Data-Driven Structural Priors for Shape Completion Supplemental Material

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The supplemental material presents several additional results and comparisons which complement the experiments reported in the main paper.

Comparison to symmetry detection. Figure 1 shows the same comparison as Figure 10 in the main paper, but averaged over all shape categories that have a single reflective symmetry. We note our method offers a smaller improvement than on the airplane category because there is less ambiguity (e.g., airplanes are approximately symmetric top-to-bottom, while chairs are not). That said, [Podolak et al. 2006] still suffers from large errors compared to our method.

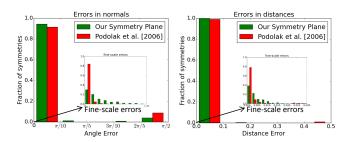


Figure 1: This figure complements Figure 10 in the main paper and shows the error of the symmetry plane estimation for all datasets except for bicycles and tables, which have zero or multiple reflectional symmetries.

Per-point labeling accuracy. During the part structure estimation our system also assigns a label to each point. To make it possible for the future researchers to compare to our per-point labeling accuracy we provide average accuracy (i.e., the fraction of correctly labeled points) over all categories in Figure 2.

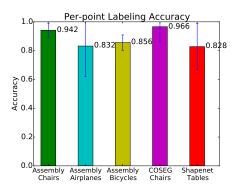


Figure 2: This plot shows the per-point labeling accuracy.

References

PODOLAK, J., SHILANE, P., GOLOVINSKIY, A., RUSINKIEWICZ, S., AND FUNKHOUSER, T. 2006. A planar-reflective symmetry transform for 3D shapes. *ACM Trans. Gr.* 25, 3.