12 Additional Results

In this section we show additional result images. The images are explained in the captions.

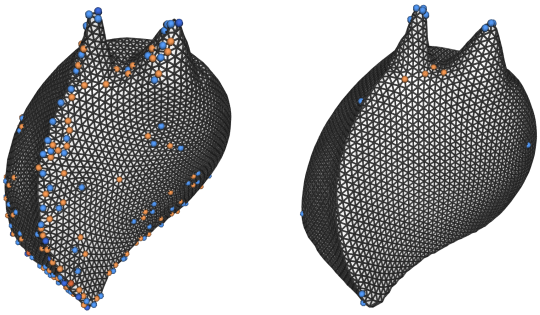

Figure 17: *Left: input model of* 10 $v4$, 133 $v5$ *vertices,* 132 $v7$ *and* 3 $v8$ *vertices. Right: final model of* 18 $v5$ *vertices and* 6 $v7$ *vertices.*

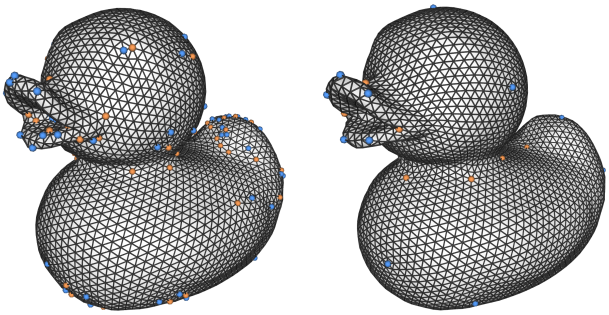

Figure 20: *Left: A duck model with 86 irregular vertices with valence 5 and 74 irregular vertices with valence 7. Right: Our editing system allows the reduction of the irregular vertices to 22 vertices with valence 5 and 10 vertices with valence 7.*

Figure 21: *An alternative pattern for the Souzou model.*

Figure 22: *A spaceship model with a zebra pattern.*

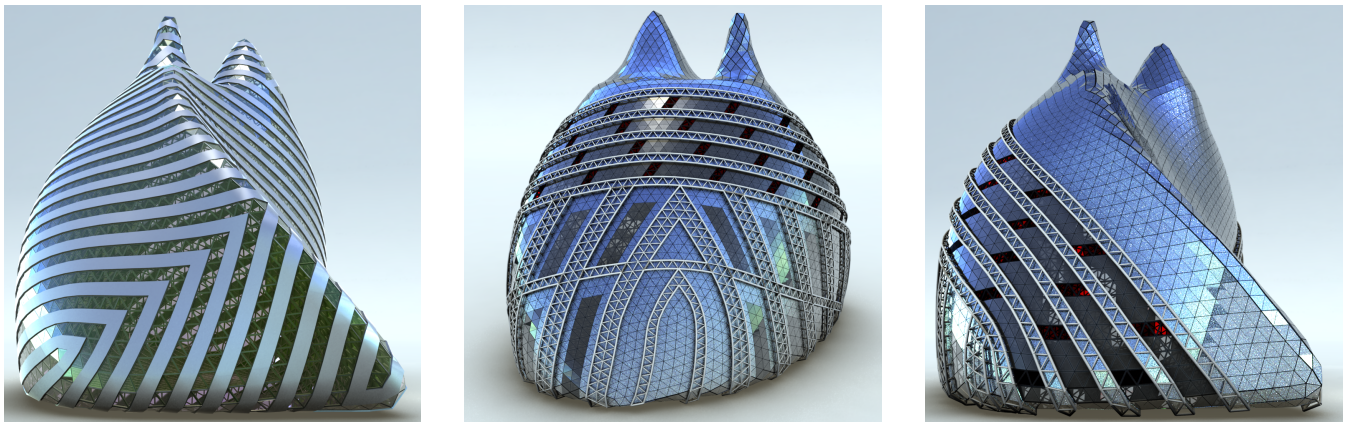

Figure 16: *Architecture with different designs: A zebra pattern (left), the front view of a shopping mall design (middle), and the side view of the shopping mall design (right). All designs have in common that the designer first reduced the singularities to a reasonable number (Fig. 17). The first design is the zebra pattern composed with equal-spaced strips (See Fig. 16 left). The second is the pattern of weaving panels (See Fig. 1). The third one is the shopping mall design (See Fig. 16 middle and right).*

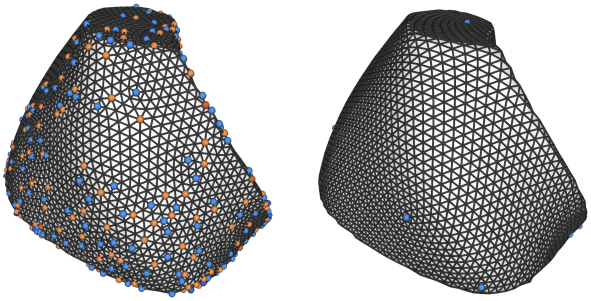

Figure 23: *Left: input model of* 142 *v*5 *vertices and* 132 *v*7 *vertices. Right: final model of* 16 *v*5 *vertices and* 4 *v*7 *vertices.*

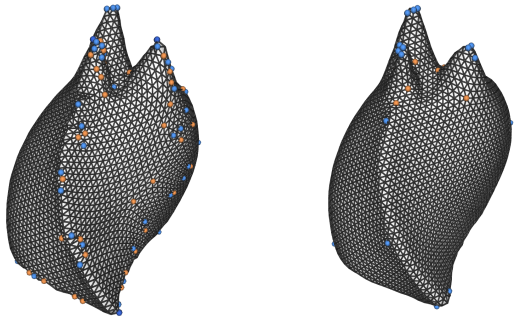

Figure 25: *Left: input model of* 3 *v*4, 90 *v*5 *vertices and* 84 *v*7 *vertices. Right: final model of* 21 *v*5 *vertices and* 9 *v*7 *vertices.*

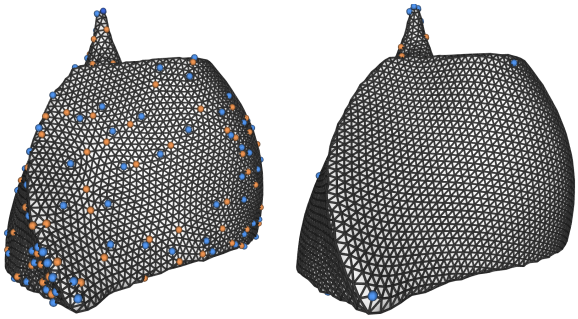

Figure 24: *Left: input model of* 2 *v*4, 140 *v*5 *vertices and* 132 *v*7 *vertices. Right: final model of* 16 *v*5 *vertices and* 4 *v*7 *vertices.*

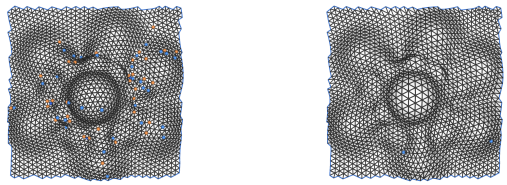

Figure 26: *Left: input model of* 3 *v*4, 30 *v*5 *vertices and* 34 *v*7 *vertices. Right: final model of* 2 *v*5 *vertices.*

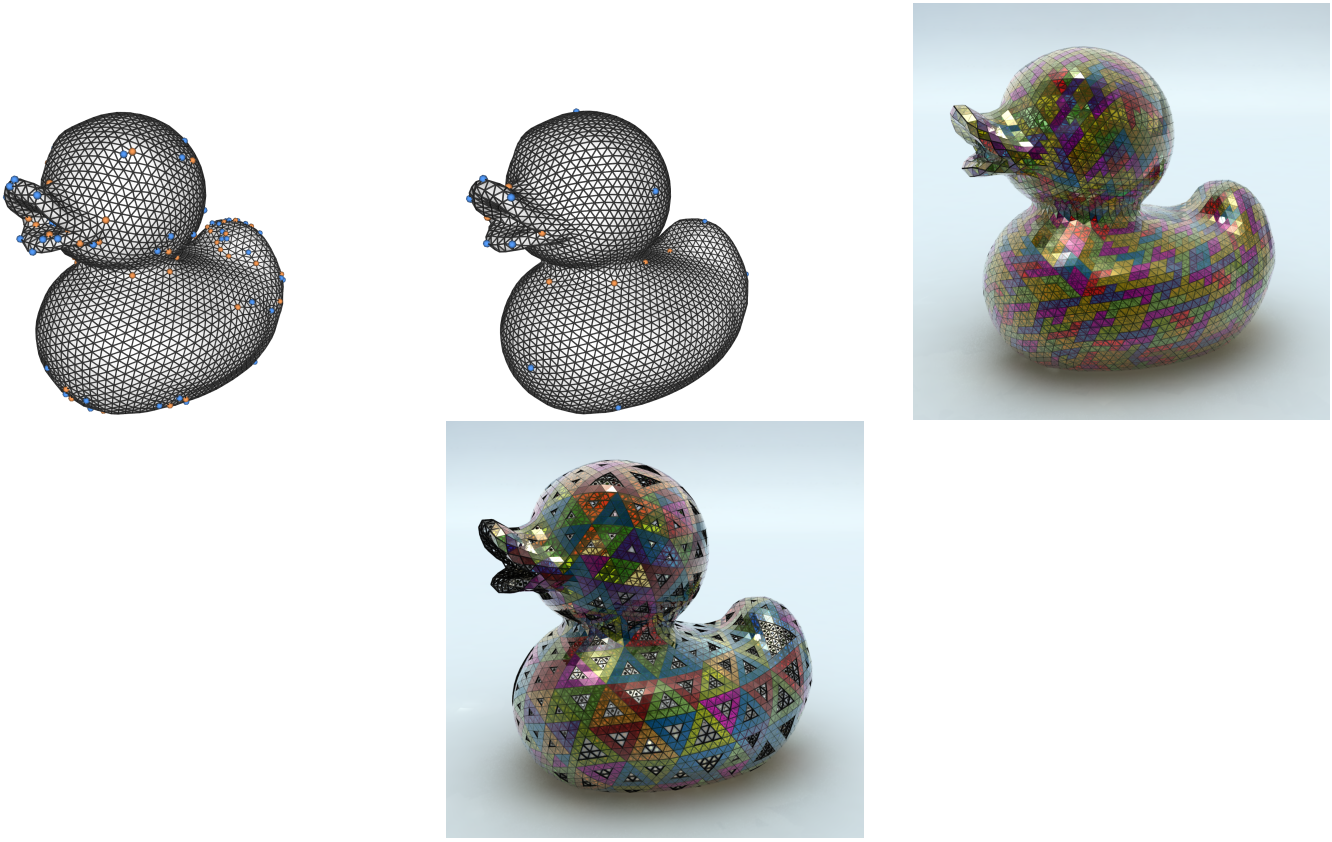

Figure 18: *Left: A duck model with 86 irregular vertices with valence 5 and 74 irregular vertices with valence 7. Middle Left: The duck was edited to reduce the irregular vertices to 22 vertices with valence 5 and 10 vertices with valence 7. Middle Right: A Tetris like pattern is applied to the edited duck mesh. Right: A triangle pattern is applied to the edited duck mesh. The Tetris blocks and the triangle building blocks are placed in such a way that no building block is allowed to contain an irregular vertex.*

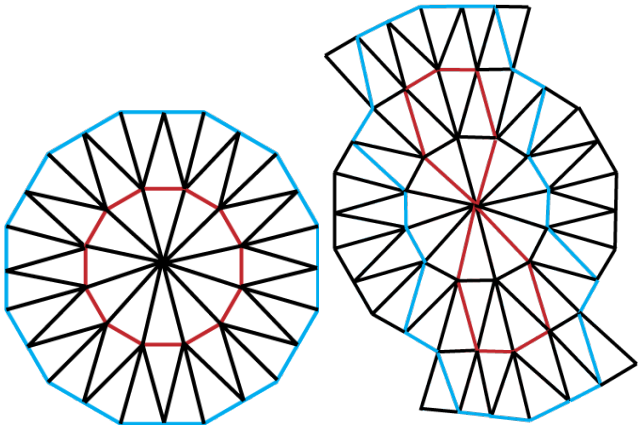

Figure 27: *Moving a* $v12$ *vertex.*

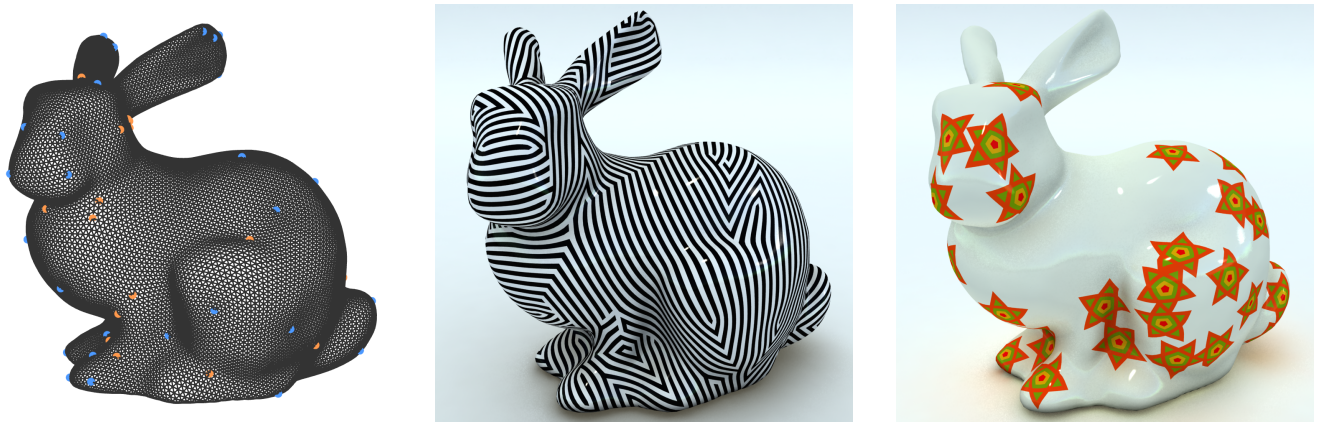

Figure 19: *Bunny with different designs : A zebra pattern and a star pattern.*