

Supplementary Materials

1. Non-parametric approach

GANalyze offers an alternative to the non-parametric approach in which real images are simply sorted on their memorability score to visualize what makes them memorable (example using ImageNet images [1] shown in Figure S1). The parametric, fine-grained visualizations generated by GANalyze provide much clearer visual definitions.

2. Extra GANalyze example image arrays

We only present a small number of GANalyze image arrays in the main paper, but include more examples here (see Figures S2, S3, S4, and S5. In addition, the GANalyze project page: <http://ganalyze.csail.mit.edu/>, offers a tool to help explore even more examples in a more convenient manner.

References

- [1] Olga Russakovsky, Jia Deng, Hao Su, Jonathan Krause, Sanjeev Satheesh, Sean Ma, Zhiheng Huang, Andrej Karpathy, Aditya Khosla, Michael Bernstein, Alexander C. Berg, and Li Fei-Fei. Imagenet large scale visual recognition challenge. *Int. J. Comput. Vision*, 115(3):211–252, Dec. 2015.

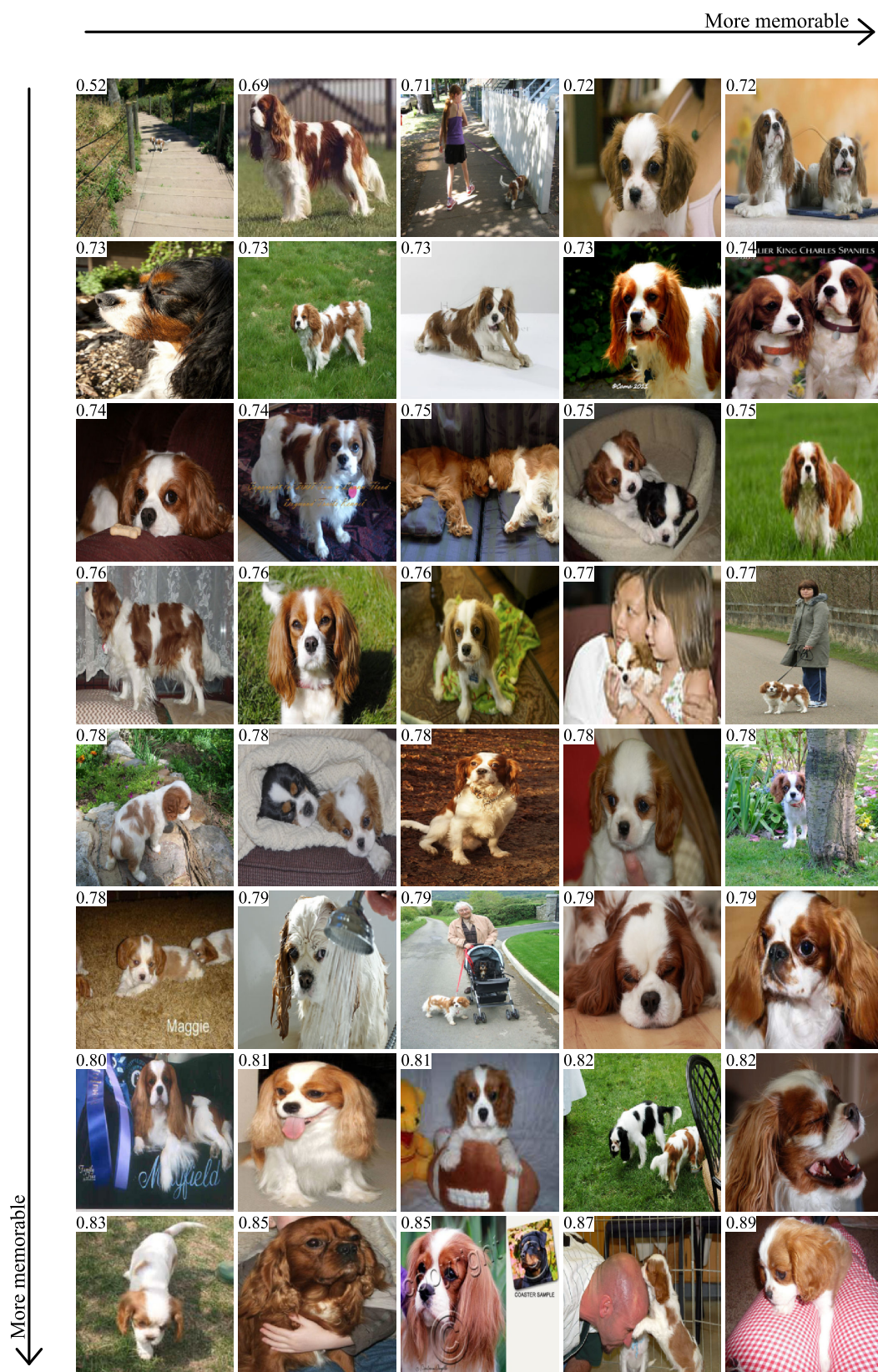


Figure S1. Real images sorted on their MemNet score. As opposed to GANalyze, this is a non-parametric way of visualizing what it looks like for images to become more memorable.

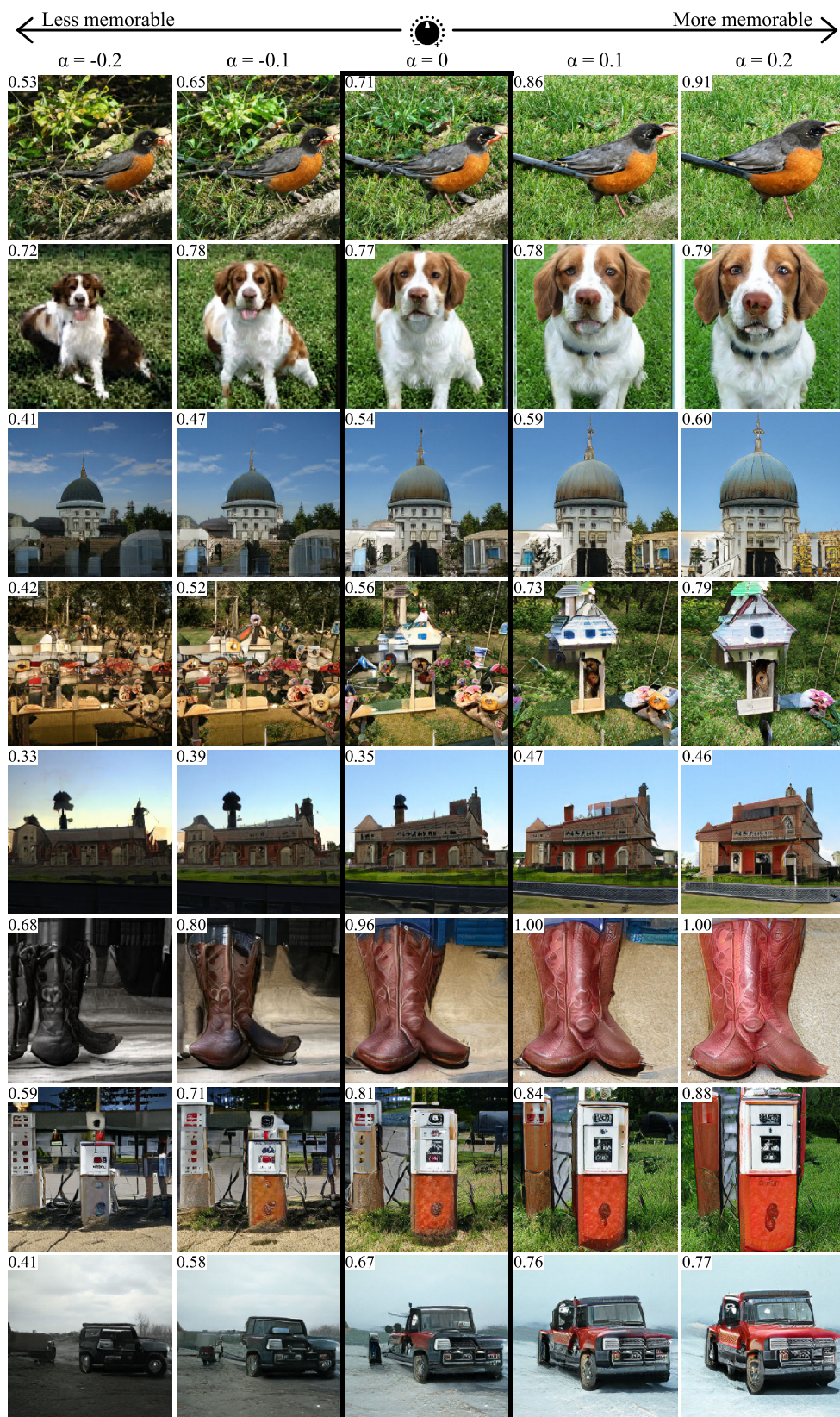


Figure S2. More examples of generated images along the memorability dimension. The middle column represents $G(\mathbf{z}, \mathbf{y})$, the generated image serving as the original seed to create a series of clone images more or less memorable.

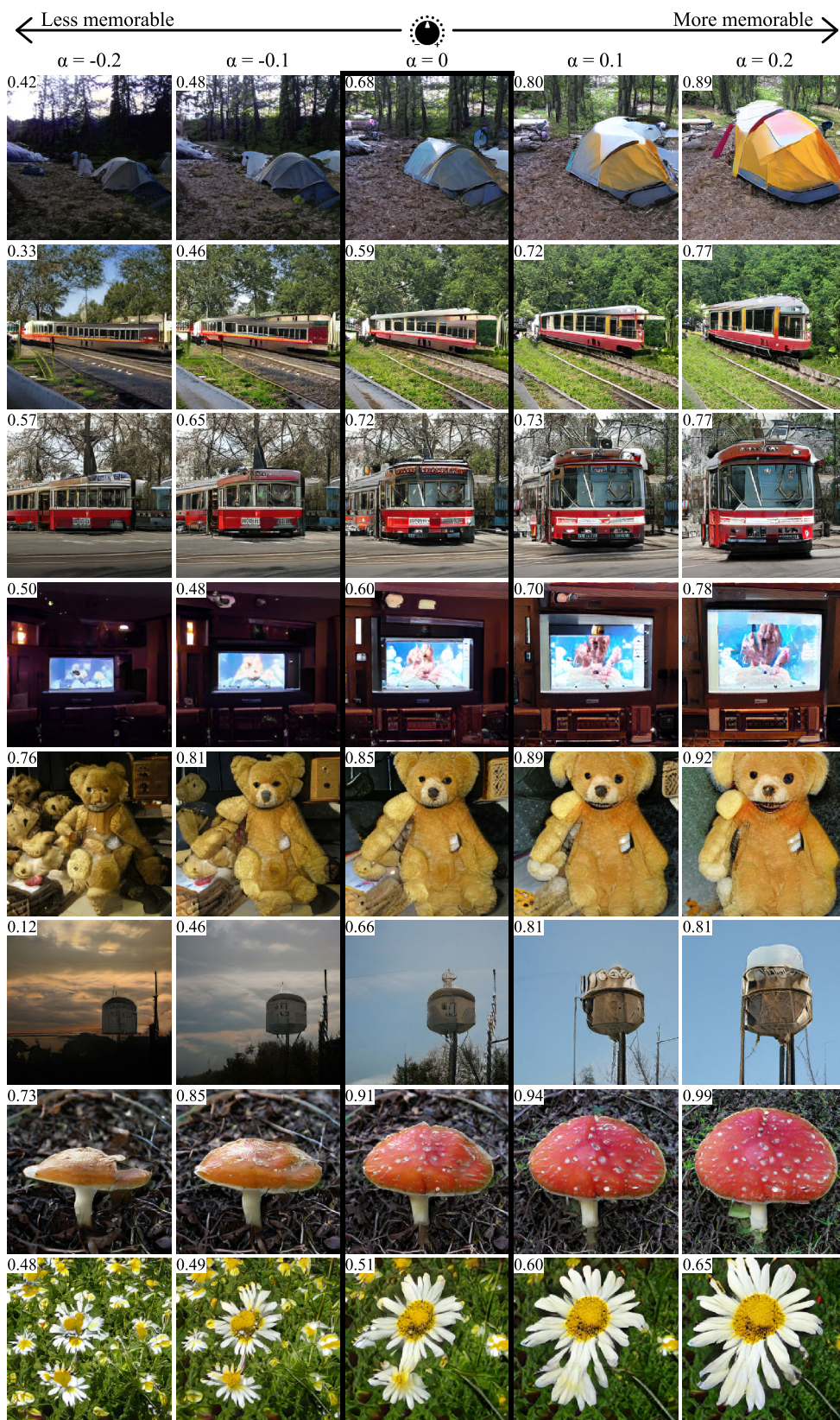


Figure S3. More examples of generated images along the memorability dimension. The middle column represents $G(z, y)$, the generated image serving as the original seed to create a series of clone images more or less memorable.

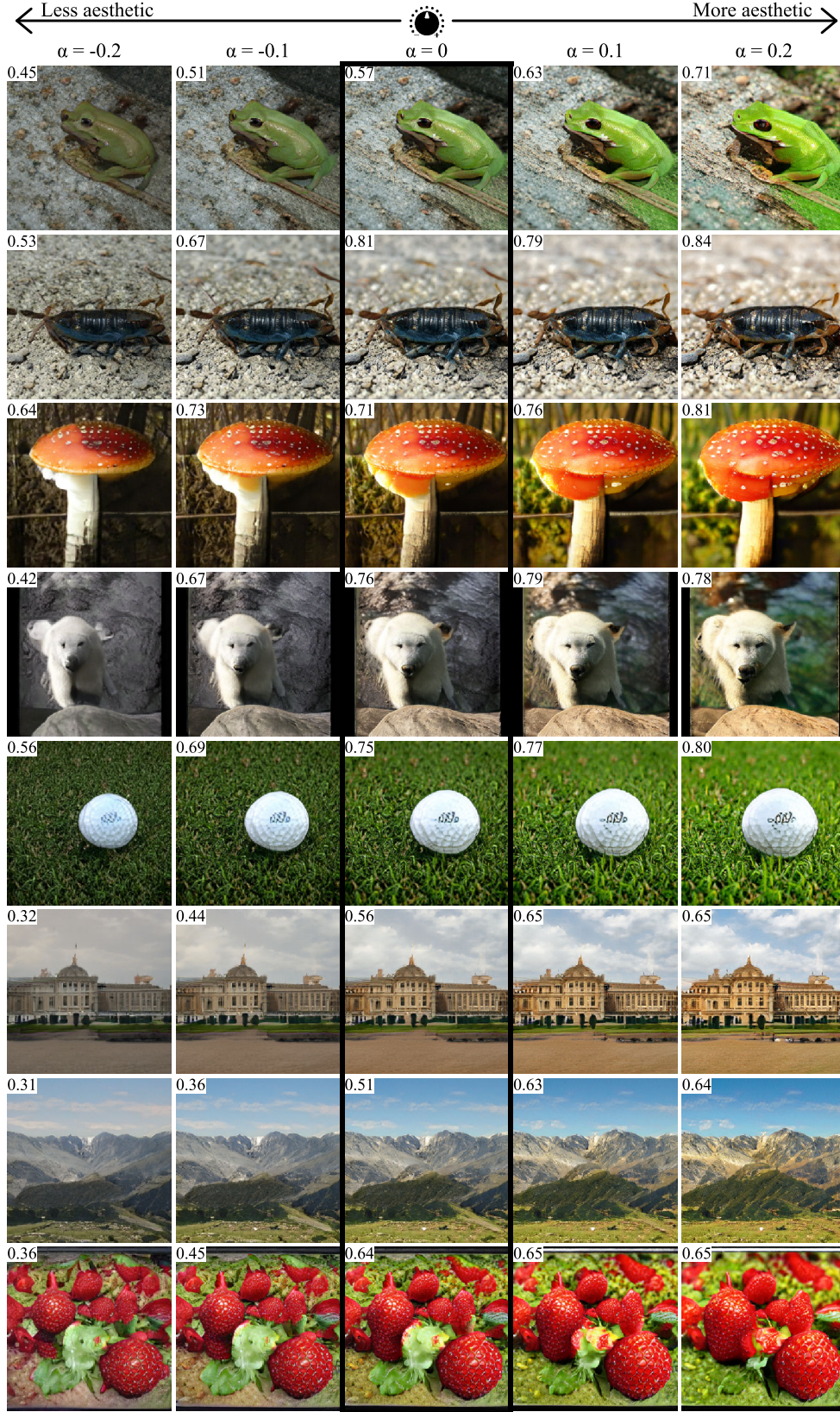


Figure S4. More examples of generated images along the aesthetics dimension. The middle column represents $G(\mathbf{z}, \mathbf{y})$, the generated image serving as the original seed to create a series of clone images more or less aesthetic.

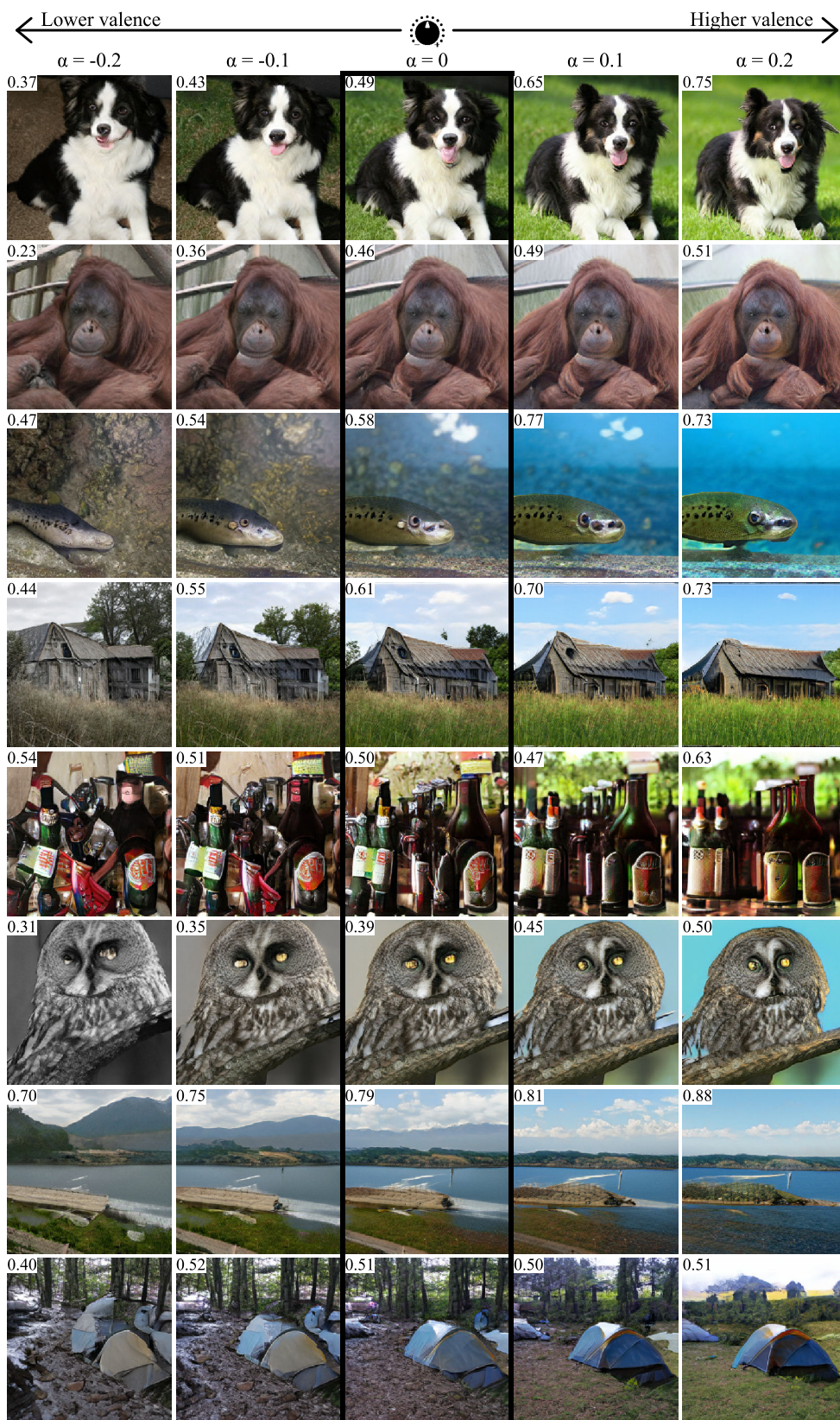


Figure S5. More examples of generated images along the emotional valence dimension. The middle column represents $G(\mathbf{z}, \mathbf{y})$, the generated image serving as the original seed to create a series of clone images higher or lower in emotional valence.