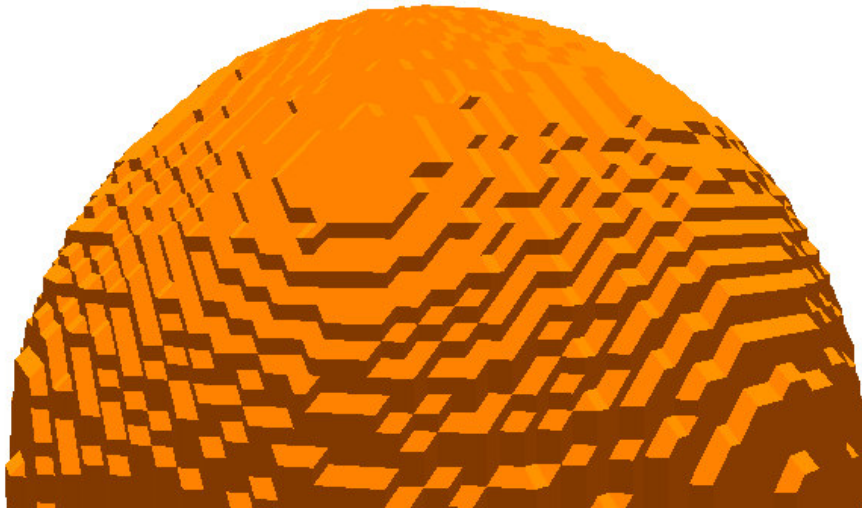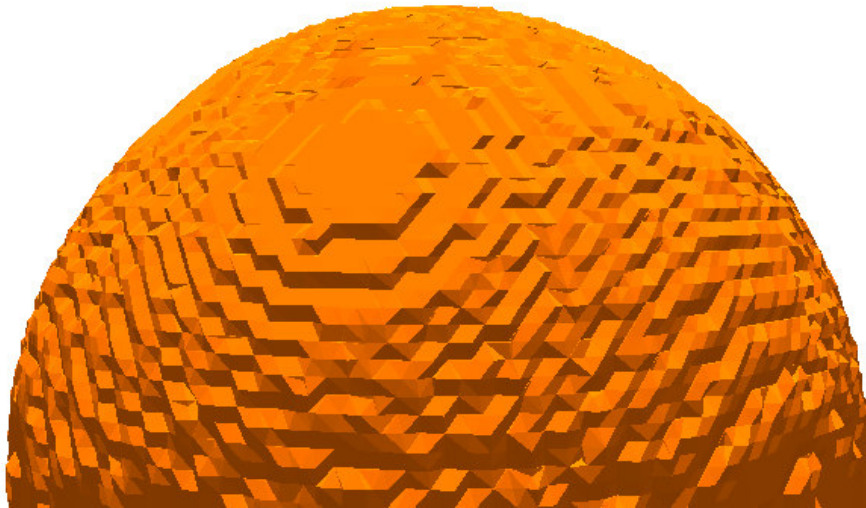# Shape from Silhouette:
Image Pixels for Marching Cubes

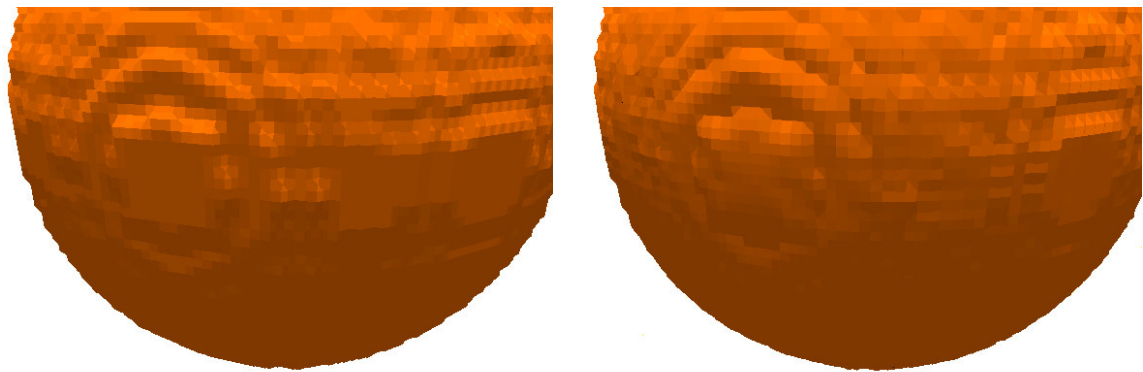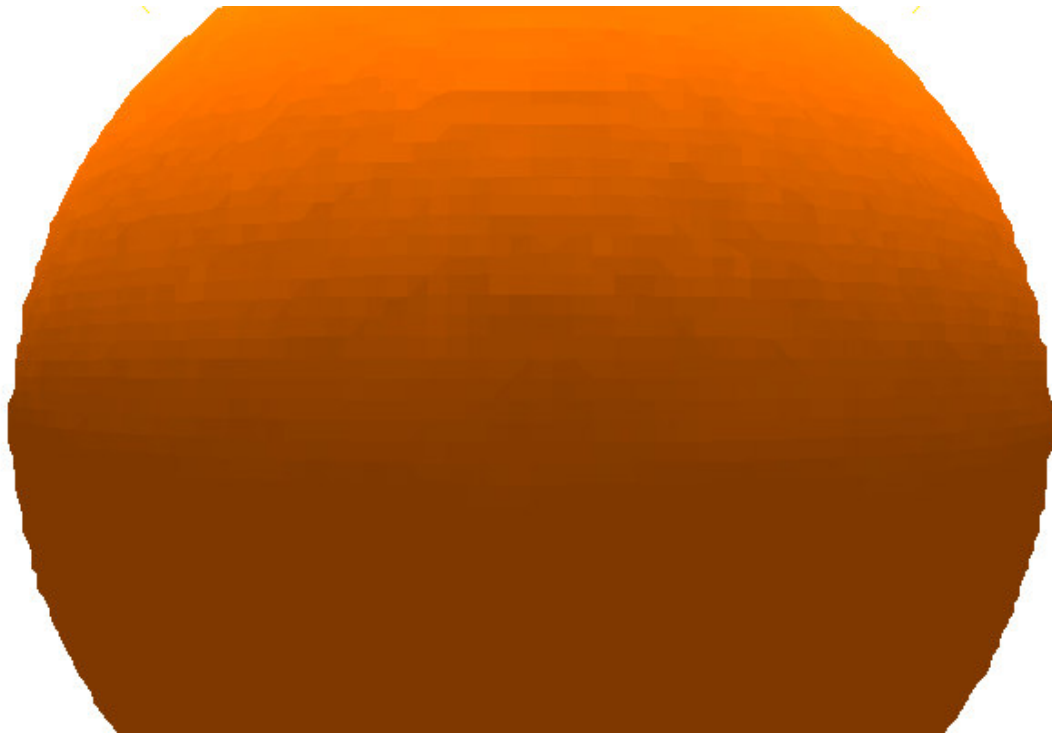## [Additional Images]

(a)

(b)

Figure 1: Rendering using triangles; a. with *edges-centers* marching cubes; b. with pixel-rays marching cubes.
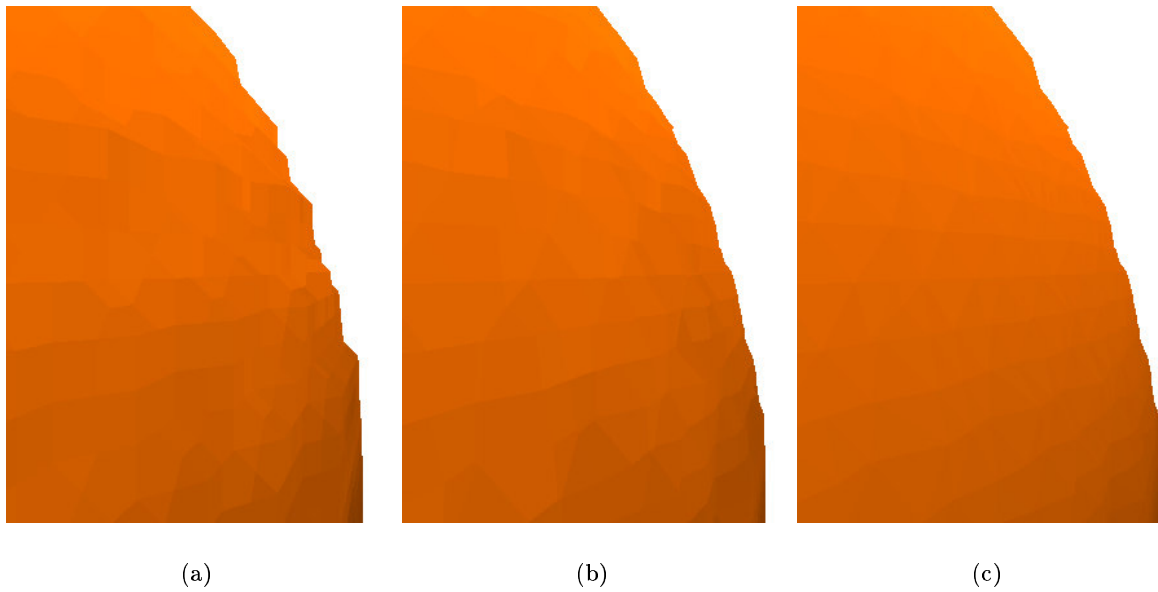
(a)

(b)

(c)

Figure 2: Rendering using voxel normal : each voxel normal is given to all triangles it contains; a. with *edges-centers* Marching cubes; b. with pixel-rays; c. with smoothed normal (distance of 5 voxels).
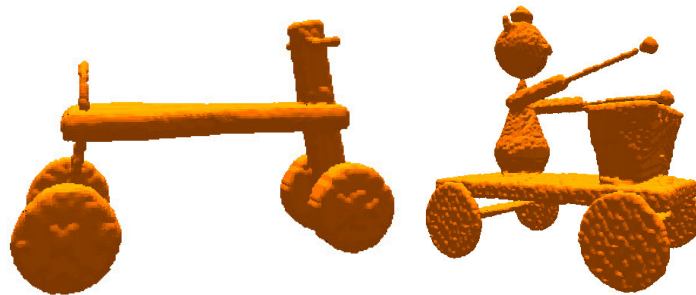
(a)   (b)   (c)

Figure 3: Rendering using voxel normal with smoothing (in the submitted paper, image histograms have been enlarged to make surface irregularity appear); a. with *edges-centers* marching cubes note the bumpy surface on object silhouette; b. with pixel-rays marching cubes contour is less bumpy; c. with real sphere normal.
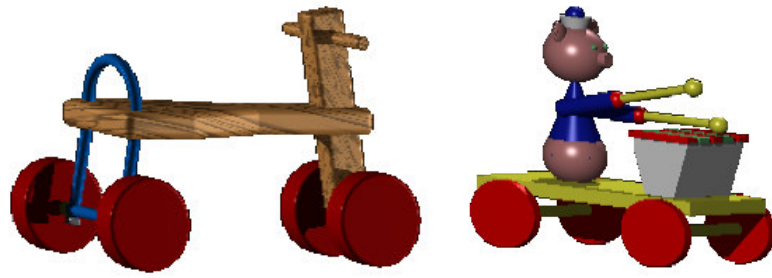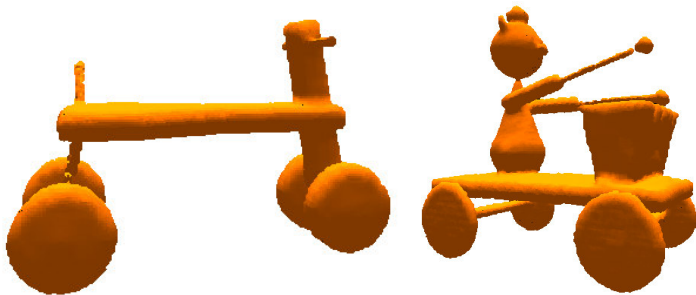
(a)
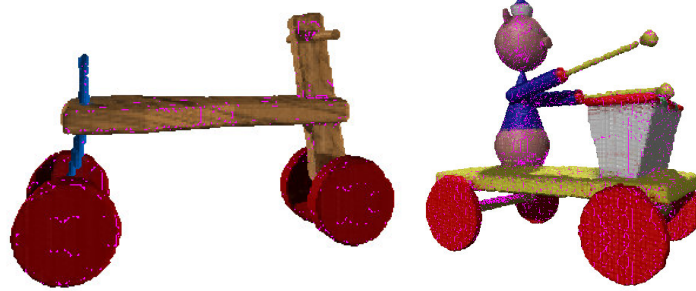
(b)

(c)

(d)

Figure 4: a. Actual object images for a virtual quad and a virtual pig; b. rendering with triangles color (corresponding to voxel average radiance); reconstructed octree depth is 8 for the quad and 9 for the pig; purple pixels correspond to voxels never intersected by in-rays; c. Rendering using smoothed normal (neighborhood size=1); d. same as c, with a neighborhood size=5.
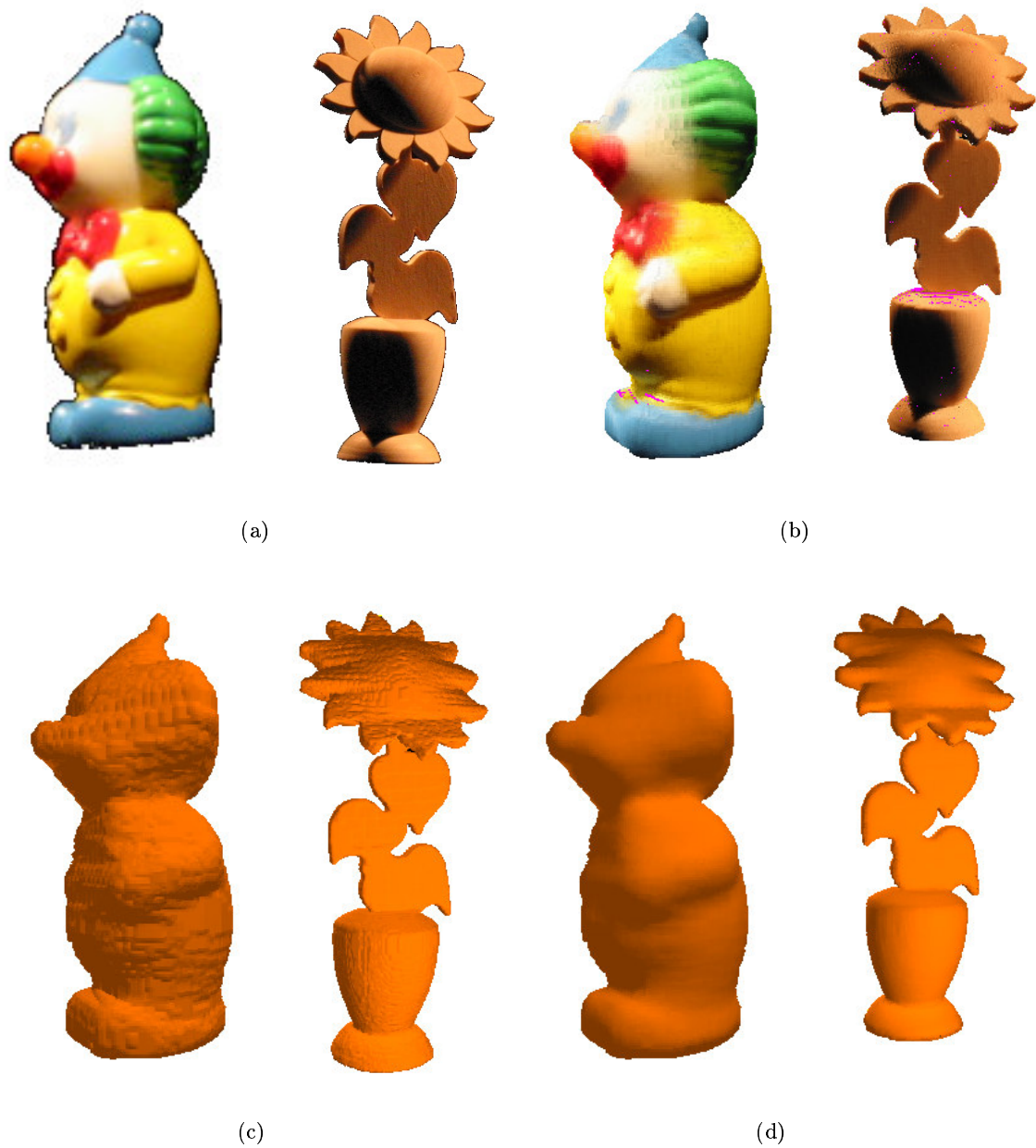
(a)

(b)

(c)

(d)

Figure 5: a. Actual object images for real objects: a plastic clown (toy) and a wood-flower; b. rendering with triangles color (corresponding to voxel average radiance); reconstructed octree depth is 8 for the quad and 9 wood-flower; purple pixels correspond to voxels never intersected by in-rays; c. Rendering using smoothed normal (neighborhood size=1); d. same as c, with a neighborhood size=5. Note that cavities in the real clown surface generate artifacts for the reconstructed shape.