HanDiffuser: Text-to-Image Generation With Realistic Hand Appearances –Supplementary Material–

A. Additional Results

We show additional qualitative comparisons with the Stable Diffusion [2] baseline and the proposed HanDiffuser in Fig. 1 and Fig. 2.

We also show additional qualitative results and intermediate outputs from the two components of HanDiffuser in Fig. 3 and Fig. 4.

References

[1] Matthew Loper, Naureen Mahmood, Javier Romero, Gerard Pons-Moll, and Michael J. Black. SMPL: A skinned multi-person linear model. In *ACM Trans. Graphics (Proc. SIGGRAPH Asia)*, 2015. 4, 5

[2] Robin Rombach, Andreas Blattmann, Dominik Lorenz, Patrick Esser, and Björn Ommer. High-resolution image synthesis with latent diffusion models. In *The IEEE Conference on Computer Vision and Pattern Recognition (CVPR)*, pages 10684–10695, 2022. 1

[3] Javier Romero, Dimitrios Tzionas, and Michael J. Black. Embodied hands: Modeling and capturing hands and bodies together. *ACM Transactions on Graphics, (Proc. SIGGRAPH Asia)*, 2017. 4, 5

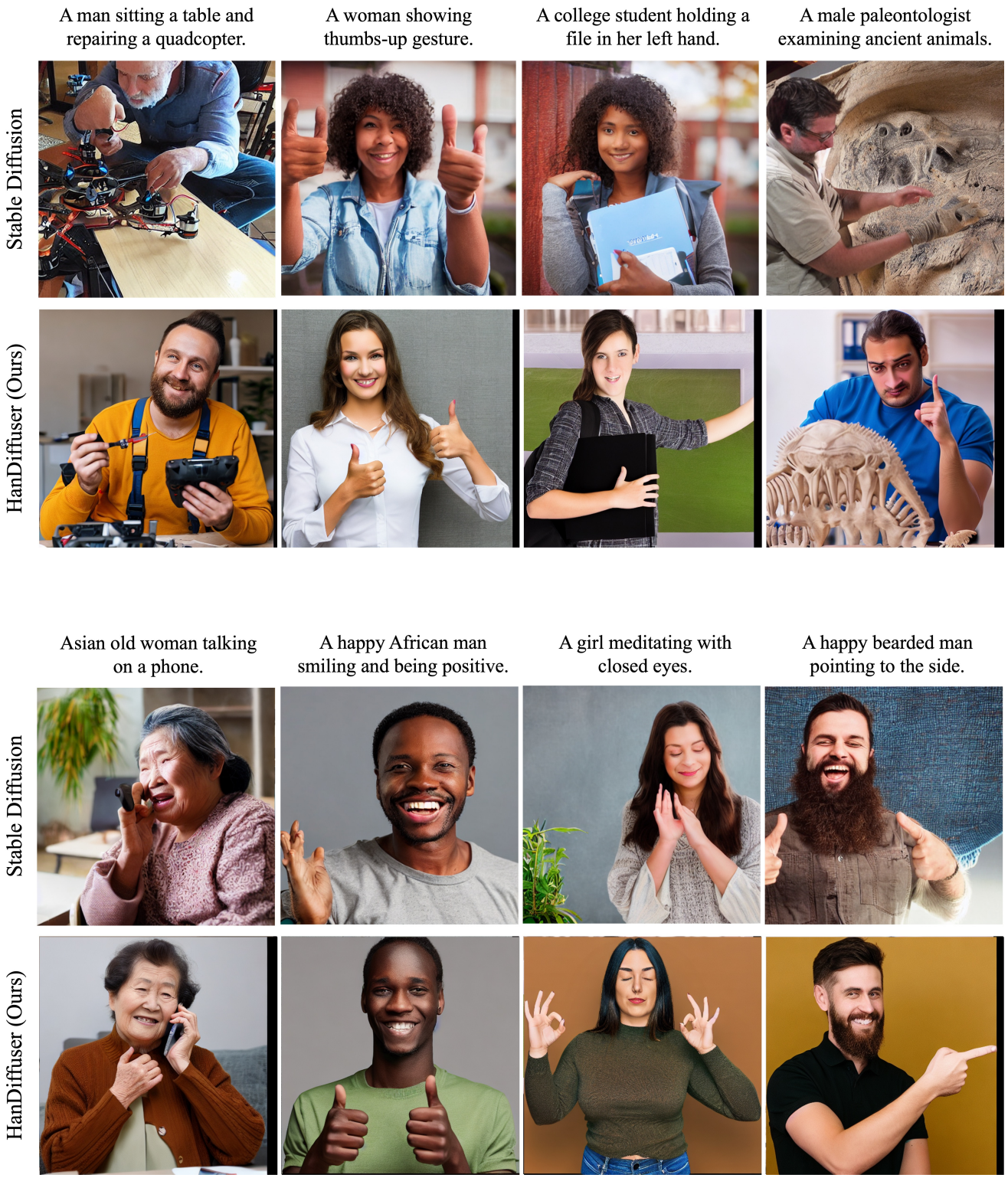

Figure 1. **Qualitative Comparison.** We compare the quality of hands in images generated from Stable Diffusion and the proposed HanDiffuser.

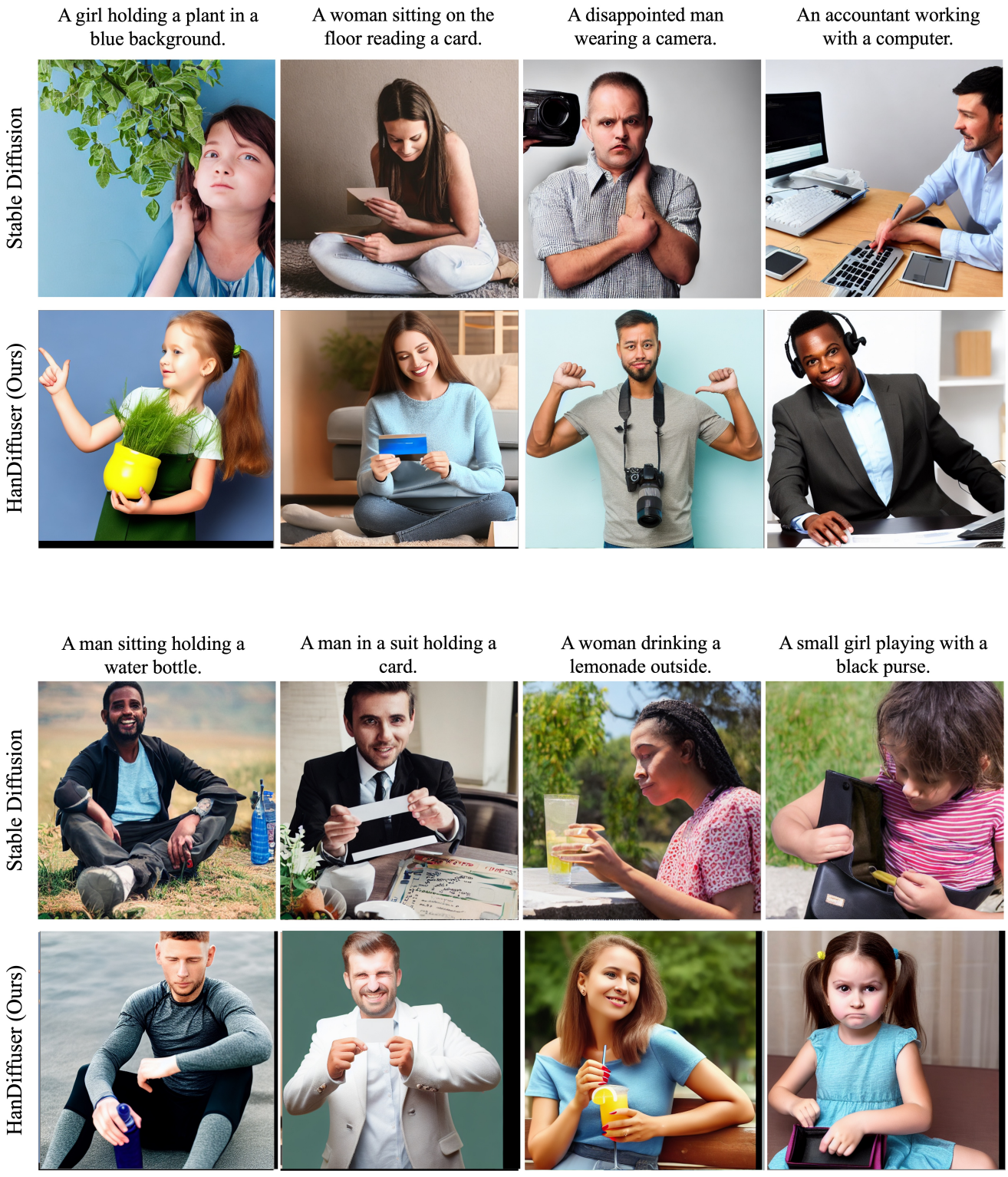

Figure 2. **Qualitative Comparison.** We compare the quality of hands in images generated from Stable Diffusion and the proposed HanDiffuser.

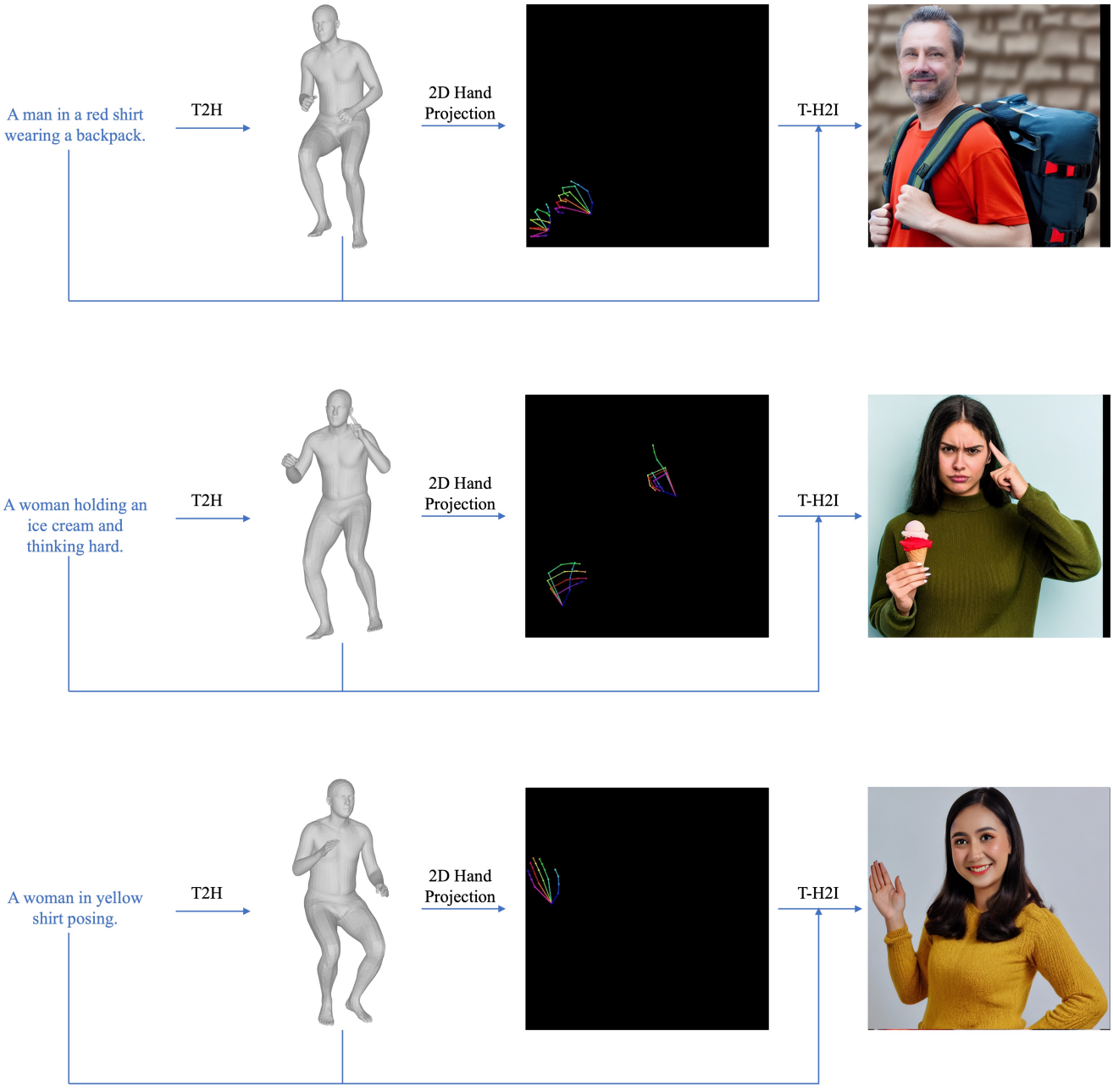

Figure 3. **HanDiffuser Qualitative Results.** Given a text input, Text-to-Hand-Params (T2H) generates SMPL-H [1, 3] parameters. We extract the MANO-Hand from SMPL-H and use some camera parameters to obtain 2D hand poses. The text, MANO-Hand and 2D hand poses are used to generate the final image using Text-Guided Hand-Params-to-Image .

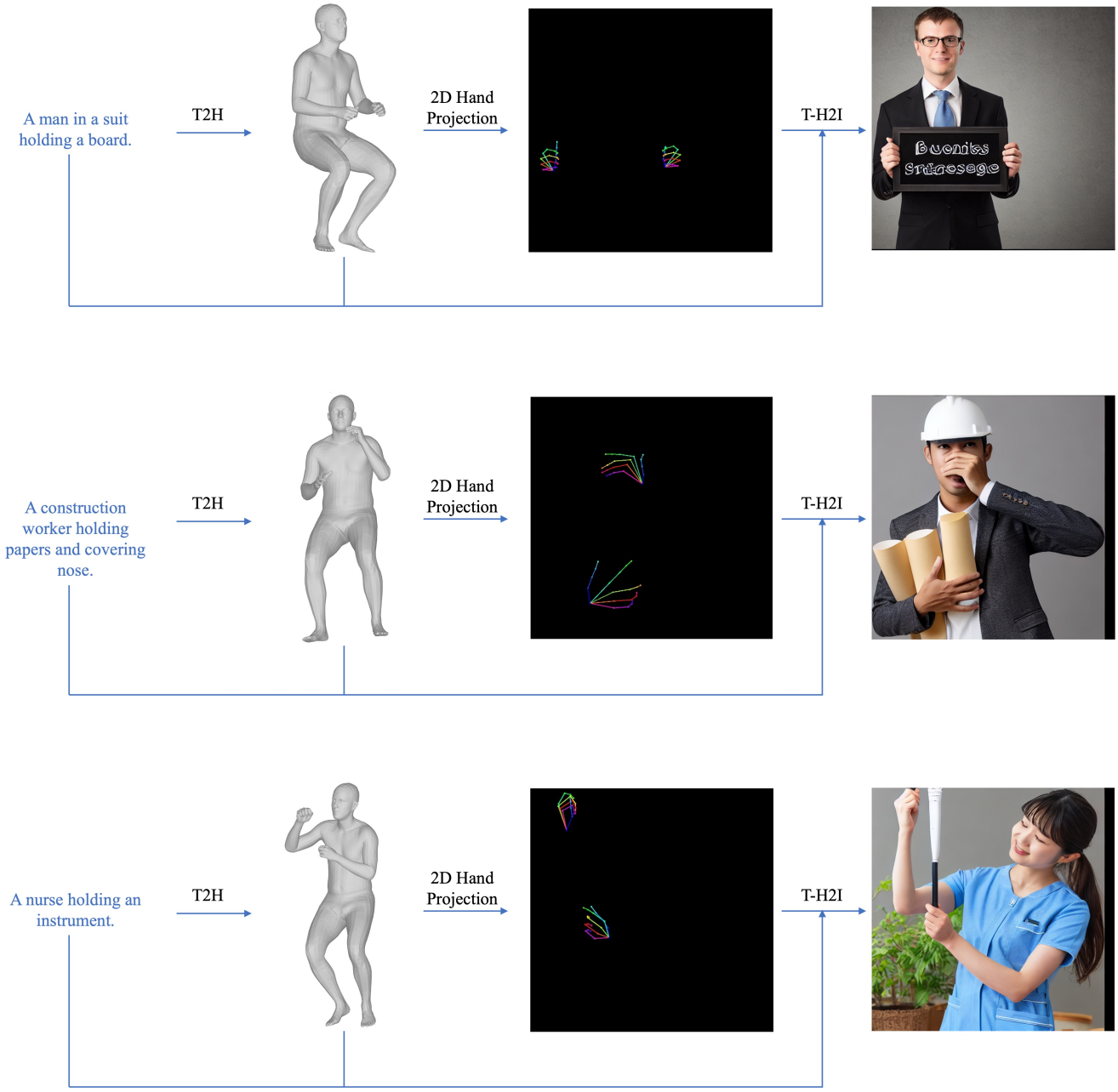

Figure 4. **HanDiffuser Qualitative Results.** Given a text input, Text-to-Hand-Params (T2H) generates SMPL-H [1, 3] parameters. We extract the MANO-Hand from SMPL-H and use some camera parameters to obtain 2D hand poses. The text, MANO-Hand and 2D hand poses are used to generate the final image using Text-Guided Hand-Params-to-Image .