

Supplementary Materials: Towards Artist-Like Painting Agents with Multi-Granularity Semantic Alignment

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1 SUPPLEMENTARY VISUALIZATIONS

As shown in Fig. 1, we provide a detailed illustration of the processing procedure for the Semantic Content Stratification Module. We present an extensive qualitative comparison featuring enlarged details alongside state-of-the-art methods as shown in Fig. 3. In Fig. 4, we showcase the remarkable expressiveness of our method on images with complex textures aligned to the semantic content.

In `Painting_Sunflower.gif`, we provide the complete process of strokes placing based on the simulation painting system, and the reference diagram for the entire painting process is shown in Fig. 2.

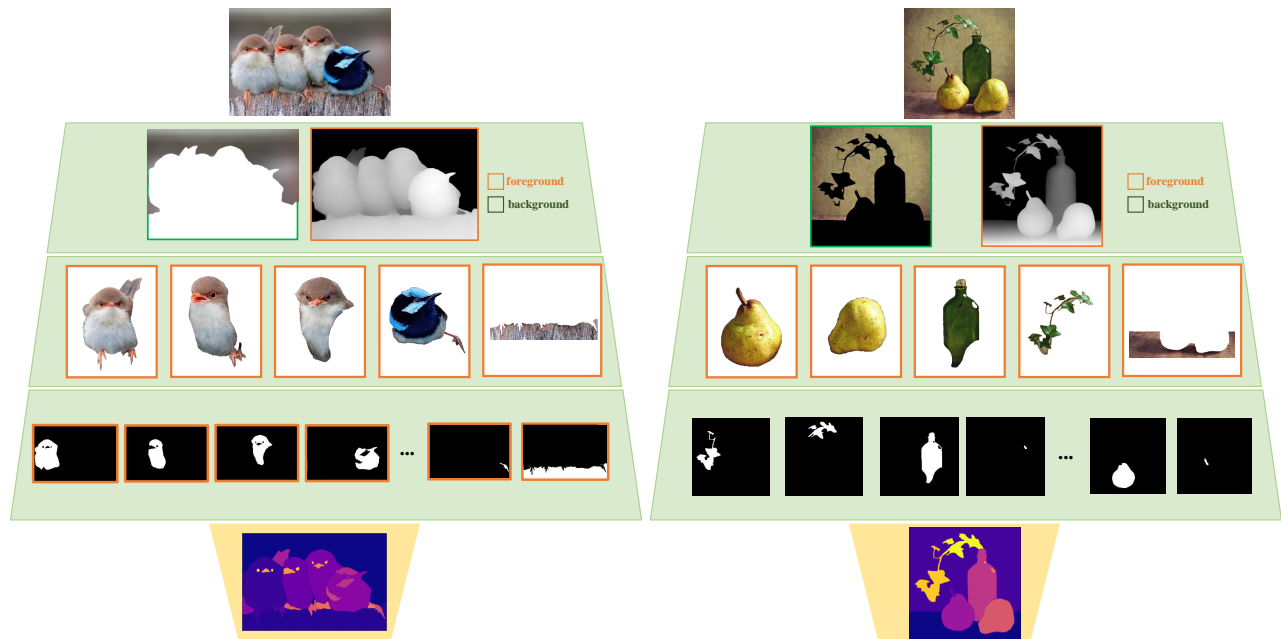


Figure 1: We showcase some visualization examples to illustrate how the semantic content stratification module processes input images and delineates painting areas. Thanks to the strategy of iteratively prompting SAM, our semantic content stratification module can decompose the input images into hierarchical fine-grained and semantics-encapsulated painting regions with diverse shapes.

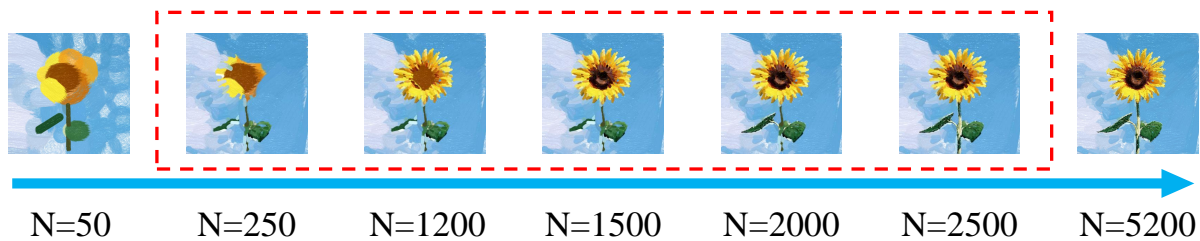


Figure 2: Reference diagram of the entire painting process based on the simulation painting system. The middle part highlights region-specific painting process based on semantic masks, executed in single layer.

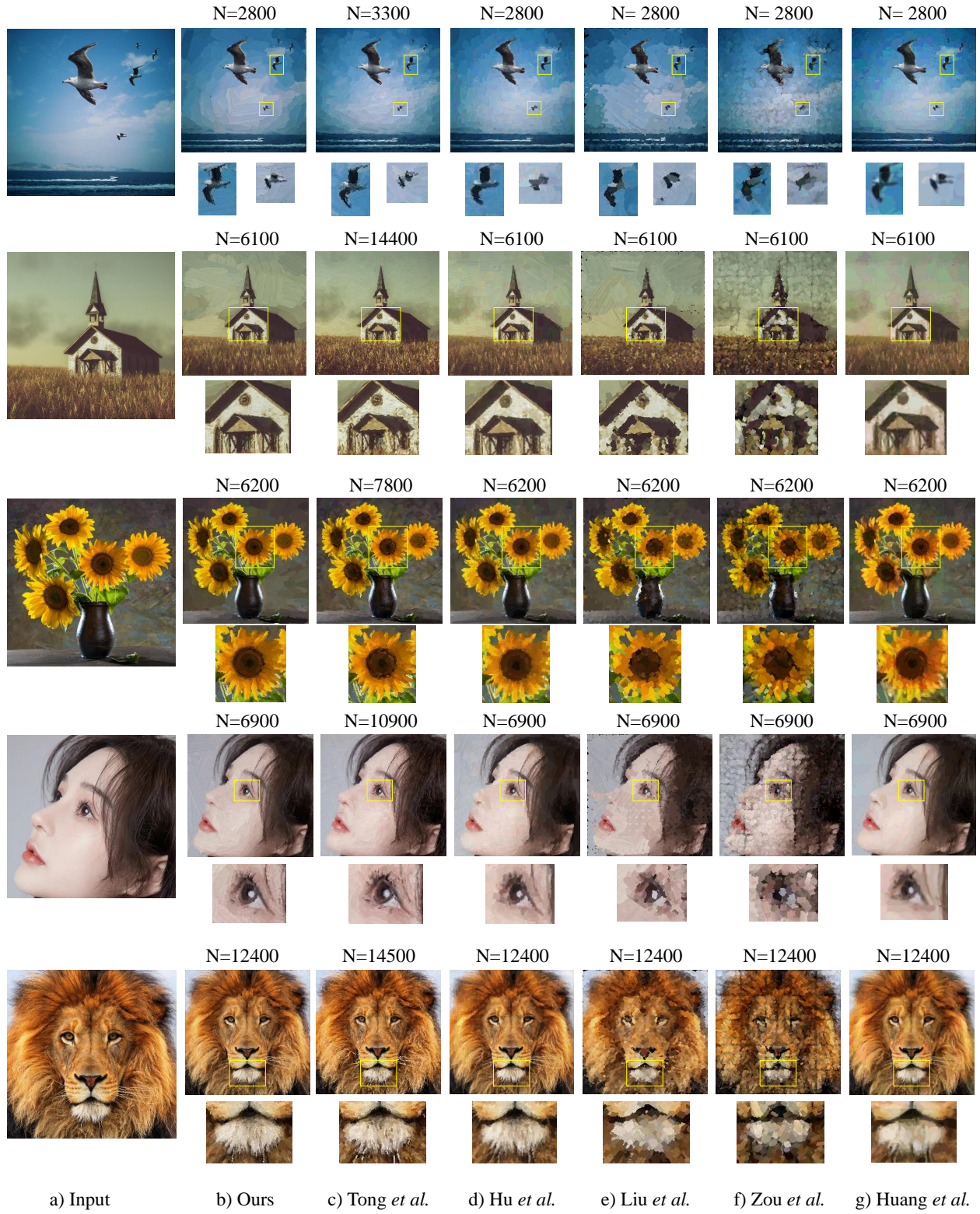


Figure 3: Qualitative comparison with state-of-the-art methods. We showcase the rendering results of previous methods and ours. N denotes the number of strokes used. Please zoom in to capture more details.

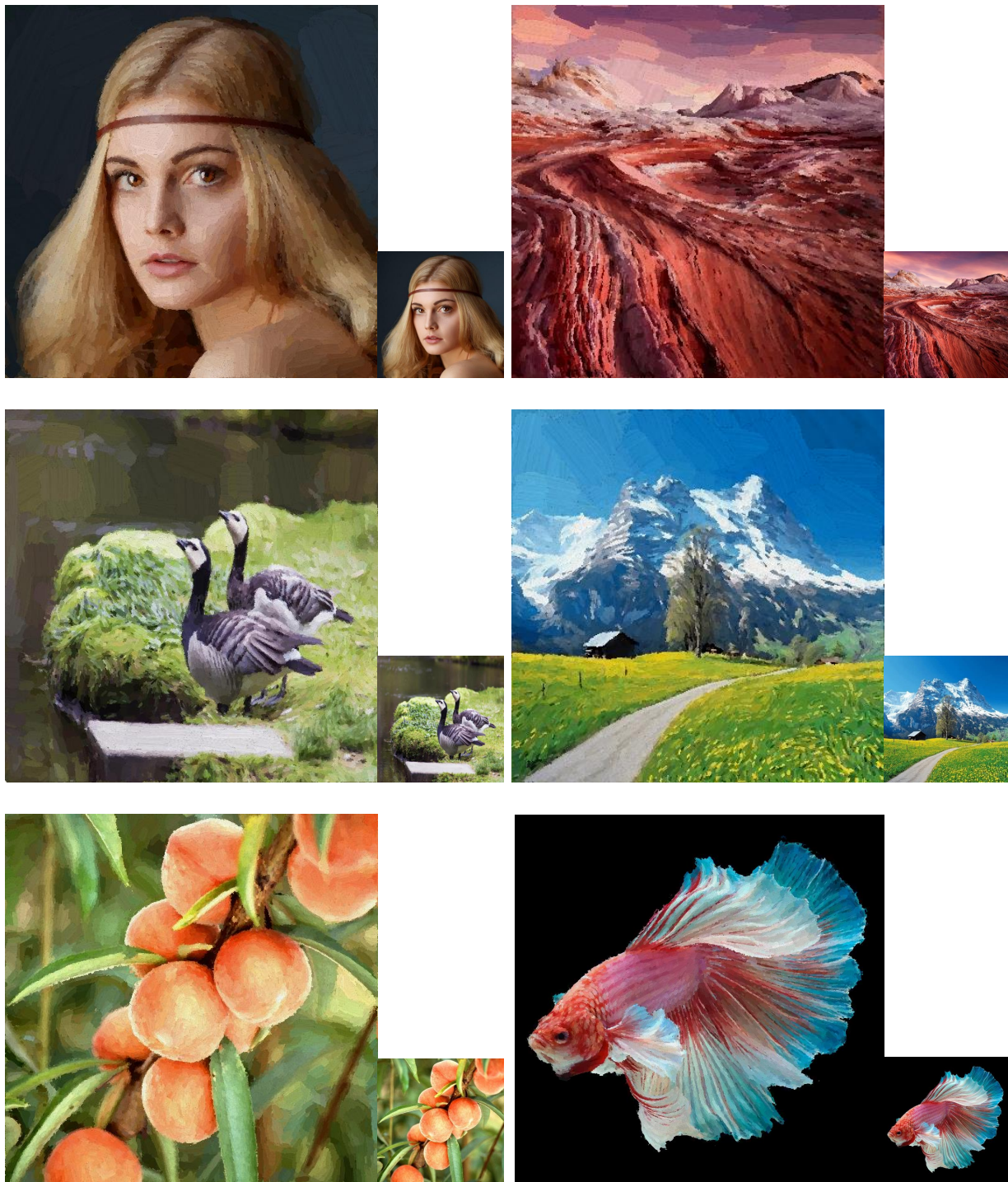


Figure 4: Six oil paintings generated through our method. The input images are on the right of each oil painting.