## LAPIG: Language Guided Projector Image Generation with Surface Adaptation and Stylization

- Supplementary Materials -

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User input text prompt: "Make it a stained glass artwork"

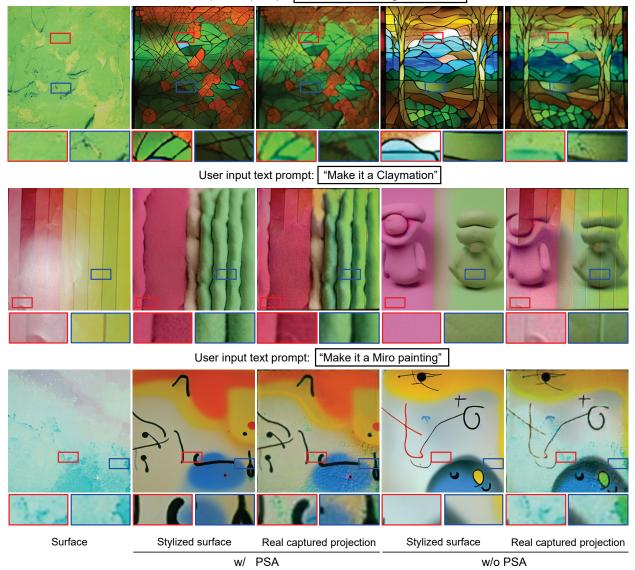


Fig. 1: Comparison between language guided projector image generation (LAPIG) w/ and w/o PSA. **Three** user input text prompts are used to stylize **three** projection surfaces. The text prompt to stylize the surfaces shown here are **Make it a stained glass artwork** for the 1<sup>st</sup> row, and **Make it a Claymation** for the 2<sup>nd</sup> row, and **Make it a Miro painting** for the 3<sup>rd</sup> row. The 1<sup>st</sup> column shows the original projection surfaces. The 2<sup>nd</sup> and 4<sup>th</sup> columns are stylized projection surfaces by LGST w/ or w/o PSA, given the user input text prompt on the top of each surface. The 3<sup>rd</sup> and 5<sup>th</sup> columns present real captured scene under projection w/ or w/o PSA, i.e., the 2<sup>nd</sup> or 4<sup>th</sup> column projected onto the 1<sup>st</sup> column after projector compensation.

## **1** INTRODUCTION

In this supplementary material, we show additional experimental results, including more surfaces and text prompts in Figure 1 and Figure 2. More qualitative comparisons between language guided projector image generation w/ and w/o PSA are shown in Figure 1 and Figure 2. The results further demonstrate the effectiveness of our PSA, because w/ PSA outperforms w/o PSA by a significant margin.

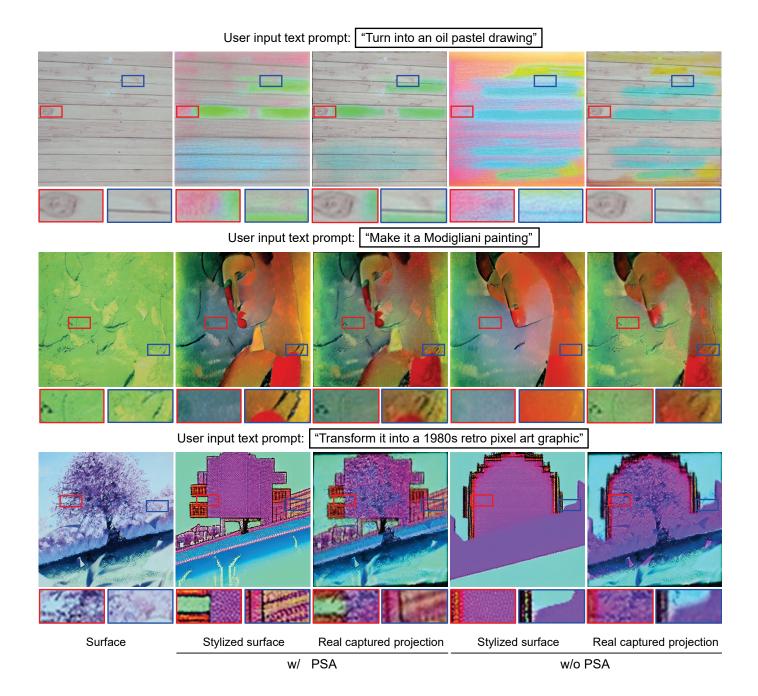


Fig. 2: Comparison between language guided projector image generation (LAPIG) w/ and w/o PSA. **Three** user input text prompts are used to stylize **three** projection surfaces. The text prompt to stylize surfaces shown here are **Turn into an oil pastel drawing** for the 1<sup>st</sup> row, and **Make it a Modigliani painting** for the 2<sup>nd</sup> row, and **Transform it into a 1980s retro pixel art graphic** for the 3<sup>rd</sup> row. The 1<sup>st</sup> column shows the original projection surfaces. The 2<sup>nd</sup> and 4<sup>th</sup> columns are stylized projection surfaces by LGST w/ or w/o PSA, given the user input text prompt on the top of each surface. The 3<sup>rd</sup> and 5<sup>th</sup> columns present real captured scene under projection w/ or w/o PSA, i.e., the 2<sup>nd</sup> or 4<sup>th</sup> column projected onto the 1<sup>st</sup> column after projector compensation.