Structured Annotations for 2D-to-3D Modeling: Additional Data from Our User Studies

Yotam Gingold*
New York University / JST ERATO

Takeo Igarashi
University of Tokyo / JST ERATO

Denis Zorin
New York University

We performed a comparison study between our system and FiberMesh [Nealen et al. 2007]. FiberMesh was modified to display an underlying guide image and to have a second side-by-side view; both views had a button to reset the view parameters. Subjects were asked to create a 3D model from a 2D illustration in each system and to work until satisfied. All subjects received the same image. Subjects were randomly assigned to use our system or FiberMesh first. Before using each system, subjects were given 15 minutes of training, which consisted of a brief video and hands-on, guided experimentation. Throughout the study, subjects were encouraged to "think out loud." The example illustration and data collected from the comparison study are shown in Figure 1.

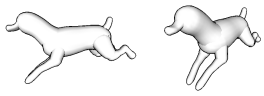
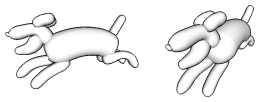
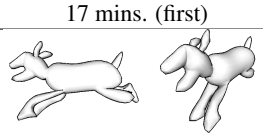
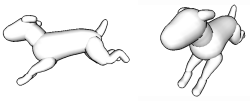
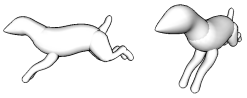
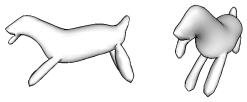
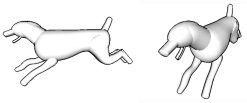
	Our System	[Nealen et al. 2007]
Subject 1	 43 mins. (preferred)	 17 mins. (first)
Subject 2	 23 mins. (first)	 24 mins. (preferred)
Subject 3	 17 mins. (first & preferred)	 23 mins.
Subject 4	 18 mins. (first & preferred)	 13 mins.
Subject 5	 22 mins. (preferred)	 64 mins. (first)
Subject 6	 40 mins. (preferred)	 22 mins. (first)
Subject 7	 37 mins.	 53 mins. (first)

Figure 1: *Our comparison study. The given 2D illustration (top) along with the 3D model created using our system (left column) and FiberMesh [Nealen et al. 2007] (right column). Each row corresponds to a single subject. Time until satisfaction, whether the system was preferred by the subject, and whether the system was used first by the subject are displayed underneath each model.*

References

NEALEN, A., IGARASHI, T., SORKINE, O., AND ALEXA, M. 2007. FiberMesh: Designing freeform surfaces with 3D curves. *ACM Transactions on Graphics 26*, 3, 41.

*e-mail: gingold@cs.nyu.edu

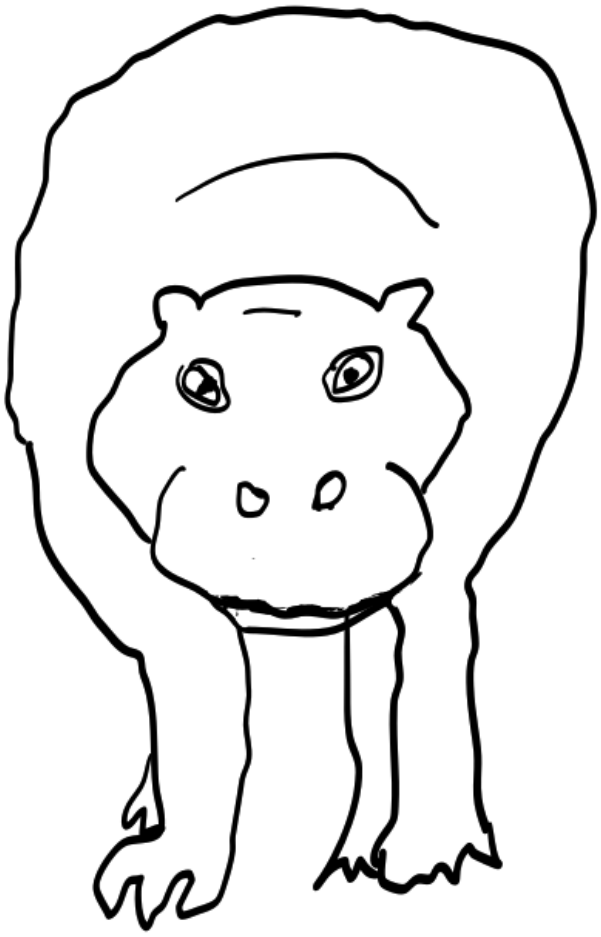


Figure 2: *One subject in our informal user study struggled with this drawing whose point-of-view is aligned with primitives' spines.*