Example-Based Microstructure Rendering with Constant Storage (Appendix)

BEIBEI WANG, School of Computer Science and Engineering, Nanjing University of Science and Technology, China
MILOŠ HAŠAN, Adobe Research, USA
NICOLAS HOLZSCHUCH, University Grenoble Alpes, Inria, CNRS, Grenoble INP, LJK, France
LINGQI YAN, University of California, Santa Barbara, USA

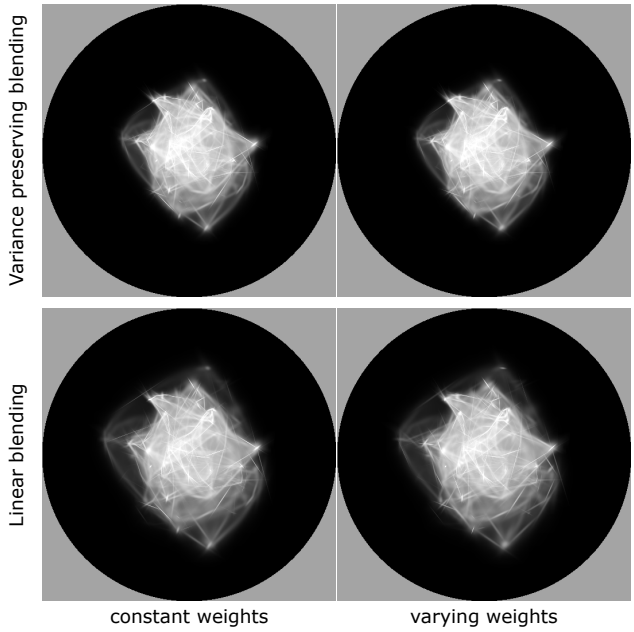

Fig. 1. Comparison NDF images computed with approximate and accurate Jacobians in linear blending and variance preserving blending, showing that the approximation makes little difference in practice.

ACM Reference Format:
Beibei Wang, Miloš Hašan, Nicolas Holzschuch, and LingQi Yan. 2020. Example-Based Microstructure Rendering with Constant Storage (Appendix). *ACM Trans. Graph.* 1, 1 (September 2020), 1 page. https://doi.org/10.1145/nnnnnnn.nnnnnnn

A APPENDIX

A.1 Accurate Jacobian Blending

We use the chain rule to compute the blended Jacobian **J**. In our results, we actually use an approximation in the Jacobian computation: since the blending weights vary slowly within each target patch, we assume that the weights for blending are locally constant. To validate that this approximation make little difference in practice, we compare the NDF images with these two approaches (with and without approximation) in Figure 1.

Authors' addresses: Beibei Wang, School of Computer Science and Engineering, Nanjing University of Science and Technology, 200 Xiaolingwei Rd, Nanjing, 210094, China, beibei.wang@njust.edu.cn; Miloš Hašan, Adobe Research, San Jose, USA, milos.hasan@gmail.com; Nicolas Holzschuch, University Grenoble Alpes, Inria, CNRS, Grenoble INP, LJK, 655, avenue de l'Europe, Grenoble, France, Nicolas.Holzschuch@inria.fr; LingQi Yan, University of California, Santa Barbara, 2119 Harold Frank Hall, Santa Barbara, CA, 93106, USA, lingqi@cs.ucsb.edu.

0730-0301/2020/9-ART $15.00
https://doi.org/10.1145/nnnnnnn.nnnnnnn