

Pilot Study Images

The images in this section are from the pilot study. The images were selected to illustrate the different treatments for a single target pair, thus all images have the same two underlying target pairs, which were shown in Figure 3.1 (b). Target A is a triangle and target B is a vertical rectangle. The percentage of target A that is overlapped by target B is 60.

No two participants saw the same trial image, and no participant saw the same target pair more than once during the experiment, thus, although the images are very similar, they were displayed to 16 different participants during the study.

First, images in the *Color-Color* group are shown, followed by images in the *Color-Bump* group and the *Bump-Bump* group. The original images were generated at 1024x1024 pixel resolution. To save space, only images from *C0*, *C1*, *C3*, *C5*, and *C7* are presented. The *Side-by-side View* is also shown for the *Color-Color* group. Images are at 58% original size. Because 1500 total images were generated for the pilot study, it is not feasible to show more than a small sample. To provide a different example of how the images were generated and balanced across participants, the *Main Study Images* section presents the images that one individual participant experienced uniquely.

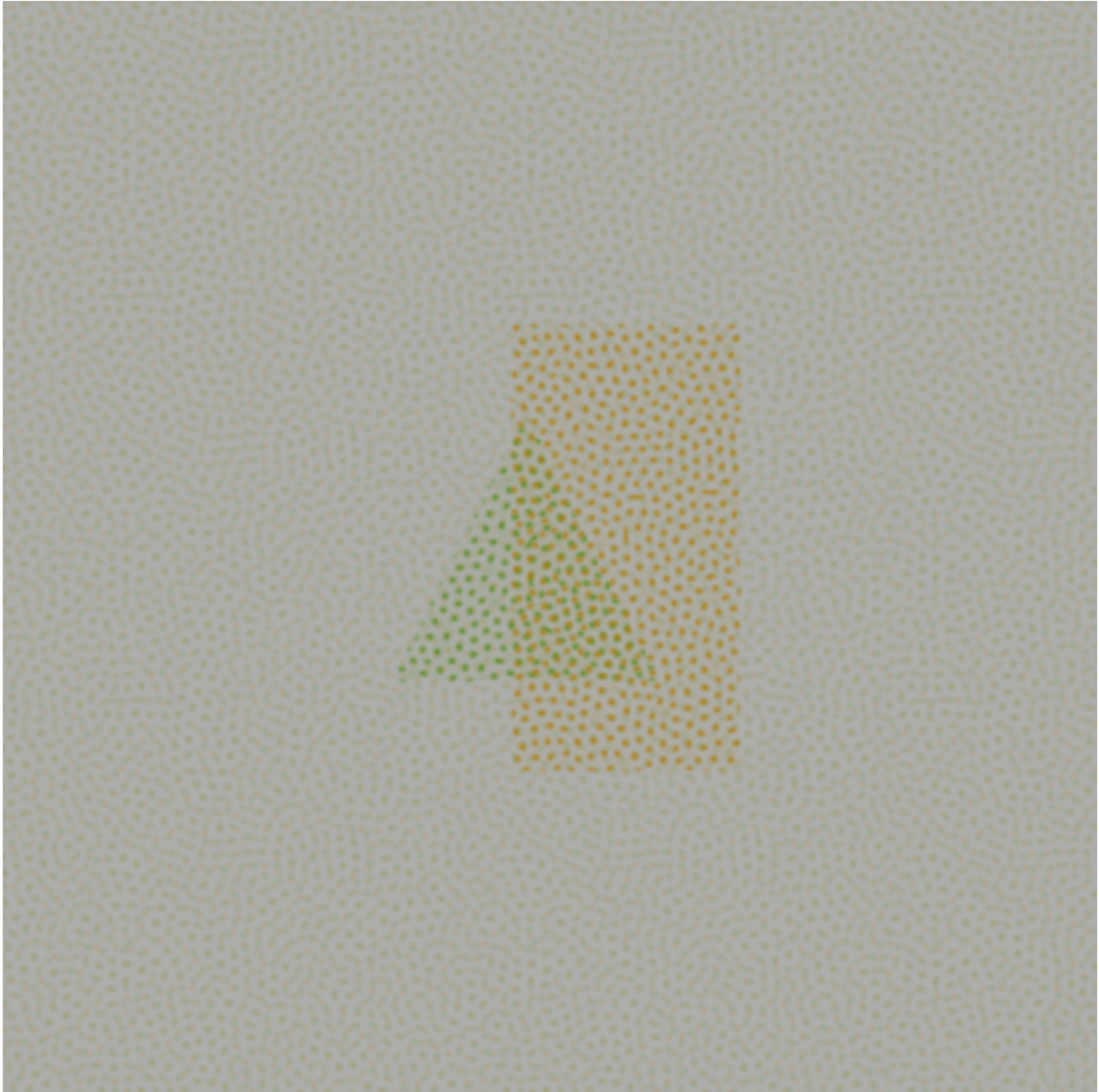


Figure 3.19: Image from *C0* for the *Color-Color* group, shown at 58% original size. Targets are the triangle shown in green-yellow DDS alpha-blended spots and the vertical rectangle shown in mustard spots.

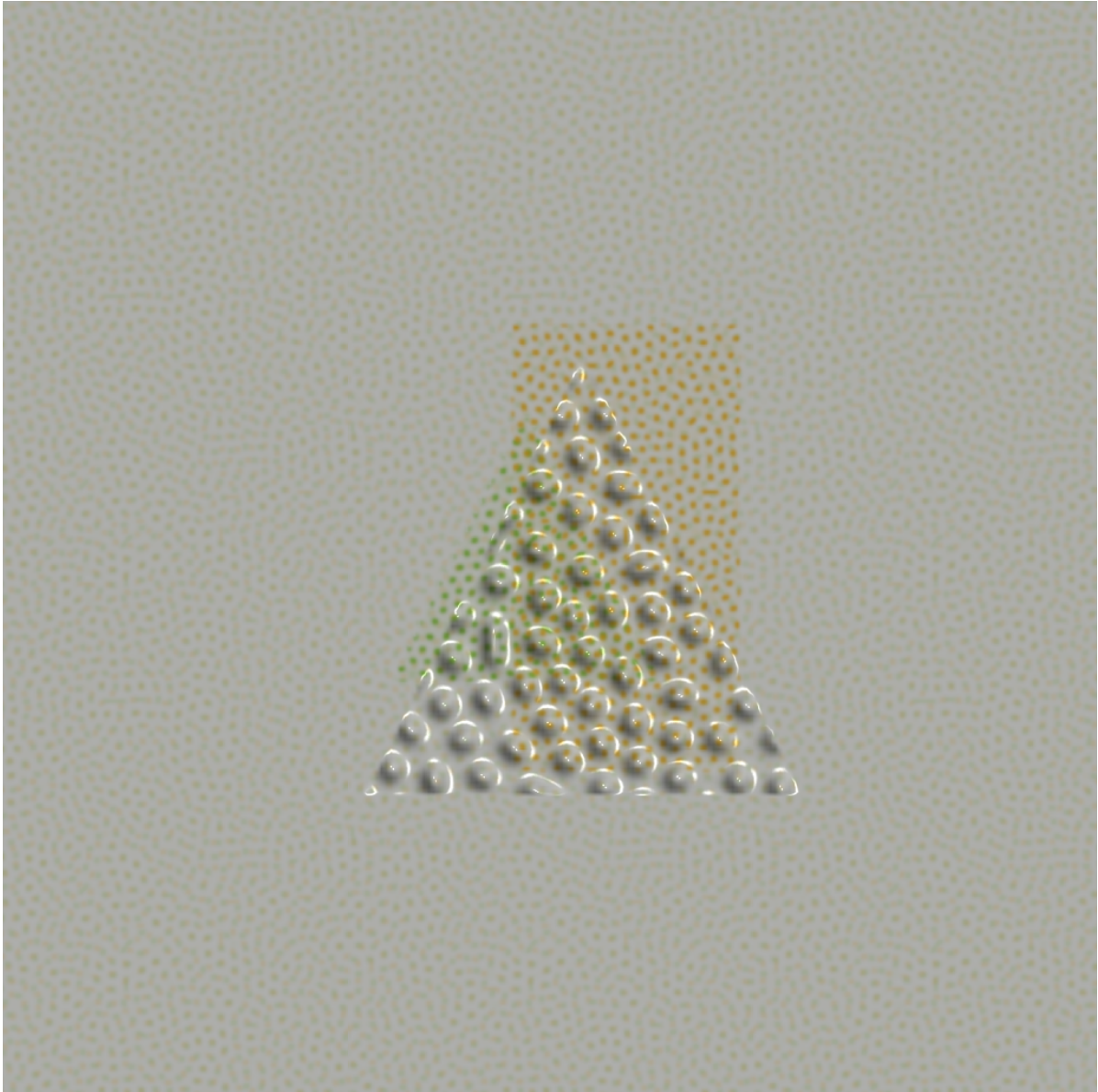


Figure 3.20: Image from *CI* for the *Color-Color* group, shown at 58% original size. Targets are the triangle shown in green-yellow DDS alpha-blended spots and the vertical rectangle shown in mustard spots. The distractor is a large bump triangle.

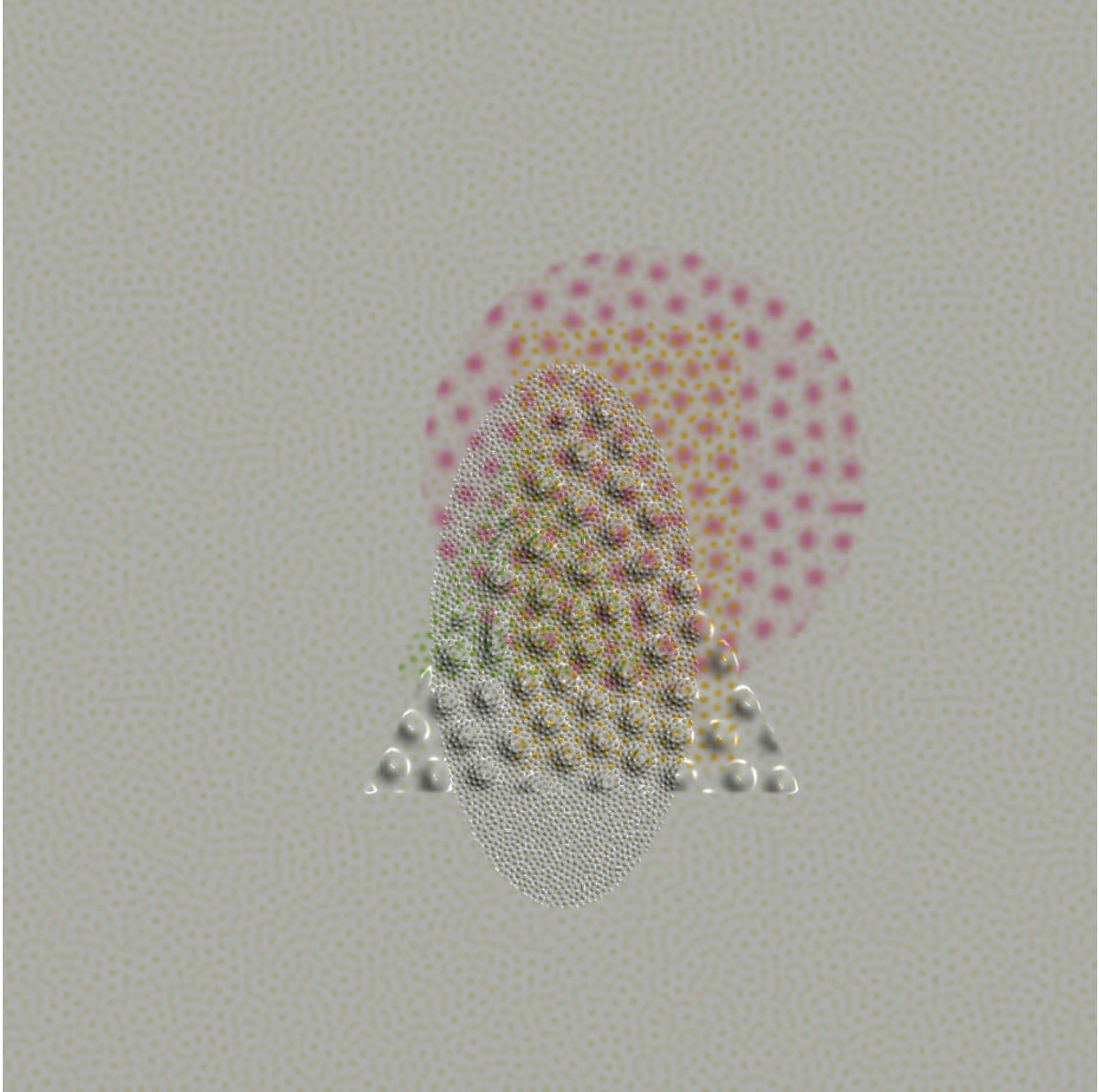


Figure 3.21: Image from *C3* for the *Color-Color* group, shown at 58% original size. Targets are the triangle shown in green-yellow DDS alpha-blended spots and the vertical rectangle shown in mustard spots. The new distractors are a pink circle and a tiny bump oval.

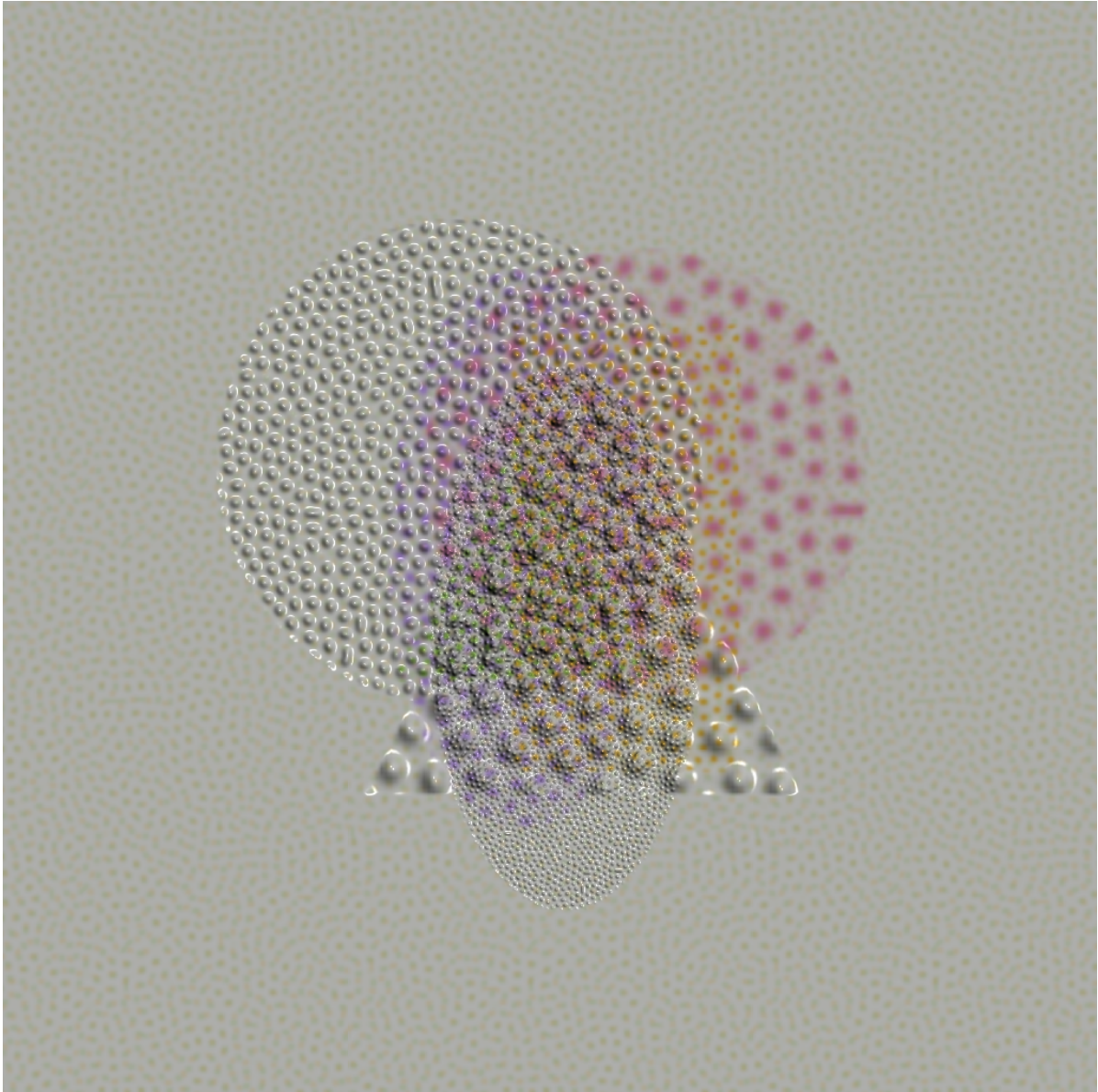


Figure 3.22: Image from *C5* for the *Color-Color* group, shown at 58% original size. Targets are the triangle shown in green-yellow DDS alpha-blended spots and the vertical rectangle shown in mustard spots. The new distractors are a lavender oval and a medium bump circle.

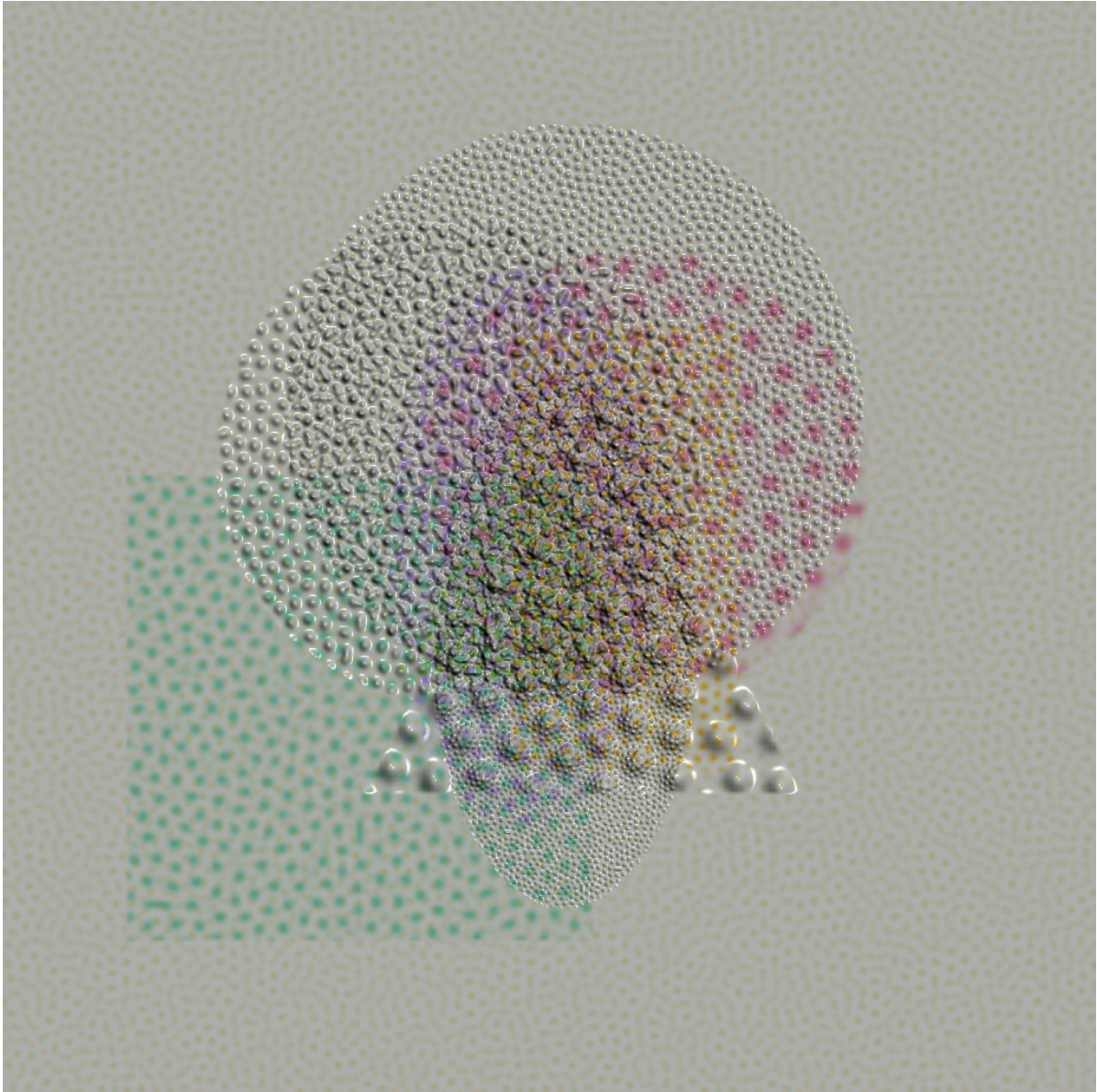
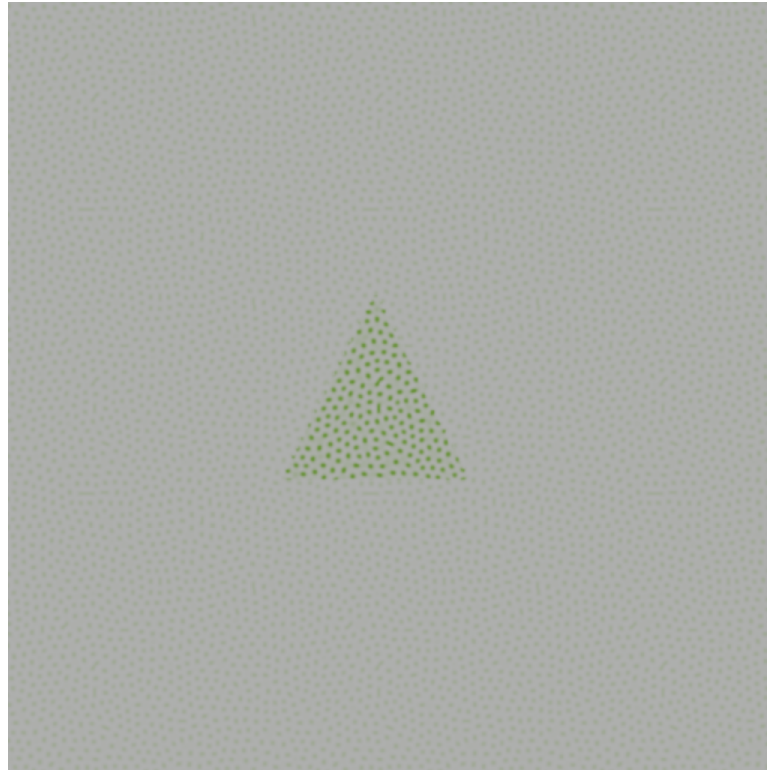
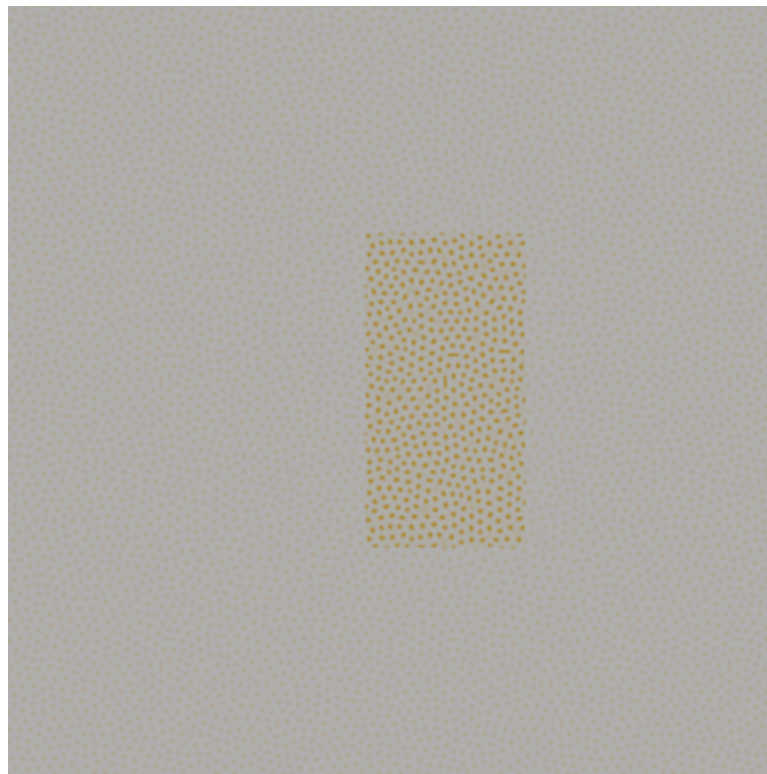


Figure 3.23: Image from *C7* for the *Color-Color* group, shown at 58% original size. Targets are the triangle shown in green-yellow DDS alpha-blended spots and the vertical rectangle shown in mustard spots. The new distractors are a turquoise square and a small bump circle.



(a)



(b)

Figure 3.24: Images for the *Side-by-side* view for the *Color-Color* group. Participants are asked to estimate the amount of target A (a) that would be overlapped by target B (b) if the two images were overlaid.

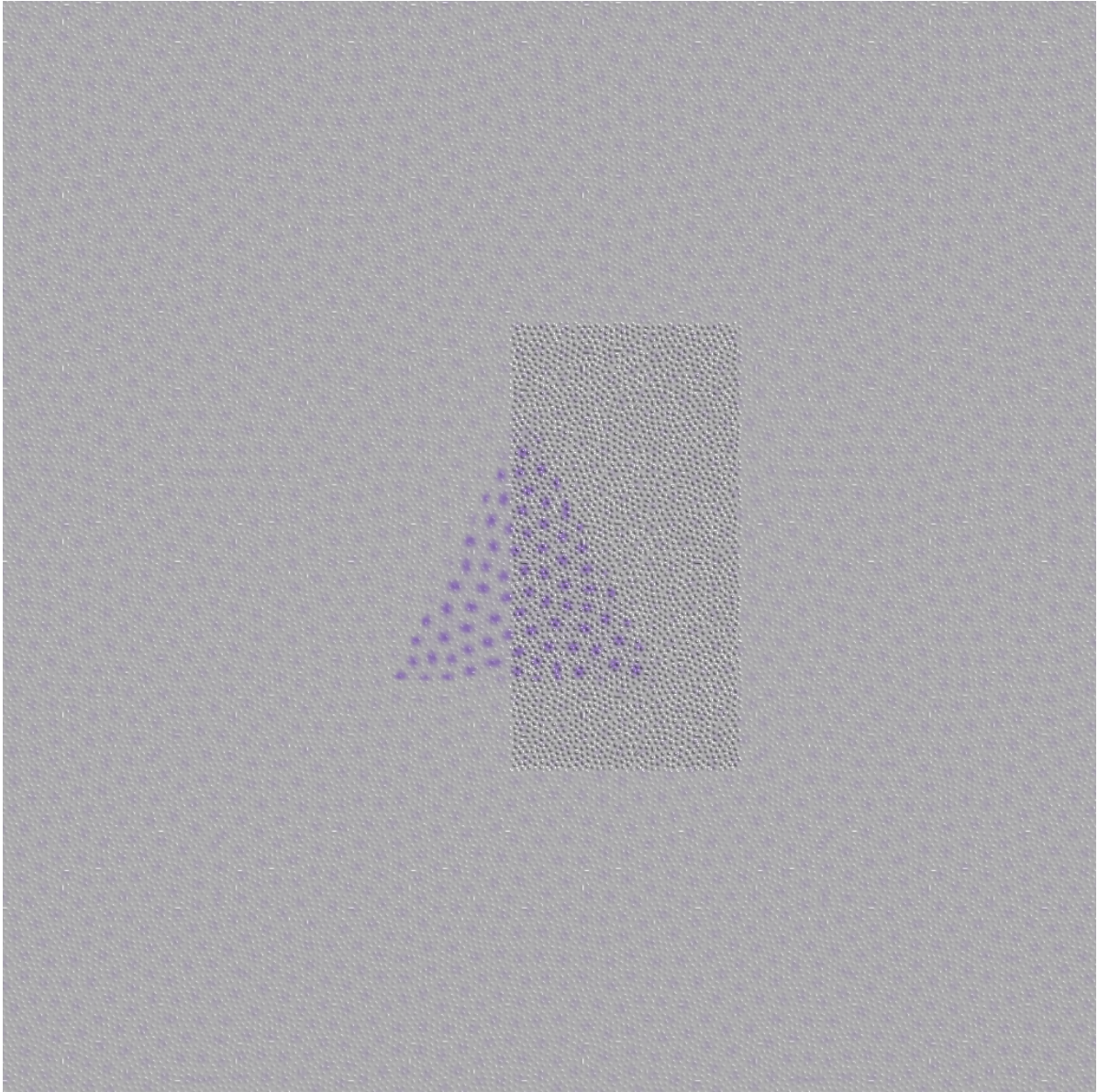


Figure 3.25: Image from *C0* for the *Color-Bump* group, shown at 58% original size. Targets are the triangle shown in lavender DDS alpha-blended spots and the vertical rectangle shown in tiny bumps.

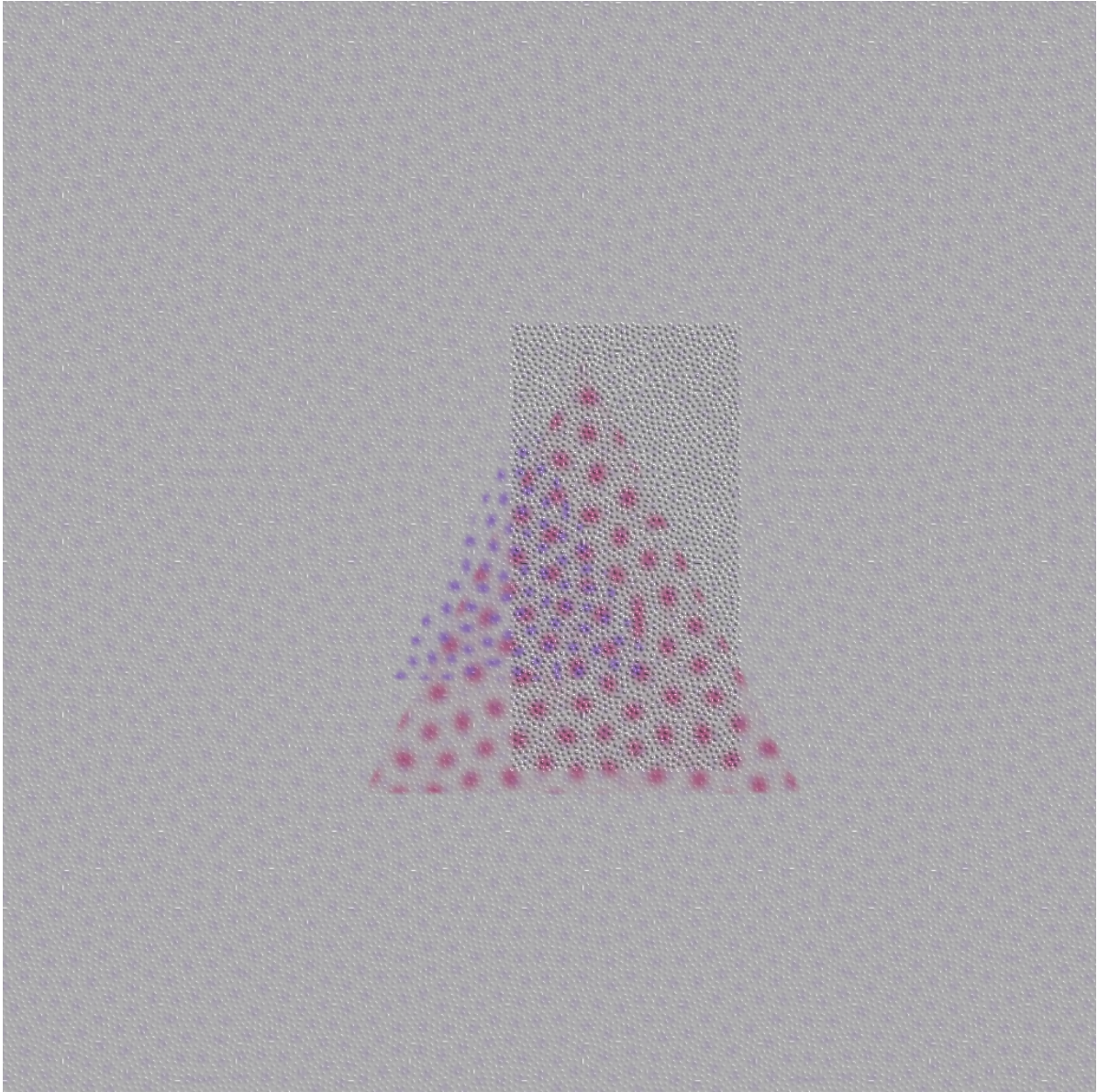


Figure 3.26: Image from *CI* for the *Color-Bump* group, shown at 58% original size. Targets are the triangle shown in lavender DDS alpha-blended spots and the vertical rectangle shown in tiny bumps. The distractor is a large pink triangle.

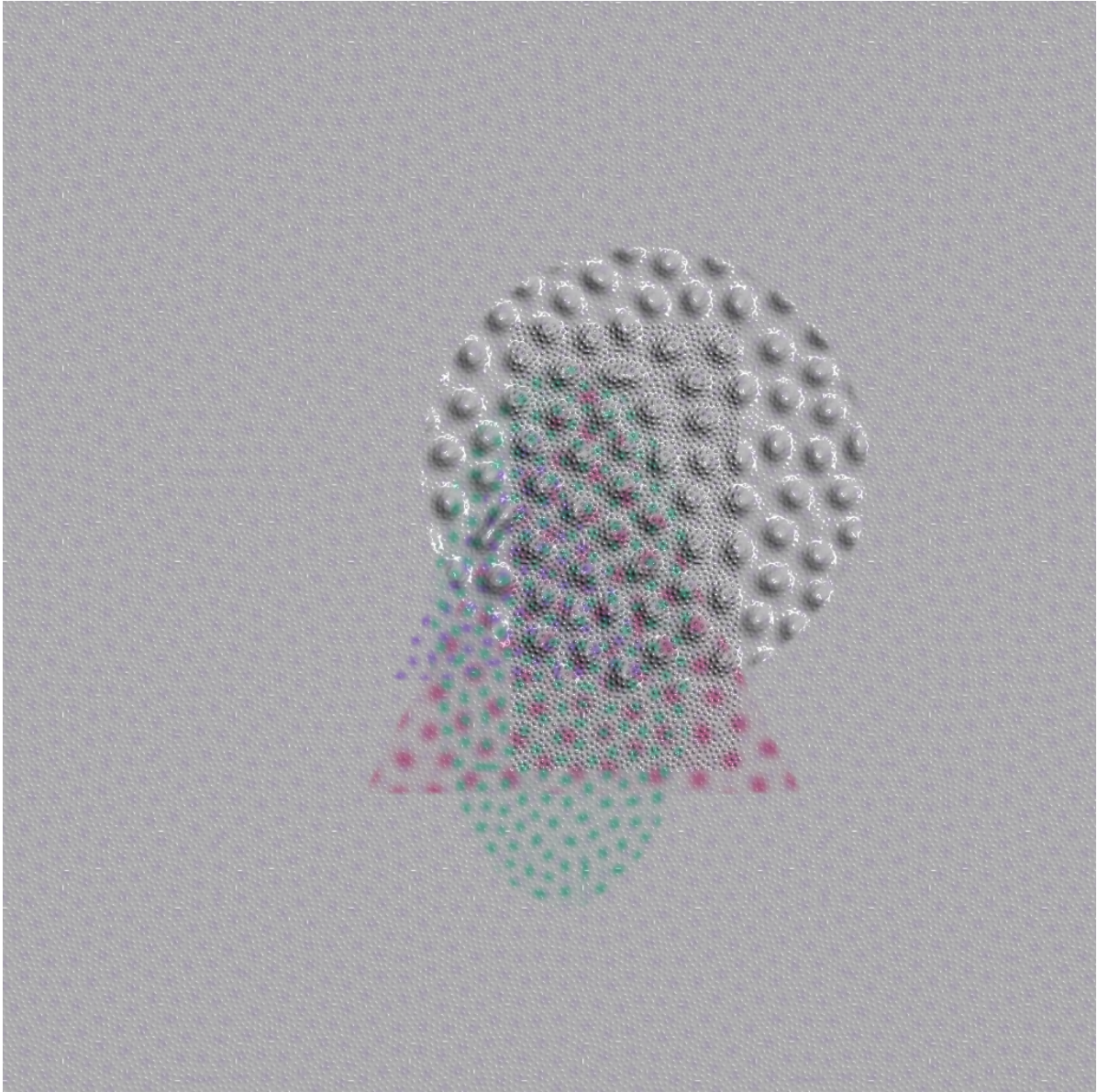


Figure 3.27: Image from *C3* for the *Color-Bump* group, shown at 58% original size. Targets are the triangle shown in lavender DDS alpha-blended spots and the vertical rectangle shown in tiny bumps. The new distractors are a large bump circle, and a turquoise oval.

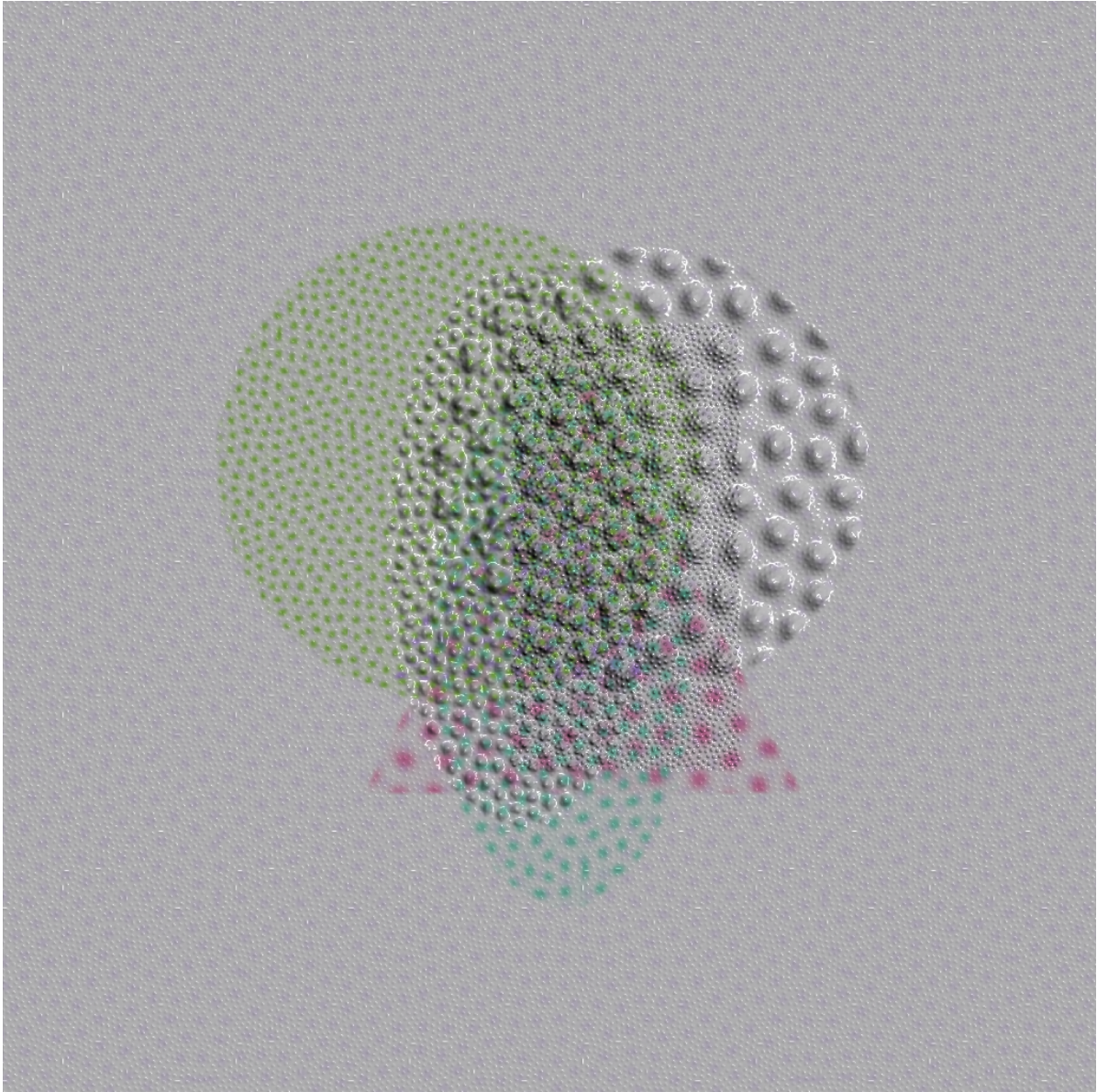


Figure 3.28: Image from *C5* for the *Color-Bump* group, shown at 58% original size. Targets are the triangle shown in lavender DDS alpha-blended spots and the vertical rectangle shown in tiny bumps. The new distractors are a medium bump oval and a green-yellow circle.

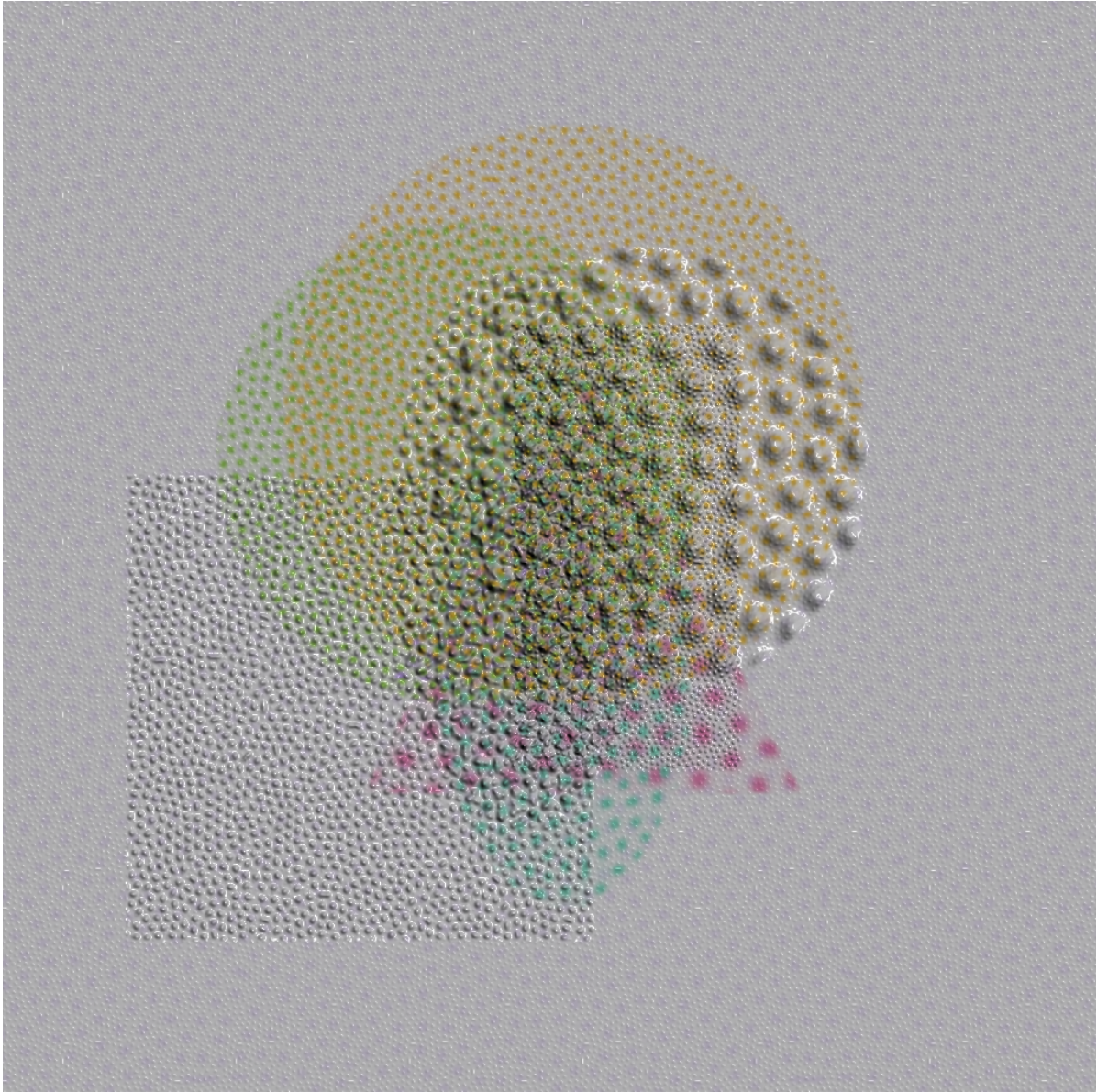


Figure 3.29: Image from *C7* for the *Color-Bump* group, shown at 58% original size. Targets are the triangle shown in lavender DDS alpha-blended spots and the vertical rectangle shown in tiny bumps. The new distractors are a small bump square and a mustard circle.

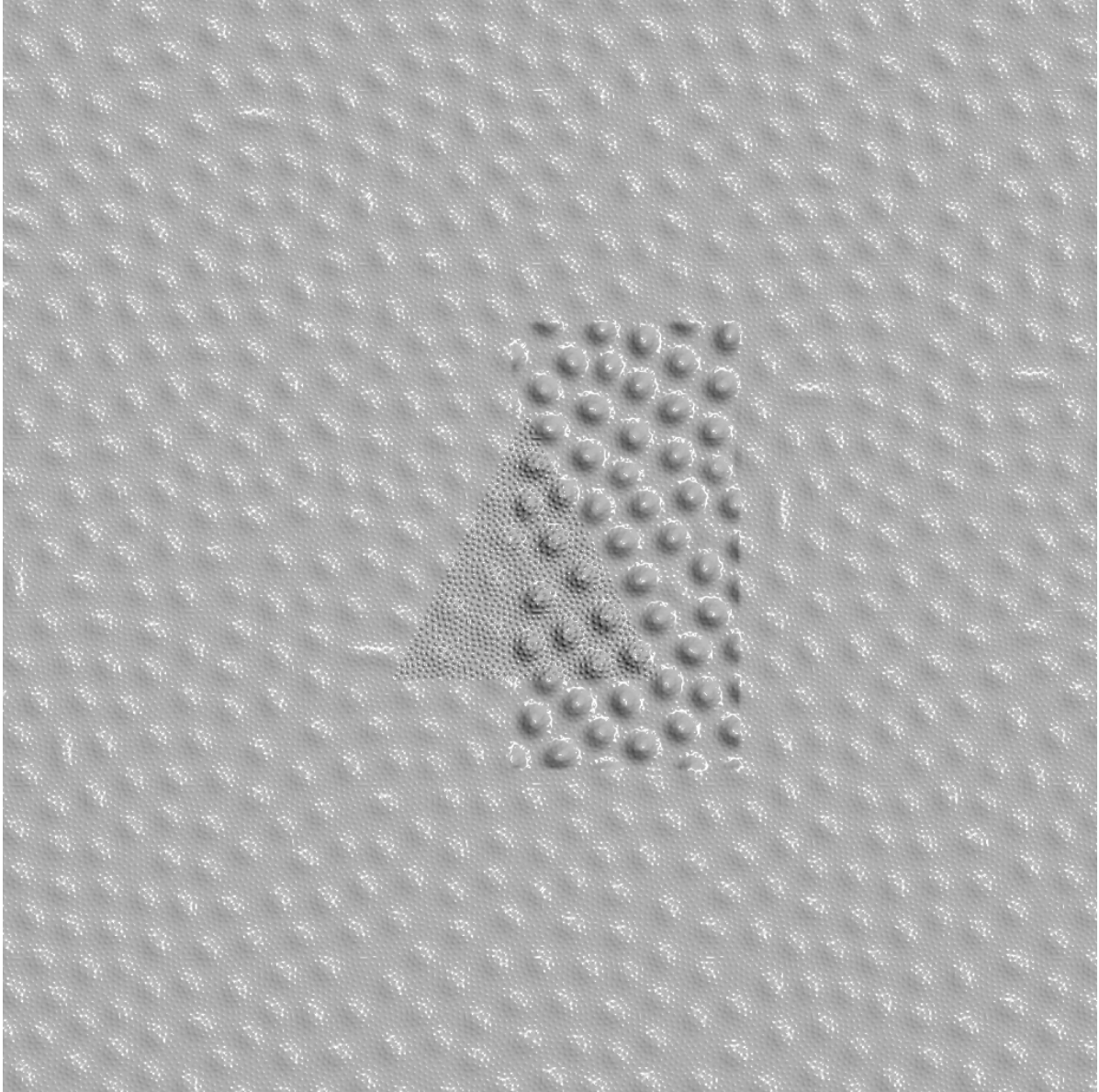


Figure 3.30: Image from *C0* for the *Bump-Bump* group, shown at 58% original size. Targets are the triangle shown in tiny bumps and the vertical rectangle shown in large bumps.

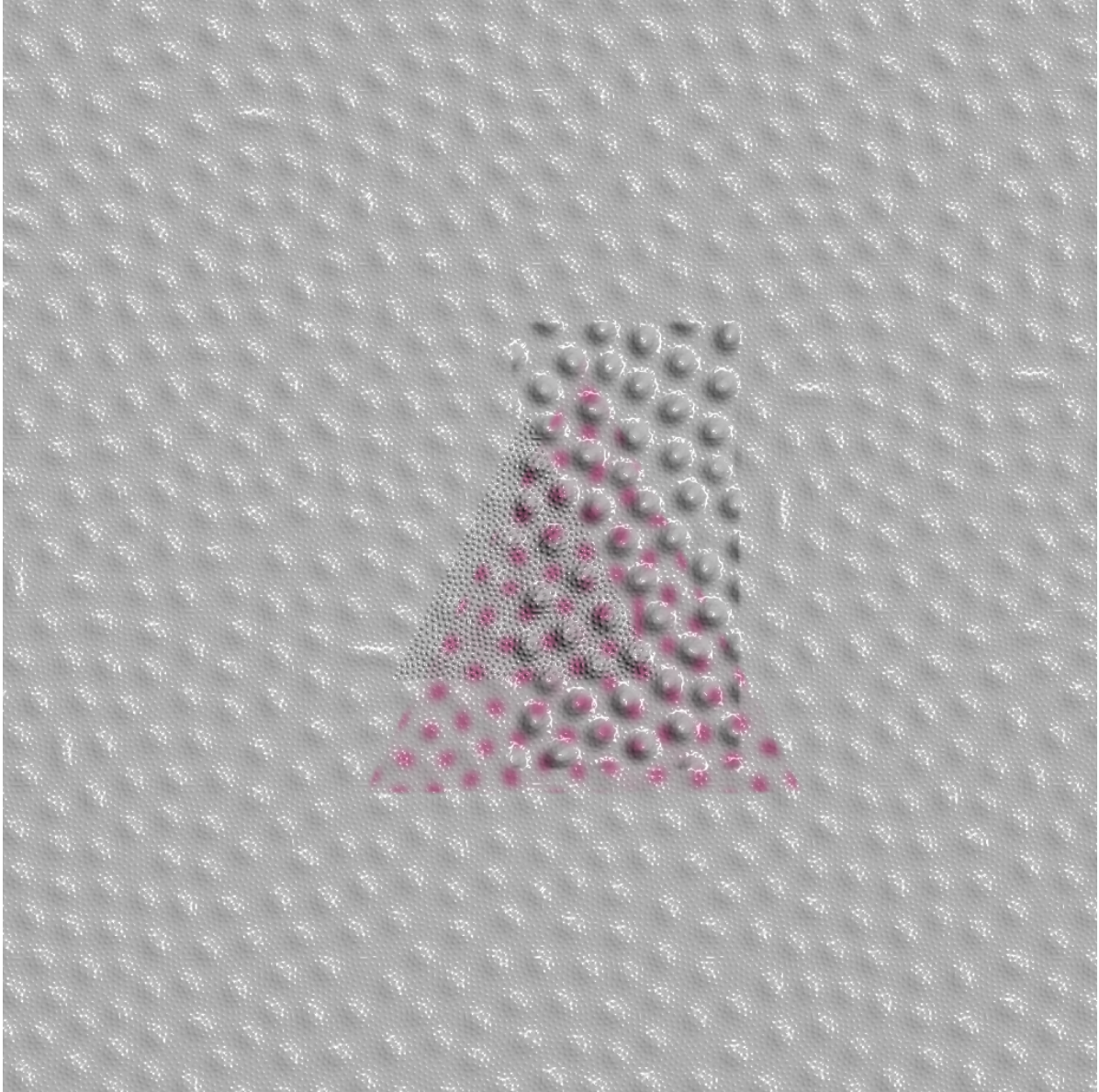


Figure 3.31: Image from *CI* for the *Bump-Bump* group, shown at 58% original size. Targets are the triangle shown in tiny bumps and the vertical rectangle shown in large bumps. The distractor is a large pink triangle.

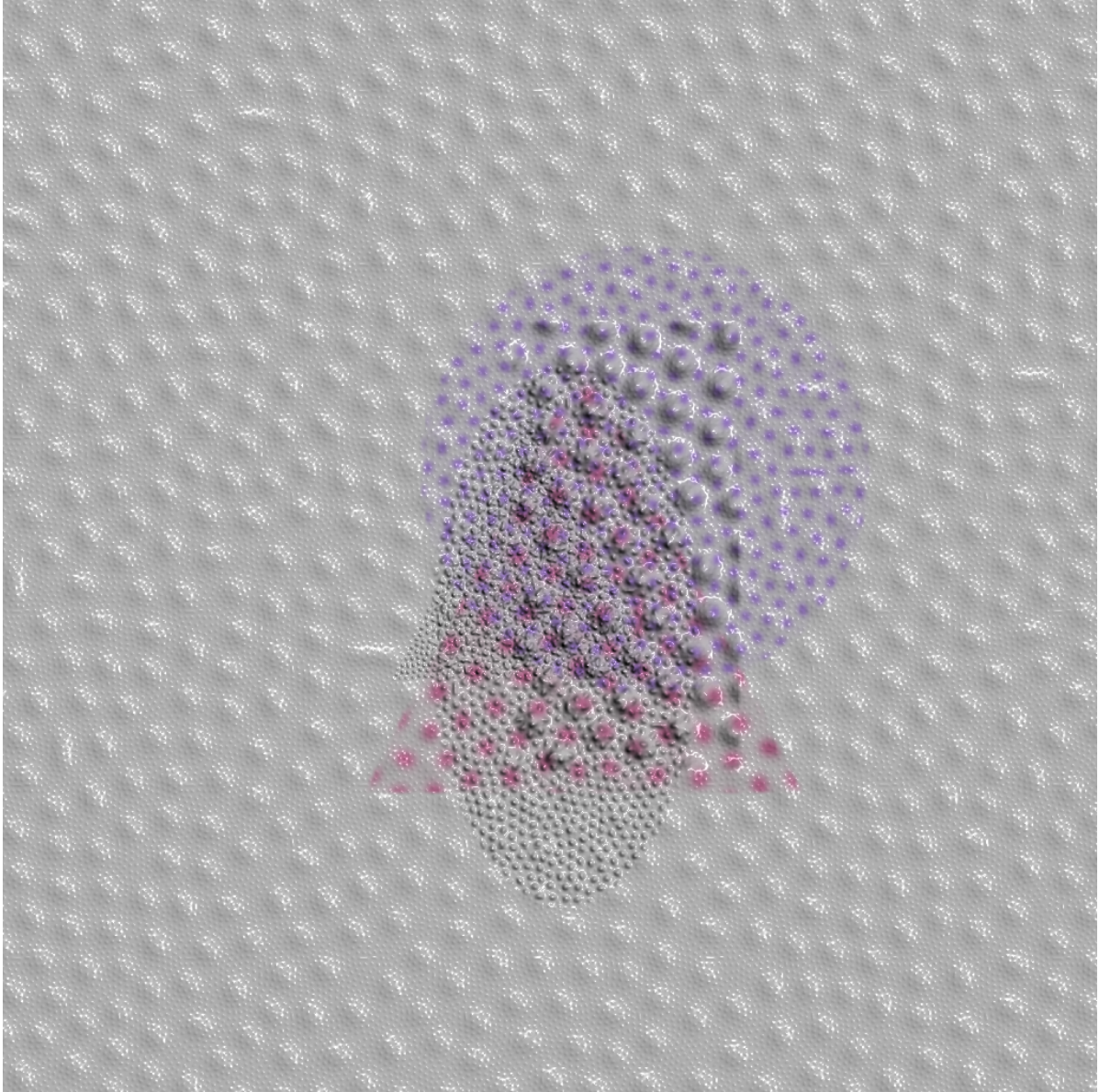


Figure 3.32: Image from *C3* for the *Bump-Bump* group, shown at 58% original size. Targets are the triangle shown in tiny bumps and the vertical rectangle shown in large bumps. The new distractors are a large lavender circle and a small bump oval.

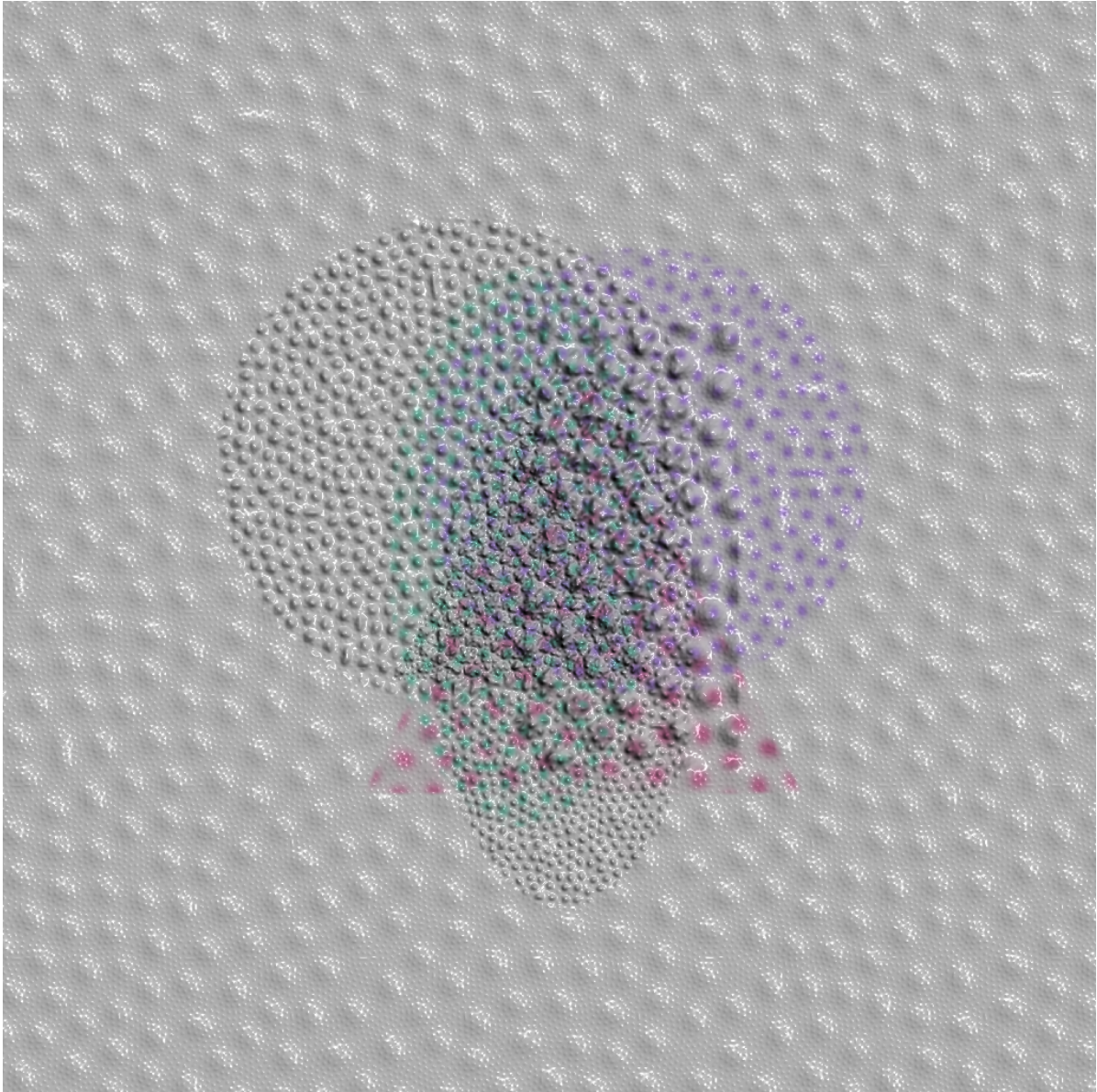


Figure 3.33: Image from *C5* for the *Bump-Bump* group, shown at 58% original size. Targets are the triangle shown in tiny bumps and the vertical rectangle shown in large bumps. The new distractors are a turquoise oval and a medium bump circle.

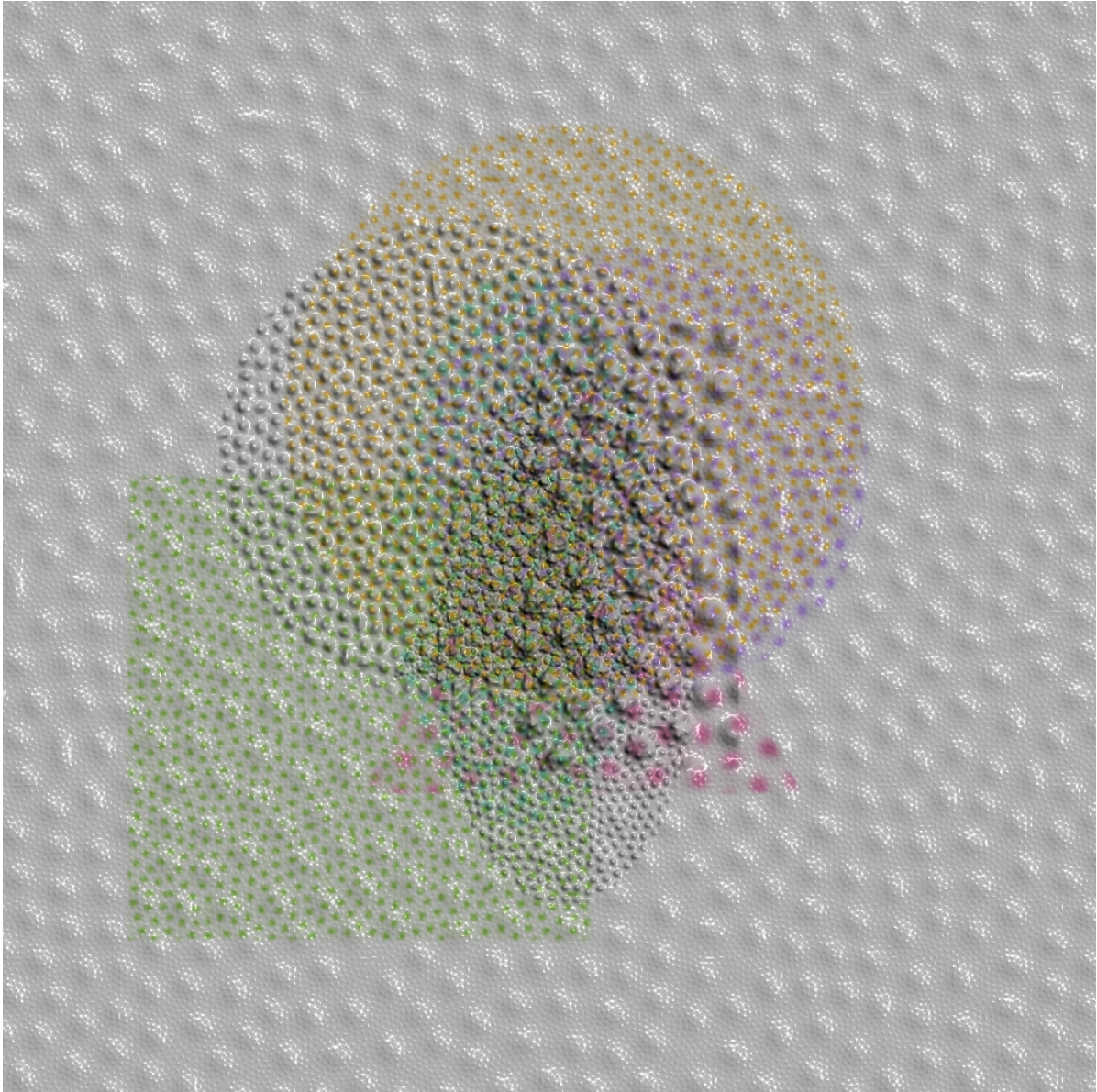


Figure 3.34: Image from *C7* for the *Bump-Bump* group, shown at 58% original size. Targets are the triangle shown in tiny bumps and the vertical rectangle shown in large bumps. The new distractors are a green-yellow square and a mustard circle.