

Townhouse Collapse Elicits Question on the Lifespan of Bricks— and the Age of the French Quarter

By Richard Campanella Tulane School of Architecture

HE COLLAPSE of a 213-year-old townhouse at 808-810 Royal Street in the French Quarter this past October — "a classic example of the demolition-by-neglect," as neighborhood advocate Meg Lousteau put it — prompted a city-wide conversation on the structural viability of New Orleans' oldest neighborhood. Said architect John Williams in an interview with the *Times-Picayune*,

the biggest problem facing the Vieux Carre is the aging of bricks and mortar. The life of a brick is between 150 and 200 years and mortar typically lasts between 75 and 100 years. [The Royal Street collapse] should be a wakeup call...to get qualified brick masons to tuck point their buildings and in some instances replace the bricks.... I guarantee you the mortar (in the collapsed building) was shot.

A lifespan on brick and mortar raises the question of the structural age of the French Quarter. How widespread is this problem, at least potentially? I aimed to understand the architectural geography of this district a few years ago via a spatial analysis of the Vieux Carré Survey, that amazing inventory (now online at http://www.hnoc.org/vcs/) of the 300-year-old neighborhood's chains of title and structural history. The results form a number of chapters in my 2006 book, *Geographies of New Orleans* (University of Louisiana Press), which map and analyze the chronology and geography of building styles, their architectural typologies, and their iron adornment. Here I will focus solely on the aspect of building age — that is, an analysis of the Quarter's 2,244 extant street-fronting structures (as opposed to rear dependencies and outbuildings) based on when they were originally constructed. Understanding the geography of building age sheds light on the location and distribution of edifices falling within that age window when bricks and mortar, if unmaintained, may start to disintegrate.

Structurally speaking, today's French Quarter, for all its colonial roots and Caribbean-Mediterranean feel, is a decidedly 19th-century neighborhood erected after the city came under American dominion. Only one of every hundred structures standing today (1.2 percent) dates to the 18th century, while over three of every four (77 percent) were built between 1800 and 1899 and one of five (21 percent) date from the 20th century.

More specifically, 61 percent of the entire present-day Quarter arose between the Battle of New Orleans (1815) and the onset of the Civil War (1861), especially the 1820s-1850s and in particular the 1830s. Plotted as a histogram, we see four "valleys" (before 1820, 1860-1880, 1930-1960, and after 1980) in-

ABOVE Collapsed circa-1801 townhouse at 808-810 Royal Street, October 2014. The building was empty at the time and, miraculously, no one on busy Royal Street was injured. The site has since been cleared away. Photography by Richard Campanella

terspersed among three "peaks" (1820-1860, 1880-1930, and in the 1960s and 1970s) in the construction dates of the French Quarter's extant structures.

First Valley, before 1820 The relatively few (96) surviving structures predating 1820 do not, of course, represent low levels of construction prior to that year. On the contrary, the Quarter was entirely developed by 1820, so much so that development had spread into adjacent faubourgs. Rather, this "valley" reflects the toll of time on centuries-old buildings in a busy, dense, subtropical port city. Parcels opened up by the disappearance of these ancient edifices, through either demolitions, disaster, or decay, were usually reoccupied during later "peaks" in construction. It is not a coincidence that the collapsed building at 808-810 Royal, which according to my data ranked as the 37th oldest of the 2,244 buildings analyzed, fell within this oldest cohort of neighborhood buildings.

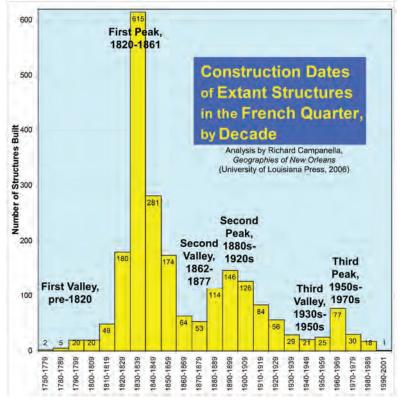
First Peak, circa 1820-1861 The rise of sugar cane and cotton, the arrival of Northerners and foreign immigrants, the development of the steamboat, and the city's monopoly on Mississippi Valley trade brought great wealth to New Orleans during the antebellum "golden age." Hundreds of multistory edifices arose to meet the demand, especially in the 1830s, when New Orleans ranked among the wealthiest and largest cities in the nation. Illustrating the prosperity of this era is the fact that, of the 1294 extant structures built during 1820-1862, over half (52 percent) were sumptuous townhouses. The French Quarter in these times constituted a generally affluent residential neighborhood in its core blocks, with a business district along its upper and riverfront flanks and working-class populations in its lower and rear blocks. These patterns, too, are evident in the data: 21 percent of structures built in this era were storehouses, with commercial use on the ground floor and residences above, and another 20 percent were cottages, where working class residents were more likely to dwell. The decline in construction in the 1840s-1850s may be explained by a number of factors: full development of the neighborhood's parcels, increasing popularity of uptown and Esplanade Avenue sites for new construction, repercussions of the Panic of 1837, and increasing trade competition in the form of Northern canal and railroad construction.

Second Valley, 1862-1877 The dearth of structures dating from these fifteen years reflects the turmoil of Civil War, blockade, federal occupation, and Reconstruction. Many local and regional businesses folded, investment dollars were limited, and few buildings went up. Only three percent of today's buildings date from this era.

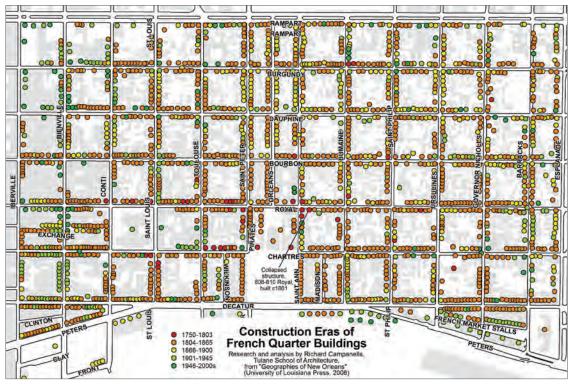
Second Peak, 1880-1920s New Orleans enjoyed a second (though much more modest) "golden age" in the turn-of-the-century era, which coincided with a minor construction boom in the French Quarter. But while a number of impressive Italianate townhouses and storehouses went up in this second peak, the new construction comprised mostly humble wooden abodes for families of modest means. The upper class had by this time departed for uptown or Esplanade Avenue, leaving the French Quarter to the working class, among them thousands of indigent immigrants from Sicily who were accommodated in old mansions subdivided into cheap rental flats. It was a phenomena seen in many big cities in this era: "Vacated houses were converted into tenements and rooming houses," observed geographer David Ward in regard to national trends, "while vacant lots and rear yards were filled with cheap new structures." In New Orleans, those cheap new structures meant shotgun houses and bungalows. Of the 196 shotguns and 18 bungalows now standing in the French Quarter, fully 88 percent were built during the 1880s to 1920s. And of the 525 total extant building

erected during these four decades, only eight percent were upscale townhouses for the affluent.

Third Valley, 1930-1950s A number of factors contributed to the decline in construction in these years. Depression and World War II diverted attention and funds away from real estate investment, while in the midst of that era, designation of the French Quarter as a protected historic district (1937) regulated demolition and new construction. Tourism and conventions during this era, meanwhile, were at levels too low to motivate new hotel construction. Countering these trends were the extensive renovations of the Works Progress Administration and Public Works Administration in the 1930s, especially in the French Market area, and the gerrymandering of the Vieux Carré Commission's jurisdiction to exclude certain Rampart Street blocks, the upper North Peters river side, and the 200 block of Royal, thus greenlighting a number of demolitions and modern constructions.



Map of construction dates of extant buildings in the modern French Quarter, based on an analysis by the author.



Histogram of construction dates of extant buildings in the modern French Quarter, based on an analysis by the author. Note: the figure "77" from 1960-1969 do not mean 77 different buildings, but rather the number of parcels occupied by new structures, usually very large hotels.

Third Peak, 1950s-1970s The late 1950s to the mid-1970s saw the final boom in French Quarter construction, and it constituted mostly large multiparcel hotels and affiliated structures such as parking garages. A moratorium on additional Quarter hotels has since quelled new construction, and since the 1980s, only a few new buildings have gone up, all by law designed to blend into the 19th-century scenography.

How old, then, is the French Quarter? From a structural standpoint, the prototypical French Quarter streetscape dates to the second quarter of the 19th century, 1825-1850, with a few streetscapes pre-dating this era and a fair number post-dating it. This puts the lion's share of the neighborhood's buildings in the 165-190 year old range, within the end-of-life timeframe of bricks estimated by John Williams. Fully 62 percent of Quarter buildings $-\ 3$ out of 5 — are over 150 years old, including 73 that are over 200 years old — or rather 72, now that one has collapsed.

John Stubbs, director the Tulane School of Architecture's Master of Preservation Studies Program, explains that brickwork in general, but especially of this vintage generation, is particularly vulnerable to the wide temperature and humidity range of Louisiana's subtropical climate. Elements "slowly break down the relatively durable outer surface" of bricks as well as mortar, which exposes more surface area and increases the rate of deterioration. "Early builders knew this," says Stubbs, "and protected exterior brick surfaces with plaster, painted finishes, roof overhangs, stone parapet caps, drip edges at openings, and pitched paving surfaces. Interior surfaces were likewise protected with a shelter coat of lime-based plaster or stucco, which was then painted." With these protective overlays and maintenance interventions, the lifespan of local bricks may be extended for many years. Unfortunately, some owners have done the opposite. Stubbs points to a trend of the 1960s-1970s, to remove protective surfaces such as clapboards and stucco to reveal a "natural brick look," as a particularly ill-advised move. More commonly, "inadequate and improper repointing with hard cement mortars, and excess dampness [within] lower several feet of masonry walls," allow deterioration to set in.

Brick deterioration thus has the potential to be a major problem throughout New Orleans' showcase historic neighborhood — all the more impetus to keep mortar repointed, keep brickwork covered whenever possible, and keep sources of moisture at bay.

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