Supplementary Material (Paper ID 88)

1 Input image data from Middlebury Stereo

|	$v_L(x,y)$	$v_R(x,y)$	$v(x,y)$ and $d(x,y)$
$r = 0.5$	im0	im4	im2
$r = 0.25$	im1	im5	disp2
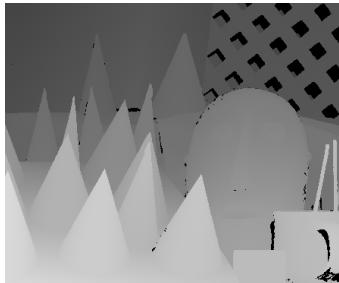
Figure 1: cones

	$v_L(x,y)$	$v_R(x,y)$	$v(x,y)$ and $d(x,y)$
$r = 0.5$	im0	im4	im2
$r = 0.25$	im1	im5	disp2
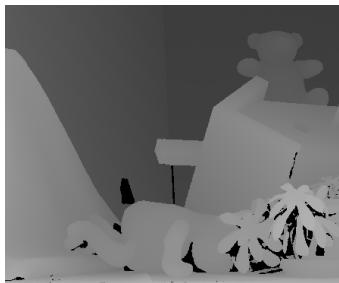
Figure 2: teddy

2 Results

Table 1: Summary

	dataset	disparity error	viewpoint(r)
Figure 3	cones	Gaussian	0.5
Figure 4	cones	Gaussian	0.25
Figure 5	cones	uniform	0.5
Figure 6	cones	uniform	0.25
Figure 7	teddy	Gaussian	0.5
Figure 8	teddy	Gaussian	0.25
Figure 9	teddy	uniform	0.5
Figure 10	teddy	uniform	0.25

* Note that MSE values may be slightly different from those desribed in the paper, becuase disparity errors are generated by the randam number generator.

σ	linear interpolation	band-limited linear interpolation	optimal interpolation
0.5	MSE = 70.9	MSE = 70.9	MSE = 71.5
1.0	MSE = 88.1	MSE = 88.1	MSE = 89.2
3.0	MSE = 209.5	MSE = 182.6	MSE = 177.6
5.0	MSE = 311.1	MSE = 252.1	MSE = 245.4
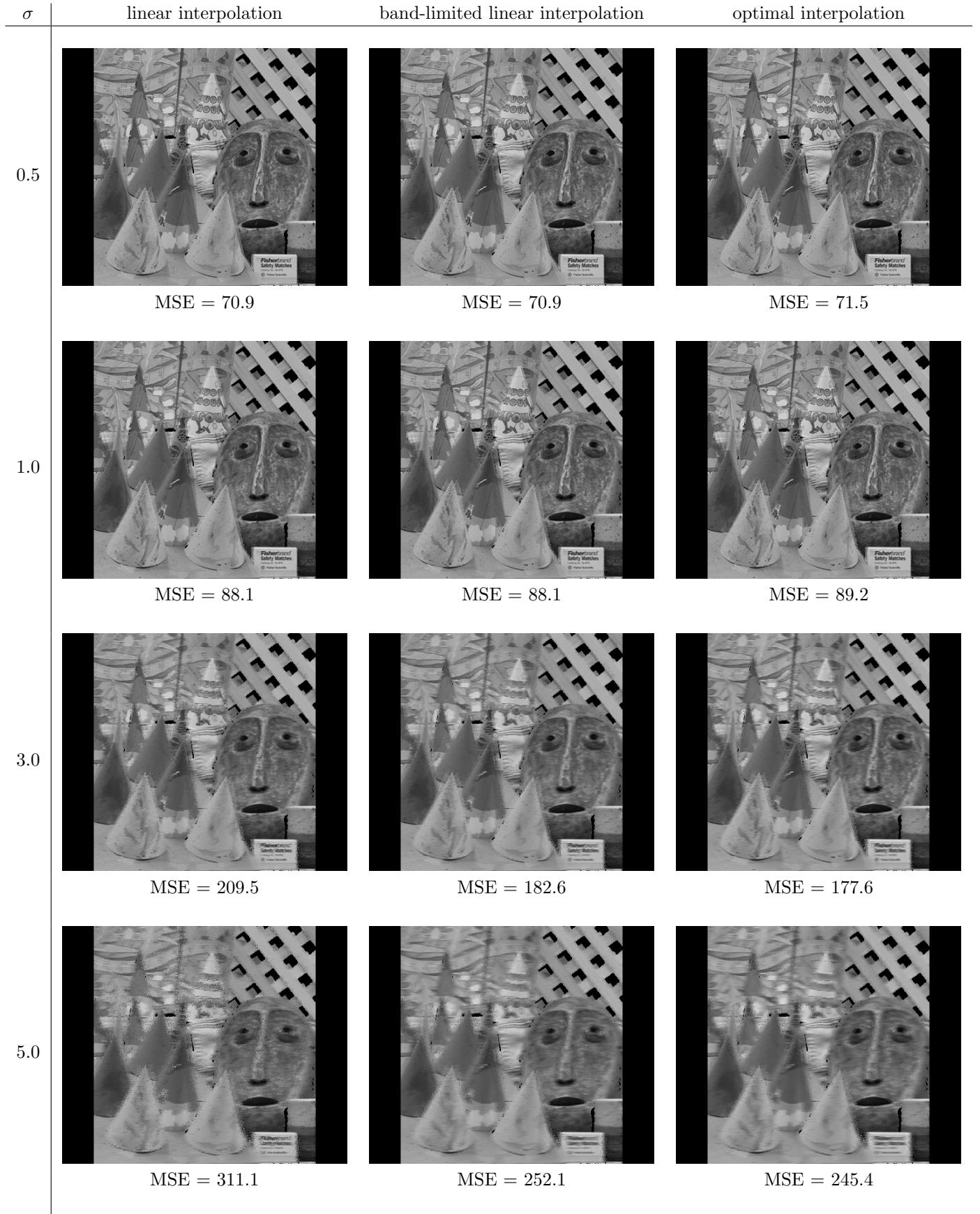
Figure 3: dataset: *cones*, disparity error: Gaussian, viewpoint: $r = 0.5$

σ	linear interpolation	band-limited linear interpolation	optimal interpolation
0.5	MSE = 49.3	MSE = 49.3	MSE = 49.6
1.0	MSE = 58.2	MSE = 58.2	MSE = 58.8
3.0	MSE = 139.3	MSE = 133.6	MSE = 124.0
5.0	MSE = 224.3	MSE = 194.4	MSE = 181.7
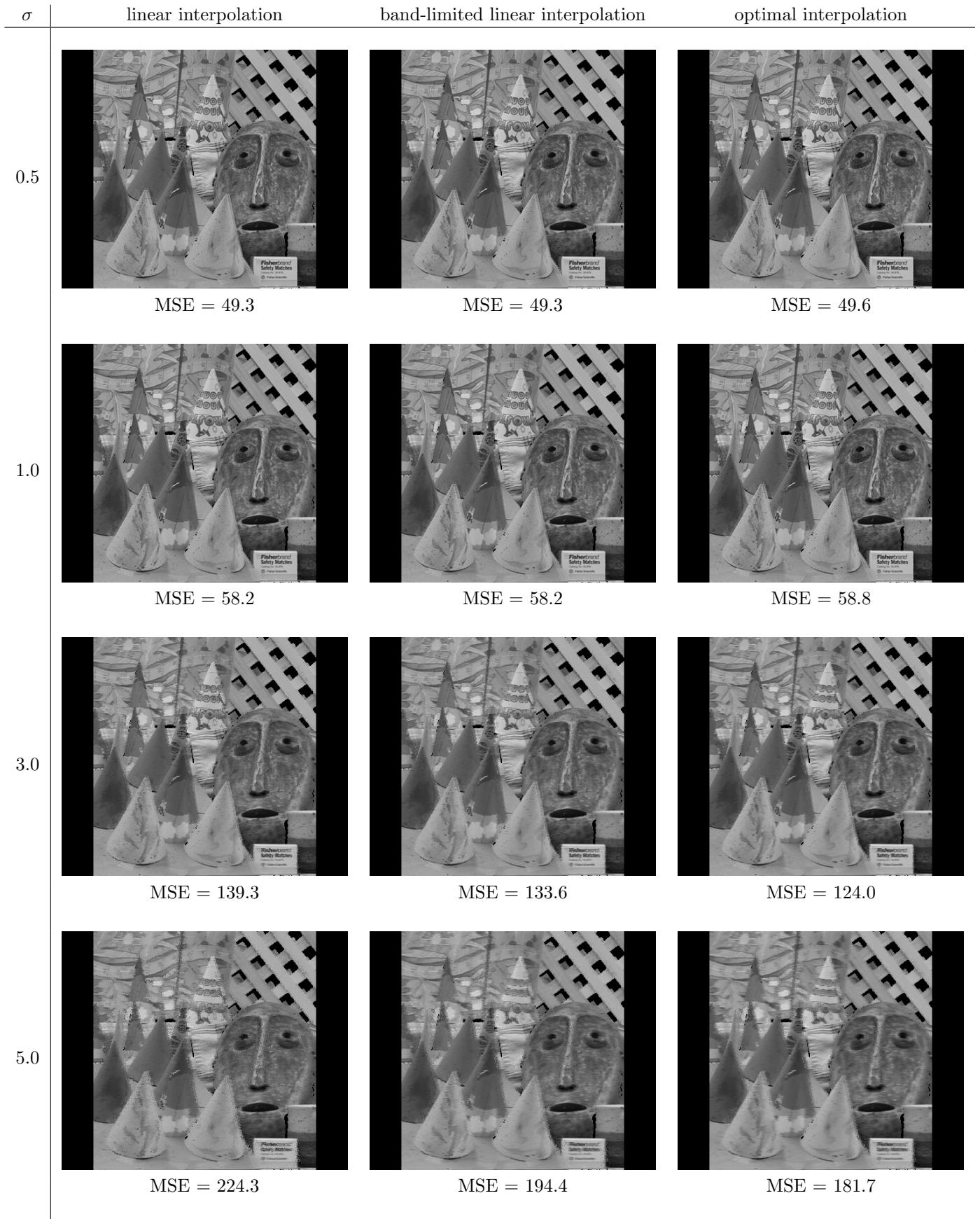
Figure 4: dataset: *cones*, disparity error: Gaussian, viewpoint: $r = 0.25$

a	linear interpolation	band-limited linear interpolation	optimal interpolation
0.5	MSE = 69.0	MSE = 69.0	MSE = 69.2
1.0	MSE = 72.8	MSE = 72.8	MSE = 73.7
4.0	MSE = 186.0	MSE = 153.2	MSE = 150.9
7.5	MSE = 306.1	MSE = 229.6	MSE = 223.6
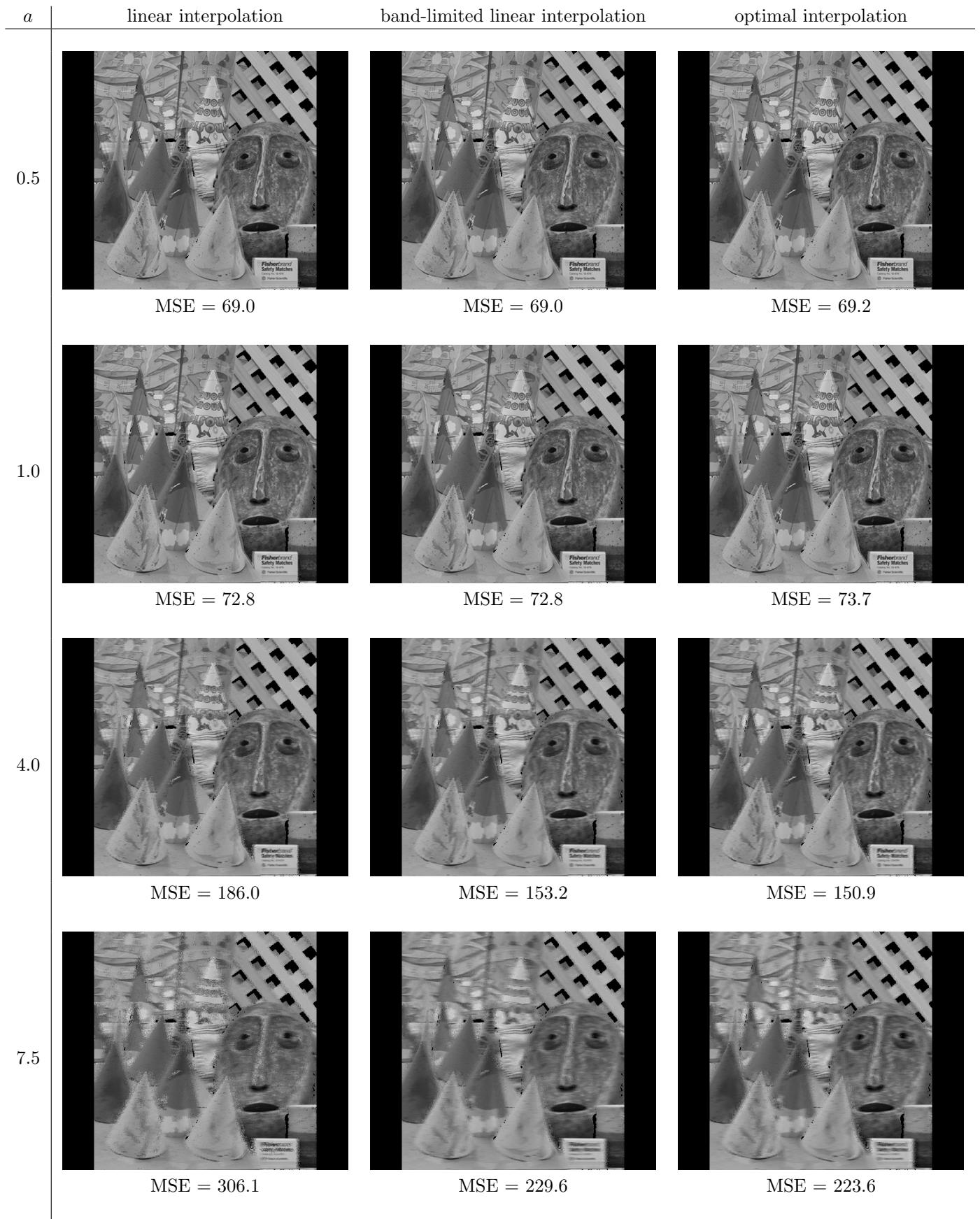
Figure 5: dataset: *cones*, disparity error: Uniform, viewpoint: $r = 0.5$

a	linear interpolation	band-limited linear interpolation	optimal interpolation
0.5	MSE = 47.7	MSE = 47.7	MSE = 47.8
1.0	MSE = 49.6	MSE = 49.6	MSE = 49.9
4.0	MSE = 115.6	MSE = 112.5	MSE = 102.1
7.5	MSE = 216.0	MSE = 180.9	MSE = 164.2
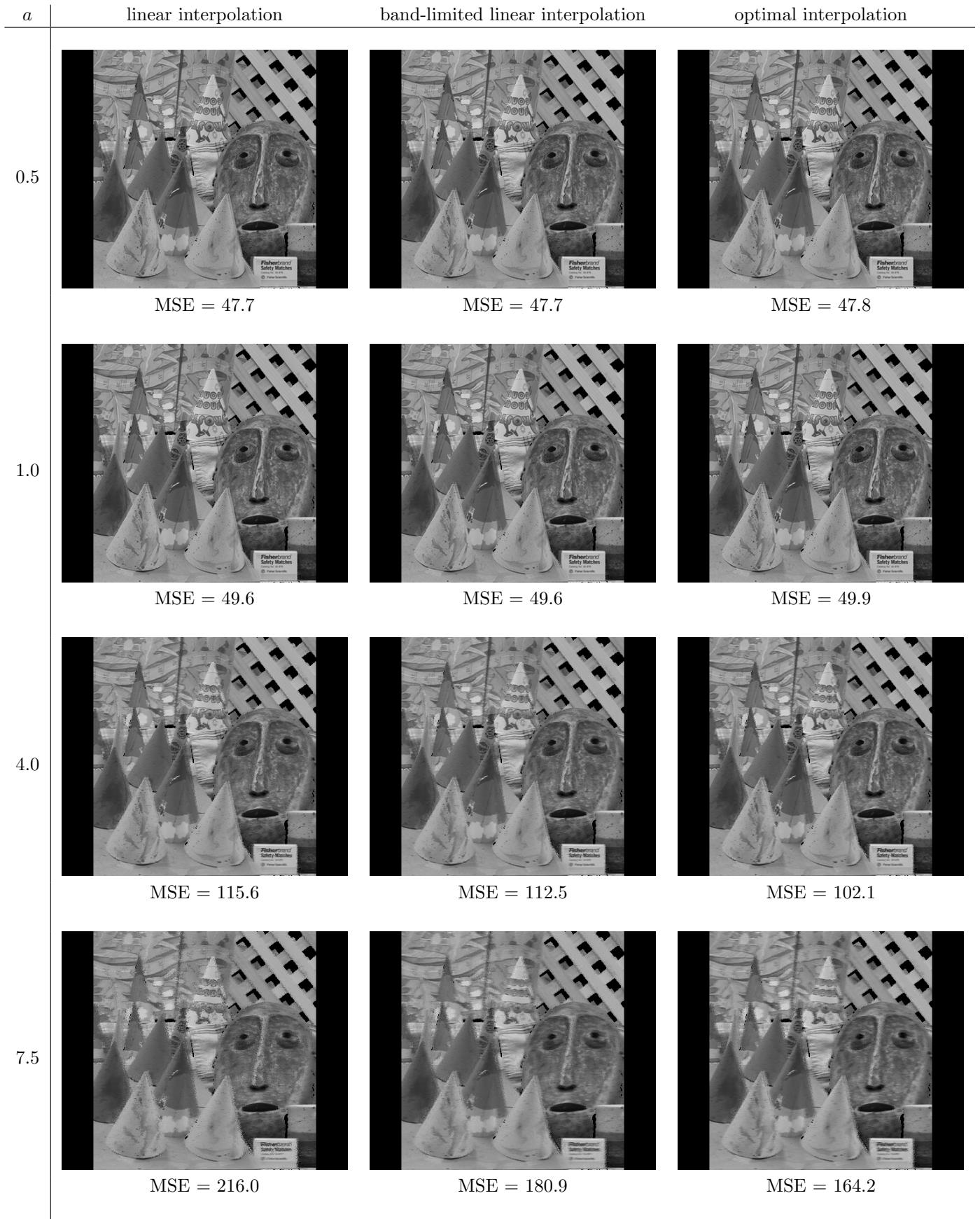
Figure 6: dataset: *cones*, disparity error: Uniform, viewpoint: $r = 0.25$

σ	linear interpolation	band-limited linear interpolation	optimal interpolation
0.5	MSE = 82.0	MSE = 82.0	MSE = 82.7
1.0	MSE = 90.5	MSE = 90.5	MSE = 91.9
3.0	MSE = 164.2	MSE = 147.5	MSE = 145.6
5.0	MSE = 225.8	MSE = 191.6	MSE = 186.7
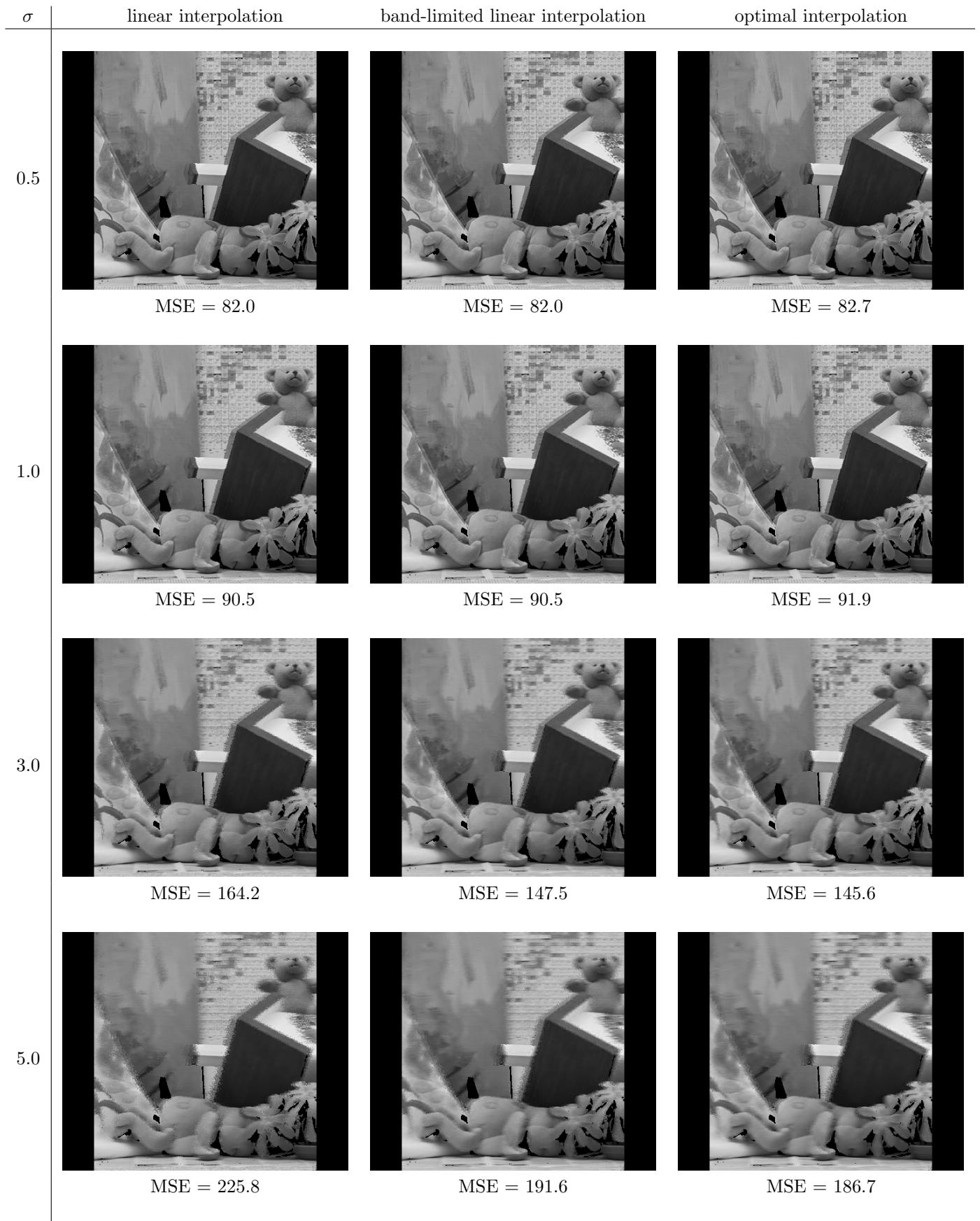
Figure 7: dataset: *teddy*, disparity error: Gaussian, viewpoint: $r = 0.5$

σ	linear interpolation	band-limited linear interpolation	optimal interpolation
0.5	MSE = 47.8	MSE = 47.8	MSE = 48.2
1.0	MSE = 53.6	MSE = 53.6	MSE = 54.4
3.0	MSE = 102.5	MSE = 99.1	MSE = 93.0
5.0	MSE = 158.4	MSE = 139.3	MSE = 129.5
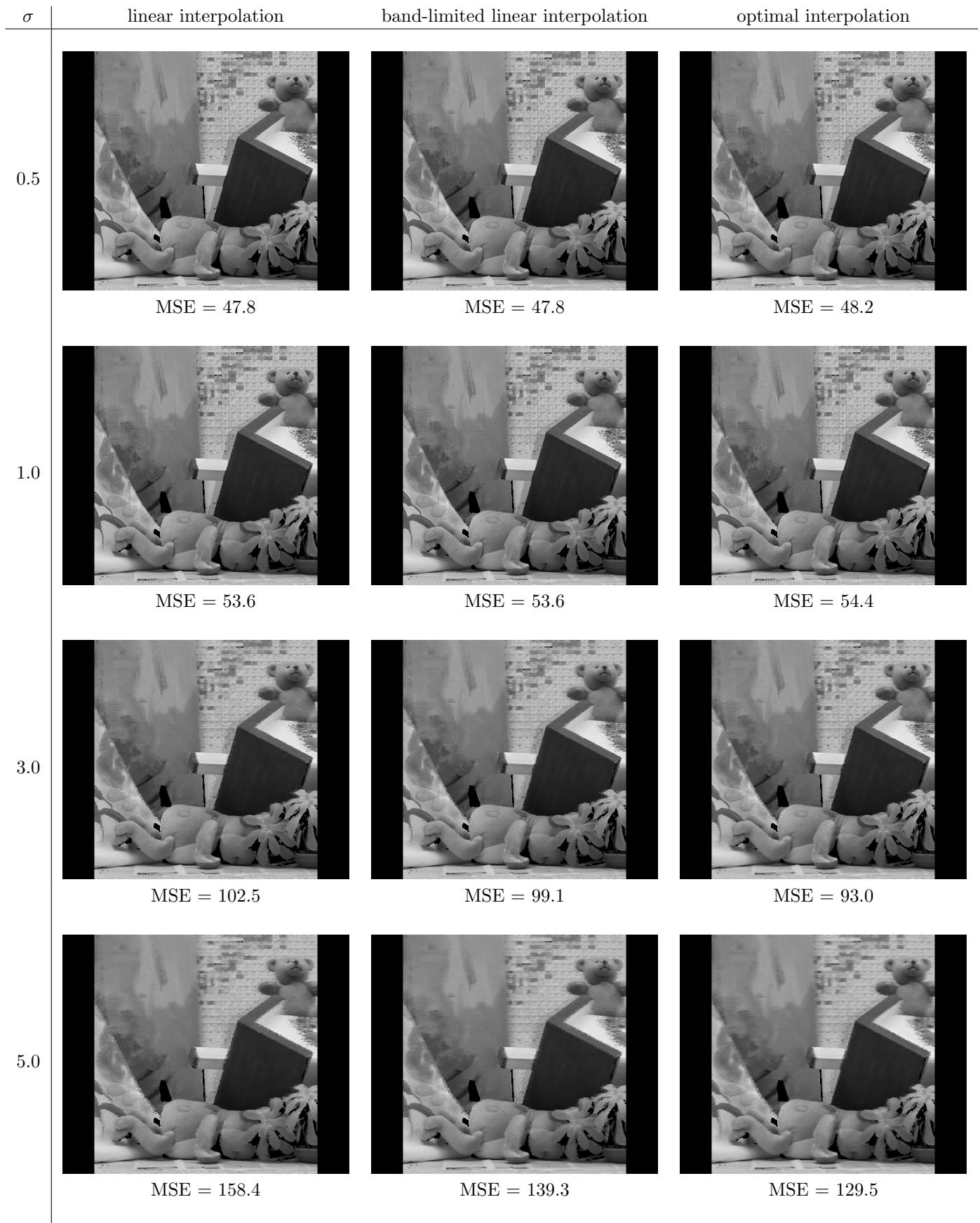
Figure 8: dataset: *teddy*, disparity error: Gaussian, viewpoint: $r = 0.25$

a	linear interpolation	band-limited linear interpolation	optimal interpolation
0.5	MSE = 80.9	MSE = 80.9	MSE = 81.2
1.0	MSE = 82.5	MSE = 82.5	MSE = 83.7
4.0	MSE = 147.9	MSE = 128.4	MSE = 129.5
7.5	MSE = 224.5	MSE = 175.1	MSE = 173.9
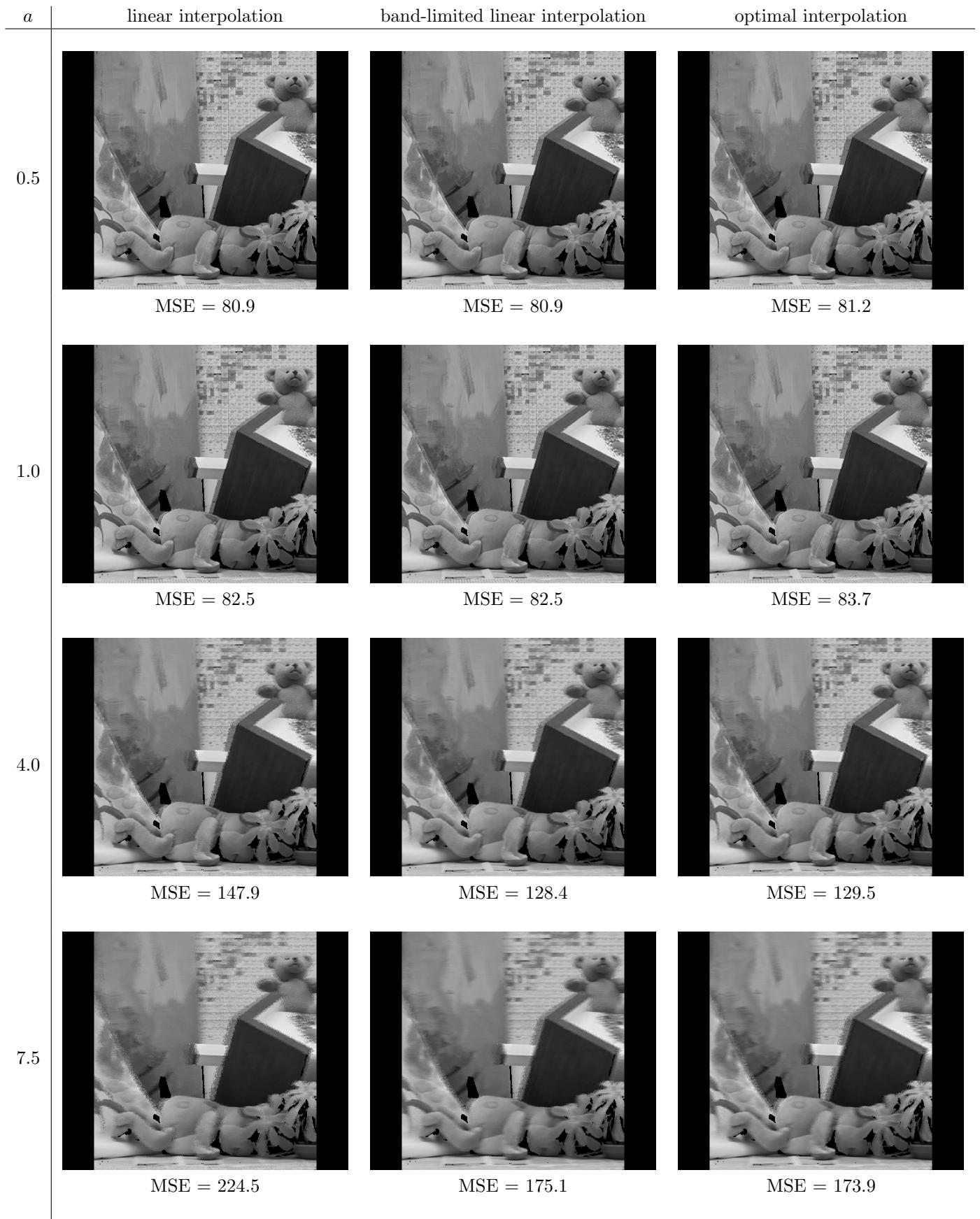
Figure 9: dataset: *teddy*, disparity error: Uniform, viewpoint: $r = 0.5$

a	linear interpolation	band-limited linear interpolation	optimal interpolation
0.5	MSE = 47.3	MSE = 47.3	MSE = 47.4
1.0	MSE = 48.3	MSE = 48.3	MSE = 48.8
4.0	MSE = 86.8	MSE = 84.9	MSE = 79.3
7.5	MSE = 150.7	MSE = 128.5	MSE = 117.7
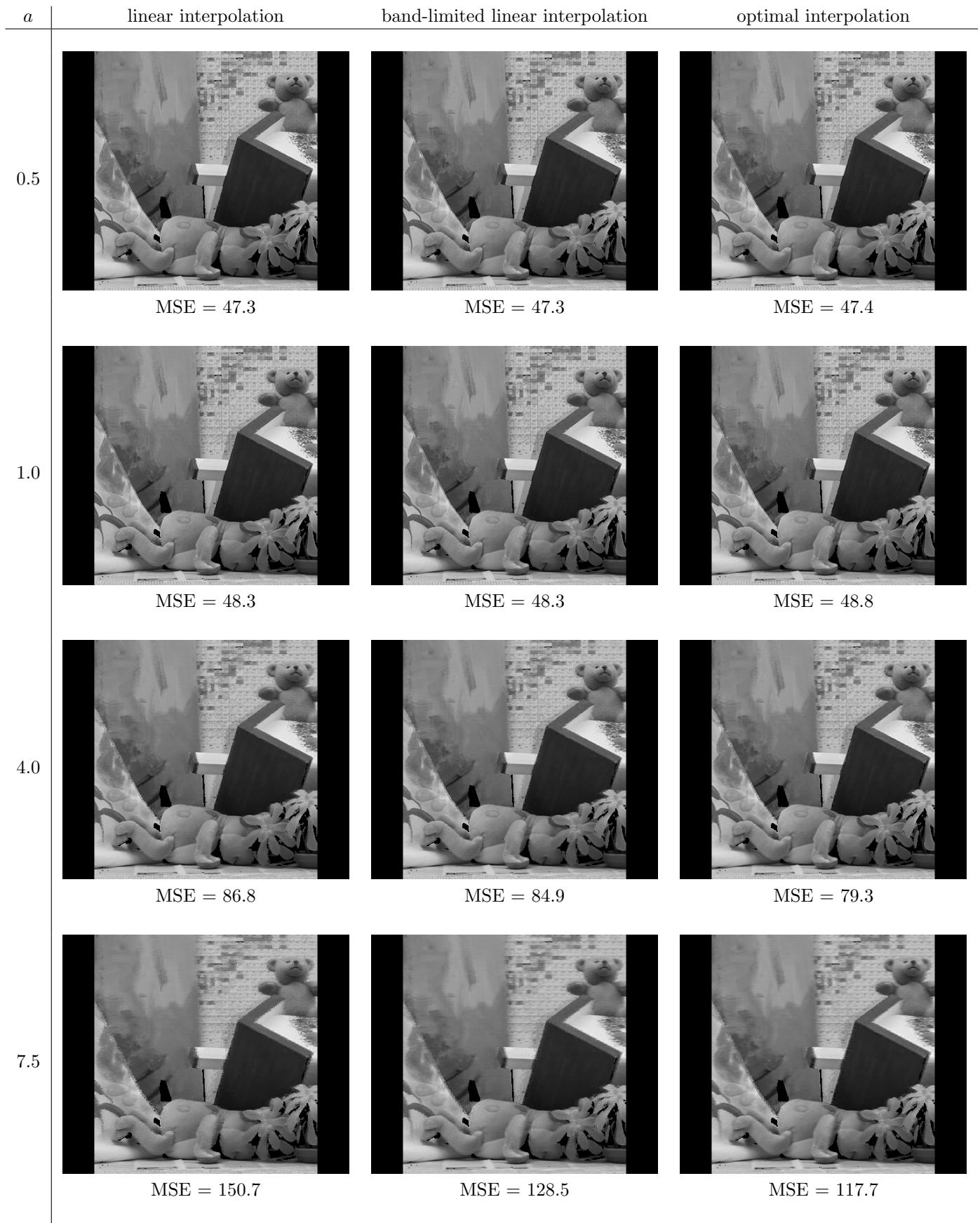
Figure 10: dataset: *teddy*, disparity error: Uniform, viewpoint: $r = 0.25$