



In the valleys along the west slopes of the Sangre de Cristo mountain range, men have been constructing permanent buildings for seven hundred years. Leaving aside the formative stages of Indian architecture and considering within this study only structures of which standing remains are evident, four distinct periods of building can be distinguished: Indian, Spanish Colonial, early Territorial and later American. As significant monuments of each period survive in the Embudo area, the purpose of this sketch is to point them out and to describe the main characteristics of this architectural evolution. No attempt is made here at a complete inventory of the district's architecture.

According to legends of the Picuris Indians, their pueblo was once the largest and strongest of the Pueblo communities along the Rio Grande. Although today greatly reduced in numbers and the present pueblo consisting largely of recent structures, portions of the village date back to the period before the Spanish conquest of 1598.

Rooms from this early era are characterized by two important features. One is the use of "puddled adobe" masonry. This type of wall is laid up in two-foot-thick courses and shaped by hand; each course must dry thoroughly before the next layer is added. The technique of making adobe brick was a Spanish innovation in New Mexico. The other unusual feature of the early Indian building is the method of supporting the center beams for each room on a post set in a basin-like hole in the floor. These depressions, out of the center of which rises the post, are sometimes round, sometimes irregular in shape. Interestingly enough, similar dish-like holes with the stubs of center posts have lately been found in the excavations of a fourteenth century pueblo in the Pot Creek area eighteen miles north of Picuris. Recent construction at Picuris is indistinguishable from that of Spanish or Anglo builders in other parts of the valley.

The first century of Spanish domination in New Mexico seems to have left no tangible remains in the Embudo watershed. The small Spanish population of the province huddled in constant fear of Indians in small communities along the Rio Grande. Also the

Pueblo revolt of 1680 destroyed to a greater or lesser degree all structures which the Spanish had built. Some of these could be renovated by the returning Spanish after 1692, but other than a few mission churches, no buildings anywhere in New Mexico retain more of their pre-Revolution form than a few fragments of walls.

Following the Pueblo rebellion, Indian danger continued, but it now came from nomadic Utes and Apaches rather than Pueblos. In northern New Mexico serious Indian danger continued until the 1860's when the U. S. government constructed several military forts in the area. But despite this threat of Indians a few Spanish farmers, impelled by land-hunger, had begun to move into lateral valleys off the Rio Grande by the mid-eighteenth century. Parts of the Embudo watershed were settled by the 1740's.

When a settlement such as Trampas or Dixon was made in one of these out-lying valleys, precautions had to be taken for defense. Although no examples of defense architecture survive unaltered, one can surmise several of the solutions which these early settlers devised. A wealthy family could afford a house and barn that enclosed all sides of a patio. With exterior walls devoid of openings, save for a main wagon gate, all rooms opened directly onto the patio. A second solution would be for several small householders to build around a common patio and share in defense. Or, thirdly, a defense tower could be built with a round, masonry lower story and a polygonal-shaped upper story of logs.

In the Embudo watershed no patio-centered dwellings survive today. Although the land holdings in the area are today too small to support seigniorial establishments, these may once have existed. The New Mexican tradition of dividing both the ancestral house as well as the land among heirs has militated against the survival of large establishments. Given the ups and downs of family fortune, it is not unusual to find a once-large house surviving in three or four stages of repair or desolation (see Fig. 7). One part may be well cared for, supplied with a water-tight tin roof, plastered with cement and the windows fitted with steel casement. Another suite of rooms may be decrepit



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Fig. 2 Torreón, Dixon, N. M.



Fig. 3 Church at La Placita, N. M.

but lived in; yet other parts of the original house may be quite abandoned, walls eroded and roof caved in. Ofttimes portions of the house have disappeared entirely and the visitor is only aware that they once existed because of the alignment of walls of adjacent buildings or through the presence of a terrace-like mound of earth created by fallen adobe walls or roof.

The village of Dixon in the lower Embudo valley is important because it retains to some degree the form of a community built tightly around a plaza for defense. The small individual houses are contiguous so that the continuous line of exterior walls could serve for fortification. Later modifications of these houses have cut doors and windows in the exterior walls and thus changed the character of the architecture so the visitor is not immediately impressed with the once-defensive nature of the compound. On the south side of Dixon almost half of the compound's houses have been removed to make way for conventional stores. But reminiscent of the village's early defense precautions are two *torreóns* which stood near the corners of the compound. One of these towers is reduced to a mere foundation; the other, still roofed, is decaying as a pig sty (Fig. 2).

Unquestionably the most important and best preserved monument of the Spanish Colonial period is the church at Trampas, San José de Gracia. Constructed between 1760 and 1776 of adobe masonry and covered by an adobe-packed roof, it is a "text book example" of mission architecture in New Mexico: compact, geometric mass; restricted fenestration plus the transverse clearstory above the roof of the nave; a plan which clearly articulates nave, transepts, polygonal apse and provides a choir balcony and baptistry; nave spanned by vigas which are supported on elaborately cut corbels (Fig. 5). The basic features of these mission churches derive from the sixteenth century "fortress churches" of Mexico even though modified by the limited technology and economy of the new area.

The characteristic church type of Trampas is repeated in a smaller, later edition in the charming little church at El Valle and the small chapel on the Santa Barbara River near Rodarte, now reduced to ruined walls. But the New Mexico heightened ceiling over the altar area is retained for architectural emphasis in small churches like Vadito even though the transverse clearstory, the original reason for the stepped-up profile, has been omitted.

A second and smaller church type, rectangular in shape with a circular apse, was used in the Embudo basin for both churches and Penitente chapels. The

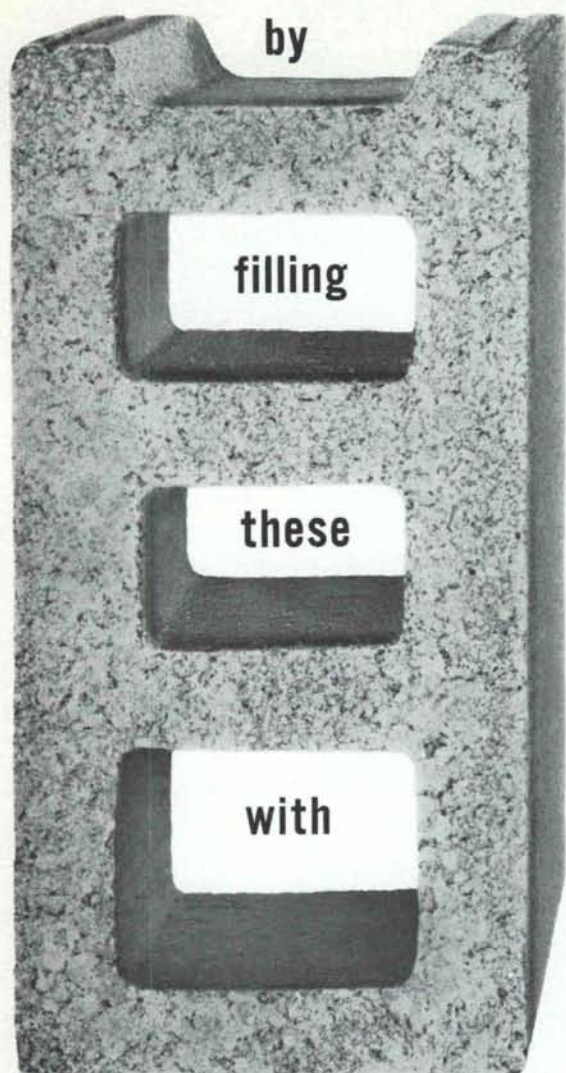
original flat-roofed form of this simple type is found in the *morada* at Llano de Peñasco. Here windows are very small and the entrance is on a side wall as usual in *morada* design. This building type is also repeated in the village churches at Rodarte, La Placita de Peñasco, Vadito and Apodaca (Fig 3). Equipped here with a relatively steep corrugated iron roof which becomes conical in shape to accommodate the circular apse, these churches are provided with larger windows, a wooden floor and a regular axial entrance.

Early in the present century new parish churches were built in several communities, perhaps at a time when the Roman Catholics were feeling the competition of Presbyterian mission activity. These nondescript late churches retain none of the traditional forms of the valley. Protestant construction was no better, as indicated by the church at Chamisal.

The disappointing fact of New Mexico's domestic architecture is that outside a few Indian pueblos, there are no very old buildings left, at least nothing survives which retains its original appearance. Sections of old adobe walls—even whole rooms—may survive, incorporated into recent buildings. But these surviving fragments retain nothing of their original character except exaggeratedly thick walls. The reason for this absence of old buildings lies in the material used. Adobe is the most fugitive of materials and adobe edifices are in a continuous state of evolution. The earth loaded on wooden roofs to keep out rain and to provide insulation is so constant an invitation to decay that a roof, unprotected by water-proofing (a relatively recent innovation in New Mexico) will rot out and require replacement at 50 to 75 year intervals. Adobe walls erode from both wind and rain and they are particularly vulnerable at the ground line, where ground moisture causes more rapid erosion than elsewhere. With constant attention, however, an adobe edifice can last for hundreds of years, as rooms at Picuris pueblo or some Spanish churches attest. But with the changes of family fortunes, extremely few houses have had the continuous care necessary for preservation. After a generation of neglect, an adobe structure will have disintegrated beyond the point of repair. The other deterrent to old adobe houses retaining their original character is the great ease with which they can be remodeled.

Given the fugitive and plastic character of adobe and also the fact that adobe brick made in 1940 with mud from the same clay bank will look indistinguishably like brick made in 1840 or 1740, there is discour-

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Fig. 4 House near Rodarte, N. M.



Fig. 5 Church of San Jose de Gracia, 1760-76, Trampas, N. M.

agingly little internal evidence within an adobe building itself to indicate its history or original appearance. But on the other hand, the technology of New Mexico throughout the Spanish and Mexican periods was so constant that it is unlikely that any striking changes took place in the architectural forms. Thus even though we lack well-preserved dwellings dating from early periods, we can turn to structures built late in the nineteenth century for a good visual picture of what the earlier edifices probably looked like. The Vasquez house, hidden away in the mountain-locked valley of Ojito, comes as near retaining the look of early houses as anything left. Built originally in a U-shape about a court, more than half the building has melted away, leaving only three rooms. Windows are few and small and woodwork crude. Other buildings of early appearances are houses in the northeast corner of La Placita's plaza (Fig. 6).

The simple beauty of this architecture can be seen in a series of six houses strung along the north bank of the river at Trampas (Fig 1). Modern windows were never punched through the north walls of these houses, most of them owned by members of the Lopez family and in excellent states of preservation, and they retain the old-style flat roof. But best of all are the splendid adobe-plastered walls whose basic geometry is only relieved by their gently undulating surfaces and contours.

Though there is no change from the basic adobe and wood construction of the Spanish period, the decades following American intervention in New Mexico show signs of architectural change in three ways. First, villages began to string out along roads, a dispersal that began as soon as the U.S. Government brought the Indians in the Sangre de Cristo mountains under control. No longer forced to cluster together in villages for mutual protection, farm houses were built nearer the fields. Nor did these free-standing edifices have to have windowless outside walls for protection.

Secondly, new Yankee-built sawmills began to turn out quantities of sawn lumber which were used for gabled roofs, plank flooring, porches and wood trim. The Yankees also brought good steel tools to shape and ornament this lumber. Though the Spanish had iron tools, they were scarce and expensive after the hard and dangerous haul from Mexico. Cheaper wood and tools resulted in paneled doors, louvred or paneled window shutters, and elaborately molded window and door casings. The old *portal*, instead of its simple log posts and crudely profiled corbel blocks of Colonial times, is now composed with squared posts to whose top and base have been nailed strips of moldings to imitate capitals and bases (Fig. 7). Interior woodwork becomes more plentiful, especially for wood encasements for fireplaces. The pitched roofs that replaced the old flat ones were at first covered with wooden board and batten; later limited quantities of roof covering called *terneplate* (small sheets of iron covered with lead) were brought over the Santa Fe Trail. Not until the railroad arrived in 1880 did the ubiquitous corrugated iron roofing begin to be used.

The third notable architectural effect of Yankee annexation is the presence of window glass in the Territory. When glass had to be carted 2000 miles by ox-cart from central Mexico, it was all but unused; when Santa Fe traders could get glass by wagon train or even better by railroad, it was utilized immediately. Houses built after 1865 have larger and more numerous openings. And since openings can so easily be cut through existing adobe walls, many old houses were supplied with new glass windows. This is another major reason why so few structures of Colonial appearance are preserved.

If he looks carefully, the historian will also note that Yankee architectural notions now began to filter into the Territory along with Yankee tools and window

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Fig. 6 Ruined house, La Placita, N. M.



Fig. 7 House north of Trampas, N. M.

glass. This new fashion is announced by such details as pedimented lintel, and wood moldings that have a somewhat Classical quality. Belatedly and very simply such details recall the Greek Revival style which had flourished forty years earlier on the Atlantic seaboard. In other parts of the Territory, the new style is provided with a wall capping of kiln-burned brick, but this feature, which protected the tops of adobe walls from erosion, is absent in the Peñasco area, largely, one supposes, because of the prevalence of gabled roofs which served the same function. The Greek Revival accent is admittedly a superficial detail and old houses could quite easily be "modernized" by the addition of a little wood trim. The Territorial style, as this provincial version of the Greek Revival is called, did not appear before the 1860's in New Mexico and there is no surviving trace of it in the Watershed before 1870.

It is in this period that the domestic building of the Peñasco area begins to be of considerable architectural interest. The house type that still dominates the region emerges: a long, strung-out edifice, covered by a ridged roof of tin and preceded on its front by a narrow *portal* which is usually as long as the house. In plan this house is merely a sequence of rooms which can be added to or partitioned off according to family requirements. This single file of rooms may sometimes turn into an L. No patio-centered house can today be found in the area, though it may at one time have existed; nor do any residences evidence the formality of a central hall plan that is sometimes associated with Territorial style trim in Santa Fe or Taos.

The finest example of late nineteenth century Territorial architecture in the watershed was the Policarpio Romero house in Peñasco. Constructed, as nearly as one can tell about 1870, much of the house was demolished in 1935 for a highway right-of-way. The remaining sections, empty and vandalized, melt away year by year. The splendid *portal* that still stands once opened onto one of the three courtyards. The most handsome feature of the house is the intricately paneled double doors of the *portal* (Fig. 8).

The villages of Rodarte and Llano, situated above Peñasco, are still full of similar cut-out and paneled doors (Fig. 7). This work appeals to the collector and many examples have been carried off to Santa Fe and Taos, but enough remains to give evidence of the vital folk art tradition which once flourished in the area. Far from the sobriety of carpenters handbooks on Greek Revival, this work has an irrepressible spontaneity. Starting with a few basic themes, the imagina-

tions of the local craftsmen then wrought upon them an infinite number of minor variations.

Enough of this work remains to demonstrate also how the details of woodwork vary from one community to another. Each locality seems to have a particular repertoire of forms of its own and their distinct local character would seem to be due to the fact that a specific craftsman had worked in the area. Good examples of this are intricate paneled doors in which rectangular panels alternate and fit together with panels of looping, ogee form or with such fanciful and non-architectural shapes as pointing hands, figure-eights or stars. The variations are as infinite and ingenious as a true folk expression can produce (Fig. 9).

That this folk tradition continued to a relatively late date is indicated by the work of Alejandro Gallegos who still worked in Llano de Peñasco during the first quarter of the present century and died in 1935.

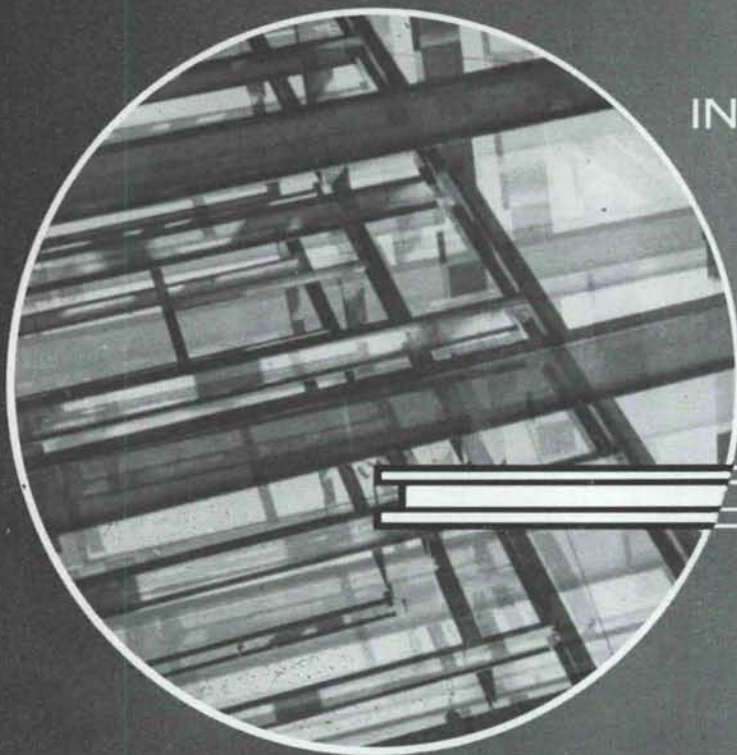
Related to this carpenter folk art, if not directly to architecture, are elaborate wooden constructions for cemeteries. Consisting of intricate crosses for head pieces, fencing to surround the grave and very large crosses for the center of the plot, this work, alas, is rapidly falling prey to decay and curiosity hunters. The best preserved examples are in the cemetery near El Valle (Fig. 10).

From this Territorial period come also a series of interesting water-driven grist mills. Housed in simple log structures set firmly on substantial but uncemented stone foundations, these buildings are of no great architectural importance. Historically, however, their interest is considerable. Conveyed in an overshot flume, the water plays against a horizontal water wheel whose axle directly turns the millstone in the grinding room above. The heavy log floors of these mills are plastered with hard adobe to prevent the loss of grain through cracks. Three of these mills in the watershed retain their mill wheels and grinding equipment. One mill, owned by Lorian Cordova of Rockwall, N. M., was still in operation during the autumn of 1961 (Fig. 11). Several other mill structures but minus grinding equipment are also to be found.

During the last two decades villages of the upper Embudo watershed have not suffered the economic and population decline that has affected so many rural areas in New Mexico. The reasons for this phenomenon are currently under study by different subcommittees of the Interagency Council for Area Development. This relative prosperity has meant that buildings in the area have not been abandoned to the extent that

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Fig. 8 Door of Romero house, c.1870, Penasco, N. M.



Fig. 9 House near Rodarte, N. M.

has happened in many communities; indeed there has even been some new building.

The interesting thing about the construction of the past twenty years is that it retains a degree of local character which, though not distinguished, at least differentiates it from the anonymous highway-side architecture that one encounters endlessly in New Mexico. This local character is only a matter of a few details—and not very handsome ones at that—yet one is grateful for the slight variety which they offer.

The most obvious feature which the folk art enthusiast will notice is the series of exterior murals extending over the whole front and side walls of bars. Usually these represent mountain scenes with peaks, sunset skies, cascading streams and furtive deer. A rather simple calendar art, it is true, but homespun and a welcome relief from the standardized blight of Coco-Cola signs—even though the realist might point out that most of these bar murals advertise a brand of beer.

The other local characteristics are more architectural and one wonders the more at their widespread popularity because they are so ugly. Such a detail is

the heavy diagonal channeling carved on the four faces of front porch posts which give the effect of a clumsy spiral. Often these are varnished to make them even more conspicuous. The second feature is the clipped gable end, which at its peak and with considerable structural complication, turns the gable into a hipped roof. Such details illustrate yet again man's instinctive need to beautify utilitarian objects by the expenditure of additional labor. —Bainbridge Bunting

For an over-all view of the culture of the Embudo area see A PILOT PLANNING PROJECT FOR THE EMBUDO WATERSHED OF NEW MEXICO, published by the Interagency Council for Area Development and the New Mexico State Planning Office, May, 1962. The PILOT PLANNING PROJECT drew its information from reports such as the present one.

Photo credits. Nos. 2 and 4, Jack Boucher for the Historic American Buildings Survey; No. 8, Gordon Ferguson; others, Bainbridge Bunting.

Fig. 10 Wooden cross, Cemetery near El Valle, N. M.

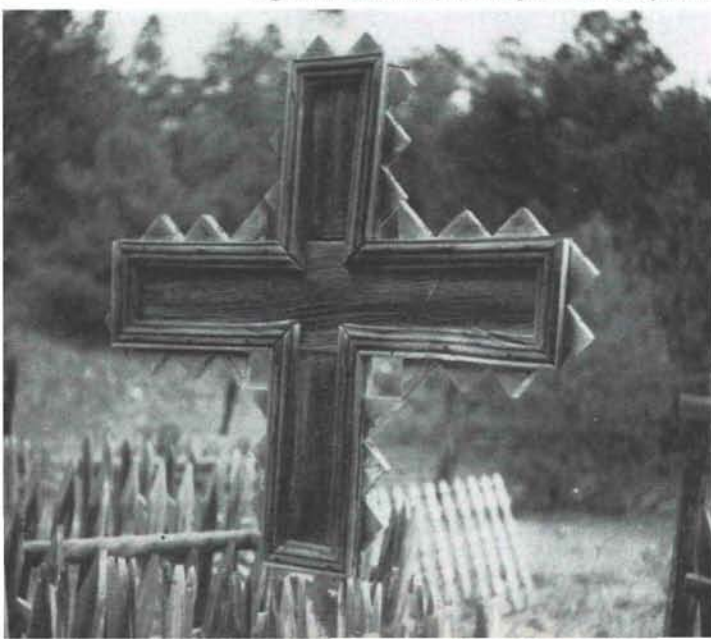


Fig. 11 Cordova Grist Mill, Rockwall, N. M.

