

The Wooden Walls of Territorial New Mexico

by:

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Architectural historians seem to agree that Spanish buildings in New Mexico are characterized by wall construction in adobe brick.

The classic work on Hispanic structures in New Mexico by George Kubler (1940) focused on the region's remarkable series of Franciscan churches. Although many of these were built of stone in the first colonial period, 1598-1680, they converted largely to adobe wall construction in the reconquest era, 1693-1821. More recent investigations, including *Taos Adobes*, (1964) and the article on "The Architecture Of Northern New Mexico" in the 1966 September-October issue of this journal by co-editors Bunting and Conron, pointed out the continuing significance of adobe construction in the Mexican period, 1821-1848, and to a slightly lesser extent in Territorial times, 1848-1912.

Between the Mexican and First World War, building projects in New Mexico reflected the shifts from Hispano-Mexican to Anglo-American authority, technology and taste. An influx of Protestant sects increased ecclesiastic building, and the new Territorial Government required expanded space. In addition, there was the need to house a new complexity of secular institutions, both military and commercial. The diminished threat of Indian hostilities, the advance of rail lines and communication ties, and the remarkable increase of governmental and commercial activities all implemented an expanded physical and economic security. Photographs suggest that the resulting commercial and governmental buildings in post Civil War New Mexico drew inspiration from stone and brick models of Mid-western Victorian revival styles.

The military end of the War between the States found men moving westward again. From 1870 to 1910 the number of inhabitants in New Mexico rose from ninety-two thousand to three hundred and twenty-seven thousand. Settlers, new and old, needed houses.

The older building technology of adobe wall construction was not always sufficient. Moreover, Anglo-Americans were accustomed to solving their domestic housing problems with wood. Powered saws, planers and lathes, as well as the wide variety of molding planes, from Sandusky and eastward, joined the adze, auger, axe, hand lathe, and other traditional tools introduced by Spaniards before 1600. The domestic architecture in New Mexico became a blend of Hispanic and Anglo-American woodworking technology.

Spanish-Americans were masters at woodwork. Seventeenth-century churches and houses in Mexico displayed precisely cut and intricately fitted wooden ceilings and framed doors whose design origins lay in the Mudéjar style of Moorish Spain. Even along the unstable northern frontier of New Spain, handsomely carved wooden beams (*vigas*) supported heavy earthen roofs in 17th-century stone missions. It is, however, not in these imposing, official struc-

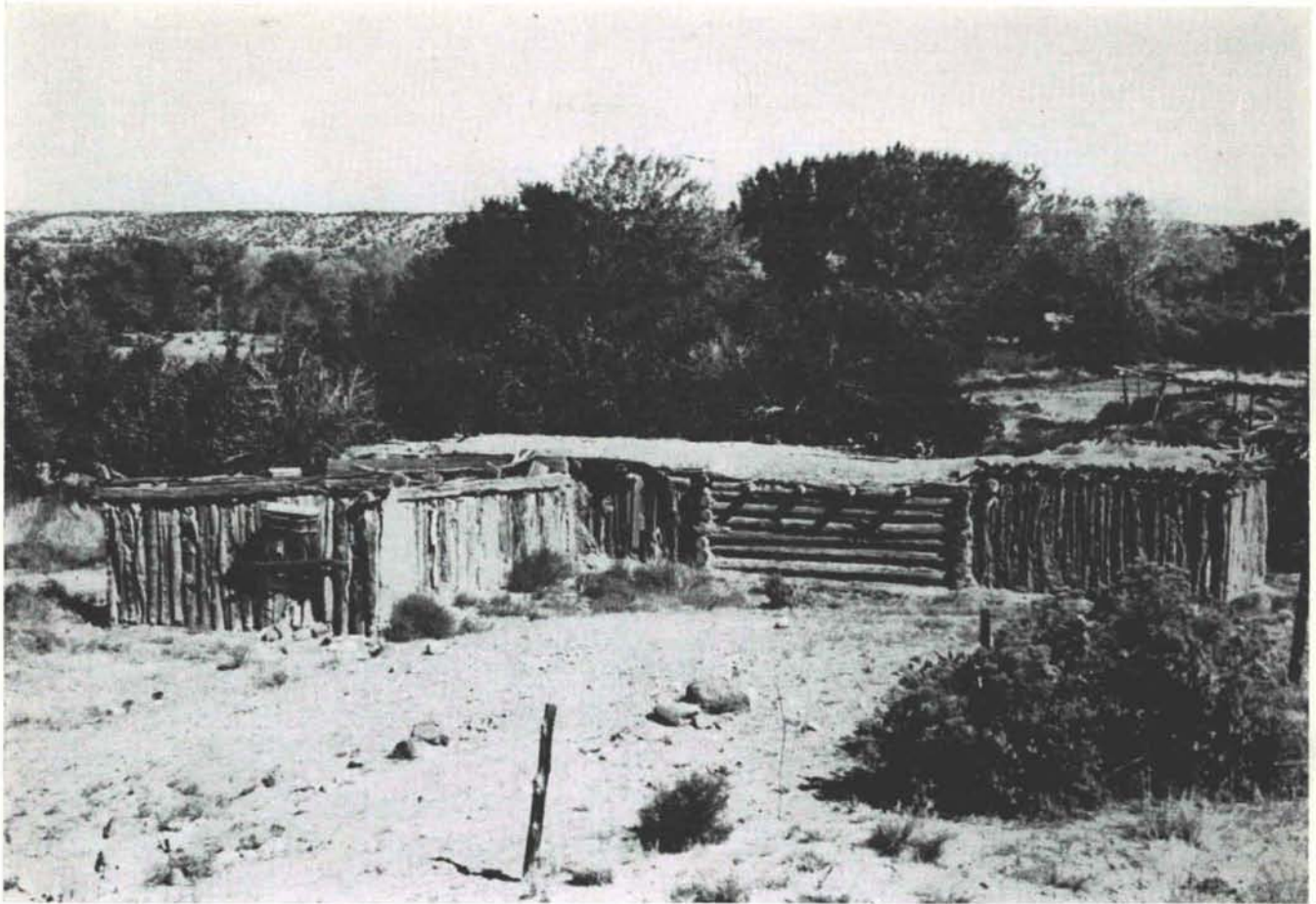


Plate 1

tures of colonial New Mexico, but in the vernacular building methods used by Spanish settlers to raise fences and house walls that we must look for an Hispanic building tradition in wood that persisted through Territorial times.

In New Mexico, Spaniards called a wall of vertical members a *jacal*. The method, often used in pre-Renaissance Europe to form a defense wall, was known as a pallsade: stakes driven upright into the ground and lashed together. Spain and Mexico used the *jacal* to fence in corrals. By Territorial times in New Mexico, closely set posts filled in with adobe plaster served as walls for corrals, stables and houses.

On the Atlantic coast, settlers from northern Europe also built wooden walls before 1700. While Englishmen employed vertically set timbers and inner planking, Scandinavians raised walls of horizontal logs. Massive framing with stout vertical beams eventually gave way to balloon construction in well-settled areas, but houses built of logs set lengthwise and notched at the corners followed the frontier West.

The log house moved into the great river basins and plains, and finally out to California and New Mexico.

Plate 1 shows the two basic methods of constructing a solid wooden wall just described: the vertical post and the horizontal log. Both techniques appear in a single structure built a few miles north of Española on the Chama river, probably before 1900. The form of house and stable are not clearly separated — a practical combination used from rural times in Medieval Europe through frontier times in our Western States. The wall building technologies of Hispano and Anglo-Americans, the use of available materials, and the continuation of a traditional way of life are successfully combined in this specimen of vernacular architecture. It is an exceptional document of the cultural history of Territorial New Mexico.

In our example, the upper end of each vertical post is cut into a tenon. When lined up, the pointed ends establish a running tongue. This lets into a groove cut on the underside of a horizontal capping beam. In nearby corrals, posts set at intervals and at



Plate 2

corners are often allowed to retain their natural forks in order to support a capping beam placed at right angles to the parallel walls which they brace. Where nails are plentiful, tops of posts are cut flat and covered by a plank. In houses at Cañones, this plank supports ceiling beams (*vigas*), whose ends are cut flush with the wall and covered with a fascia board. Cracks between posts are filled with adobe plaster, often of sufficient thickness to hide the *jacal* construction. These methods of building wooden walls with vertical members as seen in rural northern New Mexico seems to be a Spanish innovation.

On the other hand, the "log cabin" type of wall appears to have been introduced to New Mexico by eastern settlers from Ohio, Missouri, and Kentucky by early Territorial times. An inventory of 1766 (Twitchell I, no. 454) in the Land Management Bureau at Santa Fe suggests a house made of logs, but the description is too brief to establish the exact method of wall construction. Fortunately, early photographs provide visual documents of log build-

ings in New Mexico, such as the grist mill at the Pascual Martínez house in Taos.

This trading center for Indian and Spaniard, and later for eastern trapper and mountainman, was the site of a sawmill set up by Wilfred Witt before 1860. Las Vegas, because of its site on the railroad, had the Territory's first planing mill in 1879. (Bunting, *Taos Adobes*, p. 11)

Plate 2 indicates a distinctive use of milled lumber in a barn at Vallecitos. Short, thick planks, averaging 4 by 6 by 48 inches, are nailed horizontally over a frame. The unusually short length of these planks may be the result of spacing between studs. However, the lack of uniform size suggests the economic use of scrap lumber. Horizontal sheathing on the gable ends of the barn introduces the third type of wooden wall common to Territorial New Mexico.

Throughout sparsely settled Rio Arriba county, numerous post-Spanish War houses display board and batten gables set above what appear to be traditional walls of adobe brick. Actually, these walls are

made of frames covered with horizontal wooden siding. On this board surface, strips of lathing are set at an angle about a foot apart to produce a diagonal pattern of ridges that hold a thin covering layer of adobe plaster. Board siding may also be set on the diagonal and covered with tar paper before the slanting pattern of lathing is nailed on. The shallow crust of adobe which is held by and covers over the diagonal lathing requires constant repair.

Plate 3 illustrates a common variation in the frame, siding and lathing wall. Here, wider lathing is attached as vertical planks, but the lathing is again used to support a surface of adobe plaster. The adobe surface has fallen away to reveal a set of short, narrow planks set perpendicular to a horizontal median board under a window. Built shortly after the nearby south penitente *morada* of Abiquiú (about 1910), the small building serves as a tiny chapel honoring Our Lady Of Guadalupe.

Wood also appears in buildings of adobe brick. Short beams appear as deeply set lintels over door and window openings. Planks are used to strengthen and level the courses of adobe brick. However, neither use of wood represents the extent of technological innovation shown in the vertical post or diagonal lathing method.

We may assume that the lack of wooden walls in Spanish-colonial New Mexico reflected a cultural preference for adobe technology, as well as an acceptance of the relative inaccessibility of large timbers. Even in Hispanic houses of the mid 1800's, including those built near forested mountain slopes and well-timbered streams, walls of adobe brick predominate. (Post or jacal walls are poorly documented before 1850.) It is not until railways carried machinery for planing and sawmills into the territory that houses began to display the variety of wooden walls described here.

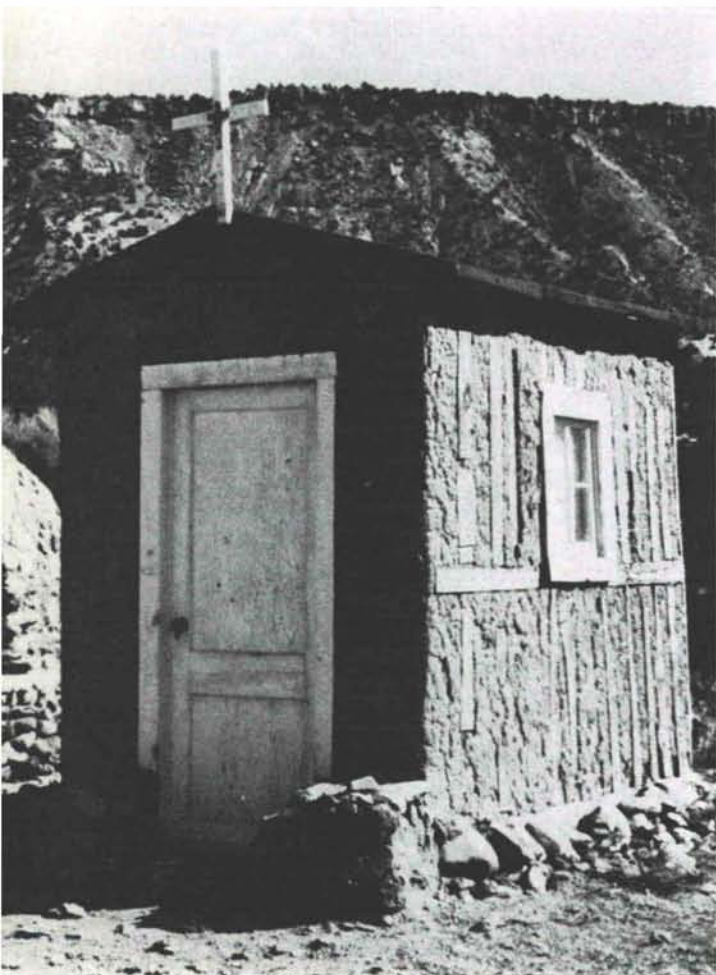
The Territorial architecture of New Mexico is distinguished by more than wooden pediments and porch banisters, and patterned cornices of kiln-fired brick. The Hispanic use of vertical-post walls continues alongside methods of the English-speaking frontier to raise walls of horizontal logs and, with the introduction of milled, standard size pieces of lumber, of siding and lathing on framed studding.

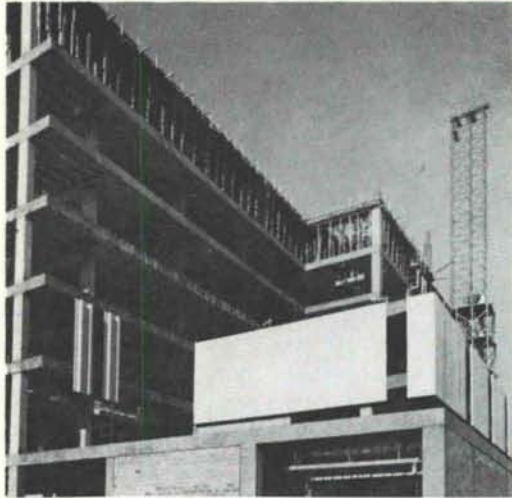
In comparison to Spanish colonial times, adobe takes on a less dominant role as the basic building material of the region. Brick, stone and wood begin to win popular use. But it is noteworthy that adobe is used on board walls of diagonal lathing and vertical posts, perhaps as an Hispanic preference for its visual effect.

Despite the increasing weight of Anglo-American culture, its materials and technology, the traditional forms of late Spanish-colonial architecture in New Mexico persist through the 1800's and well into the present century. This heritage included the use of wooden walls in the vernacular buildings of Territorial New Mexico.

— Richard E. Ahlborn

Plate 3





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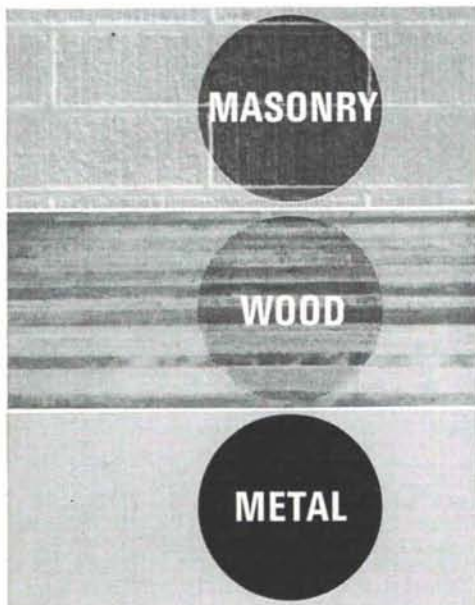
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