

# Gloss Perception in Painterly and Cartoon Rendering - Supplemental Materials

## 1 Mapping coefficients

### 1.1 Lab data

	$\alpha$	$\beta$	$\gamma$	$\delta$	$\epsilon$	$\zeta$
Brush 4	0.807	0.318	-0.252	0.212	0.618	0.317
Brush 8	0.837	0.290	-0.230	0.235	0.494	0.424
Brush 16	0.722	0.285	-0.224	0.234	0.308	0.584

**Table 1:** Mapping coefficients for the brush sizes in our lab dataset. Opaque strokes.

	$\alpha$	$\beta$	$\gamma$	$\delta$	$\epsilon$	$\zeta$
Brush 4	0.835	0.191	-0.142	0.206	0.648	0.278
Brush 8	0.765	0.171	-0.121	0.340	0.512	0.361
Brush 16	0.676	0.143	-0.109	0.231	0.275	0.567

**Table 2:** Mapping coefficients for the brush sizes in our lab dataset. Semi-transparent strokes.

	$\alpha$	$\beta$	$\gamma$	$\delta$	$\epsilon$	$\zeta$
Brush 4	0.767	0.167	-0.109	0.220	0.689	0.244
Brush 8	0.721	0.116	-0.058	0.304	0.528	0.361
Brush 16	0.565	0.205	-0.141	0.304	0.243	0.611

**Table 3:** Mapping coefficients for the brush sizes in our lab dataset. Bump mapped strokes.

	$\alpha$	$\beta$	$\gamma$	$\delta$	$\epsilon$	$\zeta$
Medium Quant.	0.757	0.105	-0.074	0.151	0.836	0.136
Strong Quant.	0.756	0.132	-0.098	0.232	0.772	0.182

**Table 4:** Mapping coefficients for the cartoon quantization levels in our lab dataset.

### 1.2 Mechanical Turk data

	$\alpha$	$\beta$	$\gamma$	$\delta$	$\epsilon$	$\zeta$
No Brush	0.618	0.284	-0.204	0.282	0.787	0.158
Brush 4	0.485	0.259	-0.176	0.292	0.594	0.317
Brush 8	0.462	0.227	-0.150	0.287	0.391	0.492
Brush 16	0.412	0.153	-0.081	0.243	0.249	0.606

**Table 5:** Mapping coefficients for the brush sizes in our Mechanical Turk dataset. Opaque strokes.

	$\alpha$	$\beta$	$\gamma$	$\delta$	$\epsilon$	$\zeta$
No Brush	0.549	0.469	-0.346	0.416	0.689	0.213
Brush 4	0.552	0.328	-0.235	0.357	0.471	0.310
Brush 8	0.522	0.253	-0.175	0.350	0.325	0.513
Brush 16	0.487	0.265	-0.193	0.274	0.162	0.652

**Table 6:** Mapping coefficients for the brush sizes in our Mechanical Turk dataset. Semi-transparent strokes.

	$\alpha$	$\beta$	$\gamma$	$\delta$	$\epsilon$	$\zeta$
No Brush	0.596	0.390	-0.295	0.355	0.711	0.205
Brush 4	0.470	0.263	-0.183	0.345	0.397	0.456
Brush 8	0.381	0.183	-0.103	0.305	0.286	0.547
Brush 16	0.358	0.162	-0.088	0.230	0.137	0.679

**Table 7:** Mapping coefficients for the brush sizes in our Mechanical Turk dataset. Bump mapped strokes.

	$\alpha$	$\beta$	$\gamma$	$\delta$	$\epsilon$	$\zeta$
No Stylization	0.563	0.359	-0.274	0.233	0.589	0.351
Medium Quant.	0.603	0.356	-0.279	0.311	0.615	0.325
Strong Quant.	0.633	0.383	-0.302	0.447	0.478	0.433

**Table 8:** Mapping coefficients for the cartoon quantization levels in our Mechanical Turk dataset.