

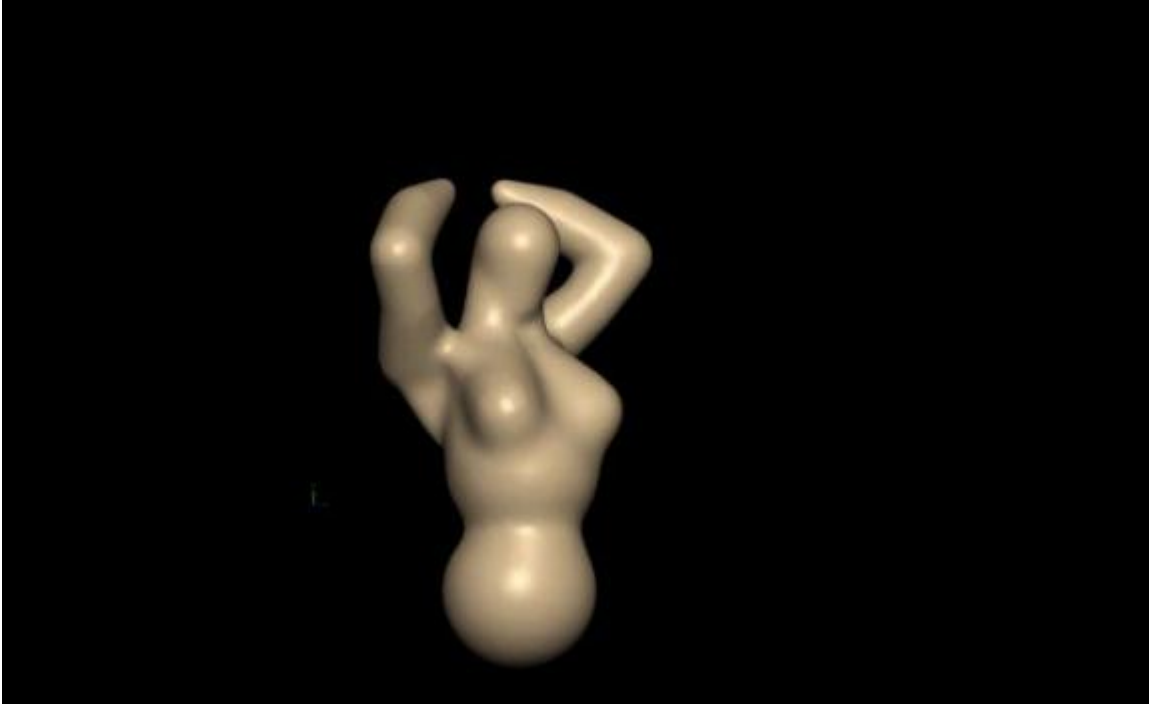
Creating an Ornamental Door Knocker with FreeForm Modeling Plus



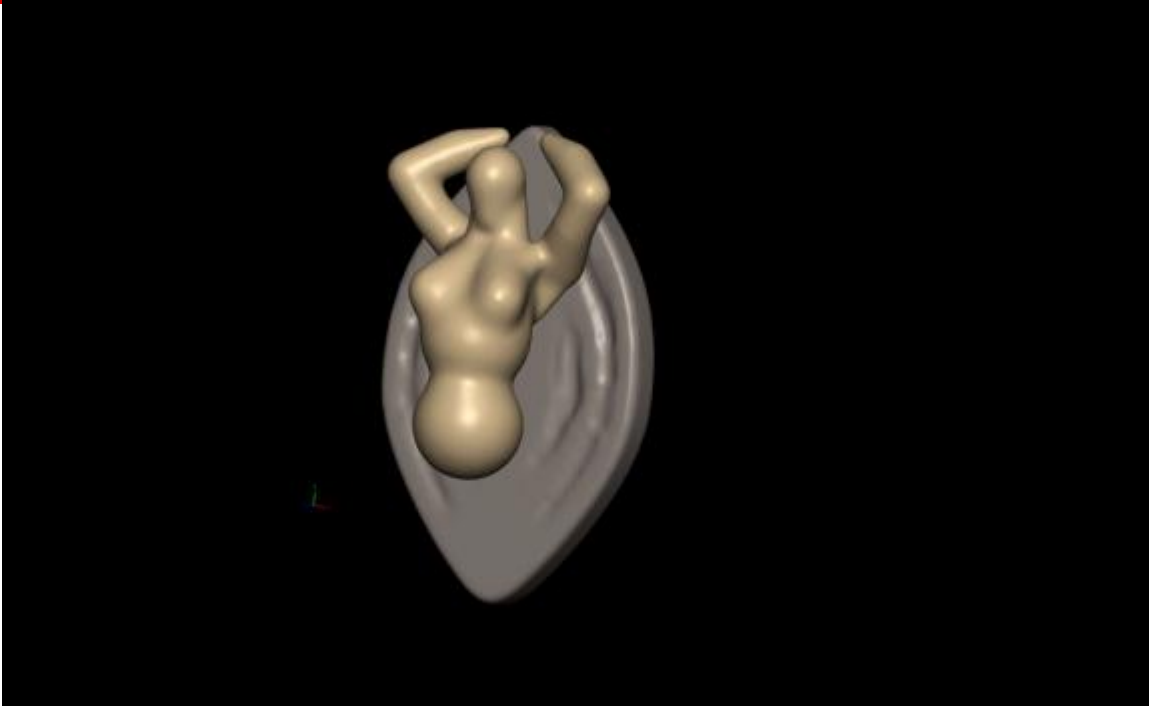
Designed & Modeled by Joe Menna (www.freewebs.com/black_irish)

This workflow will demonstrate the production of an ornamental door knocker using the FreeForm Modeling Plus system.

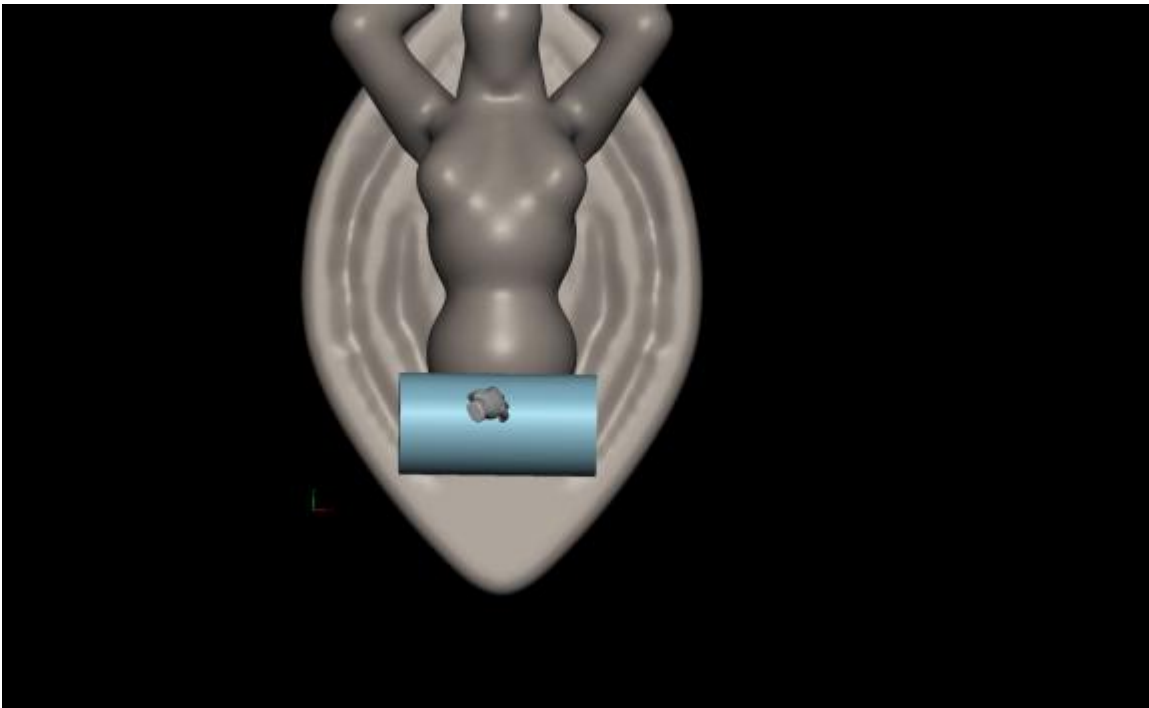
The centerpiece of the door knocker is an antique style caryatid. I begin the figure by blocking in the major forms of the body using the Add Clay tool. I sculpt along one side of the model only and use the Mirror Clay tool to save time. In this way the basic forms of the figure can be developed in a flowing gestural manner, directly akin to sculpting with real clay or plastiline.



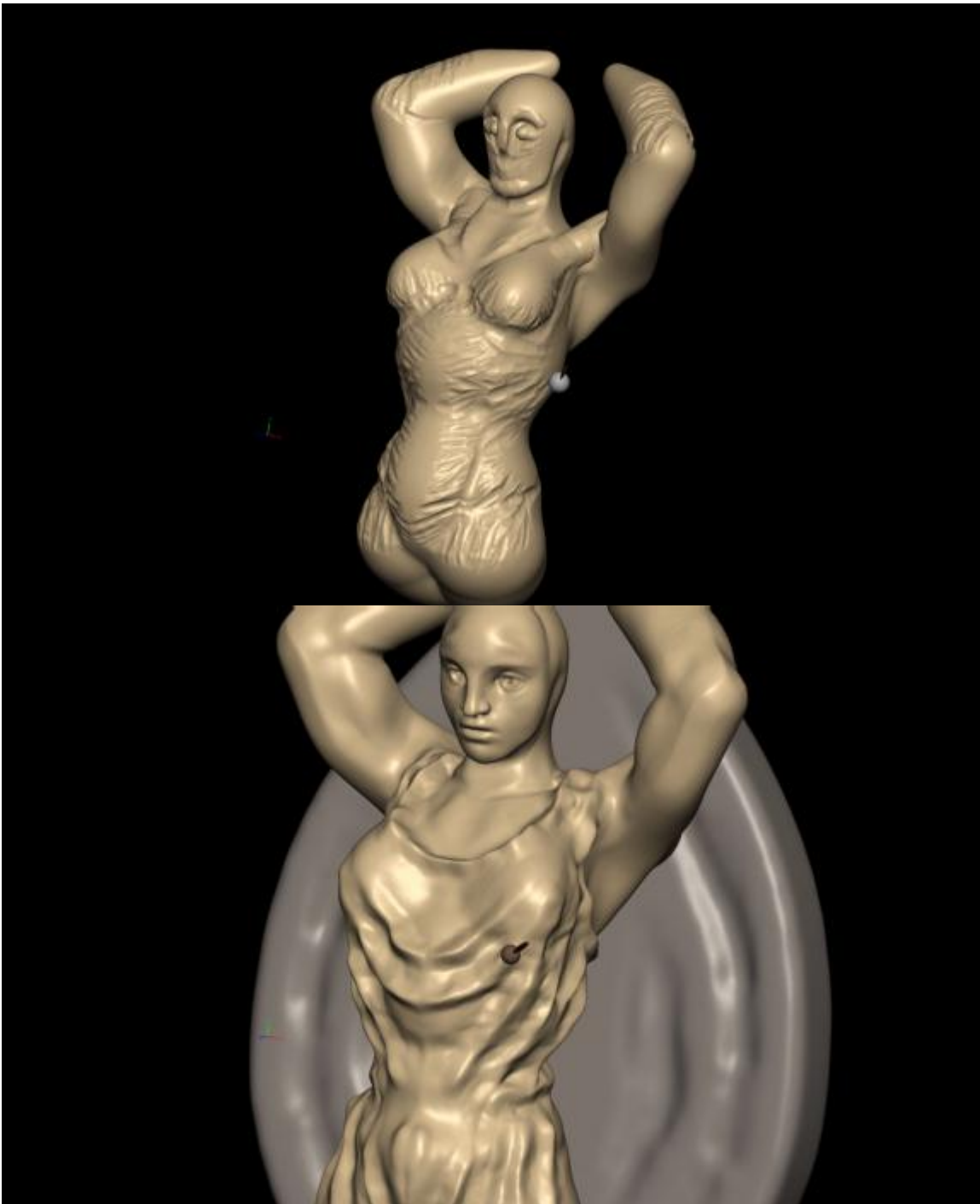
I create an empty new piece of clay and use the Wire Cut Clay tool to create a background base behind the blocked in figure (shown in the following image). When satisfied with the form of this piece, I refine its shape using various Sculpting tools. For an organic model such as this, FreeForm offers a unique range of sculpting solutions to create complicated, harmonious decorative shapes and patterns. In this case the background piece will be sculpted to imitate the appearance of drapery surrounding the figure.



I create another empty piece and use the Basic Shapes tool (shown below) to create and ornamental pedestal to support the torso of the figure. I add further detail to the pedestal using the Wire Cut Clay tool and other construction tools.



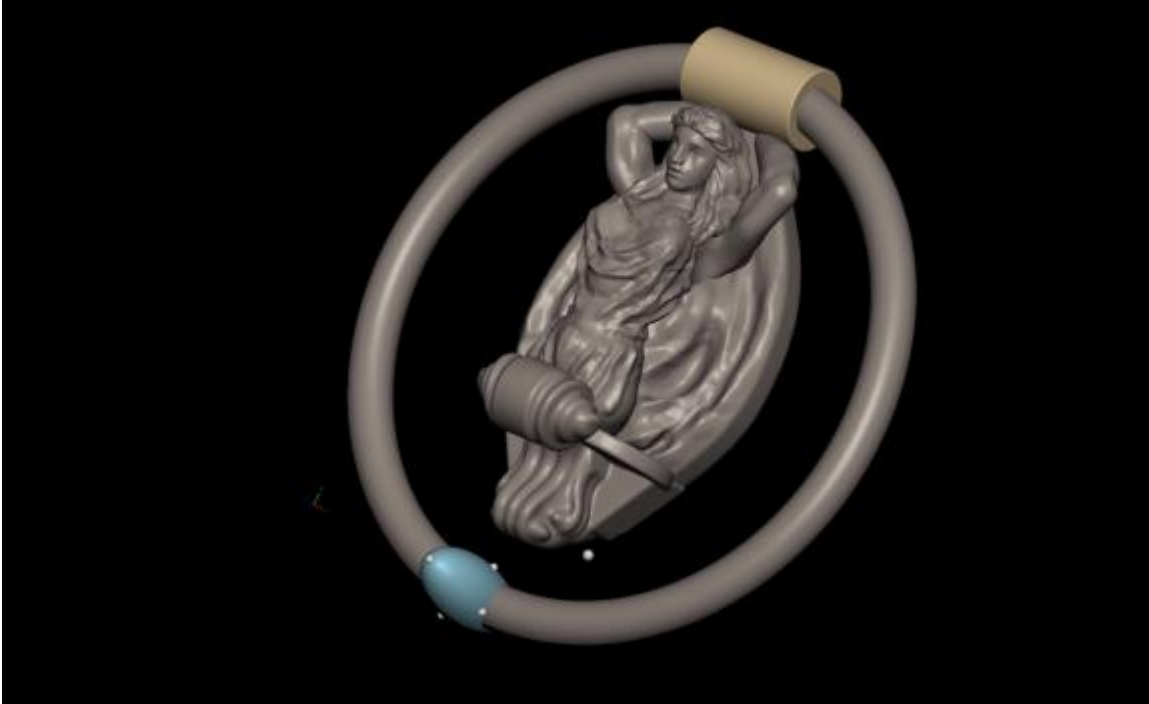
I reactive the figure and use the Carve and Smudge tools to shape the details of the figure and drapery. I use the Smooth Clay tool as I proceed in order to keep the forms developing in a consistently clean manner. I begin by blocking out the major forms of the figure and slowly refining them until I have achieved my desired result.



I combine the separate pieces into one and create an additional empty piece for the knocker. This piece will contain the ring of the knocker. I circumscribe the original model with a 3D curve and use the Pipe tool to create a ring at the desired thickness.

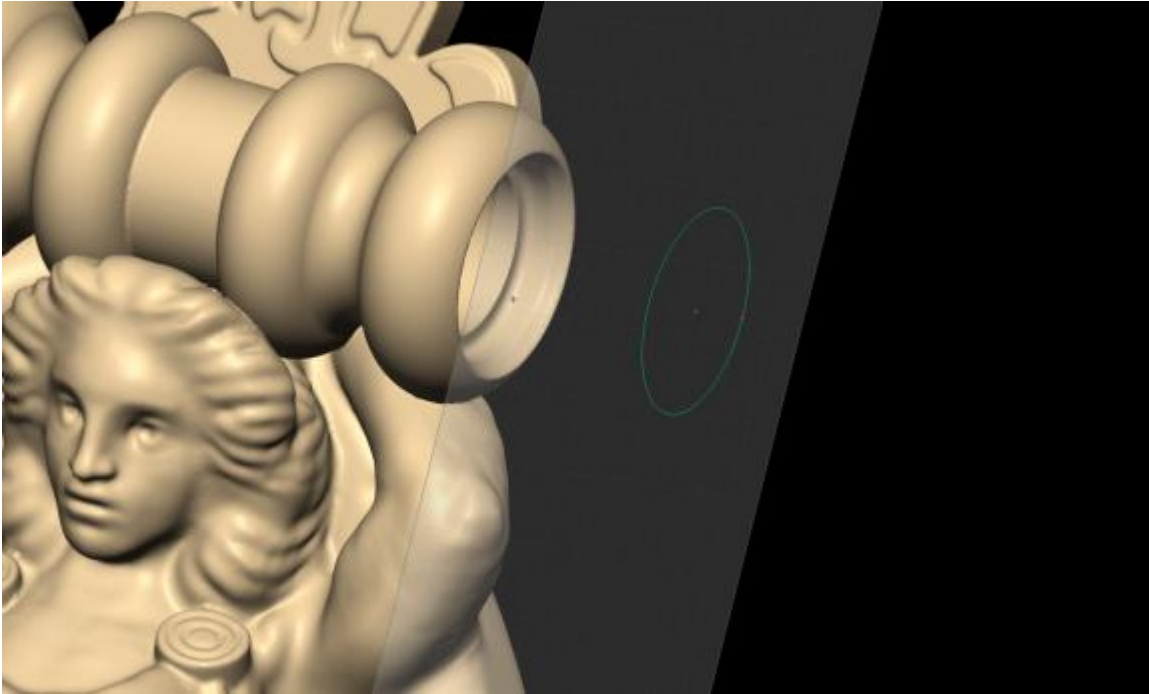


I activate the base model and create a cylinder which intersects the ring (shown below). I offset the ring piece enough to provide clearance for it to move and subtract this volume from the original model. By deleting the offset piece I am left with two intersecting pieces with spatial clearance to allow for the movement and articulation of the ring.

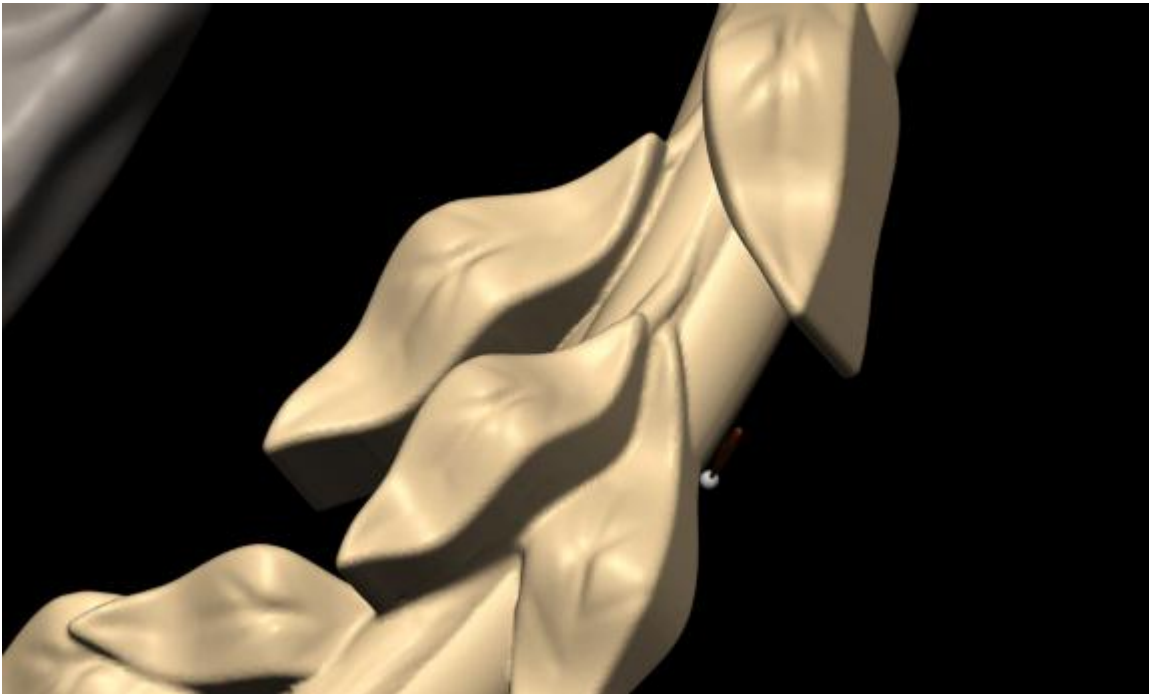


I add a knob to the ring using the Basic Shapes tool (shown above).

I add further detail using various wire cutting and embossing strategies (shown below).



I add additional ornamentation and decoration to the ring piece as desired. In this case I sculpted a single leaf and cut and pasted it around the circumference of the ring to create a traditional decorative floral motif.





When satisfied with the final structure of the model, I revisit various portions of the design to include any desired decorative accents.