



Historic Places Merced

Data Analysis of Craftsman Architecture



Kristal Lizarraga, Anaïs Guillem, David Torres-Rouff, Ph.D
University of California, Merced

Abstract

Digital preservation of city history generates appreciation in how shifting demographics and architecture lead to its current state. In collaboration with the project, Historic Places Merced, there is an on-going analysis with data collected from the previous historic building survey by using R. We intend to study the evolution of architecture styles, specifically the Craftsman style, over time. Through data analysis to extract patterns and significance, there can be appreciation in the development of the city. As a result, by observing the evolution of Craftsman houses in Merced, this provides an opportunity to study and understand when they were implemented over time, recognize their significance in shaping Merced, and promote awareness for digital preservation of historical buildings.

What is a Craftsman?

A multitude of architecture styles evolved through history from the 19th century through the 20th century and can be found throughout Merced. The most prominent one is the Craftsman style as seen on the right:

- depicts the common low-pitched gable roof/ hipped roof
- square posts
- porch and often covered with clapboard or bevel siding.
- overhang eaves

Course of Action

- Used RStudio as the platform to analyze the data entry from the digitized data set courtesy of Historic Places Merced from the public building survey of 1985
- Developed a code that would show the distribution of different architectural styles over time.
- Identified Craftsman styles as the most common with 350 counts and plotted other styles to show its popularity.

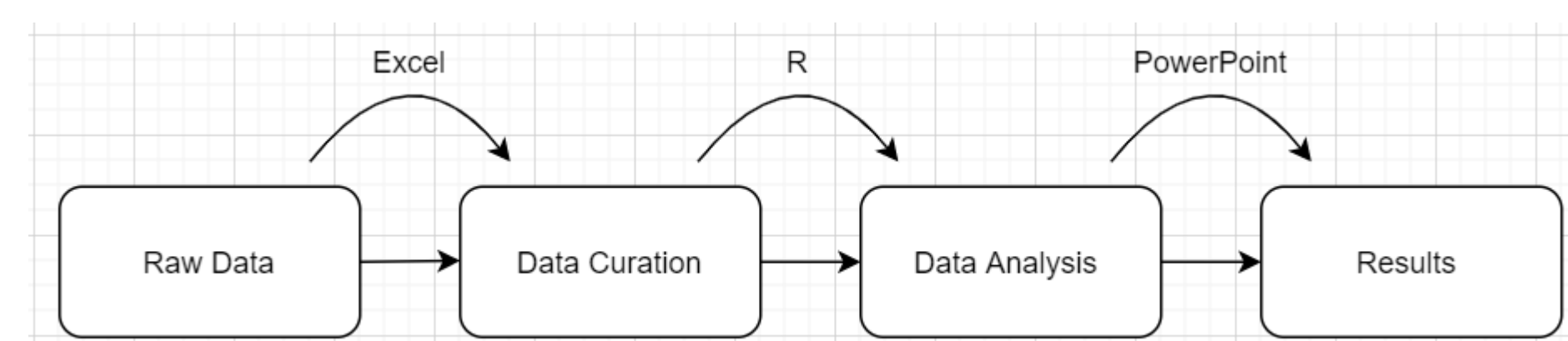


Figure 1: Schematic diagram for order of events for data analysis

Discovery of Craftsman Styles in Merced

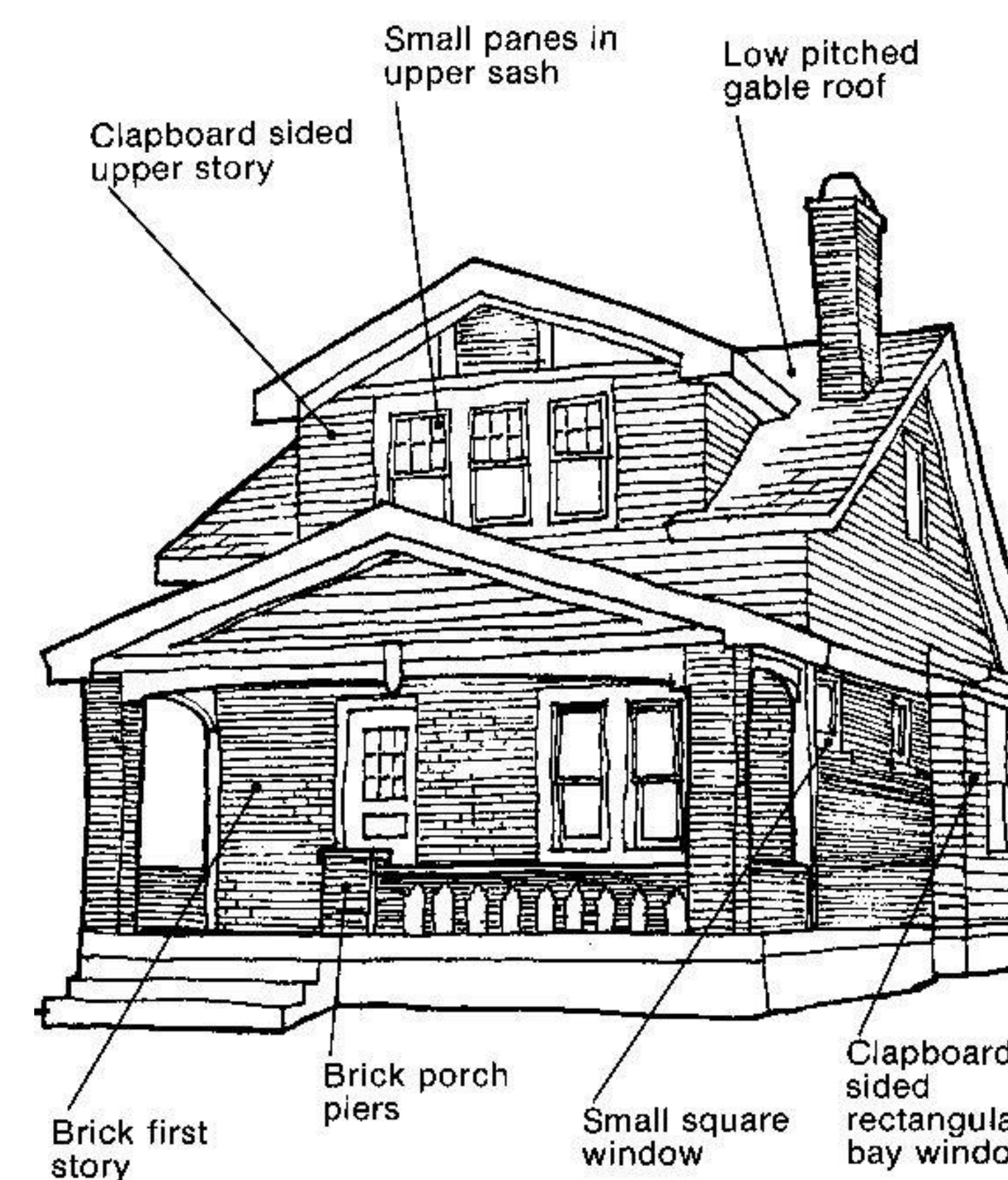


Figure 2: Examples of Craftsman style houses and their characteristics

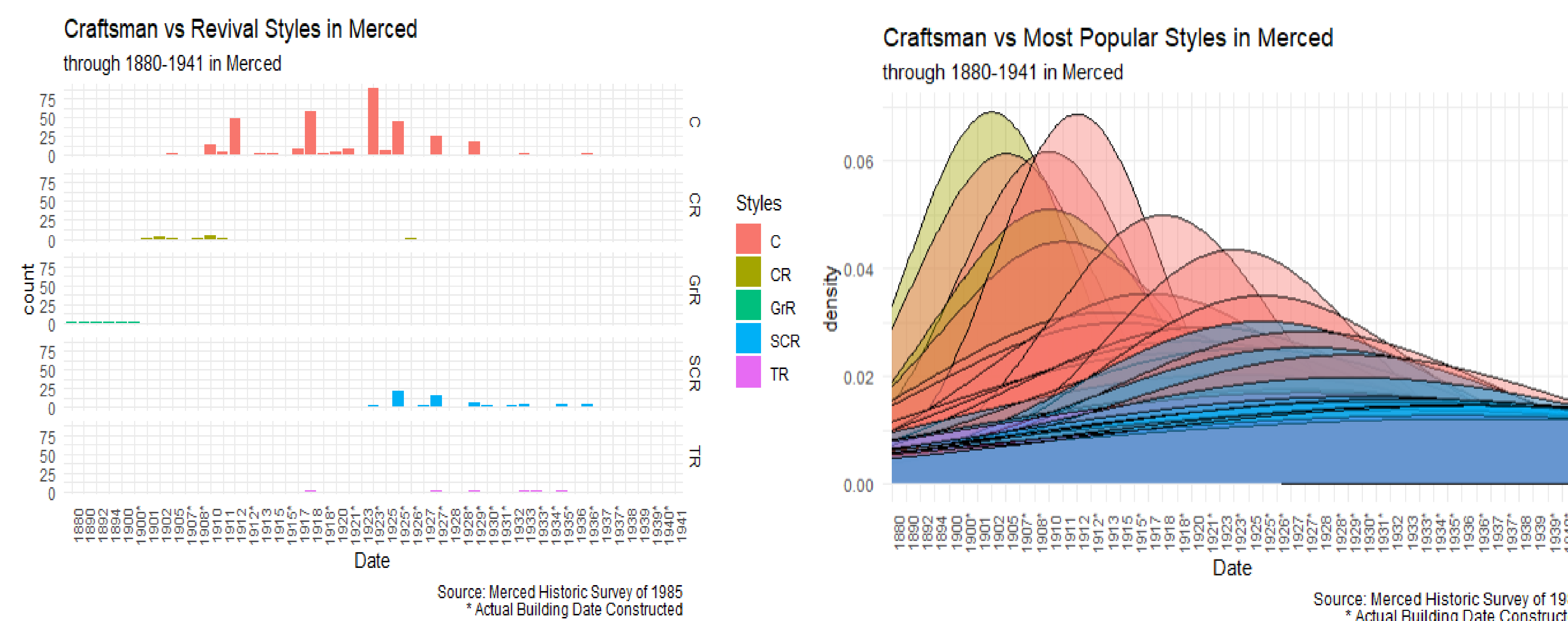


Figure 3: Analysis of Craftsman styles compared to the Revival styles, which were also considered the most popular based on the analysis of the Merced Historical Survey of 1985 sample. A bar plot is shown on the left while a density plot is shown on the right.

Significance

The conclusion of this analysis of the survey suggests that the popular style of architecture found in Mercedian homes were Craftsman style which had a total count of 351 based on the survey of 1985. Only the second most common style was Spanish Colonial Revival style which totaled around 80. The vast difference in number suggests that there had been a preference towards the Craftsman homes in the early 1900s during Merced's growth in population and homes as the graphs demonstrate an increase of houses built over a steady period. This can further be seen by the discrepancy observed with other styles such as revival or colonial architectural styles, where Craftsman homes continuously were seen throughout the years beginning from early 1900s until the late 1930s. Preference towards the Craftsman style can be credited due to having been economically-friendly with a simple layout and popular with the working class. As other more elaborate and excessive styles popular in the 19th century became phased out and people looked for simpler options, the Craftsman home became an ideal choice. Based on the sample size from the survey, it is implied that this style was the most prevalent in the city from the early 20th century.

References

- [1] City of Merced, Merced Historical Survey of 1985
- [2] Downtown Neighborhood Association, Ragsdale, 2017
- [3] Shutterstock images on Craftsman house

Acknowledgements

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