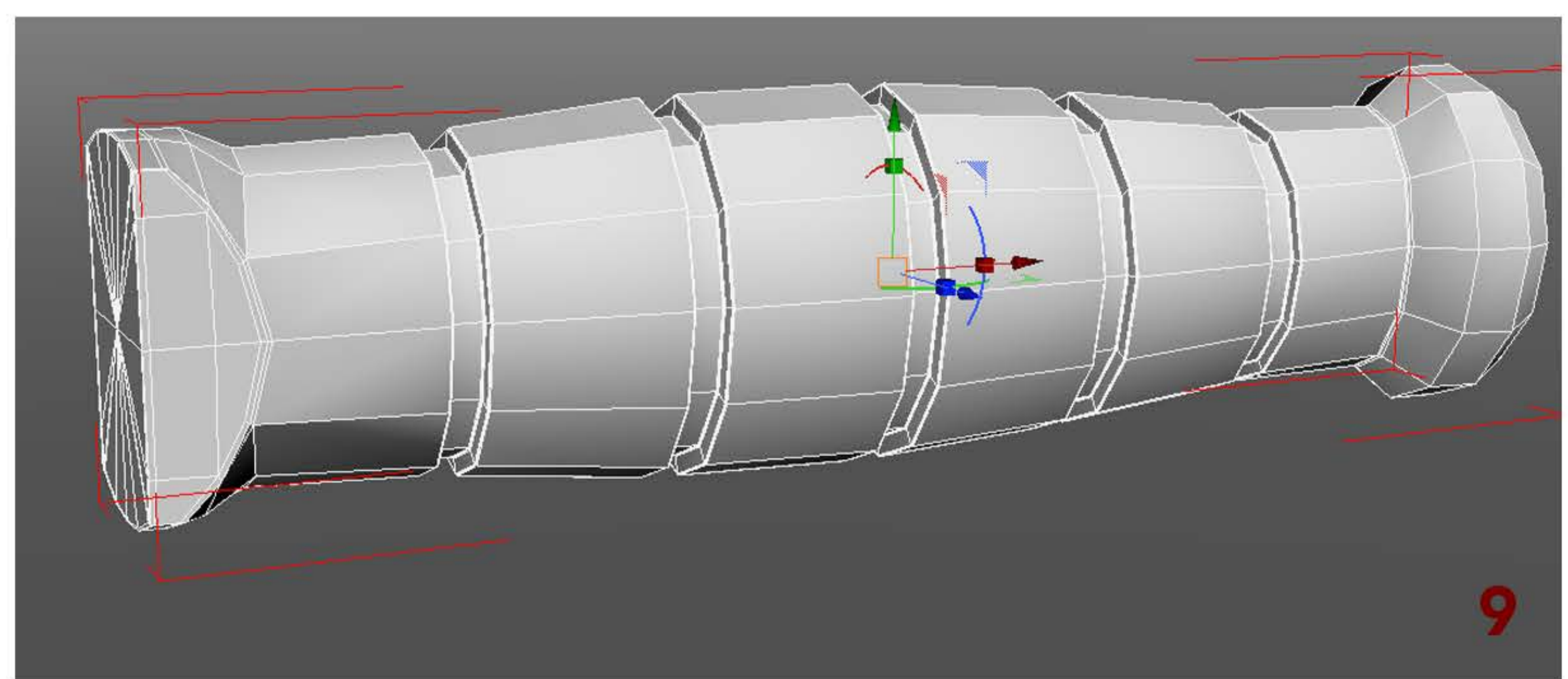
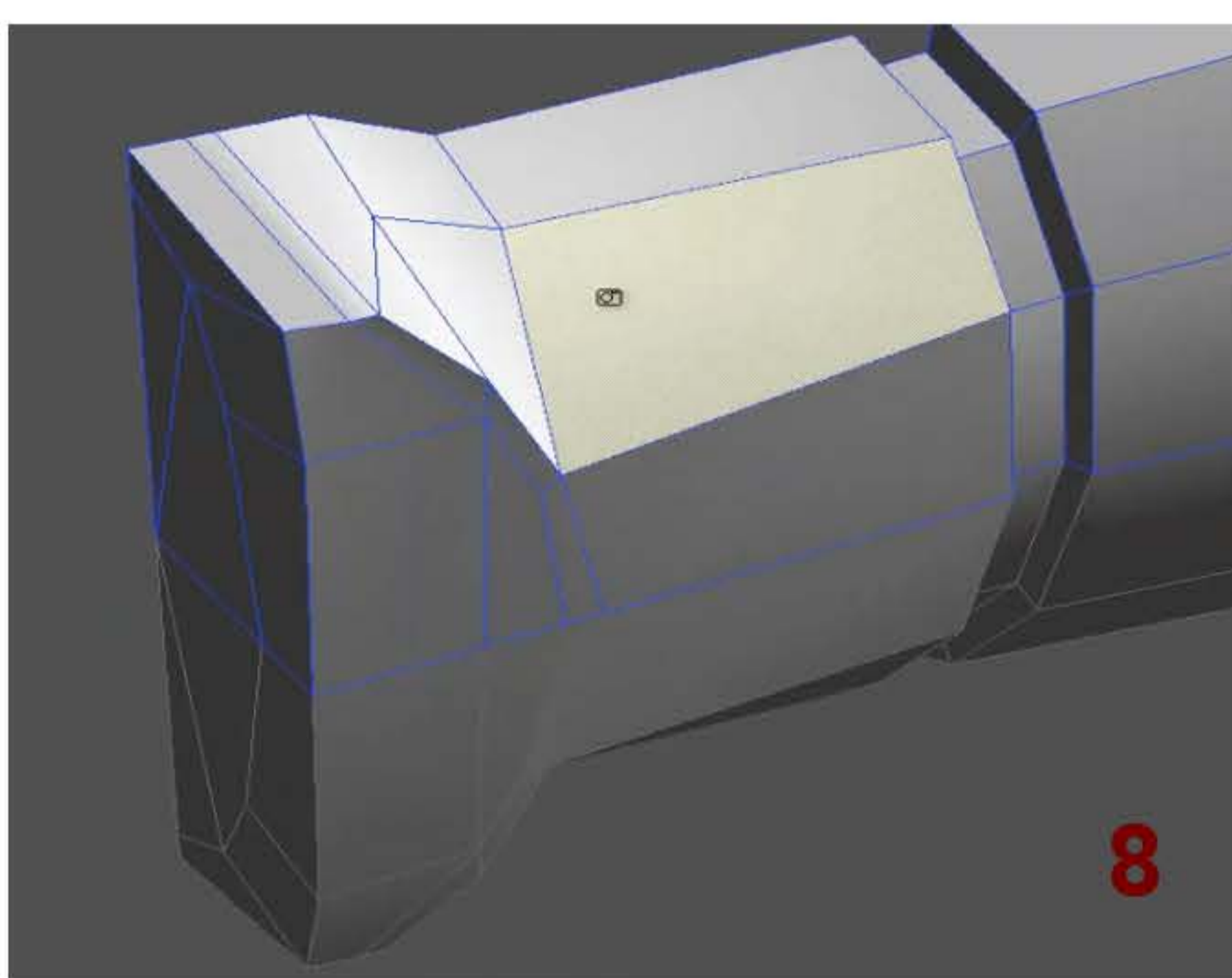
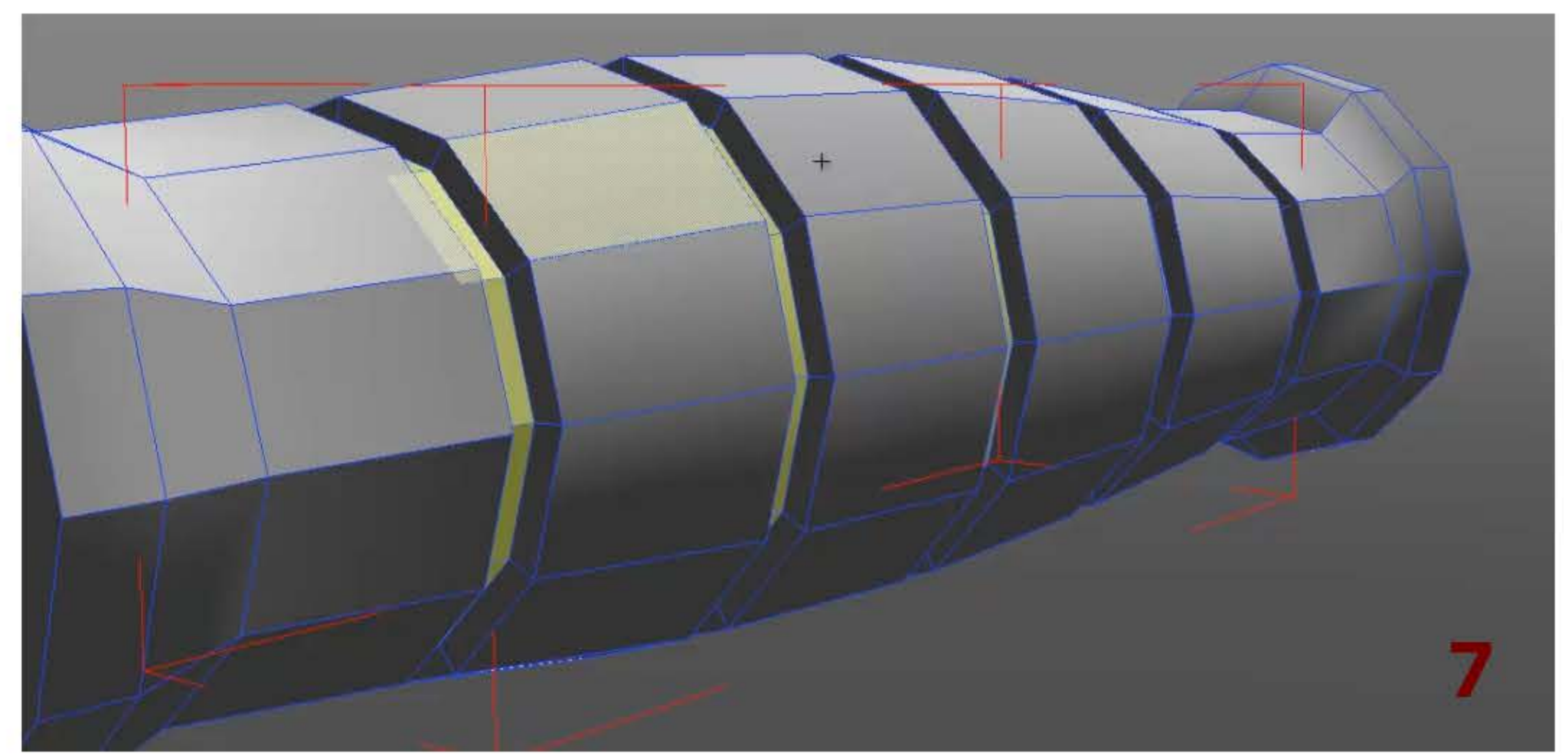
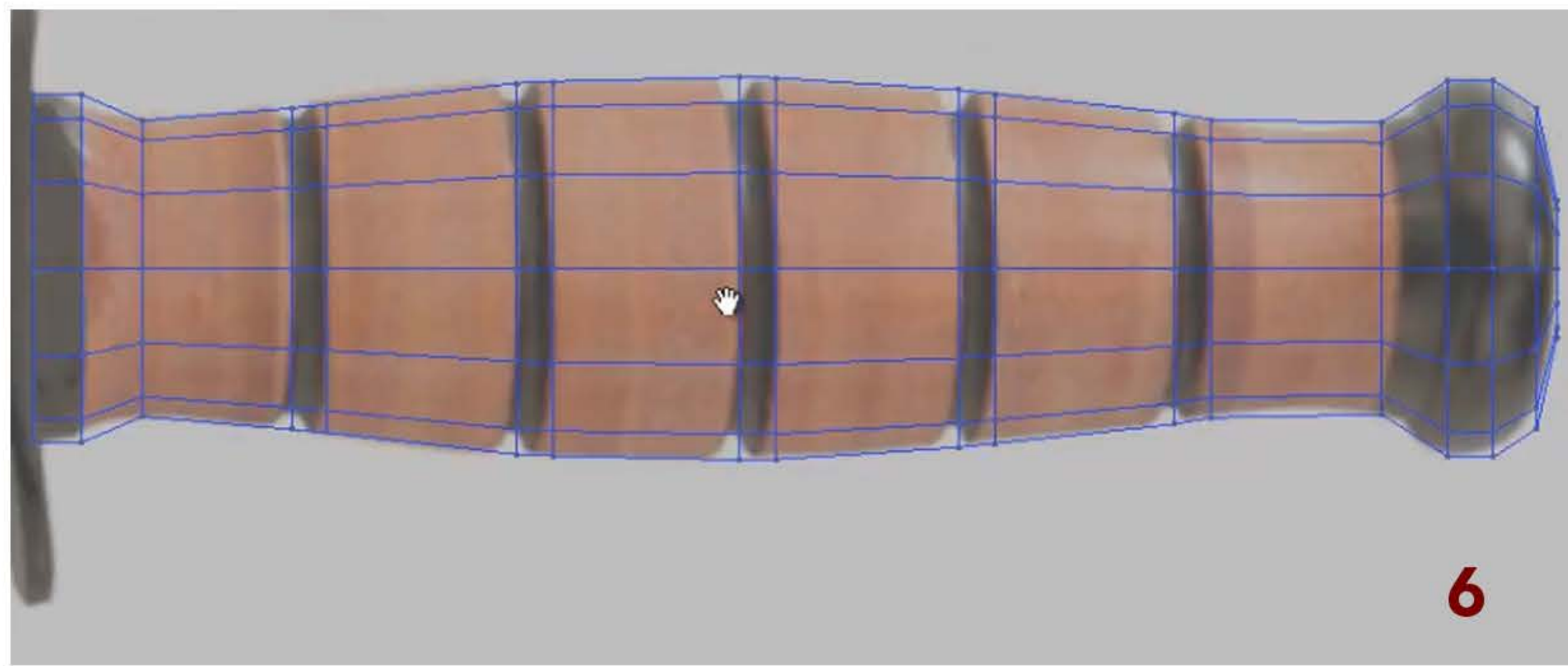
1. I started with the knife's blade. Before doing any detail, make a plan mesh, and extrude your polygons until you have a decent shape of your knife (picture 1). At this moment, the mesh is flat. When you have your base mesh, you can start adding detail - like the round part on the middle of the blade (picture 2).

Then, select the face you need and shift them outward to give a thickness to the blade (picture 3). Then, do a mirror in order to have the two faces of the blade (and lock it), and do a bridge to link faces that are not connected (picture 4).

Now, this is the complicated part : for the open subdivision mode, we need to add a lot of edges, and for some part of the mesh, it's a bit complicated because of triangles. Look at the picture 5 for the final version of the blade with the additional edges. If it's a bit complicated to do that on your own, it would be preferable to watch the video.



2. Then, let's continue this knife with the handle. We start with a cylinder, add a lot of edges and rescale them to have a basic form of the handle (picture 6). Then, select the faces that need a bevel and do it (picture 7). We now need to modify the wireframe to do the flat part of the handle as shown in picture 8. Then, we just need to add edges for the open subdivision mode (picture 9).



3. Let's start the last part of this knife : the guard. This is the easiest part of the knife. We start with a cube, add some edges and move them to obtain a rough mesh of the guard (picture 10). Then, we modify the wireframe to have round corners (picture 11). To finish, we just have to add the final edges for the subdivision mode (picture 12). The modeling is now finished.

