

Supplementary

Paper ID: 112

SHAD3S: A model to Sketch, Shade and Shadow

Introduction

We present some more qualitative results for our proposed models with diverse contours and various input conditions. Additionally, we strongly suggest the readers to please watch the video provided as a part of supplementary submission.

Results

Split model (SP)

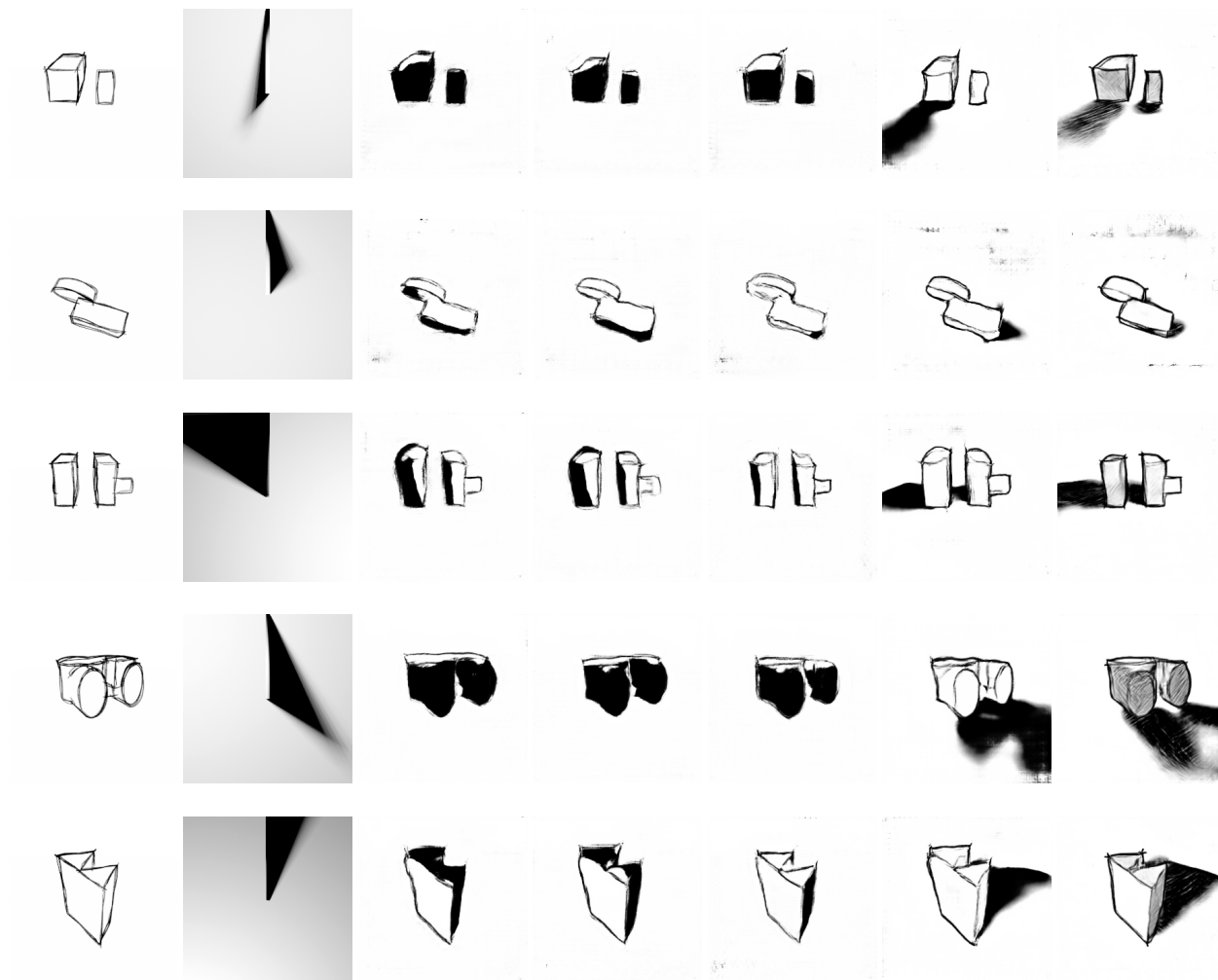


Figure 1. Input: *i.*) Contour, *ii.*) Illumination, *iii.*) 4 predicted tonal maps(highlight, midtones, shade, shadow)
Output: Rendered sketch (*from left to right*)

Split model without Shadows on ground (SP:WS)

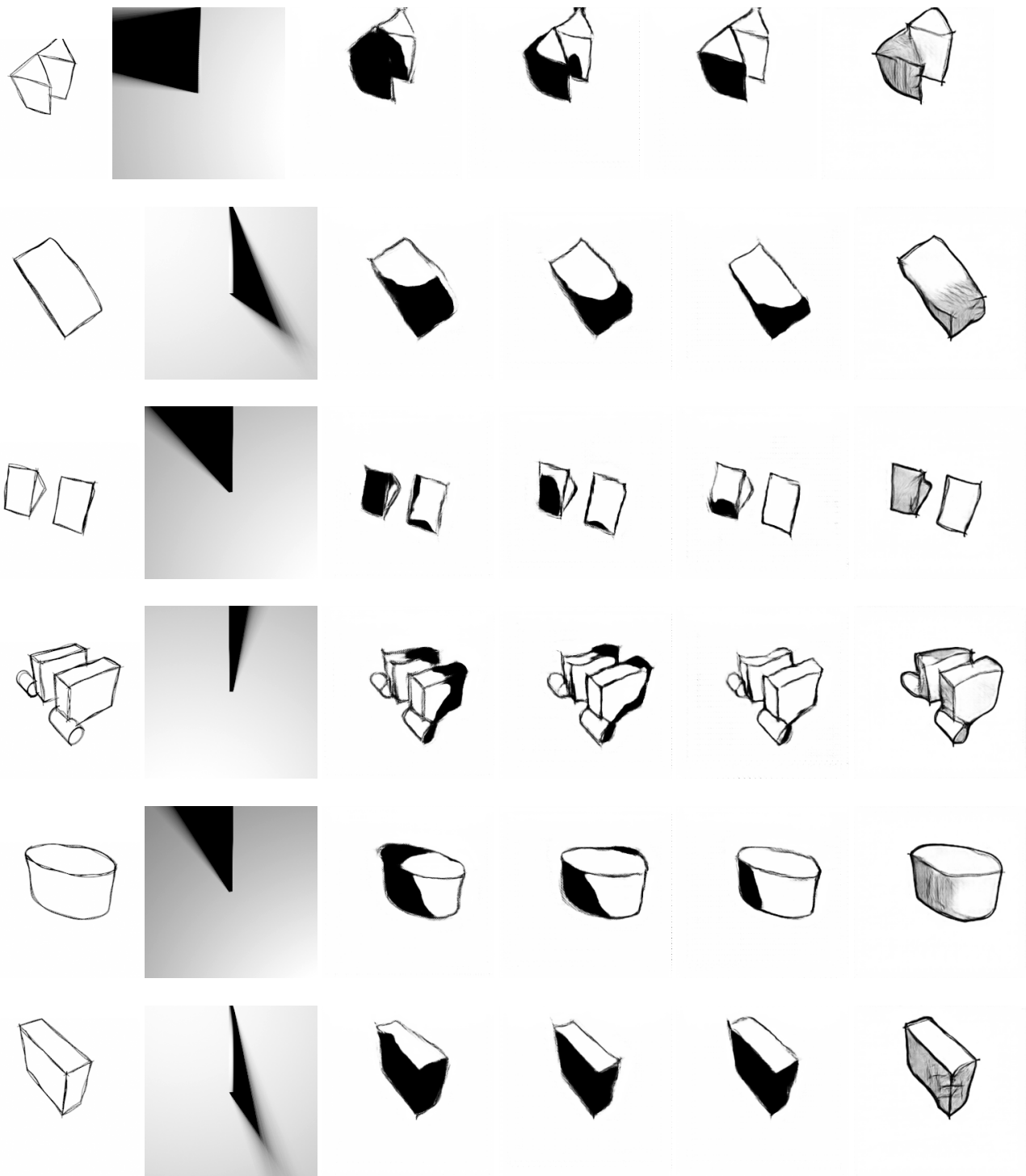


Figure 2. Input: *i.*) Contour, *ii.*) Illumination, *iii.*) 3 predicted tonal maps(highlight, midtones, shade)
Output: Rendered sketch (*from left to right*)

Squeeze-and-excitation Architecture (SE)

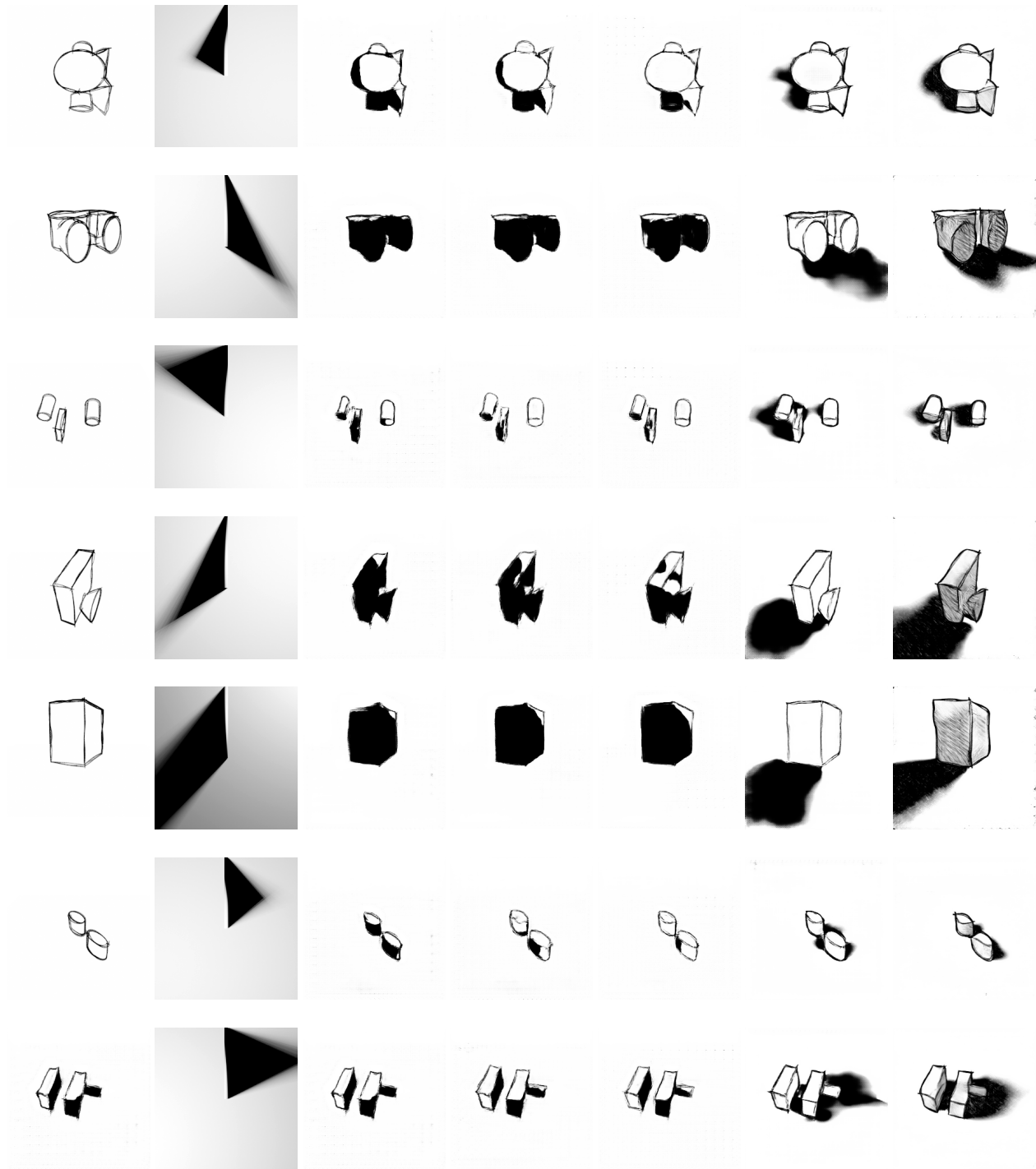


Figure 3. Input: *i.*) Contour, *ii.*) Illumination, *iii.*) 4 predicted tonal masks(highlight, midtones, shade, shadow)
Output: Rendered sketch (*from left to right*)

Direct Model (DM)

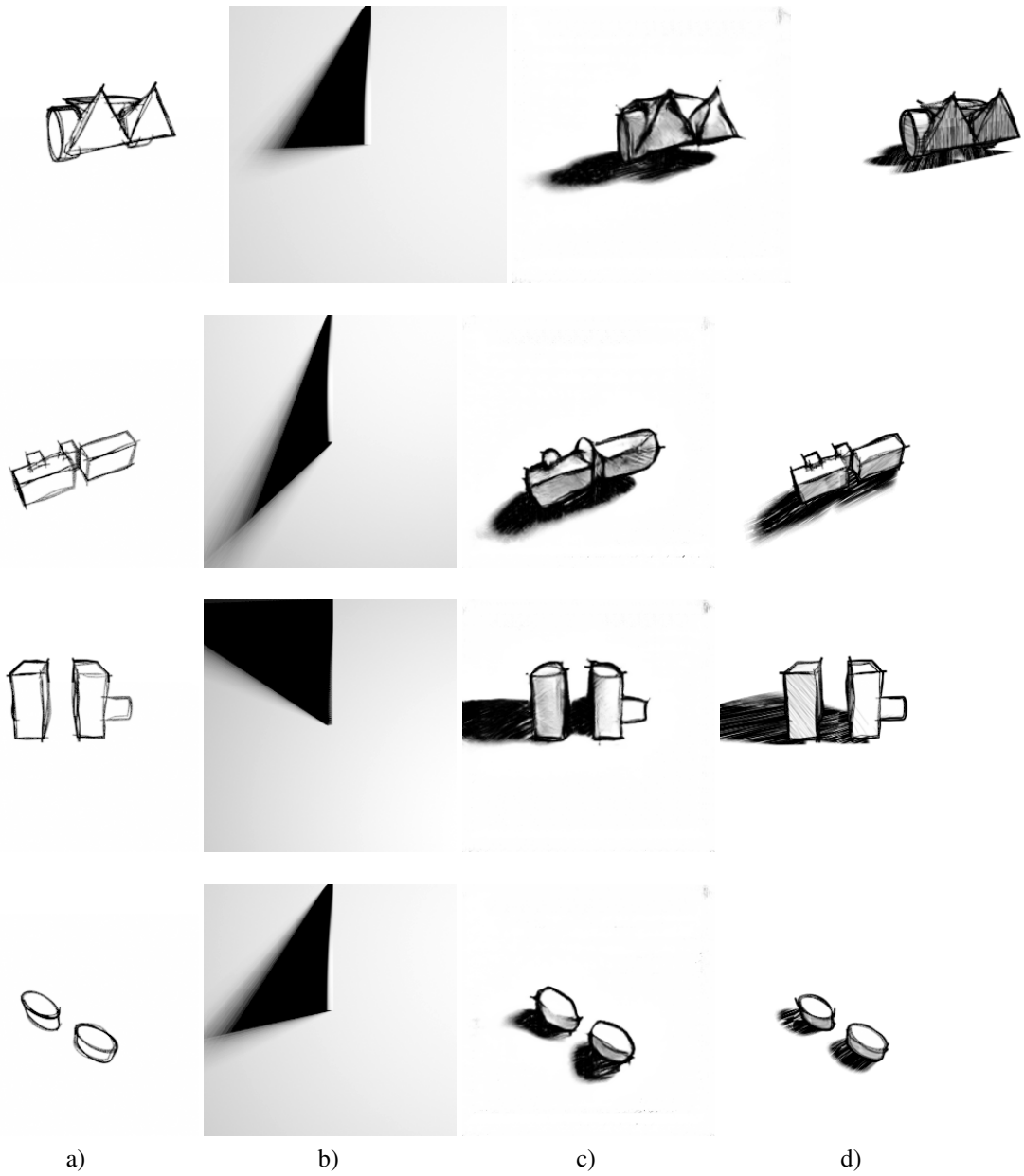


Figure 4. Input: *a)* Contour, *b)* Illumination
Output: *c)* Rendered Sketch
Ground Truth: *d)* Synthetic Sketch

Rendering Sketch with only Tonal masks as cues (exploratory experiment)

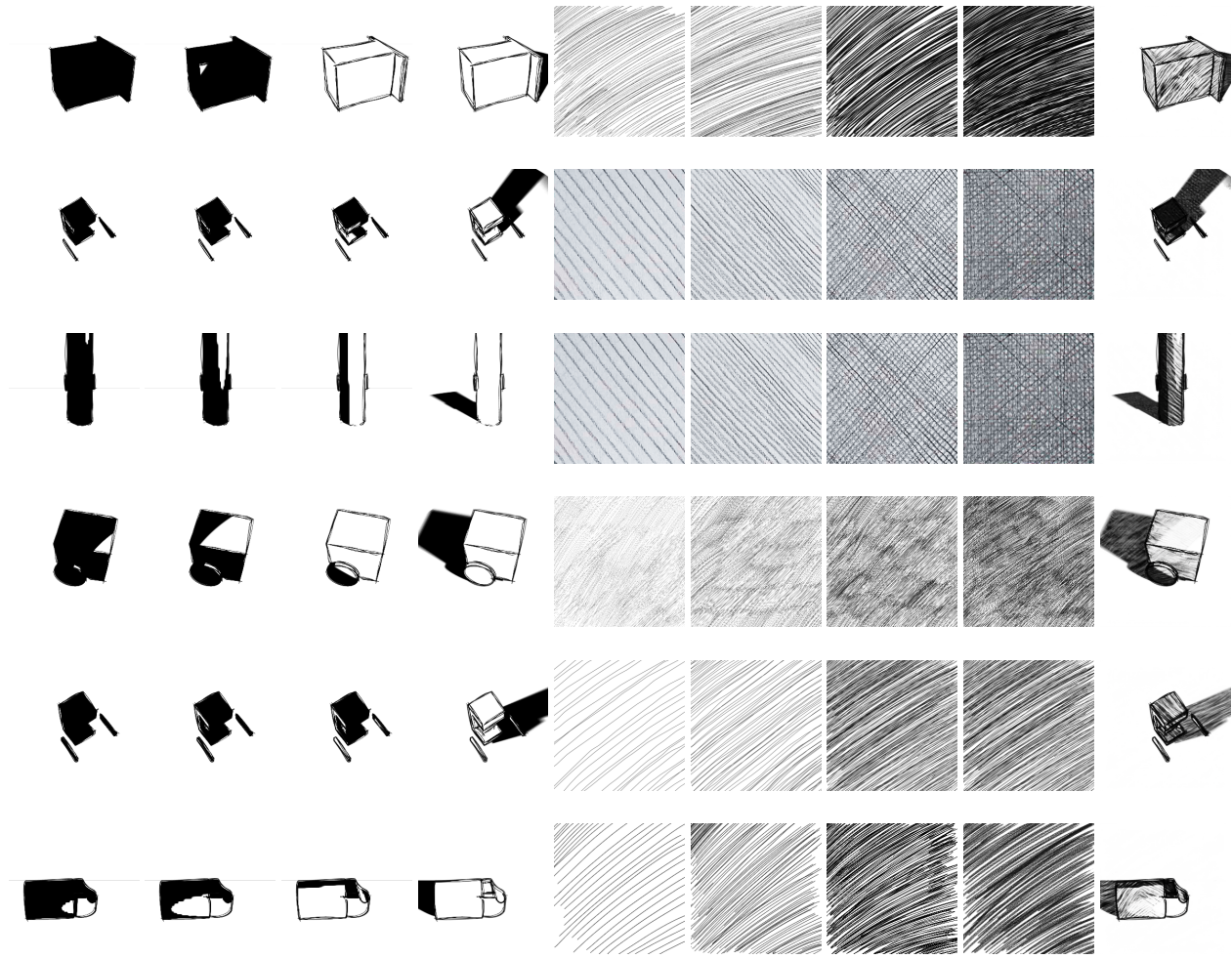


Figure 5. Input: *i.*) 4 tonal maps(highlights, midtones, shade, shadow), *ii.*) 4 input textures corresponding to 4 tonal maps
Output: Rendered sketch (*from left to right*)