

MAPPING AND INTERPRETING THE HUMAN GEOGRAPHY OF NEW ORLEANS, LOUISIANA, USA

by *Richard Campanella*

Tulane University, New Orleans, Louisiana USA

This article identifies and explains patterns of residential settlement by social groups in the city of New Orleans, Louisiana, USA, from the late colonial era to after Hurricane Katrina (1700s-2000s). Toward this end, the article also suggests sources for empirical spatial data and mapping techniques that may be used to plot and analyze these geographies through time.

Cet article présente et explique les modèles d'organisation résidentielle des différents groupes sociaux dans la ville de La Nouvelle-Orléans des années 1700 à 2000, depuis la fin de la période coloniale jusqu'aux années qui suivent l'ouragan Katrina. Dans cette perspective, il propose également des sources inédites de données spatiales empiriques et des techniques de cartographie qui peuvent être utilisées pour dégager et analyser ces géographies sur la longue durée.

Introduction

Urban residential settlement patterns reflect underlying geographies (actual or perceived) of hazards, nuisances, conveniences, and amenities, which drive land values and thus sort social groups according to economic class. Additional factors involving race, ethnicity (national origin), religion, and nativity also influence how residents distribute themselves across the cityscape, in ways intertwined with class and social position. People generally gravitate toward areas that, first and foremost, are available to them, and thence that are perceived to maximize their chances of success (in terms of housing, employment, services, amenities, aesthetics, convenience, and existing social networks), while minimizing costs and obstacles (such as price, distance, crime, discrimination, social isolation, noise, and nuisances). The resultant spatial patterns, which range from the intensely homogenous to the thoroughly heterogeneous, are complex and dynamic, varying by group, place, and time.

Objectives of this article are twofold: (1) to identify and explain human-geographical patterns in a particular city through time in terms of ethnic and racial groups, and (2) to offer empirical methodologies to map these patterns. The study area is New Orleans, Louisiana, USA, which presents a compelling physical and social environment for such an investigation, particularly in light of the extensive

destruction induced by Hurricane Katrina in 2005. Empirical methodologies for this type of historical-geographical research are highly dependent on the nation, city, and era under investigation, and the primary-source data available today.

An effort to map and interpret the spatial patterns of social groups invites questions about racial and ethnic identification. Most nations' censuses (though by no means all) request such self-descriptions from their citizens; some ask for "ancestry" or "ethnicity," others for "race" (with response options ranging from skin color to national or continental origins), and still others for membership in certain indigenous groups (yet another contested identity). Nations that endeavor to embrace multiculturalism, including the United States, have recently accommodated a broader range of identity choices, plus the ability to choose more than one category or none at all. France has resisted this sort of social enumeration for generations, concerned that officially acknowledging social subdivisions undermines aspirations toward a colorblind and indivisible sense of French nationality, while possibly fostering *communitarisme*, factionism, and discrimination. The purpose of this study is not to engage or take sides in this debate, but rather to recognize that city dwellers worldwide form ethnicity-based spatial patterns in their residential distributions, and that these geographies are socially significant, influential in the cityscape, and worthy of study.

Ethnic Geography of Colonial New Orleans (1718-1803)

The isolated port of *Nouvelle Orleans*, founded in 1718 on a dynamic river-dominated delta built by the channel-shifting and flooding cycles of the Mississippi River, struggled with incessant natural disaster and low prioritization by French and Spanish administrations for its first eighty years (fig. 1-2). The ethnic geography of the city, whose population never exceeded 8000 throughout the entire colonial era (1718-1803), constituted intermixed spatial patterns of a few core groups. Locally born Francophones (some white and originally from French Canada, the French West Indies, or France itself; some of mixed ancestry and either free or enslaved; others of pure African ancestry and enslaved) predominated in patterns of high spatial intermixing with members of the Spanish-speaking world and a small numbers of immigrants from elsewhere. The enslaved population lived in close proximity to their masters, often in adjacent quarters. Detailed primary-source data further articulating these colonial-era geographies are extremely scarce and sporadic.

Events during the 1790s-1800s transformed New Orleans from an orphaned outpost of two distracted European powers to a strategically sited port city of an ascendant New World nation. The development of the “cotton engine” in 1793 and the successful granulation of Louisiana sugar in 1795 facilitated the rapid conversion of New Orleans’ hinterland to plantations of high-value exportable cotton and sugarcane. New Orleans would benefit tremendously as a marketplace and transshipment port for both commodities. The agricultural technologies also breathed new life into the institution of slavery, as a labor source in the suddenly lucrative regional plantation economy; New Orleans would soon become the busiest slave market in the South. Finally, the slave insurgency in St-Domingue, which began in 1791 and eventually expelled the French regime, diminished Napoleon’s interest in the seemingly unpromising Louisiana colony and eventually motivated him to sell it to the United States in 1803. The events in St-Domingue also decreased the supply of West Indian sugar and increased demand for Louisiana cane just as many sugar-savvy Haitians arrived to New Orleans and helped launch a local sugar industry. Now under U.S. dominion, New Orleans was poised to boom. Prominent observers routinely predicted that this new American city would, as one put it, “doubtless one day become the greatest [on the] continent, perhaps even in the world” (Murray

1829, p. 426). Another foresaw New Orleans becoming “one of the greatest commercial cities in the universe” (Blowe 1820, p. 64-65).

Ethnic Geography of Antebellum New Orleans (1803-1861)

With limited immigration immediately after Americanization, the ethnic geography of New Orleans remained relatively simple. Locally born French-speaking Catholics (Creoles)—some white, some of mixed ancestry and either free or enslaved, others of pure African ancestry and mostly enslaved—predominated in patterns of high spatial intermixing. Enslaved people continued to reside in close proximity to their masters, in adjacent quarters or nearby common-wall housing. The few Anglo-American or foreign-born residents generally dispersed within the community and numbered too few to form significant ethnic clusters. In 1809, over 9,000 refugees (roughly evenly divided among white, enslaved black, and free people of color) from Haiti doubled New Orleans’ population, revived its Francophone and Afro-Caribbean culture, and reinforced its ethnically intermixed settlement patterns.

New patterns formed when Anglo-American emigration increased in the 1810s. Arrivals from the North and northern South, seeking opportunities in the rapidly developing Mississippi Valley, brought to the Old World-oriented, French-speaking Catholic city the external influences of American commerce and culture, the English language, Protestant sects, and new concepts in everything from jurisprudence to architecture to race relations. Anglo-Americans gravitated to the uppermost blocks of the Creole-dominant original city (today’s French Quarter), or upriver from it in the recently subdivided Faubourg Ste-Marie (today’s Central Business District). One early indication of the uptown settlement preference among Anglos comes from an 1808 property ownership map, in which only 8% of the 1,237 proprietors had Anglo-sounding surnames (such as *Donaldson*, *Smith*, or *Johnson*), but nearly three-quarters of them lived in the uppermost blocks of the otherwise Creole-dominant original city¹. By the 1830s, Anglo surnames numerically outnumbered French Creole names (such as *Villere*, *Dupuy*, or *Gagnon*) in adjacent Faubourg Ste-Marie, an area whose name now had become anglicized to “St. Mary” or “the American Quarter” (Tregle 1992, p.154-157, 164). Economic, religious, political, and cultural institutions arose

¹ Analysis by author using “*Plan de la Ville de la Nouvelle Orléans Avec les noms des propriétaires*,” 1808, map, at The Historic New Orleans Collection. Not all people with French- or Spanish-sounding surnames were necessarily Creole, nor were all those with Anglo-sounding surnames necessarily Anglo-Americans.

among the uptown Anglo population, further reinforcing the pattern. The same surname-interpretation methodology exercised on the 1842 City Directory reveals the expansion and persistence of the pattern: in the upper city, those with Anglo surnames outnumbered those with French surnames by a 2.8-to-1 ratio; in the lower Creole-dominant city, the ratio reversed: French outnumbered Anglos 3.2-to-1². It should be noted that surname interpretation as a methodology is imperfect, as it may confuse French Creoles with French immigrants, or miscategorize people who changed their names or intermarried. Nevertheless, in many cases, it is simply the *only* method to derive mappable social data.

Patterns driven by economic class brought complexity into this general Creole / Anglo downriver/upriver ethnic geography. In pre-industrial cities, prosperous members of charter groups usually resided in the inner city, with domestic servants and slaves living in adjacent quarters, and middle- and working-class families residing in a ring of adjacent neighborhoods. Indigents, among them immigrants, tended to settle at the city's ragged outskirts or waterfronts. The pattern is an ancient one—"in many medieval cities in Europe, the city centres were inhabited by the well-to-do, while the outer districts were the areas for the poorer segments of the population" (Van Kempen and Özüekren 1998, p. 1631)—and it carried over to New World cities. Lack of mechanized conveyances drove the pattern: pedestrian-scale movement made inner-city living a convenient and expensive luxury, which spatially sorted the classes and castes into certain residential-settlement patterns.

So too was the case in antebellum New Orleans. Charter groups, mostly comprising the upper classes of French Creole (as well as *Français de France*) and Anglo-American society, tended to live in townhouses in the old inner city. Observed Elisée Réclus in 1853, "The oldest district of New Orleans...is still the most elegant of the city," where houses had been "mostly purchased by American capitalists" (Reclus 1855-2004, p. 50). Encircling the highly desirable commercial/residential inner core was an annulus of middle- and working-class faubourgs. Further out, along the wharves, canals, backswamp, and upper and lower fringes of the city, lay a periphery of muddy, low-density village-like developments—"shantytowns," in some places. Here resided thousands of immigrants and other working-class and poor, including manumitted blacks. During the first great wave of immigration to New Orleans (1820s to 1850s, corresponding to national trends), laborer families mostly from Ireland

and Germany arrived by the thousands and settled throughout this semi-rural periphery. They predominated in the riverside upper fringe (upper Faubourg St. Mary and into the adjacent city of Lafayette), the backswamp around the turning basins of the New Basin and Old Basin canals, and the lower faubourgs (known as the "Poor Third" Municipality).

Mapping nineteenth-century immigration settlement in American cities is challenged by limitations in official census data. The U.S. Census did not record birthplace until 1850, making nation-of-origin difficult to ascertain prior to that decennial enumeration. Even afterwards, mappable addresses were rarely recorded along each individual's personal information. At best, the Census compendium volumes aggregated residents born in various nations (or, prior to unification in places like Germany and Italy, by regions in those future nations) at the ward level, which can then be mapped by those polygons. If the researcher wishes to identify patterns at a more granular level, then surname-based sampling strategies using sources with mappable addresses (such as city directories or organizational membership lists) offers another option. In the case of New Orleans' Irish and German immigrant populations, the author used surname identification (names such as *Kelly* or those with *Mc-*, *Mac-*, or *O'-*) to map probable Irish families, and institutional locations (German Protestant, Catholic, and Jewish houses of worship) to map German immigrant settlement. There is also an abundance of qualitative evidence for such patterns, left behind by visitors, journalists, diarists, and other first-person observers.

Antebellum immigrants generally avoided the inner city and settled in the semi-rural periphery, but rarely were they wholly absent or intensely clustered in any particular area. Intermixing predominated: the so-called "Irish Channel" was home to many Germans and other groups, just as Little Saxony near the lower-city riverfront housed as many Irish and Creoles as it did Saxons. The main reasons behind this spatial pattern in immigrant settlement involved jobs and real estate. Low-skill employment in this era—dock work, flatboat wharf jobs, warehousing, stockyard and tannery work, rope walks, public-works projects, canal excavation, railroad construction—lay scattered throughout the outer fringe, rather than among the offices and shops of the exclusive inner core. Slaves once were assigned these grueling and dangerous hard-labor tasks, but because they yielded higher profit on sugar plantations, a niche opened for poor unskilled immigrants. Between the 1830s

² Analysis by author based on *New Orleans City Directory* of 1842

and 1840s, white immigrants mostly from Ireland and Germany took most of the unskilled labor, dock worker, drayman, cabman, domestic, and hotel servant jobs from blacks (both free and enslaved). While some of the better working-class jobs existed downtown, most were on the outskirts. Also located in that area was cheap, low-density, cottage-scale housing, which had open lots for “truck farming,” a favorite extra-income activity particularly among Germans. Immigrants of the antebellum era thus avoided the inner city for its lack of unskilled-labor employment, its high real estate prices and crowding, and because mechanized transportation (early horse-drawn streetcars) for commuting was limited and costly. Better-off Irish and Germans, who likely arrived earlier (such as the “lace-curtain” Irish establishment of the Julia Street area), worked in downtown-based professions and lived in costly downtown dwellings; they generally blended in with charter groups and rarely rubbed shoulders with their poorer, recently arrived brethren.

People born in France comprised the third-largest immigrant group in antebellum New Orleans, followed by smaller numbers from a wide range of southern European and Latin lands, such as Spain, present-day Italy, Cuba, Mexico, Haiti, the West Indies, and Central and South America. These Catholic peoples of the Latin world usually settled in the working-class neighborhoods on the Creole (lower) side of New Orleans, below the French Quarter. With the exception of some “foreign French,” Catholic immigrants of Latin backgrounds were uncommon in predominantly Anglo-culture uptown.

The antebellum geography of New Orleanians of African ancestry consisted of enslaved blacks intricately intermixed with the white population (working mostly as domestics or “hired out” for municipal tasks), while free people of color predominated in the lower half of the city. Anecdotal evidence of these patterns comes from an 1843 article in the *Daily Picayune*: “The Negroes are scattered through the city promiscuously; those of mixed blood, such as Griffes, Quarteroons, &c., [Creoles of color] showing a preference for the back streets of the First [French Quarter, Faubourg Tremé] and part of the Third Municipality [Faubourg Marigny and adjacent areas]” (*Daily Picayune* 1843, p. 2, col. 3). The nature of urban slavery drove this pattern: the enslaved were kept in close quarters by their enslavers for reasons of convenience and security.

Succession from the union (1861), followed by four years of civil war, the defeat of the Confederacy (1865), and the emancipation of slaves, altered New

Orleans’ destiny in every way imaginable. It also transformed the city’s human geography.

Postbellum Human Geographies

The millions of southern and eastern Europeans who arrived to the United States (and the thousands who came to New Orleans) during the second great wave of immigration, 1880s to 1920s, encountered a rapidly changing urban landscape. Industrialization, the installation of urban streetcar networks, and the rise of centralized, high-rise business districts triggered two important repercussions.

First, in New Orleans, the gentry moved out of the inner city and resettled in newly developing “garden suburbs” along St. Charles Avenue and Esplanade Avenue. In some cases, wealthy families departed their opulent townhouses because they lost their fortunes to the Civil War or struggled economically in its aftermath; in other cases, they simply moved away from new urban nuisances and toward new amenities. Unsightly and smelly breweries, warehouses, and sugar refineries arose in the French Quarter in this era, a block or two from once-elegant mansions. Faubourg St. Mary began to look less like a faubourg and more like a congested downtown. Inner-city living lost its appeal. With convenient new streetcar lines affording rapid access to professional jobs in downtown offices, people no longer had to prioritize for pedestrian access in choosing where to live. This exodus, which can be traced to the 1830s-1850s but was mostly a postbellum trend, opened up scores of spacious inner-city townhouses as potential apartment housing for working-class folk. As recently as 1939, fully 78% of the city’s antebellum-era dwelling units were occupied by tenants rather than owners, and most of these units were located in or near the inner city³.

Second, employment for the unskilled poor moved from the semi-rural periphery, where they existed in the agrarian days before the Civil War, to the urban core, where postbellum modernization created new opportunities. Labor-intensive jobs disappeared from the periphery because those very lands were being developed into the garden suburbs for the relocating upper class, and because much of the needed infrastructure (canals, railroads) was already in place. Whereas an 1830s Irish laborer might have been drawn to the backswamp to dig a canal, or an 1840s German worker to the Lafayette wharves to unload flatboats, a Sicilian, Russian, Polish, or Chinese immigrant in the 1890s gravitated downtown to mar-

3 In 1939, there were 5,941 dwelling units within the 2,204 surviving pre-1860 buildings, of which 4,605 were rented to tenants (Carter 1941, p.36 and 52).

ket housewares, peddle fruit, prepare food, or sell notions. Newly arrived immigrants not only had a reason to settle close to downtown, but an affordable apartment to rent there as well.

Thus, unlike their antebellum predecessors, immigrants of the late nineteenth century eschewed the semi-rural periphery, favoring instead to live in a concentric zone of neighborhoods immediately beyond the inner commercial core. This “immigrant belt” offered enough advantages (proximity to work, convenience, housing) to make life easier for impoverished newcomers, but suffered enough nuisances (crowded conditions, decaying old building, noise, vice, crime) to keep the rent affordable. It offered to poor immigrants a place to work, a nearby and affordable abode in which to live, and (after an enclave developed) a social support haven including religious and cultural institutions. The immigrant belt ran loosely from the lower French Quarter and Faubourg Marigny/Bywater, through the Faubourg Tremé and into the Third Ward back-of-town, around the Dryades Street area, through the Lee Circle area and toward the riverfront in what is now called the Irish Channel. In this amorphous swath, immigrants and their descendents clustered well into the twentieth century, such that their enclaves earned popular monikers (“Little Palermo,” “Chinatown”) or strong people-place associations, such as “the Orthodox Jews of Dryades Street” or “the Greeks of North Dorgenois Street”.

Although ethnic groups clustered more intensely in the postbellum immigrant belt than in the antebellum semi-rural periphery, ethnic intermixing still predominated. With the exception of certain black back-of-town areas, rare was the block or neighborhood in which only one group could be found. Page after page of census population schedules record Sicilians living next to African-Americans, Irish sharing a double with Greeks, Filipinos living across the street from Mexicans—even in enclaves in which a particular group numerically predominated. Ethnic intermixture is an integral childhood memory of most New Orleanians who came of age prior to the 1960s, and it is striking how often this observation arises in their reminiscences.

The postbellum era also saw the migration of thousands of emancipated slaves into the city from nearby plantations. Their settlement patterns were driven in large part by the geography of environmental hazards and nuisances, coupled with the disdain and discrimination they suffered in an unwelcoming society. Flooding, mosquitoes, swamp miasmas, noisy railroads, smelly wharves and canals, industries, pollution, odd-shaped lots, lack of city services, inconven-

ience: these and other objectionable circumstances drove down real estate prices and thus formed the lands of last resort for those at the bottom rung. The natural and built environment of New Orleans dictated that most nuisances and monopolized the city’s two lateral fringes: the immediate riverfront and the backswamp. Poor African-Americans, the majority of who were culturally Anglo rather than Creole, clustered in these troubled areas, particularly the back-of-town, while others settled within walking distance of their domestic employment jobs in uptown mansions. Creoles, particularly those of color, remained in their historical lower-city location, and migrated lakeward as drainage technology opened up the backswamps of the Seventh Ward and adjacent areas. Other sections of the new lakefront subdivisions laid out in the early twentieth century explicitly excluded black residency through racist deed covenants. By that time, wealthier whites resided in the convenient, low-nuisance swath sandwiched between the riverfront and the backswamp (particularly along the St. Charles/Magazine corridor), and in the new lakeside neighborhoods, while working-class whites intermixed throughout the front-of-town.

New Orleans prides itself on its uniqueness, sometimes to the point of extolling peculiarities where none exists. In fact, the Crescent City’s ethnic distributions mimic those of other American cities. The expression of immigrant enclaves, wrote one social geographer, commonly “takes the form of a concentric zone of ethnic neighbourhoods which has spread from an initial cluster to encircle the CBD” (Knox 1987, p. 256) — very much what occurred in New Orleans. In *Cities and Immigrants: A Geography of Change in Nineteenth Century America*, David Ward stated that researchers are “generally able to agree that most immigrants congregated on the edge of the central business district, which provided the largest and most diverse source of unskilled employment” (Ward 1971, p.106). The concentric-ring phenomenon is standard material in urban-geography literature, where it appears diagrammatically as Ernest W. Burgess’ classic “Concentric Zone Model,” part of the so-called Chicago School of Urban Sociology. According to Burgess’ model, a theoretical city’s central business district was surrounded first by a “zone in transition,” then a “zone of workingmen’s homes,” a “residential zone,” and finally a “commuters’ zone.” In that transitional zone could be found “deteriorating...rooming-house districts” and “slums,” populated by “immigrant colonies” such as “Little Sicily, Greektown, Chinatown—fascinatingly combining old world heritages and American adaptations.” “Near by is the Latin Quarter,” Burgess added, “where creative and rebellious spirits resort.” In the “zone of workingmen’s

homes,” Burgess predicted Germans, German Jews, and other second-generation immigrants to settle, and in the residential and commuter zones, he foresaw restricted residential districts and bungalow suburbs. Burgess had Chicago in mind when he devised his Concentric Zone Model, but to a remarkable degree, he could have been describing circa-1900 New Orleans. Little Palermo, Chinatown, the Greek area, and the Orthodox Jewish neighborhood all fell within Burgess’ transitional zone (which we are calling the “immigrant belt” in this paper). Germans, German Jews, Irish, and other earlier immigrants and their descendents settled in the workingmen’s zone (former Lafayette, the Third District, and other areas of the old semi-rural periphery). Burgess’ restricted residential zone and commuter zones describe the leafy garden suburbs (also known as “trolley” or “streetcar suburbs,” for the developmental role played by that conveyance) of uptown, Esplanade Avenue, Lakeview, and Gentilly—right down to the bungalows. Even his Latin Quarter model found local representation: “creative and rebellious spirits” have long gravitated to the French Quarter (Burgess 1925, p. 47-62).

Twentieth-Century Ethnic Geographies (fig. 3-4)

Between 1893 and 1915, New Orleans installed a technologically advanced urban drainage system. The Progressive Era municipal improvement project, which collected runoff from the natural levee and pumped it through manmade drainage canals into adjacent lakes, had the effect of “neutralizing” topography as the premier factor restricting urban expansion. Suddenly, the nuisances and risks long associated with low-lying land—floods, mosquitoes, muddy streets—disappeared. At roughly the same time, automobiles and streetcar networks largely neutralized geographical distance as the other factor restricting urban expansion.

Between the 1910s and 1940s, California-style bungalows, English cottages, Neoclassical mansions, and Spanish Revival villas laid out along neat orthogonal grids arose in large numbers throughout lakefront New Orleans. Concerns about hurricane-induced storm surges were abated when the Lakefront Project (1926-1934) barricaded the land from Lake Pontchartrain with a sea wall and green expanse of elevated artificial fill. With explicitly racist deed covenants excluding sale or rental to black families, the white middle class “leapfrogged” over the black back-of-town and settled into low-lying new suburbs such as Gentilly and Lakeview. Topographic and distance neutralization, plus legally sanctioned racial polarization, were among the factors that disaggregated the historically spatially heterogeneous patterns of ethnic New Orleans.

Those trends intensified with post-World War II social and structural changes. New Orleans’ “white flight” experience resembled those of other American cities, delayed by a decade or so. Between 1960 and the 1980s, much of the white population dispersed for the recently drained suburbs of Jefferson, St. Bernard, and eastern Orleans parishes. Reasons for the exodus differed little from other cities: resistance to school integration, increasing crime rates, decline of public schools, and urban decay on the “push” side; good school districts, safety, suburban lifestyles, less congestion, and a lower cost of living on the “pull” side. Resistance to school integration drove many working-class white families out of the former “immigrant belt,” particularly from the working-class Ninth Ward, and into adjacent St. Bernard Parish. The Lower Ninth Ward, which in 1940 was mostly working-class white by the river and mostly black in the back-of-town, became a few decades later almost entirely black, as whites moved to St. Bernard and were replaced by new rural black families arriving to New Orleans in the wake of cotton and sugar agricultural mechanization.

One of the strongest factors that disaggregated New Orleans’ intermixed ethnic and racial geography began as a progressive program designed to help the poor. In the late 1930s, the Housing Authority of New Orleans (HANO) razed old neighborhoods for new subsidized, legally segregated housing projects. Of the six original projects, the two whites-only developments were higher in elevation and closer to the front-of-town, while the four blacks-only projects were all in lower-elevation, back-of-town locations (Carter 1941, map following p. 17). When the projects were de-segregated in the 1960s, whites promptly departed for affordable-living alternatives in working-class suburbs, and were replaced by poor blacks, many of them recently arrived to the city from rural areas. Within a few years, tens of thousands of the city’s poorest African-Americans became intensely consolidated and isolated into a dozen or so Gulag-like subsidized projects. With that concentrated poverty came myriad social ills, including fatherless households, teen pregnancy, violent crime, and intergenerational government dependency. “The Projects” furthered the paradoxical de facto segregation of residential settlement patterns of black and white New Orleanians, even as they integrated in schools, offices, and lunch counters.

Suburban lifestyles beckoned not only to the white middle class but to immigrants. Hispanics, principally from Central America, and Vietnamese war refugees, first settled into the area with the guidance of the Catholic Church, arrived in modest numbers in the late twentieth century. Unlike their equivalents from a century earlier, these new immigrants tended to settle not

immediately around the inner core but in the extreme suburban fringe of the metropolis, in suburbs such as Kenner, in the eastern New Orleans subdivision of Versailles, and throughout the suburban West Bank. Again, New Orleans' experience echoes national norms: immigrants across America now settle in large numbers in suburbia; popular notions of immigrant-dominated inner cities and homogenous white suburbs are increasingly obsolete.

Suburban lifestyles also attracted the black middle class. Because this group was historically associated with the downtown-based Creole community, its expansion into suburban-style subdivisions tended to occur in the drained backswamp adjacent to the old Creole faubourgs. Black, middle-class, mostly Creole New Orleanians thus spread lakeward in the early to mid-twentieth century almost exclusively on the downtown side of the city, east of City Park, and most famously in the Seventh Ward⁴. The presence of a robust and civically engaged black middle class in this area attracted other blacks—both Anglo-African Americans and Franco-African Americans as well as outsiders—to settle here. When white philanthropists funded the construction of the first modern post-World War II suburban subdivision for blacks (Pontchartrain Park) in 1955, it was located in the lakeside Seabrook section of the Ninth Ward, furthering the spread of black middle class in the area between City Park and the Industrial Canal. The transformation was met in the 1970s and 1980s with the departure of whites from the early-twentieth century developments along the Gentilly Ridge, availing more space and fine housing stock for middle-class black families. The same was true for eastern New Orleans, the last major suburban development within Orleans Parish. Initially mostly white in the 1960s and 1970s, "New Orleans East" swiftly transformed to a majority-black area after the decline of the oil economy in the early 1980s and the concurrent development of multi-family housing, including many subsidized units.

Black residential expansion into the abundant twentieth-century housing stock in the eastern half of the city can be largely traced back to this area's adjacency to the historical hearth of the middle-class black Creole community. The equivalent areas west of City Park—Lakeview and adjacent neighborhoods—were unattached to source regions of histor-

ical black settlement areas, particularly middle-class ones, and remained mostly white. New Orleans as a whole, which was a majority-white city from the 1830s to the 1970s, declined in population from a peak of 627,525 in 1960 to 462,269 in 2004, of whom close to 70% were black.

Ethnic Geography of Katrina's Floodwaters (fig. 5)

After Hurricane Katrina (August 29, 2005) overwhelmed New Orleans' under-engineered levee-protection system and inundated vast expanses of the city for weeks, observers remarked openly about the overwhelming preponderance of the African-American poor among those stranded within the city. Many journalists explained the disproportion among stranded population as a product of historical spatial correlations between class (and by extension race) and topographic elevation (and by extension flooding), i.e., that wealthy whites generally lived in high, dry areas, and poor African-Americans resided in low, wet areas. Was this human-environmental relationship as linear and direct as described? The following study investigates this question. Using Geographic Information Systems, the extent of the flood was delineated as it stood on September 8⁵. That polygon, representing persistently and deeply flooded areas (rather than areas that were briefly and lightly inundated) was intersected with block-level racial demographic data from the 2000 Census. Results are presented for the metropolitan area (that is, the contiguous urbanized portions of Orleans, Jefferson, and St. Bernard parishes on both banks, excluding rural fringe regions), and for New Orleans (Orleans Parish) alone.

For the metropolitan area, 40% of the total population of 988,182 resided in areas that were under water on September 8. Blacks outnumbered whites within that flooded area by over a 2-to-1 ratio, 257,375 to 121,262, even though whites outnumbered blacks metropolitan-wide, 500,672 to 429,902. People of Asian and Hispanic ancestry numbered 9,240 and 11,830 among the flooded population, and 25,552 and 49,342 among the total population, respectively. Thus, while one in every four whites' homes, one in four Hispanics' homes, and one in three Asians' homes flooded throughout the tri-parish metropolis (24, 24, and 36%,

4 The association of the Seventh Ward with the modern-day black Creole community is well-known to New Orleanians, and is substantiated by mapping out congregations of black Catholics—a reasonable though not perfect indicator of Creole heritage—at the level of church parishes.

5 Flood extent was delineated by the author through multispectral satellite imagery plus analyses from National Oceanographic and Atmospheric Administration, Federal Emergency Management Agency, *Times-Picayune*, and other sources. All demographic data are derived from 2000 U.S. Census enumerations at the block level. The population of the city had declined by about 4.5% between the 2000 census and Hurricane Katrina.

respectively), close to two of every three African-Americans' homes (60%) were inundated. In sum, whites made up 51% of the pre-Katrina metropolitan population and 31% of its flood victims; blacks made up 44% and 65%; Asians made up 2.6% and 2.3%; and Hispanics made up 5% and 3%.

Considering only New Orleans, 61% of the total population of 480,256 resided in areas that were flooded on September 8. Blacks outnumbered whites within that flooded area, by over a 3.8-to-1 ratio (220,970 to 57,469). Blacks also outnumbered whites citywide before the storm, 2.4-to-1 (323,868 to 134,012). People of Asian and Hispanic ancestry numbered 7,753 and 7,826 among the flooded population, and 10,751 and 14,663 citywide, respectively. Thus, 43% of whites, 53% of Hispanics, 68% of African-Americans, and 72% of Asians saw their homes flood in New Orleans. In sum, African-Americans made up 67% of New Orleans' pre-Katrina population and 76% of its flood victims; whites made up 28% and 20%; Hispanics made up 3% and 3%; and Asians made up 2% and 3%.

Similarly nuanced statistics come from those killed by the storm: while African-American victims outnumbered whites by more than double, they comprised 66% of the storm deaths in New Orleans and whites made up 31%, fairly proportionate to pre-storm relative populations⁶.

The relationship between race/class and flooding/elevation was therefore not particularly linear and direct. The reason for the nuanced, multi-interpretational nature of the residential flooding statistics is the complex historical ethnic geography of New Orleans. Those reports which erroneously implied a strong positive correlation between race/class and flooding/elevation failed to understand how the perceived technological neutralization of topography originally affected a *negative* relationship between the two: middle-class whites in the 1910s-1950s moved enthusiastically into the lowest-lying areas, and kept poor African-Americans out with racist deed covenants. Oversimplified news reports also betrayed a misunderstanding of the role of historical economic and environmental geographies, which explain the otherwise counterintuitive settlement of poor African-Americans along some of the *highest* land in New Orleans (Tchoupitoulas Street). They also failed to recognize that the "pull factors" of suburban lifestyles and the "push factors" of inner-city problems have inspired, in New Orleans as throughout the United States, a similar out-migration of middle-class non-whites as they earlier had on middle-class whites. In seeking better lives in the suburbs, New Orleanians of all races, classes, and ethnicities, falsely secure in flood-protection and drainage technologies, moved into increasingly hazardous geographies.

References

Blowe, Daniel, 1820, *A Geographical, Historical, Commercial, and Agricultural View of the United States of America*, London, Edwards & Knibb.

Burgess, Ernest W., 1925, "The Growth of the City: An Introduction to a Research Project", in *The City*, edited by Robert E. Park, Ernest W. Burgess, and Roderick D. McKenzie, Chicago, Illinois, The University of Chicago Press.

Campanella, Richard, 2006, *Geographies of New Orleans: Urban Fabrics Before the Storm*, Lafayette, LA, Center for Louisiana Studies.

Campanella, Richard, 2007, "An Ethnic Geography of New Orleans," *Journal of American History*, vol. 94, n°3, December 2007, p. 704-716.

Campanella, Richard, 2008, *Bienville's Dilemma: A Historical Geography of New Orleans*, Lafayette, University of Louisiana Press.

Carter, Sam R., 1941, *A Report on Survey of Metropolitan New Orleans Land Use, Real Property, and Low Income Housing Area*, New Orleans, Works Projects Administration, Louisiana State Department of Public Welfare, and Housing Authority of New Orleans.

Clark, David, 1982, *Urban Geography: An Introductory Guide*, Baltimore, Maryland: The Johns Hopkins University Press.

⁶ Computed by author using data presented in "Vital Statistics of All Bodies at St. Gabriel Morgue" (February 23, 2006), update to Louisiana Department of Health and Hospitals News Release, "December 13, 2005: Updated Number of Deceased Victims Recovered Following Hurricane Katrina."

- Daily Picayune**, 1843, "A Kaleidoscopic View of New Orleans", *Daily Picayune*, September 23, 1843, p. 2, col. 3.
- Edmondson, Brad**, 2000, "The New Suburbanites", *Preservation*, 52, n° 1, January-February 2000.
- Kennedy, Joseph C. G.**, 1864, *Population of the United States in 1860; Compiled from the Original Returns of the Eighth Census*, Washington, D.C., Government Printing Office.
- Knox, Paul**, 1987, *Urban Social Geography: An Introduction*, Essex, England and New York, Longman Scientific & Technical and John Wiley & Sons.
- Lewis, Peirce F.**, 1976, *New Orleans: The Making of an Urban Landscape*, Cambridge, Massachusetts, Ballinger Publishing Company.
- Lyell, Sir Charles**, 1850, *A Second Visit to the United States of North America, volume II*, London, England, John Murray.
- Louisiana Department of Health and Hospitals News Release**, "December 13, 2005: Updated Number of Deceased Victims Recovered Following Hurricane Katrina".
- Murray, Hugh**. 1829, *Historical Account of Discoveries and Travels in North America*, London, Longman, Rees, Orme, Brown, & Green.
- New Orleans City Directory of 1842.**
- Plan de la Ville de la Nouvelle Orléans Avec les noms des propriétaires**, 1808.
- Reclus, Elisée**, 1855-2004, *A Voyage to New Orleans*, eds. John Clark and Camille Martin (Thetford, VT, 2004 translation of 1855 original), p. 50 (emphasis added).
- Thevenot, Brian and Matthew Brown**, 2004, "School Segregation 50 Years Later: From Resistance to Acceptance", *Times-Picayune*, May 19, 2004, section A, p. 1.
- Torres, Manuel and Matt Scallan**, 2001, "Outward Migration: Statistics Show Orleans Parish May Be Losing Its Appeal to Hispanics, But During the 1990s, Communities Boomed in the Suburbs, Especially Kenner", *Times-Picayune*, July 9, 2001, p. 1
- Treadway, Joan and Coleman Warner**, 2001, "East Meets West", *Times-Picayune*, August 6, 2001, section A, p. 7.
- Tregle, Joseph G. Jr.**, 1992, "Creoles and Americans", in *Creole New Orleans: Race and Americanization*, edited by Arnold R. Hirsch and Joseph Logsdon, Baton Rouge and London, Louisiana State University Press.
- U.S. Census**, 2002, "American Community Survey—Ranking Tables, 2002: Percent of Population that is Foreign Born".
- Van Kempen, Ronald, and A. Şule Özüekren**, 1998, "Ethnic Segregation in Cities: New Forms and Explanations in a Dynamic World", *Urban Studies*, 35, n° 10.
- Ward, David**, 1971, *Cities and Immigrants: A Geography of Change in Nineteenth Century America*, New York, London, Toronto, Oxford University Press.
- Warner, Coleman and Matt Scallan**, 2001, "Going to Extremes", *Times-Picayune*, September 3, 2001, section A, p. 8.



Figure 1: The 1,243,700-square-mile Mississippi River Basin (yellow line) drains 41 percent of the continental U.S. and 15 percent of the North American continent. Thirty-one states and two Canadian provinces partially or fully drain into the Mississippi. The river discharges entirely along coastal Louisiana (70 percent via the Mississippi River, 30 percent via the Atchafalaya), forming the Mississippi deltaic plain. The Mississippi Delta ranks as one of the best examples of a river-dominated multi-lobe delta protruding into a sea, and New Orleans represents one of the very few metropolises to occupy such a dynamic young feature. What happened here in the past three hundred years represents the continent's purest case study of delta urbanism. Map by Richard Campanella

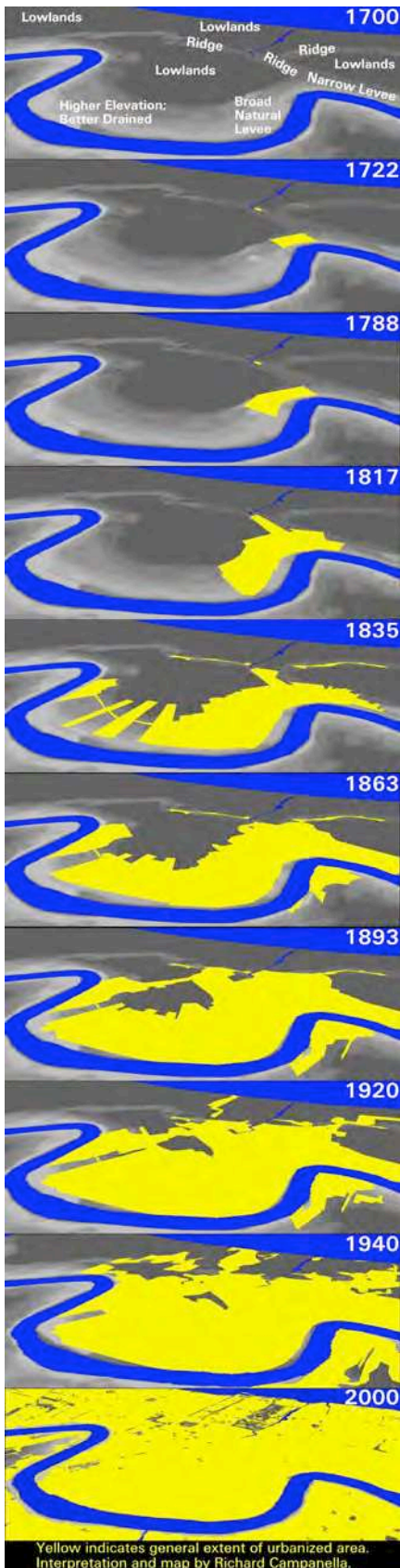


Figure 2: A series of unwritten “rules” guided urban expansion in New Orleans, from its initial 1788 spread beyond the original plat (today’s French Quarter), to the early 1900s. In the twentieth century, the “rules” began to change on account of municipal drainage, flood protection, and modern city planning. This urban-growth sequence was made by digitally co-registering historical and aerial imagery, delineating developed areas, then overlaying the results on an elevation model. From its initial 0.3-square-mile footprint at the French Quarter in the early 1700s, the deltaic conurbation now spans about 200 square miles across four parishes. GIS processing, analyses, and graphics by Richard Campanella

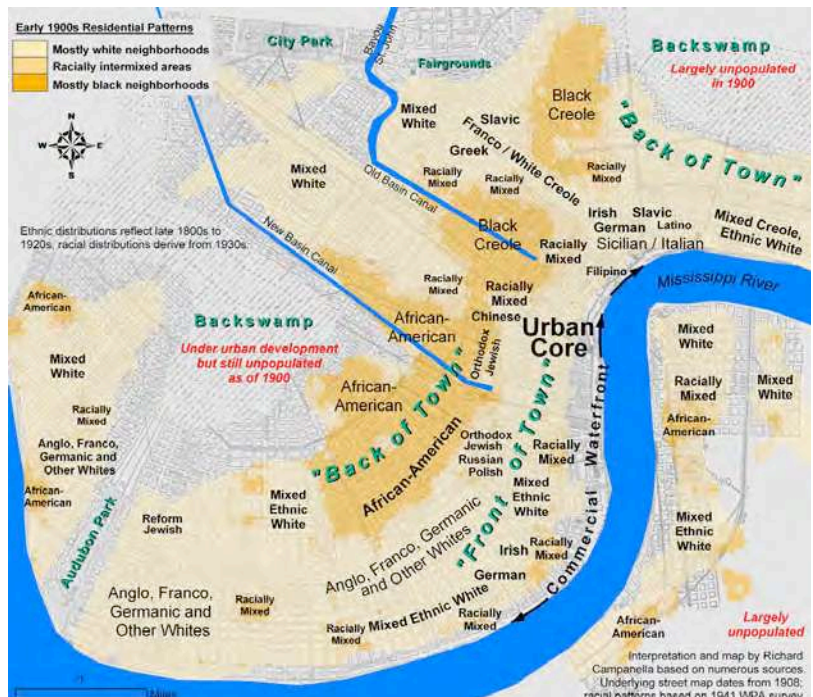


Figure 3: Ethnic and racial geographies of New Orleans in the early 1900s. Analysis and map by Richard Campanella

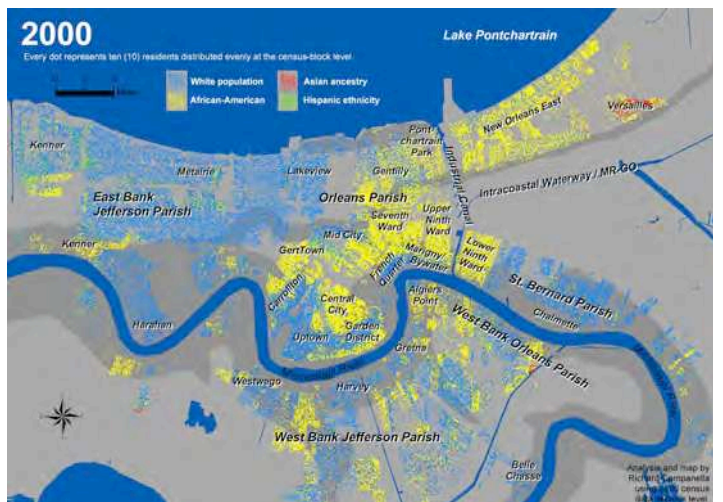
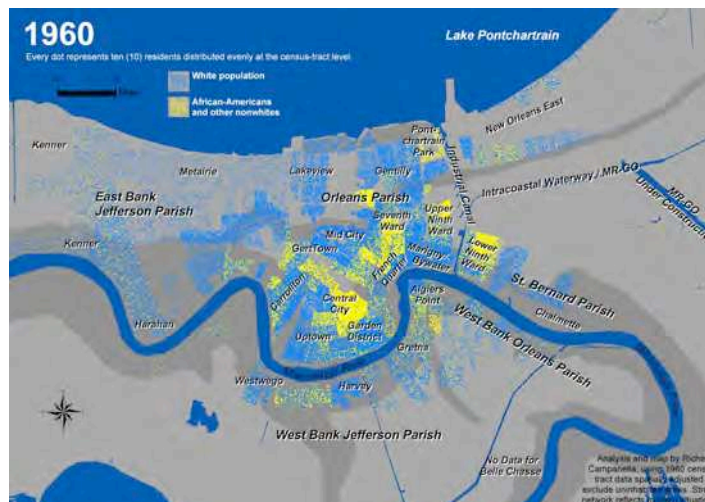
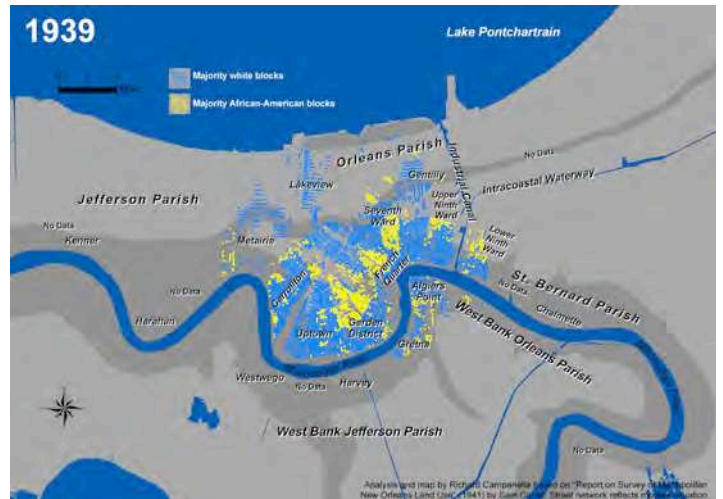
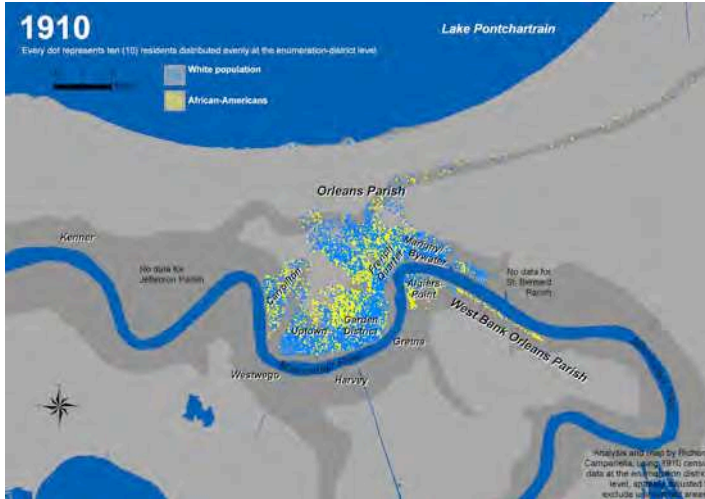
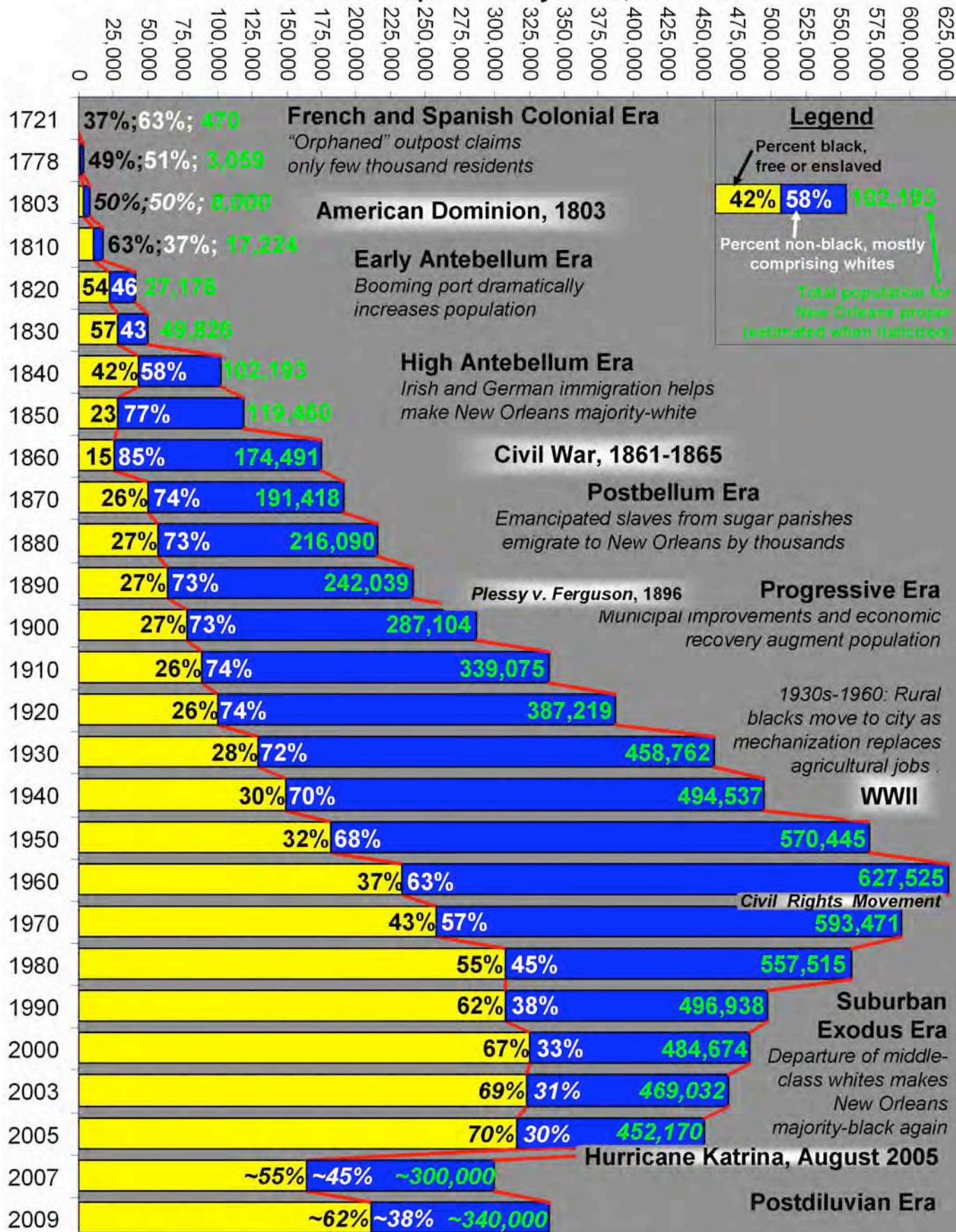


Figure 4: Human geography of New Orleans throughout the twentieth century.
 Research and maps by Richard Campanella

New Orleans Population by Race, 1721-2009



Analysis and graph by Richard Campanella based on colonial and US censuses, plus estimates for 1803 and 2003-2009. Postdiluvian populations vary by ±10-15 percent depending on methodology.

Figure 5: Population and racial composition of New Orleans proper (Orleans Parish), from early colonial times to post-Katrina. Research and graphic by Richard Campanella based on U.S. Census and other sources