

Sugar Plantations in Louisiana

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For over 200 years, planters have experimented with sugarcane cultivation on plantations in Louisiana. Their success and failure and their location of enterprise and product are all related to a variety of geographic factors. The purpose of this paper is to interpret the origins, dispersals, and landscape morphology of sugar plantations in Southern Louisiana.

The sugar plantation landscape centers upon the better drained natural levees of streams within the Lower Mississippi River flood plain. The cane sugar region encompasses nearly 12,000 square miles in 20 parishes where over 300,000 acres are utilized for sugarcane cultivation. Like beads on a string, plantations with a repeating morphology line the banks of streams throughout the area.

Historically, sugar plantations first appeared in the vicinity of New Orleans. Plantation agriculture in the area had been organized early in the 1730's with tobacco and indigo concessions. These formed a plantation base upon which sugarcane could be commercially produced. In 1742 New Orleans became the point of reception and initial cultivation for the first canes introduced by Jesuits from St. Domingue. Also in the New Orleans area Louisiana's first sugar planter, Dubreuil, experimented with sugarcane cultivation in the 1740's and DeBore' later in 1795 produced granulated sugar on a commercial plantation scale. Prior to these significant events, other plantation crops declined and thus enabled sugarcane to become the primary plantation crop of southern Louisiana.

Little is known of the distribution of plantations before 1803, but by that year, 75 sugar-enterprises of various sizes were distributed along both banks of the Mississippi River. The northward expansion of contiguous sugar plantations by 1806 was probably no farther than 35 miles north of New Orleans. Even there, sugar was being planted less than cotton. Sugar cultivation intermittently extended northward 15 miles above Baton Rouge to Pointe Coupee Parish where an outpost of former tobacco enterprises commercially produced cotton, lumber and sugar.

The plantation landscapes of the sugar region west of the Mississippi did not develop until after 1812 when planters, from the Upland Anglo-American South, began to arrive in Louisiana.

Attracted by the cheap, public lands of Terrebonne Parish, the lower Bayou Teche region, and the backlands of the upper Bayou Lafourche, the Anglos came, as land speculators such as Jim Bowie and as would-be planters. Between 1812 and 1850 they entered southern Louisiana by water, traveling on the Mississippi and on the western bayous. The rich, arable lands which they found along portions of these waterways thus became the initial plantation sites where Anglo planters settled.

The westward expansion of the plantation landscape reached only as far as the natural levees of Bayou Teche. A further westward expansion was discontinued because lands west of the Teche were not included in the Louisiana Purchase. Until 1819, they were still in the possession of Spain and later remained as a no man's land buffer between the United States territory and Spanish holdings farther west. Also, the drainable portions of southwest Louisiana, physiographically composed of Pleistocene terraces, were not well suited for sugarcane because of the poor organic composition and hardpan character of the soils. Other factors, such as the limited navigability of streams, the lack of good alluvial floodplain soils, and distance from the New Orleans market, would have been additional limiting factors even if the territory had been included in the Louisiana Purchase. Furthermore, it was not until 1880 that the region west of the Teche was effectively settled, and even then by midwestern grain farmers who took up the cultivation of rice.

The southern extent of sugar-plantations in southern Louisiana was restricted by the extent of drainable lands, all of which are character-

ized by a progressive narrowing of natural levees averaging a quarter mile wide, or less. Thus at points of extreme levee narrowing, sugar cultivation terminated.

The sugar-plantation expansion north to the Red River area and the conversion from cotton to sugar for plantations came in the 1830's and 40's with the fall of cotton prices. The northernmost sugar parishes and lower portion of the cotton region evolved into a transition zone where fluctuations in prices could cause one crop to advance and the other to retreat. Before 1825, cotton prices had remained relatively high; consequently, sugar was held back by the "high-price tide" of the cotton crops. Between 1826 and 1832, however, cotton prices fluctuated downward giving way to the slight northward expansion of sugarcane. Further expansion of the sugarcane industry came in the 1840's when cotton prices fell from 15 cents to 5 cents per pound. By 1844, Louisiana had more than 700 full-fledged sugar plantations in operation.

Although new and converted sugar plantations developed northward deep into the cotton parishes, in the 1850's the inevitable was to happen—a northern limitation of the expansion.

Sugarcane, a tropical crop, requires 12 or more months of growing season to reach full maturity. Louisiana, at best, provides a ten-month growing season in its southernmost parishes; therefore, the northern areas are extremely marginal. Exceedingly critical is the first frost and freeze which, if too early, can cause sucrose contents to diminish and sour. Although molasses can be made from frost-damaged cane, granulated raw sugar has always been the product desired by the planter.

In the early 19th century, planters had not ascertained the northern limits for successful production; consequently, some sugar cultivation extended beyond the critical frost limits. The northern expansion of the sugar plantation ended abruptly in 1856 when a severe early frost devastated the entire sugar region. The plantations along the northern fringes later reverted to cotton, a safer, more conducive crop for the northern margins of sugar cultivation. Today, the northern climatic boundary is fairly well delimited by the frost-free 250-day isoline and by the average first-frost date of November 16. (Note: All three lines converge at Meeker—the northernmost sugar plantation in Louisiana.)

JOHN B. REHDER

Very little expansion, dispersal, or otherwise significant movement of the sugar plantation went very far east of the Mississippi. In only one small area, in the parishes northeast of Baton Rouge did the sugar industry expand, and even then the movement was short-lived. Plantations here were limited by poor Pleistocene terrace soils, early frosts, and economy long based on cotton, and an early cultural separation from southern sugar areas.

The Civil War, cane diseases, and consolidation of enterprises caused the number of plantations to fluctuate from over 1000 in the Antebellum period to the present 190 while the plantation region today essentially covers the same general area as it had in 1844.

PLANTATION MORPHOLOGY

The sugar plantation today exhibits a landscape complex of distinctive visual settlement features. Towering over the cane fields, the sugarhouse chimneys denote the location of a sugar factory—an agricultural factory in the field. A cluster of barns and sheds surrounds the sugarhouse forming a centrally located outbuilding complex. Nearby is the quarters, a village grouping of nearly identical laborers' dwellings which is either centered upon a single road in a linear pattern or grouped in a block pattern based on a grid of streets. In a location separate and exclusive from the other buildings in the settlement complex, the mansion, a prominent structure, is set amid moss-draped oaks. On larger plantation enterprises, a company store and sometimes a church are located on or near the plantation holdings. Extensive fields covering hundreds, even thousands, of acres unbroken by fences stretch long and narrow from levee crests at the stream banks to backswamps downslope from the streams. Long, straight ditches divide the fields and also give them a characteristic linear appearance.

The myriad of plantation buildings, fields, and other features which compose the landscape morphology of plantations can be condensed into a single model. Degrees of cultural association proceed in descending order from mansions with the best diagnostic traits to the next best—settlement patterns of linear and block arrangements to quarter houses, sugar houses, outbuildings, stores, churches, fields and ditches with progressively less cultural identities. Mansions may

be of three possible types: Creole with French identity, Tidewater and Upland with Anglo identity. The combination of mansion type with settlement pattern reenforce each other as the two most significant diagnostic landscape traits for the cultural identity of each plantation. Although important to the total plantation morphology, the remaining elements fail to contain sufficient diagnostic traits to enable their historic cultural affinity to be accurately determined.

CREOLE PLANTATION MANSIONS

Certain diagnostic traits distinguish Creole plantation dwellings from Anglo plantation mansions. On the Creole mansion: (1) chimney(s) are always located on the inside walls near the center of the roof line: they are never placed on the exterior gabled ends of the house; (2) all front rooms open onto a gallery or porch, so that multiple front doors characterize the front of the structure; (3) internally, the floor plan may be several rooms long and from one to three rooms deep, and it distinctly lacks a central hallway inside; (4) all stairs are located on the exterior, never inside; (5) the hip roof, gallery, and raised one and one-half to two-story height are features which are inherently French traits on the Creole plantation mansion.

The techniques and materials used in the construction of Creole mansions are also diagnostic. Colomage, a French building trait of half-timbering, popular in the 18th and early 19th centuries consisted of the use of heavy cypress timbers which were pegged together to form the *carre* or frame. Interstices between timbers were filled with brick or mud nogging called *bousillage*. Brick nogging, because of its strength, supported itself in place between the timbers. However, with mud nogging, a tempering of Spanish moss, shells, or lime was necessary to stiffen the mud. In addition, small rods placed between the heavy-timbered studs and braces held the mud nogging in place.

ORIGINS OF CREOLE MANSIONS

Antecedents of the Creole plantation mansion originated with the basic double-room Creole dwelling characterized by a central chimney, double front doors, sideward-facing gables, and a front gallery

JOHN B. REHDER



Fig. 1. French Creole Plantation Mansion. Keller or Home Place Plantation.

incorporated into the roof design. As indicated by floor plans, the evolution of the Creole plantation house illustrates the continued characteristic of each front room opening onto the gallery. The front gallery also forms a continuum from the simplest Creole to the largest multi-room plantation house.

The antecedent Creole house thus blossomed into the plantation mansion by the addition of such traits as the hip roof (A French West Indian introduction), raised position with bricked ground floor, additional rooms to the sides and rear, green-shuttered French doors and windows, and the exterior weatherboarded and painted white.

Examples of Creole plantation mansions are the *Keller or Home Place* Plantation house built for the Fortier family in 1801 in Saint Charles Parish (Fig. 1); *Armant*, built in 1795 for Jean Baptist Armant and *St. Joseph*, a half-timbered mansion built about 1820 by C. B. Mericq in St. James Parish; and *Whitney* in St. John-the-Baptist Parish built about 1800 by Jean Jacques Haydel.

ANGLO PLANTATION MANSIONS

After 1812, the Lower Mississippi Valley attracted scores of Anglo-American planters from the Upland South and the Atlantic Tidewater regions. Accompanying the planters were not only folk house plans, but also architects who introduced current architectural Greek Re-

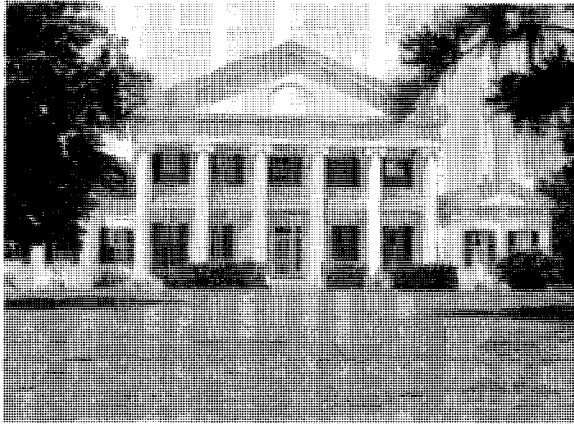


Fig. 2. Anglo Plantation Mansion. Madewood Plantation.

vival decorations and Georgian styles from the Atlantic Seaboard.

Anglo plantation mansions, as distinct from Creole houses, display the following diagnostic traits: (1) one and one-half to two stories with both floors used as living quarters; (2) usually one to two rooms deep; (3) no more than two rooms wide; (4) a central hall; (5) inside stairs; (6) end chimneys; and (7) a single front door.

The central hallway serves especially well as a diagnostic feature. Central hallways do not occur in the Creole house types. Chimney placement at the ends, particularly at the outside ends of gables, also indicates Anglo influence.

Mansions with front-facing gables are identified as Anglo dwellings having connection with the Atlantic Tidewater region. The front facing gable was the result of the architectural influence which was popular in Tidewater Maryland and Virginia and the Carolinas during the early 19th century. The trait reflects the popular Greek Revival decorative style, supported by columns, a portico, and pediments.

Building materials were brick, plaster, and cypress wood. Unlike the early Creole houses, materials did not vary between the first and second floors. Walls were either entirely brick or entirely wood, but never half-framed with mud or brick nogging as in the earlier Creole mansions.

Several examples serve as evidence of Greek Revival decoration and Tidewater affiliation. Madewood, on the left bank of Bayou

JOHN B. REHDER



Fig. 3. Anglo Plantation Mansion. Ashland-Belle Helene Plantation.

Lafourche, measures 60 feet by 68 feet (Fig. 2). It has a central hall and single front door, inside-end chimneys, and interior stairs. Constructed of brick covered with plaster, Madewood was built in 1840 by Thomas Pugh, a pioneering Anglo planter who came from a Tidewater area of North Carolina.

Another good example is Oaklawn Manor on Bayou Teche. It was built in 1837 by Alexander Porter, an Irishman who first settled in Nashville, Tennessee before moving south to Louisiana.

One final Anglo example is Ashland-Belle Helene, located in Ascension Parish on the east bank of the Mississippi (Fig. 3). Built for Duncan Kenner in 1841, the structure, through surrounded by columns, has basic Anglo features of end chimneys, and a central hall. With its floor plan of four rooms to each floor, a characteristic of Georgian symmetry, the mansion represents a basic four pen house.

UPLAND TRAITS

Based upon Southern, log-cabin, folk architecture, the Anglo plantation house was more Southern in form, and plan than it was Greek Revival. In plan, the Upland Anglo plantation house was one to two stories tall, one room deep, and two rooms wide separated by a wide hallway. Brick chimneys were on the outside of the gabled ends.

Examples of houses of the Upland influence are the Douglas White dwelling on Bayou Lafourche, Alice C. plantation house on Bayou Teche, and the Schaffer mansion on Crescent Plantation on Bayou Black.

Although both French-Creole and Upland-Anglo planters borrowed generously from the new Greek Revival decorative styles, their basic dwelling types were identified by inherent folk characteristics, particularly by floor plans and chimney positions. However, with the mansions of Anglo Tidewater affinity, the architectural innovations, styles, and decorations, considered in a complex, constituted the identifying traits.

SETTLEMENT PATTERNS

Sugar plantations exhibit the fundamental trait of agglomeration so that distinctive villages appear on the landscape. Linear patterns appear along the Mississippi River from 60km north of Baton Rouge to a point 40km south of New Orleans. Linearity is achieved from the alignment of quarter houses in a double row of laborer's dwellings which lies perpendicular to the Mississippi River. The sugarhouse and outbuilding complex are located equidistant between the levee crest and backswamp. The average linear plantation measures 475 meters in length and contains approximately 25 quarter houses. The largest plantation has 50 houses; the smallest has 6. In addition to these structures, a model plantation would have a mansion and a sugarhouse. Today only 1 of 4 plantations maintain a sugarhouse as it is more feasible to have the cane processed at large centralized mills.

HISTORIC PERSPECTIVE

Two historical considerations are important to the understanding of the present linear plantations: the initial parcelling of land in accordance with the arpent system of land surveys and the early existence of linear plantations in extra-regional source areas in the French West Indies.

The arpent system, initiated by the French and later used by the Spanish, was based on the arpent—a linear measure equaling 192'. Lands along streams were surveyed from stream bank to backswamp at a standard depth of 40 arpents. Widths were variable with frontages narrowly set at 2 to 10 arpents. The resulting landholdings became long, narrow, parcels which produced the framework in which the linear settlement pattern emerged. Although a direct cause and effect relationship cannot be proven, this association at least



Fig. 4. Linear Plantation Settlement Pattern. St. James Plantation.

suggests that the landholdings may have contributed to the linearity of plantations in those areas where the early arpent surveys were made.

Map evidence supports the antiquity of linear plantations and provides clues to a broader scale distribution of the pattern. An 1815 map of the New Orleans area indicates plantations with a linear arrangement of buildings couched within long narrow landholdings.

Extra-regional evidence supports a connection with the French West Indies as a source area from which plantation culture traits diffused to Louisiana. A linear plantation in Guadeloupe was described by J. B. Labat, a Jesuit priest who visited the island in 1696. The landholding and the arrangement of buildings are distinctly linear. Current evidence still supports agglomeration and in some cases linearity, but these are the exception and not the rule.

Between 1700 and 1763, Louisiana and the French West Indies were in close contact. Significant traits such as sugarcane plants, sugar technology, sugar makers, as well as dwelling traits such as the hip roof diffused from the French West Indies to Louisiana. The existence of a linear plantation pattern for both areas at a time when French plantation occupation was taking place in Louisiana suggests not only a French connection but also points to a possible place of origin for the linear pattern.

Examples of linear plantations with a French antiquity are the St. James (Fig. 4) Cedar Grove, Armant, and Whitney Plantations. Cedar Grove is an excellent linear plantation with over 110 years of French ownership. Originally established in the 1820's by a Haitian planter George Deslondes, Cedar Grove was maintained by French planters until 1939. Armant, named for Jean Baptist Armant, its initial owner, was established in 1796. For 180 years, through a succession of early French and later Anglo owners, the plantation has retained its linear landholding and settlement pattern to the present time. Whitney was established prior to 1800 by Jean Jacques Haydel in St. John the Baptist Parish and it too retains its linearity.

BLOCK SETTLEMENT PATTERNS

Along both sides of Bayou Lafourche, nodal-block plantations are more numerous in the upper portion of the bayou and tend to decrease in numbers downstream. The pattern is established by 4 to 25 quarter houses arranged in a grid pattern formed by 5 to 7 streets. The sugarhouse and its surrounding cluster of outbuildings constitute the nucleus of the settlement. The mansion is usually located near the levee crest about 1 to 3km from the quarter.

The unusual sites of these plantations located far from the levee crest can be explained by examining the nature of initial settlement. As the successions of plantation settlement swept over Southern Louisiana between 1730 and 1850 the widest natural levees along the Mississippi River were occupied first by French Creole planters. By the latter part of the 18th century, small French-Acadian and Spanish settlers began to occupy the frontlands on the large, natural levees of Upper Bayou Lafourche. By the time Anglo-American planters reached Southern Louisiana in the years following 1812, they found the only suitable unoccupied plantation lands limited to the backlands

JOHN B. REHDER

of Bayou Lafourche and along the narrow levees of smaller bayous to the south and west.

Along the upper portions of Bayou Lafourche, the purchase of wide frontages from small farmers occurred so infrequently that plantation holdings became large backland parcels with narrow access parcels to the bayou. The Madewood plantation in 1830 best illustrates the shape of landholdings that Anglo planters, like Thomas Pugh, were establishing during the initial occupation of the landscape. As subsequent land acquisitions took place, landholdings began to fill out. However, the initial site locations in the early 19th century established the pattern of nodal block plantation so well that today's patterns are simply vestiges of the past.

BAYOU-BLOCK PLANTATIONS

The remaining block plantations dominate the Bayou Teche and Terrebonne Parish areas and appear in a remnant stage in the northern portions of the sugar region. Unlike those of Bayou Lafourche, plantation buildings here are located close to levee crests and often directly on them (Fig. 5).

The settling process of the initial Anglo-American planters, land surveys, and resulting landholdings help to explain the bayou-block pattern. The Bayou Teche and Terrebonne Parish areas were among the last sections of the sugar region to be claimed. Anglo planters, finding the Mississippi and upper Bayou Lafourche levees already occupied, pushed farther west and south to finally settle along the narrowing bayous in the area. After 1812, lands in Louisiana were surveyed according to the General Land Office survey system. Based on township and range delineations, the surveys produced grid patterns elsewhere in southwestern Louisiana. However, the public lands between the Mississippi River and Bayou Teche were meandered, that is measured in accordance to a stream-bank locations on both sides of the stream to conform in kind to the earlier arpent surveys of riparian lands. The resulting landholdings had wide frontages measuring 35 to 60 arpents to compensate for the narrow depths of arable land. As landholdings became established on both banks of the streams in rectangular patterns, planters centrally located their buildings in a block pattern directly on the levee crests to focus

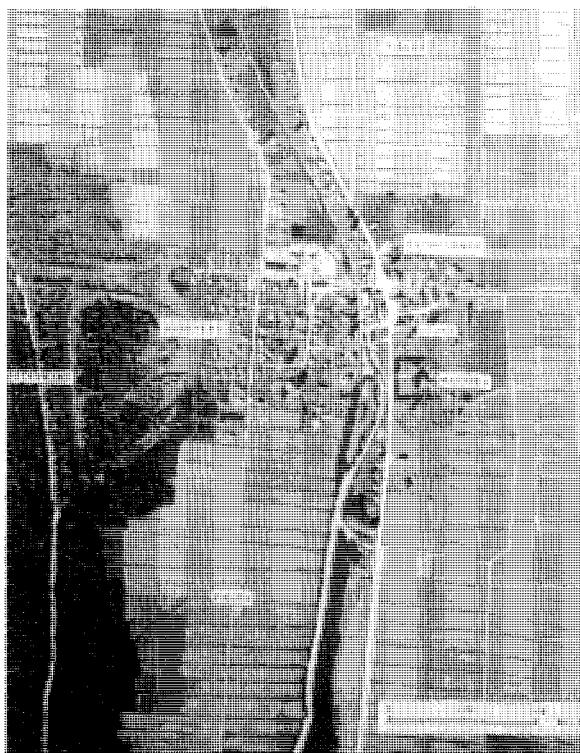


Fig. 5. Bayou Block Plantation Settlement Pattern. Ashland Plantation.

building sites and processing functions nearest the bayou—the principal transportation route.

HISTORICAL CORRELATION

Historical map evidence indicates that block plantations coincide with areas of Anglo-planter domination. Anglo-American plantations, representing plantation occupance patterns in 1844, were concentrated near the extremities of southern Louisiana's rivers and bayous where the settlement patterns of a block nature are concentrated today.

The trait of agglomeration was an almost universal characteristic of antebellum plantations throughout the South. However, after the Civil War, plantations in the Upland South experienced a dispersal of buildings, especially among quarter houses. Dwellings were dis-

JOHN B. REHDER

persed and scattered among the cotton fields because tenant laborers worked separate parcels in the forty-acres-and-a-mule complex so common to the postbellum upland plantation. Louisiana's sugar plantations, however, remained agglomerated because sugarcane required gang labor throughout its cultivation and processing. The resulting patterns of agglomeration in French Linear and Anglo block plantations begun in the 18th and 19th centuries have continued to the present time serving as identification keys to present and past landscapes and to the culture groups who built them.

CONCLUSIONS

Mansion types and agglomerated settlement patterns have served as diagnostic landscape traits for sugar plantations in Louisiana. French plantations, marked by Creole mansions and linear settlement patterns, were the result of French efforts in initiating plantations along the Mississippi River. Initial occupance patterns as revealed in the examples of Armant, Whitney, and Cedar Grove plantations testify to initial French ownership and construction.

The Anglo plantations, identified by their Tidewater and Upland mansions and block shaped-settlement patterns, were inscribed into the landscapes of the western, southern, and northern extremities of the region. The examples at Madewood, Ashland, and Oaklawn plantations provide sufficient visual and historical correlations to support their Anglo identity.

Reflecting the cultures of their initial owners, Louisiana's sugar plantations also pointed to extra-regional source areas as additional supporting evidence of their origins. House types and settlement patterns from the French West Indies and the Upland and Tidewater South accompanied migrating planters and served as keys to cultural diffusion.

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