continental United States, and is the basic reference for all subsequent change (Kniffen 1990: 50). For later vernacular buildings which are the result of the dissemination of popular plans and high styles which because of fashion, are always present in the urban areas but are slow to be introduced into the rural areas, at least until the proliferation of published popular designs which occurred in the twentieth century, the housetype changes rapidly because of the pressures of style.

The Subtype arises as an experimental response to the cultural or physical environment into which the type is first introduced, and results in refinement, change, and subsequent variation. The formation of subtypes is extremely slow and requires a great length of time for houses built by ethnic populations, since they are effected slowly by cultural processes and are changed only with cautious innovation (Vlach 1986:62). After the twentieth century, however the subtype like the housetype changes rapidly because of the impact and spread of popular architectural styles.

Zion Hill Typology

A typology of building types has been formulated for Zion Hill and incorporated into the following architectural analysis. The 69 contributing dwellings within the district are divided into ten basic building types and related subtypes, which include double and triple-pile shotguns (18.0%), double pens (0.02%), saddlebag and saddlebag subtypes (0.04%), pyramidals (0.06%), triple-pile shotgun bungalow and subtypes (47.0%), triple-pile bungalows (0.07%), clipped-gable bungalows (0.04%), modified ell-plans (0.01%), and miscellaneous other plan types (11.0%).

The seriation diagrams which accompany the following descriptions of housetype and significance illustrate the development of the dominant house forms within the community of Zion Hill. Building types and subtypes were defined, in the absence of access to dwelling interiors for a confirmation of plan types, by exterior features such as room-depth or pile, bay configuration, porch and roof form, and chimney location.

The Shotgun:

The shotgun was first defined by Kniffen (1936) as "one room in width and from one to three or more rooms in depth, with a [front]-facing gable". It was first built by free blacks or des hommes de couleur libre from Haiti who immigrated to New Orleans in the first decade of the nineteenth century. The housetype was further refined in New Orleans into several subtypes such as the Double Shotgun, the Camelback and the North Shore Shotgun by the mid-nineteenth century (Vlach 1986:67).

New Orleans had a large African Community since 1722, consisting of both freedmen and slaves, and incurred a large influx of Haitians, fleeing the conditions of Port-au-Prince by way of Santo Domingo in 1809. As the African Community had been steadily growing since the eighteenth century, many free blacks were involved in the building trades, and there were large numbers of black house builders from the onset of the nineteenth century. The rapid

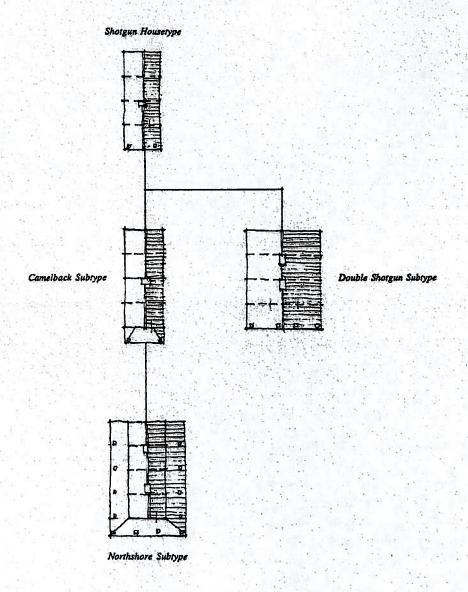


Figure 1. Evolution of the Shotgun Housetype and major Subtypes in New Orleans and the north shore of Lake Pontchartrain, Louisiana

influx of new immigrants created a severe housing shortage by 1810, but free blacks, with their own financial and building resources were in a position to construct houses of their own choice (Vlach 1986:63). The shotgun was first built in the traditional one-story, one-room-wide and two-room-deep plan of *la maison basse* of Southern Haiti. It was later transformed into three subtypes as it spread throughout the Black Creole neighborhoods of New Orleans (Fig. 1). The double shotgun, as its name implies, was literally two single houses built side by side, beneath a common roof. It was used to maximize the viability of urban lots with double-occupancy units and was developed as early as 1854. The Camelback was either a single or double shotgun which had a one-and-a-half or two-story rear addition and appearing as early as 1832, was a similar response to the expensive purchase prices for urban lots.

The North Shore subtype was a single shotgun with a wide veranda on three of its four sides and was built by vacationers from New Orleans on the north shore of Lake Pontchartrain, Louisiana (Vlach 1986:62).

The construction of the shotgun spread out from New Orleans into the bayous of Louisiana, and eastward, across the south into the Carolinas and Virginia, northward, up through the Mississippi Valley into Kentucky and westward, across the Mississippi, and into Texas. The initial widespread distribution of the shotgun can be attributed to its construction by African-American builders and tradesmen, even though the houses which they often built were to be utilized as rental units, which were often owned and leased by Anglo-American landlords. By the twentieth century the housetype was adopted and built by Anglos as well as African-Americans, being utilized as workers housing which expanded the shotgun's geographical range northward to Chicago and westward into California (Vlach 1977:51). The shotgun house was built for over one hundred and thirty years, from the first decade of the nineteenth century through the fourth decade of the twentieth century.

Vlach (1976, 1977, 1986) has traced the origins of the shotgun house from Haiti and its blending with the indigenous Arawak Indian bohio to the one-room-wide, two-room-deep, rural housetype or agbo ile of the Yoruba tribe in West Africa. It is described as containing the basic features of the Haitian shotgun, even in having its gable end often facing the front. The Yoruba antecedent continues to be constructed as a common rural housetype in southwest Nigeria into the late twentieth century.

The shotgun house which appears in the Zion Hill Community is an early twentieth century derivative of the Louisiana shotgun. As with most of the Louisiana shotguns which are found along the Mississippi, the Zion Hill shotguns are 1920s and 1930s balloon frame examples and are present as five subtypes of the shotgun house type (Fig. 2). They appear as either three or four-room-deep plans and were built originally with central chimneys to serve the flues of wood-burning stoves, although some have been removed.

The Double Shotgun Bungalow:

The double shotgun which originated in New Orleans as a subtype of the shotgun house form, was refined in appearance to more closely resemble the popular bungalow during the early twentieth century and may be defined as it appears throughout Louisiana and Texas as a separate housetype altogether, with its own variations or subtypes. The examples of the Double Shotgun Bungalow which were built in Zion Hill exhibit great diversity but nonetheless retain their typological relationship to the shotgun (Fig. 3). They are the dominant housetypes in the district and appear as either three or four-room-deep plans with two or four-bay fronts, and incorporate full or half-porches, respectively. Built of balloon frame construction, they are present as four subtypes of the double shotgun bungalow housetype.

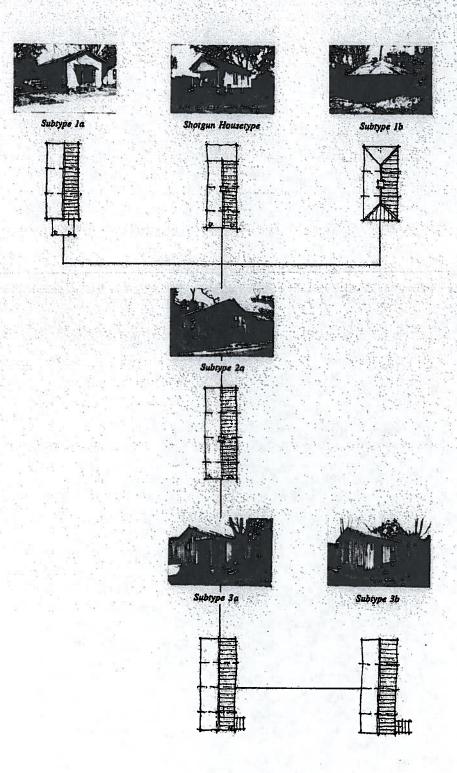


Figure 2. Typology of the Shotgun Housetype and Subtypes in Zion Hill, Nacogdoches, Texas.

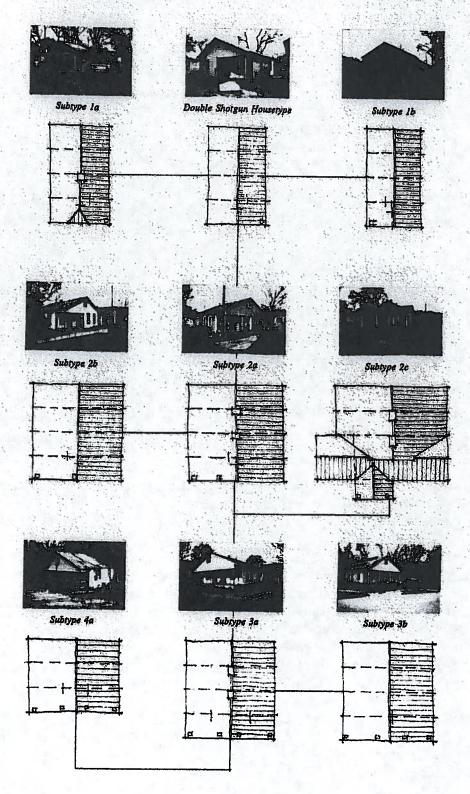


Figure 3. Typology of the Double Shotgun Housetype and Subtypes in Zion Hill, Nacogdoches, Texas.

The Double-pen:

Typologically based upon and the result of an expansion of a one-room or single-pen house, the double-pen house consists of two rooms or pens, separated by a common wall with chimneys located on either one or both gable ends. Based upon a typically southern additive pattern which resulted in a dwelling being enlarged laterally instead of vertically, it serves as the basis for several other housetypes such as the saddlebag and dogtrot. It is a housetype associated with Upland South origins and was a common dwelling form which was constructed by settlers who migrated from an Upper Southern hearth area (Wilson 1974:67).

Double-pens are one-room-deep or single-pile and occur with two rooms of either square or rectangular plan. The roughly square configuration of the pen as a basic unit of construction is an English derivative which originated in Tidewater Virginia and Maryland while a rectangular shape is of Scotch-Irish origins. The double pen moved from the Chesapeake Tidewater eastward through Kentucky, Tennessee, Arkansas and into Missouri and southward into Georgia and Alabama where it spread across the Lower South into Louisiana and Texas (Jordan 1978:111).

The double-pens which appear in the Zion Hill Community are late nineteenth century examples of this popular house form (Fig. 4). They are of balloon frame construction and are present as a single house type, although the dwelling may be enclosed within another housetype during the construction of a later addition, and were originally built with single or double end chimneys which served individual fireplaces, although some have been removed.

The Saddlebag:

Resulting initially from the lateral expansion of the single pen in the formation of the doublepen with which it is typologically related, the saddlebag is differentiated from the double-pen in having a central chimney located at the interior partition wall, which separates both rooms.

Although the saddlebag housetype was built and occupied by settlers associated with Upland South origins and diffused along the same routes responsible for the spread of the doublepen, it has close ties with the institution of slavery. Since two families could be expediently housed under a single roof it became a popular plan type which was built as slave quarters throughout the South and like the double-pen, would later be adopted as a house form by African-Americans. The saddlebag continued to be built as worker and tenant housing into the twentieth century from North Carolina to Texas (Swaim 1978:32).

The saddlebags which appear in the Zion Hill Community are late nineteenth century examples (Fig. 5). They are of balloon frame construction and are present as a single house type, although the dwelling may be enclosed within another housetype during the construction of a later addition.



Figure 4. Typology of the Double-pen Housetype in Zion Hill, Nacogdoches, Texas.



Figure 5. Typology of the Saddlebag Housetype in Zion Hill, Nacogdoches, Texas.

The Pyramidal:

Characterized by and named after its pyramidal-shaped roof and incorporating a four-room plan, this house type was first described by Kniffen in 1936. A popular plan type, the pyramidal house was built with a central chimney which served as many as four flues for wood burning stoves. The expansions of the lumber industry and the railroads, which provided the availability of milled building materials as well as house plans and a transportation network to move mass-produced items, assisted in the diffusion of this house type. It was built as tenant and worker housing throughout the rural areas of the Lower Mississippi Valley in the late nineteenth and early twentieth centuries (Kniffen 1990:35).

The pyramidals which are present in the Zion Hill Community are early twentieth century examples (Fig. 6). They are of balloon frame construction and are present as a single housetype and three subtypes. Two of the subtypes appear to be earlier double-pen and saddlebag housetypes which were incorporated into larger pyramidal houses. Usually two-room-deep or double-pile houses, the pyramidals have been enlarged with small wood frame shed additions, and have either full or partial-width engaged porches.

Modified Ell-Plan:

The Modified Ell-Plan was built as a turn-of-the-century elaboration of the ell-plan house type. The ell-plan was a popularization of a traditional house type, whose diffusion across the continental United States like that of the pyramidal, was associated with emerging industry. It was built as worker housing in the mill towns of the southeast, as inexpensive farmhouses from the rural southeast into the midwest, and as company-provided and suburban housing in the urban areas of the midwest, south and southwest.

The modified ell-plan is characterized by an enlarged central section, covered by a steeply pitched hipped roof, with secondary cross gables, and often displays Queen Anne ornamentation such as scroll-sawn wood trim at the gable ends and on porches (Hardy, Heck and Moore 1990:90).

The modified ell-plan which is present in Zion Hill is a simply detailed nineteenth-century example of this housetype. It is of balloon frame construction and features wood corner boards terminating into a wide frieze board, decorative barge boards at the gable ends, and a small porch with a hipped roof.

The Triple-pile Bungalow:

The three-room-deep or *triple-pile* bungalow was one of the most common, popular housetypes built throughout the continental United States in the early twentieth century. Popularized through literature, magazines and even songs between 1910 and 1930, this bungalow was built in both rural and urban areas. It is a simple design which is characterized by a gabled roof, with offset or centered gabled porch treatments, square or battered wood columns, and knee braces at the eaves. Exposed rafter tails, sawn to receive an integrated gutter system are common.

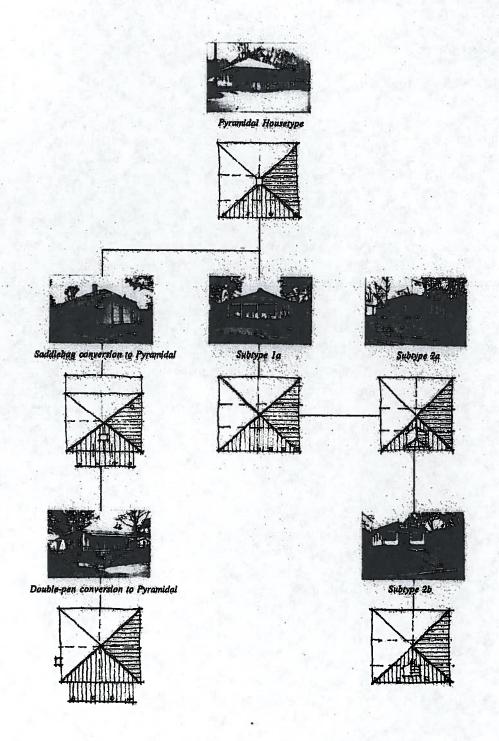


Figure 6. Typology of the Pyramidal Housetype and Subtypes in Zion Hill, Nacogdoches, Texas.

The triple-pile bungalows which are present in Zion Hill are extremely simple variations of this housetype and many feature gable vents but do not include knee braces (Fig. 7). They are of balloon frame construction and appear as one housetype and three subtypes.

The Clipped-Gable Bungalow:

The clipped-gable bungalow appears as a larger, more ornate bungalow design, characterized by multiple-gabled roofs, clipped or hip-on-gable, with offset gable or hipped porch treatments, square, battered, or grouped wood columns, and knee braces at the eaves. As with the simpler triple-pile bungalow, it features wide eaves and exposed rafter tails, which may be sawn to receive integrated gutter systems.

The clipped-gable bungalows which are present in Zion Hill are simple variations of this housetype, and feature gable vents but do not include knee braces (Fig. 7). They are of balloon frame construction, are three or four-pile deep and three bays wide, and appear as one housetype and two subtypes.

Miscellaneous Plan Types:

Miscellaneous plan types for Zion Hill include irregular plan bungalow and vernacular houses which are not representative of the dominant housetypes present in the district and for the purposes of this study, are considered anomalous. As they are not related to the development of the existing housing stock of Zion Hill, they have been indicated as a percentage and have not been seriated.

Figure 7. Typology of the Triple-Pile and Clipped-Gable Bungalow Housetypes and Subtypes in Zion Hill, Nacogdoches, Texas.

Design Concepts