

ENERGY PITFALLS AND INTERPRETIVE OPPORTUNITIES IN REGIONAL HOUSE MUSEUMS

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Summary

Developing an historic property into a house museum involves a complex relationship between the curatorial approach and eventual energy consumption. Two house museums in New Orleans demonstrate the costs and benefits of using climate-responsive architectural features in their interpretive programs.

"Living in New Orleans reminds me of trying to swim in molasses or ride a bicycle in the sand: you sweat a lot; if you work real hard you might get somewhere; but mostly you get real tired so you stop and have a drink."

(Leslie Smith, singer)

For buildings as well as people, the climate of New Orleans poses a difficult problem. Potential passive responses to the summer's heat and humidity are few, while the comfortable transitional seasons make one wish there were no buildings at all. Contrary to popular belief, the winters are cold and damp enough to cause high heating bills in houses designed for summer conditions. (Fig. 1)

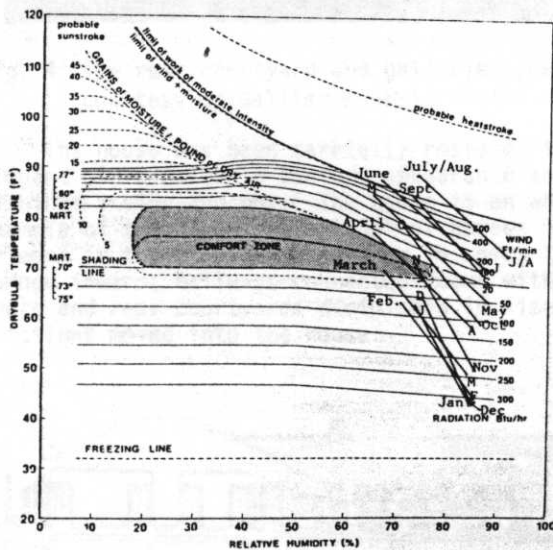


Fig. 1 New Orleans climate data plotted on Olgyay's Bioclimatic Chart.

With architecture students from Tulane University we have researched the climate responsive design and performance of six historical houses in the New Orleans area: Destrahan Plantation (1790, wings added 1810, remodeled 1840); the Masson House, an early Creole cottage (1805); Sun Oak, a Creole cottage in Greek Revival style (1836); Oak Alley Plantation (1939); Gallier House (1857); and the Twitchell House, a wood frame shotgun (1890). Our findings confirm that until the mid-twentieth century houses were designed to maximize the thermal comfort of the occupants by recognizing the changing climatic conditions outside. A wide range of architectural and lifestyle-related strategies were incorporated into designs of many styles. These were relied on for thermal comfort rather than the mechanical systems and fossil fuels which are used today.

Developing an historic property in the New Orleans area as a house museum, therefore, involves a set of decisions with significant implications for energy consumption. Two basic approaches - the conservatorial and the interpretive - are exemplified by two of the houses studied: Gallier House and Destrahan Plantation, both currently operating as house museums. A comparison of the two illustrates the complexity of the relationship between energy use and the assumed role of a house museum.

Gallier House

Designed in 1857 by the local architect James Gallier, Jr., this early Victorian is located on Royal Street in the French Quarter of New Orleans.



Fig. 2 Location of Gallier House in the French Quarter, New Orleans, Louisiana

