

# Coherent Mark-based Stylization of 3D Scenes at the Compositing Stage – Style Breakdowns –

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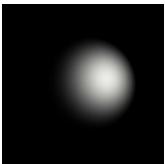
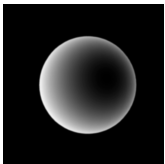


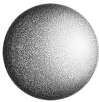
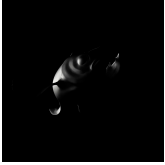





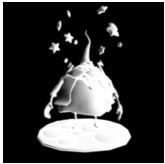




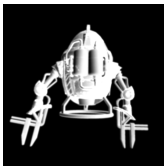





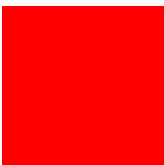


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We show here the input G-buffers, parameters and textures used to produce the styles demonstrated in the paper and in the video.

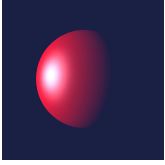
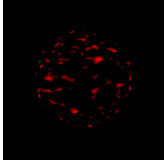

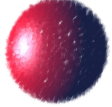




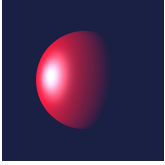

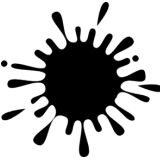
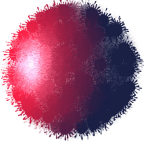


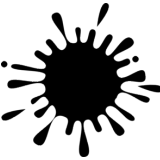

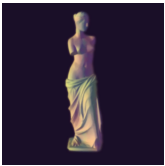
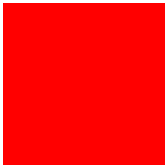


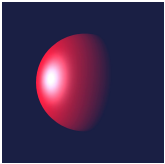


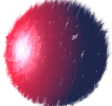
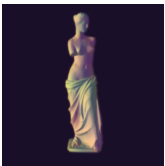
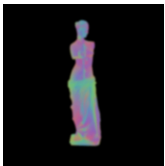


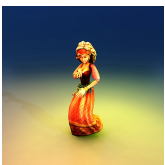
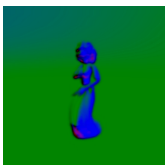


## 1. Pen-and-ink

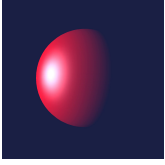
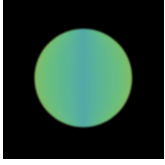







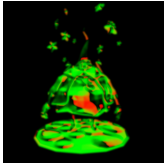



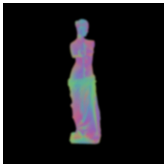


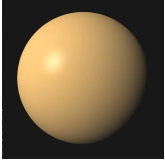
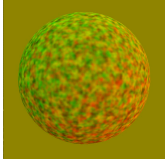



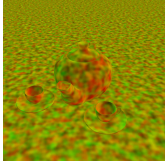

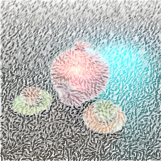
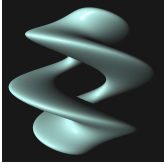
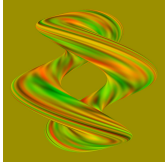

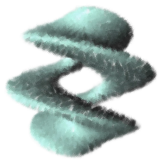
Global parameters	Color	Density	Orientation	Brush texture	Final rendering
Stippling					
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$f = 85.8$ $s_d = 0.030$ $w_u = 0.95$ $\omega = 0.018$ $n = 3$					
$f = 85.8$ $s_d = 0.030$ $w_u = 0.95$ $\omega = 0.018$ $n = 3$					
$f = 85.8$ $s_d = 0.030$ $w_u = 0.95$ $\omega = 0.018$ $n = 3$					
$f = 110.6$ $s_d = 0.022$ $w_u = 0.99$ $\omega = 1$ $n = 3$					

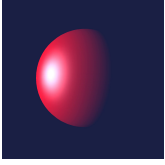


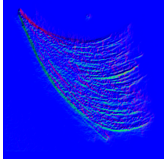
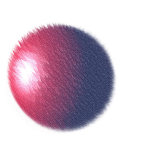
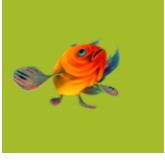


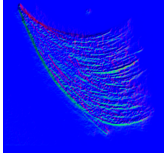

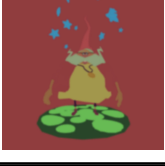


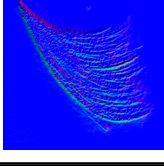

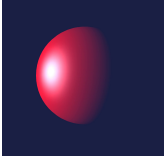
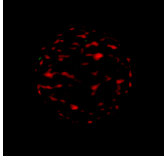
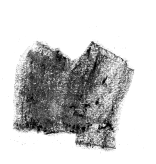
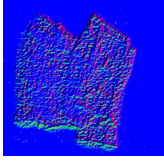
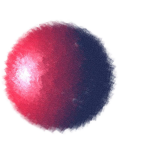
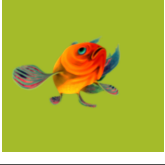
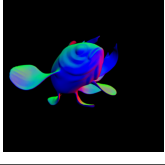

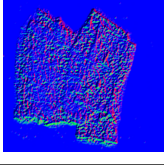

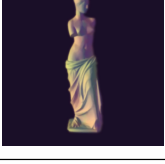


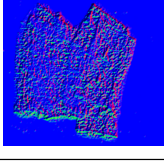

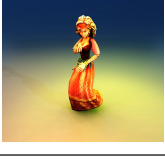
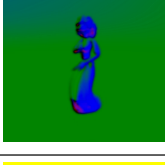
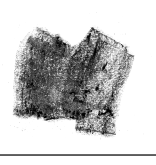
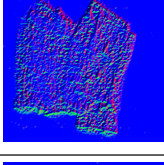



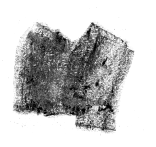
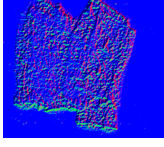

Global parameters	Color	Density	Orientation	Brush texture	Final rendering
<b>Hatching</b>					
$f = 67.5$ $s_d = 0.067$ $w_u = 0.99$ $\omega = 0.018$ $n = 3$					
$f = 67.5$ $s_d = 0.035$ $w_u = 0.99$ $\omega = 0.018$ $n = 3$					
$f = 67.5$ $s_d = 0.035$ $w_u = 0.99$ $\omega = 0.018$ $n = 3$					
$f = 67.5$ $s_d = 0.035$ $w_u = 0.99$ $\omega = 0.018$ $n = 3$					
$f = 67.5$ $s_d = 0.035$ $w_u = 0.99$ $\omega = 0.018$ $n = 3$					
$f = 67.5$ $s_d = 0.035$ $w_u = 0.99$ $\omega = 0.018$ $n = 3$					
$f = 46.80$ $s_d = 0.045$ $w_u = 0.997$ $\omega = 0.0$ $n = 3$		 Density  Size			

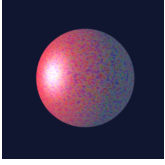


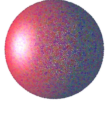








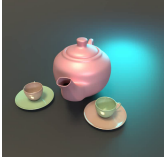


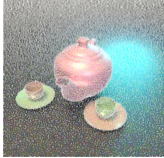


## 2. Painterly

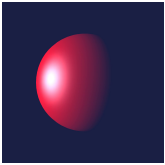

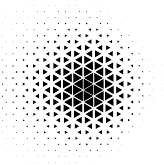

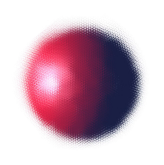


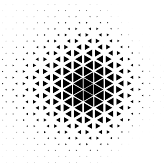

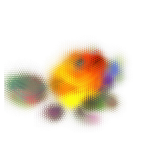

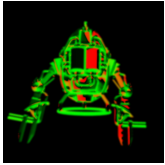
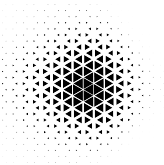



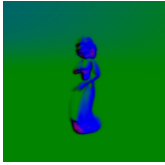
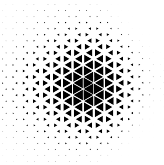


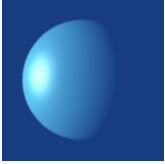


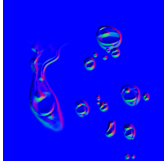
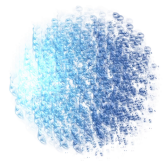



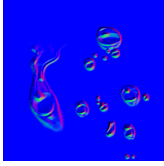
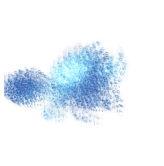
Global parameters	Color	Orientation	Brush texture	Final rendering
<b>Fiber Charcoal</b>				
$f = 17.3$ $s_d = 0.124$ $w_u = 0.896$ $\omega = 0.001$ $n = 3$				
$f = 41.6$ $s_d = 0.039$ $w_u = 0.896$ $\omega = 0.001$ $n = 3$				
<b>Splash</b>				
$f = 6.9$ $s_d = 0.206$ $w_u = 0.96$ $\omega = 0.653$ $n = 3$				
$f = 13.8$ $s_d = 0.112$ $w_u = 0.846$ $\omega = 0.474$ $n = 3$				
$f = 17.9$ $s_d = 0.082$ $w_u = 0.84$ $\omega = 0.672$ $n = 3$				
<b>Knife</b>				
$f = 16.30$ $s_d = 0.149$ $w_u = 0.896$ $\omega = 0.001$ $n = 3$				
$f = 100$ $s_d = 0.048$ $w_u = 0.896$ $\omega = 0.001$ $n = 3$				
$f = 38.7$ $s_d = 0.035$ $w_u = 0.942$ $\omega = 0.12$ $n = 5$				

Global parameters	Color	Orientation	Brush texture	Final rendering
<b>Clouds</b>				
$f = 11.9$ $s_d = 0.336$ $w_u = 0.811$ $\omega = 0.982$ $n = 3$				
$f = 16.3$ $s_d = 0.202$ $w_u = 0.752$ $\omega = 0.982$ $n = 3$				
$f = 21.30$ $s_d = 0.142$ $w_u = 0.811$ $\omega = 0.982$ $n = 3$				
$f = 24.80$ $s_d = 0.167$ $w_u = 0.752$ $\omega = 0.982$ $n = 3$				
<b>Brush</b>				
$f = 7.8$ $s_d = 0.028$ $w_u = 0.83$ $\omega = 1$ $n = 3$				
$f = 7.8$ $s_d = 0.028$ $w_u = 0.83$ $\omega = 1$ $n = 3$				
$f = 7.8$ $s_d = 0.028$ $w_u = 0.83$ $\omega = 1$ $n = 3$				

Global parameters	Color	Orientation	Brush texture	Brush normal	Final rendering
<b>Fiber</b>					
$f = 15.6$ $s_d = 0.137$ $w_u = 0.904$ $\omega = 0.018$ $n = 3$					
$f = 18.30$ $s_d = 0.090$ $w_u = 0.94$ $\omega = 0.018$ $n = 3$					
$f = 21.0$ $s_d = 0.057$ $w_u = 0.904$ $\omega = 0.018$ $n = 3$					
<b>Pastel</b>					
$f = 12.20$ $s_d = 0.149$ $w_u = 0.896$ $\omega = 0.001$ $n = 3$					
$f = 18.40$ $s_d = 0.056$ $w_u = 0.896$ $\omega = 0.001$ $n = 3$					
$f = 29.20$ $s_d = 0.050$ $w_u = 0.896$ $\omega = 0.001$ $n = 3$					
$f = 38.70$ $s_d = 0.035$ $w_u = 0.942$ $\omega = 0.12$ $n = 5$					
$f = 37.30$ $s_d = 0.027$ $w_u = 0.908$ $\omega = 1.0$ $n = 3$					

Global parameters	Color	Orientation	Brush texture	Final rendering
<b>Pointillism</b>				
$f = 27.3$ $s_d = 0.064$ $w_u = 0.987$ $\omega = 0.001$ $n = 3$				
$f = 38.5$ $s_d = 0.053$ $w_u = 0.987$ $\omega = 0.001$ $n = 3$				
$f = 27.3$ $s_d = 0.047$ $w_u = 0.987$ $\omega = 0.001$ $n = 3$				
$f = 16.2$ $s_d = 0.02$ $w_u = 0.6$ $\omega = 0.8$ $n = 3$				

### 3. Large splats

Global parameters	Color	Orientation	Brush texture	Brush normal	Final rendering
<b>Triangles</b>					
$f = 10.20$ $s_d = 0.30$ $w_u = 0.896$ $\omega = 0.001$ $n = 3$					
$f = 8.40$ $s_d = 0.266$ $w_u = 0.896$ $\omega = 0.001$ $n = 3$					
$f = 17.30$ $s_d = 0.116$ $w_u = 0.896$ $\omega = 0.001$ $n = 3$					
$f = 38.7$ $s_d = 0.065$ $w_u = 0.942$ $\omega = 0.12$ $n = 5$					
<b>Bubbles</b>					
$f = 5.0$ $s_d = 0.402$ $w_u = 0.96$ $\omega = 1$ $n = 3$					
$f = 11.30$ $s_d = 0.209$ $w_u = 0.846$ $\omega = 1$ $n = 3$					

#### 4. Procedural splats

##### 4.1. Dynamic Gabor noise

Global parameters	Gabor kernel	Orientation	Gabor noise	Final style
<b>Thresholded Gabor noise</b>				
$f = 16.50$ $s_d = 0.151$ $w_u = 0.981$ $\omega$ : irrelevant $n = 3$				
$f = 21.60$ $s_d = 0.151$ $w_u = 0.977$ $\omega$ : irrelevant $n = 3$				
<b>Watercolor</b>				
$f = 13.30$ $s_d = 0.229$ $w_u = 0.875$ $\omega$ : irrelevant $n = 3$				
$f = 55.20$ $s_d = 0.033$ $w_u = 0.982$ $\omega$ : irrelevant $n = 3$				

##### 4.2. Animated splat

Global parameters	Color	Density	Orientation	Implicit brush	Final rendering
<b>Procedural Hair</b>					
$f = 26.5$ $s_d = 0.37$ $w_u = 0.6$ $\omega = 1$ $n = 2$					
$f = 26.5$ $s_d = 0.37$ $w_u = 0.1$ $\omega = 1$ $n = 2$					