

Machiya vs. Shotgun

The vernacular residential architecture of Kyoto and New Orleans share similar elements. Due to the hot and humid climate in each location, the residential styles evolved along parallel paths. The narrow houses that are elevated off the ground help to circulate air through the spaces. Cultural influences create changes to each type of house. For example, the machiya's relationship with the street and the entry sequence are different than the shotgun. The unique cultural characteristics of each house in combination with the climate conditions create the distinct architectural styles of the shotgun and machiya house types.

Given the climate of Kyoto and New Orleans, both the shotgun and the machiya are thin, long houses that are elevated off the ground. The narrow building type means that the house is only one room wide, allowing for better air circulation through the house. With lot sizes being as narrow as 12 or 15 feet, which is a standard room size, a hallway is considered wasted space. These dimensions allow for machiyas and shotguns to consist of a series of rooms. In machiyas, the entrance provides an outdoor hallway, which leads to the interior spaces that are linked with sliding walls. With smaller lot sizes, space becomes more valuable and successive rooms become necessary for a high functioning house. The shotgun house generally utilizes the ceiling fan as a means of airflow to create a more comfortable environment. Though both types of houses have high ceilings to allow for better air circulation.

While the shotgun and machiya have the same basic layout, the street presence of each house is different. The machiya sits closer, if not directly on, the street creating a wall of facades. The roofs of the individual machiyas overlap, meaning that the houses share a party wall condition. The age of the machiya is shown by the position of the roofs, with the newer houses having higher roofs. One alteration applied to the exterior of the machiya is a slanted guard to keep dogs away from the facade. This guard provides protection from the street by creating a buffer from the street activity. This small buffer space makes the entrance sequence from the street more comfortable, allowing the facade to breathe. In the French Quarter, the typical shotgun has a set of steps and a small stoop leading up to the house. The short flight of steps creates a similar condition to the guard on the machiya. However, the biggest difference between the entrance of the machiya and shotgun is the level at which one enters the house. The interior of the shotgun is considered as part of the private residence, forcing guests to climb steps to reach the front door. This contrasts greatly with the front door of the machiya, which is at street level. Anyone may enter the machiya and come into the street level receiving area but then must be invited up into the rooms of the home. In both homes, the raised portion of living area denotes a private space, apart from the street.

The shotgun's stoop is sometimes replaced by a front porch. The shotgun created a porch culture in New Orleans. The climate made porches necessary since it was often more comfortable outside on the porch with a breeze than inside the home. The Japanese machiya sits on the street and doesn't allow the opportunity for a front porch but instead utilizes an interior courtyard. The interior courtyard allows for views from the interior rooms into nature, the windows acting as picture frames. Often times a small porch borders the courtyard, allowing residents to enjoy the outside air and view. This small interior porch is treated differently than the New Orleans porch, they are wooden surfaces without furniture where residents sit directly on the wood surface. The interior courtyards benefit the neighborhood by creating microclimates. The use of the front porch demonstrates the more social culture of New Orleans as opposed to the more private and shy culture of Kyoto. The front porch creates a more informal reception of people off the street while the machiya formally invites guests into

the home.

Shotgun houses were generally built in pairs with a party wall in the middle and a small alley on each side. These houses were associated with working class families because of the inexpensive design. The machiyas were sometimes mixed use residences. The street level continued into the house, which denoted the area that anyone could enter into. The raised rooms of the house were for invited guests only, as those who came in needed to take off their shoes. The front parlor room could be used for business if needed. This contrasts with the shotgun, which was generally only used for residential purposes. The machiya allows for a separation between the business and residential program of the house while the shotgun doesn't have the same opportunity for separation. The circulation of the machiya demonstrates the more formal and accommodating aspects of the Japanese culture. Strangers can come through the front door and into the home, however that is not custom in New Orleans. The machiya can provide more flexibility and privacy from room to room with sliding doors, however the shotgun doesn't provide the same flexibility. The shotgun has doorways from room to room which forces one type of circulation throughout the space.

Though the machiya and shotgun are built around the same principles, the execution creates unique housing types. The cultural influences of Kyoto and New Orleans are reflected in the housing types used in each location. However, both house types are designed to allow for air circulation to promote cooling in the hot and humid climates where the houses exist. The shotgun is a streamlined design, there is only one circulation path through the house, which is a succession of rooms. The machiya allows for more freedom by incorporating sliding walls into the scheme. Each house has proved a successful model for the climate and culture it was built in.