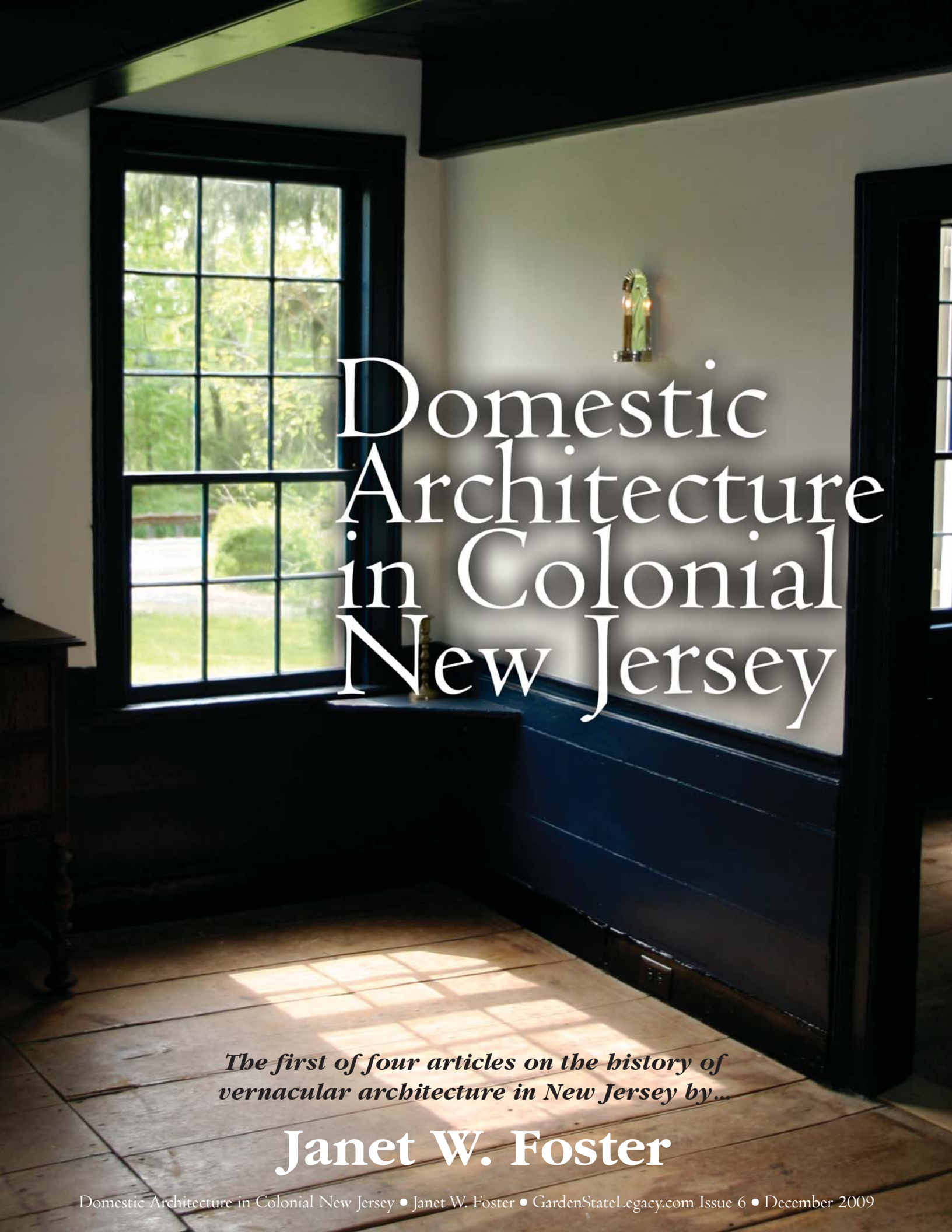


Domestic Architecture in Colonial New Jersey

The first of four articles on the history of vernacular architecture in New Jersey by...

Janet W. Foster

Although a relatively small state, New Jersey in the colonial period was at the center of the shifting balance of power among European countries. The Swedes, the Dutch, and the English all claimed some portion of modern New Jersey at some period in the 17th century. Although Germany was not yet united into the country we now know, people from its provinces and city-states emigrated to the New World, including New Jersey in the 18th century. The boundaries of the state and its official language were set in 1664 when New Jersey's land was fully claimed by the Duke of York in the settlement marking the Dutch surrender of New Netherlands, but the multiple heritages of its earliest European settlers would leave an indelible mark for another century-and-a-half.

A reconstruction of a Lenape hut—the first New Jersey vernacular architecture.
From http://www.lenapeprograms.info/

Architecture–the art of creating habitable space–was carried out in the 17th and 18th centuries by craftsmen-builders who entered an apprenticeship as young men, and retired as masters with apprentices of their own. What was known about the performance of materials, the structural requirements of live loading and the internal reinforcements necessary to allow a building to weather a strong nor'easter gale, had all been learned by trial and error, over centuries. The transmitted knowledge was solid, reliable, and largely resistant to innovation.

Vernacular, or populist, architecture was local–it reflected climactic conditions, material availability, and culture. It influenced ideas of appropriate ways to build, and inside, the disposition of space. Whether one entered a house directly into a kitchen, or directly into a hallway, reflected community traditions and culture. Whether roofs were tile, slate or thatch reflected local familiarity with the handling of such materials; learning to handle the materials was part of a particular culture. Because of its local nature, traditional builders and their clients shared mental blueprints of what a house–or church, or store–should look like. The only thing open to discussion was its location and relative size.

The vernacular building traditions of Englishmen from different parts of Great Britain, and of the Swedes, the Dutch, the Germans, all were re-created to some extent in New Jersey in the 17th century. When people established themselves well enough to build a permanent house, they of course reached to the traditions they knew. Although in a sense frontier settlers, these peoples of England and Sweden and Holland and Germany also thought of themselves–at first, at least–as very much a part of a community that extended to the other side of the Atlantic. They intentionally created "New" Jersey, filled with communities named for the Old World–Newark, Hanover, Middlesex–with an eye to improving, but also recalling, the old version of the place.

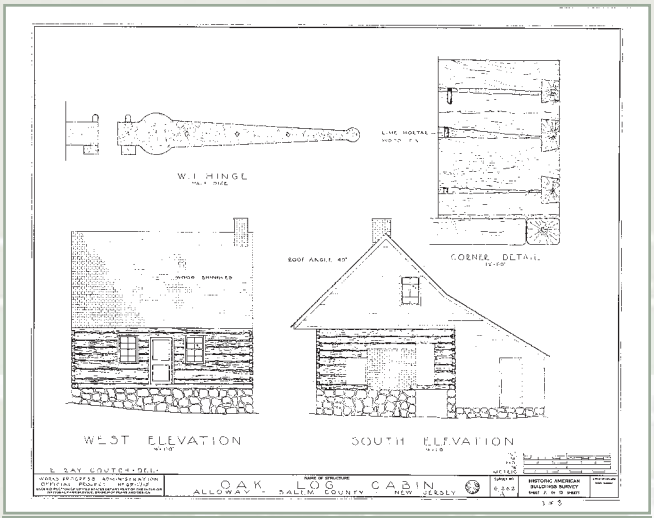
The Lenni Lenape had created perfectly serviceable vernacular dwellings of their own, including long-houses that ably used the abundant local trees as a material. But the European settlers who encountered them had their own building tradition in wood, and deemed their own method superior. The de-forestation of Europe during the medieval period is well known, as people chopped down trees for fuel, housing, and agricultural pursuits. Thus, although their building traditions relied on wood, it had become rather a luxury by the time the first settlers were reaching America in the 17th century. Presented with all the timber that could be harvested, wood was used for all building frames and trimwork, as had been the norm in Europe. Because of the abundance of wood and the lack of brick and tile manufacturing facilities, wood was adopted for roofing and

sheathing of almost all buildings, giving the colonial settlements right from the start a distinctive, "American" look.

The Swedes established forts and settlements along the Delaware River and Delaware Bay, in an attempt to establish an agricultural colony that would help support the motherland. Fort Nya Elfsborg was located near today's Salem, New Jersey, and guarded the nearby farmers and woodsmen who settled there beginning in 1639. The Swedish colonists, brought with them the far-northern European tradition of building with tree trunks roughly squared and the laid one on top of the other–what we now call a "log cabin." Although European versions could demonstrate quite sophisticated carpentry, the form also lent itself to a simplicity that did not need much in the ways of tools or building skills. Log cabins were held together by the corner notching; nails were useless with the big timbers that could be cut from the virgin forests, and nails were a scarce and expensive imported item anyway in the earliest days of settlement.

The Swedish colony was small and produced relatively few log buildings in New Jersey. The Swedes themselves officially surrendered their forts and settlements to the Dutch in 1655, who in turn gave them over to the English in 1664. But the sturdy log buildings along the Delaware were seen by many later immigrants coming into Philadelphia from all over Europe, and the idea of the log building was thus successfully transmitted to the New World. The log house, first seen in the New World in settlements in New Jersey, Delaware, and Pennsylvania became an American archetype, linked with the opening of the West for its ease in construction and the way it utilized the most abundant material seen on the eastern half of the country.

Dutch New Netherlands centered on the trading port of New Amsterdam, later New York, which had an urban center from the moment of its founding. In the city, Dutch merchants re-created the brick buildings with narrow facades topped by front-facing gables familiar from Amsterdam and Leiden as soon as they could. But New Netherlands was a water-borne empire, and it stretched far up the Hudson, River, inland to the Delaware River,



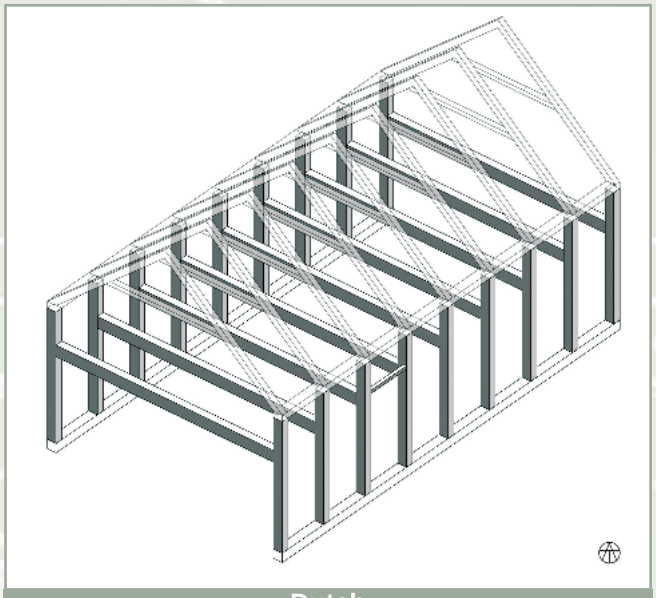
No 17th century Swedish log cabins are known to survive in New Jersey. The example here is probably 18th century, but its simple form cannot be too far distant from its predecessors in nearby locations in South Jersey.

and all along the lands of Staten Island, Long Island, and New Jersey where there was direct water contact with New York Harbor. In these far flung, rural places, the Dutch settlers used models of farm buildings from the Netherlands as their guide to building. In most cases, they found wood to be the best available material for building, and so transformed the traditional brick farmhouses of Holland into frame houses in America.

One-and-a half-stories tall, with steeply pitched gable roofs, the boxy-looking houses are identifiable by a number of features mostly relating to their internal arrangements. Most characteristically, the Dutch used a distinctive heavy timber frame that is composed of a series of parallel "bents" running the length of the building.

The bents are spaced about four feet apart and tied together with sills and roof plates at the bottom and top. The framing design means that a Dutch house can easily be extended by adding more bents in a row–thus making the house longer, but it is rare and difficult to tie the framing in to additions that extend the house either upward or to the rear.

Inside, another distinctive feature of early Dutch houses in New Jersey would have been the fireplace. The cooking fireplace of Dutch tradition, urban or rural, was one of an open



Dutch

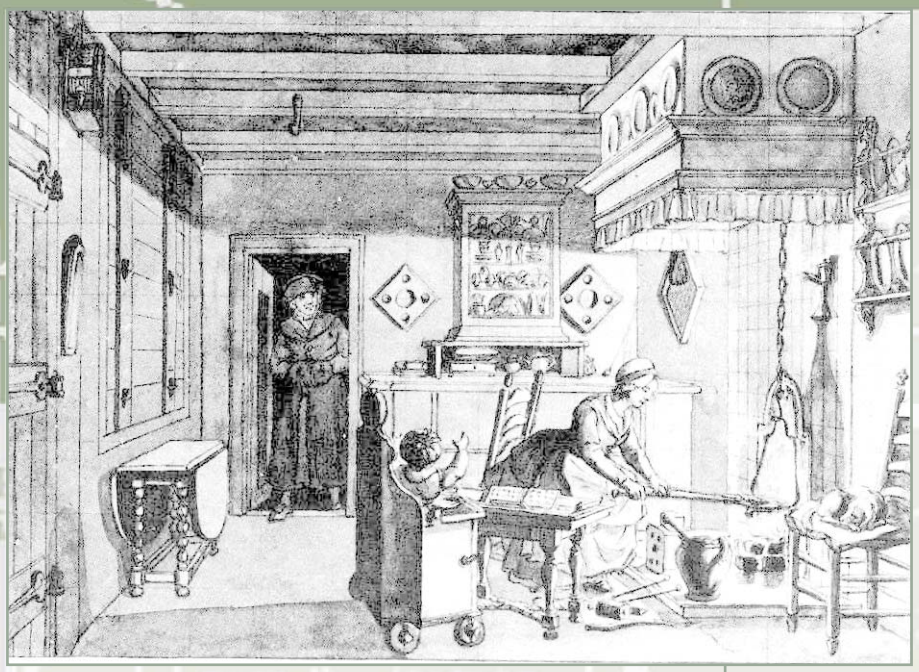
hearth on an end wall, vented by a broad chimney above. There were no walls on the sides of the hearth to enclose the fireplace. In the Netherlands, where trees had always been a limited commodity, cooking was done over a peat fire, which burns without generating a lot of smoke. In the New World, the Dutch found little peat, and lots of hardwood, and so burned that in their fireplaces. They quickly discovered that without side walls–or jambs–to their fireplaces, the hardwood smoke did not just float upward toward the chimney, but tended to fill the room instead. In very short order, the Dutch vernacular building tradition of jambless fireplaces was given up, and replaced with English style fireplaces, with sides, or jambs, that were designed to pull smoke up and out the chimney. See illustration above.

In New Jersey, settlers of different nationalities tended to encounter each other frequently. Although individual neighborhoods or communities might be more-or-less homogenous, people of different backgrounds, ethnicities, religions, and building traditions mixed together in the marketplace and in civil society. The skills of a trained builder were much in demand, as one of the defining characteristics of colonial America as a more-or-less constant labor shortage, particularly among specialty skills like carpentry. Thus it is no surprise that for the Dutch "problem" of a fireplace design incompatible with local fuel,

(Above) Wyckoff-Garretson House, Somerset County, NJ. Center door and right-hand side built about 1730; left side extension of the house and remodeling ca. 1800. The house has recently been restored and is open to the public on a limited basis. (Below) Inside the Dutch framing system is clearly evident.

there was a ready answer in the home of an English neighbor or inn-keeper.

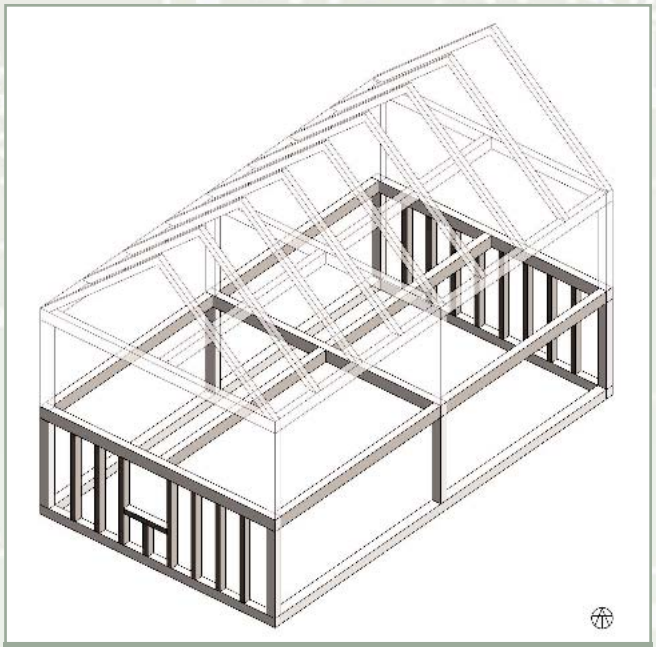
The English also had a heavy-timber tradition of framing buildings, but it relied on construction of a series of interlocking boxes. It may be helpful to conceptualize the English



A 17th century engraving shows the jambless fireplaces used in the Netherlands, and initially, in Dutch settlements in New Jersey. It was almost universally replaced during the 18th century with the more efficient English-style fireplace with sides or jambs. From http://www.dutchbarns.org

framing model as one that created the outline of a cube for each part of the house, and joined these cubes together to form a building. The "cubes" could be stacked, for full two and occasionally even three-story height; they could be added in any direction for projecting wings to any side of the building; they could be adjusted in size. This provided somewhat more architectural flexibility, but it used more timber and was even more complicated to construct than the Dutch system.

The hybridization of Anglo-Dutch building techniques was as inevitable as the intermarriage that took place each time the laughing daughter of a Dutch farmer caught the eye of a handsome English boy. In time, carpentry and building reflected a new, American sort of vernacular architecture that accounted for the abundance of wood, the climate that was both hot and cold in season, the versatility of the English frame, and the simplicity and sturdiness of the Dutch frame. This hybrid form, developed from about 1730 on, has been called the "East Jersey Cottage," in recognition of its location primarily in the Province of East Jersey, which included the eastern and northern parts of the state; land that had once been part of New Netherlands. The East Jersey Cottage appears with frequency in what is today Essex, Union, and Morris Counties, and examples are also among the



English

early houses in today's New York City and western Long Island. It is almost unknown in southern New Jersey where the Dutch never established settlement; and East Jersey cottages are rare in more northerly parts of New Jersey, like Bergen County, where the Dutch settlement was denser and more homogenous.

The East Jersey Cottage was a story-and-a-half in height, with a gable roof over a three-bay façade, The front entry was located at one of the side bays; the door leads into a hallway containing a staircase and accessing two rooms,

one front and one back.

Additions are typically made to the side, as in the Dutch fashion. At their simplest, the addition is merely a lean-to shed on the side. Some additions, particularly in the post-Revolutionary era, were made so that the original front door became the center of a balanced, symmetrical composition. Most typically for the East Jersey Cottage, however, is the arrangement of a side-hall house and a stepped-down kitchen wing to the side.

Compare that to the "saltbox" or "Cape Cod" forms of New England, where wooden houses also were constructed using English framing systems. There, the form evolved to conserve as much heat in the house during long winters, and so typically low-ceilinged rooms revolved

A classic form of the East Jersey Cottage, with its high wall above the openings on and main facade, and a stepped-down kitchen wing with porch to the side. This house is located between Basking Ridge and Green Village, at the Somerset-Morris border.

around a central chimney. In warmer climates in Virginia and farther south, out-buildings and kitchens were arrayed in linear fashion beyond the main house, so that heat-generating activities like cooking were kept well away from the main living areas. The middling climate of New Jersey required both efficient heating and cooling, and the East Jersey cottage achieved this through an integral fireplace which helped warm adjacent rooms in winter, but it also developed taller ceilings and a separate kitchen wing with useful outdoor space on the porch for the summer.

The framing of the East Jersey Cottage used the "cube" concept of the English frame, but extended the vertical supports beyond the height of the first floor as in the Dutch system. The result was a second story with a little bit (usually two to three feet) of vertical wall on the

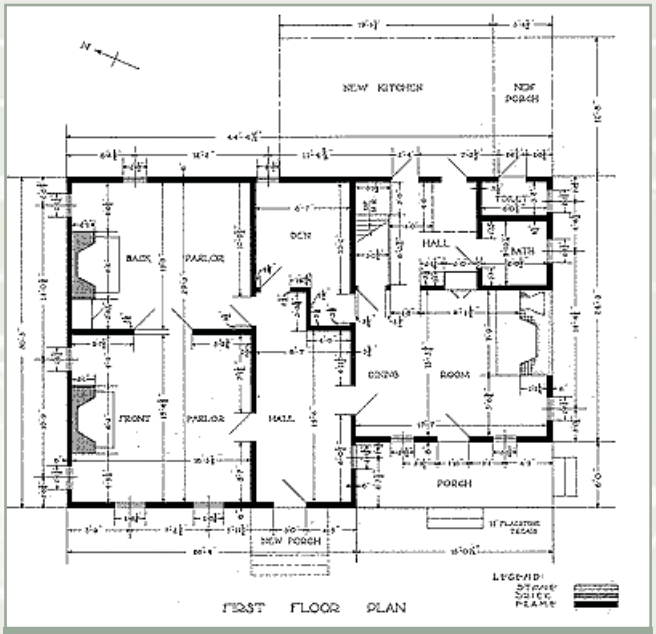
The Timothy Mills House (ca. 1740) in Morristown represents the East Jersey cottage's expanded form, with center hall and rooms arranged on each side of the hall. The lean-to shed on the far gable end protected the bake oven and originally provided a sheltered place to store firewood and other things next to the house.

outer edge of the room, and then a sloped ceiling reflecting the roof pitch above. It creates a cozy, but definitely more useful second floor space under the eaves of the house than the entirely slope-ceiling space that would be within the English "Cape Cod" house.

The high wall between the tops of the first floor windows and door, and the eave line of the roof gives a distinctive appearance to this regional vernacular architecture. This broad space was at first treated simply as wall, but later examples in the 19th century may have placed windows on this level, at least on the façade, giving rise to the "kneewall window," or, as they are sometimes descriptively called, a "lie-on-your-stomach" window, for that is how you would need to position yourself to see out of them from within those second floor rooms. Dressed up within wide entablature boards, the proportions of the East Jersey cottage made them particularly amenable to updates in the Greek Revival style, popular in the 1830s to 1850s, and so the old colonial house form remained in use into the 19th century.

Beyond the East Coast settlements of the English and Dutch, New Jersey was also settled

along the Delaware River from an early date by people who left a distinct architectural imprint. Philadelphia's establishment in 1681 as a center of religious tolerance brought both "non-conformist" English like the Quakers and



The Bruen House in Madison is another version of the East Jersey cottage. The dotted lines on the façade indicate the later addition of windows on the façade.

German Protestants of several sects. The "Quakers," or The Religious Society of Friends, was founded in the 1650s in England and by the 1680s had become enough of a nuisance politically and socially that King Charles II could be persuaded to give an enormous tract of land in the New World to leader William Penn for resettlement of Quakers and other dissidents.

The Quakers who came to Philadelphia and western New Jersey in the late 17th and early 18th centuries were, in the broadest generalization, a more sophisticated crowd than the English Puritans and Pilgrims who had settled New England. Better educated, and often from more urban places in England, the Quakers were not adverse to creating cities, and did so conscious of the collective good. They recognized that dense urban living in the age of the fireplace could be hazardous, and so supported the establishment of brickyards early on. Brick buildings were preferred over wooden ones by the English Quakers in Philadelphia and West Jersey. William Penn had his own house built in brick in 1682 on the Pennsylvania side of the Delaware; across the river in what is now Burlington, English Quakers under the direction of Francis Collings constructed a hexagonal-plan meeting house of brick between 1683 and 1687.

Being more urban in origin than the Pilgrims, the Quakers favored tall, narrow two-story houses, perfect for urban lots. Rather amusingly, the same form can also be found as farmhouses where there is plenty of room to spread out. Such is the power of vernacular architecture and the communal sense of what is "correct."

The vernacular traditions of the English Quakers included a memory of the medieval city of London, and the decorative use of brick to create patterns on walls. In Henry VII's Hampton Court Palace, the red brick walls were accented by black bricks forming a diamond pattern on the walls. The more architecturally proper description of this is a "diaper" pattern. Over two hundred years later, in the 1720s, prosperous Quakers in colonial New Jersey returned to this technique in decorating their own houses. The patterned-end house of South Jersey is a geographically unique expression of a building material and decoration that went from nobility to commoner, and from continent to continent.

The best examples of the patterned end brick houses remain in Salem County. The gable end wall was left windowless, the better to show the brick patterning; frequently the original owner included initials of himself and his wife, and the date of construction in the pattern. Such a public and visible assertion of ownership, family, and longevity might actually seem to be boasting from the otherwise humble Quakers.

New Jersey's colonial architecture of the Delaware Valley also includes the stone houses of the German settlers. Like the Quakers, German religious dissidents were welcomed in Philadelphia. Many went west from there, forming the strong German, or "Pennsylvania Dutch" communities of Berks and Lancaster Counties. But some traveled up the Delaware and settled on the eastern bank, imbuing German traditions, language and architecture into communities from the river, like

The 18th century Hancock House in Salem County shows the "checkerboard" effect of the patterned brickwork on the façade of the house. The two-story form, with central door and pent roof across the façade was typical of the vernacular architecture of the English settlers of south, or West Jersey.

Reigelsville, to places as far northeast as German Valley (today's Long Valley).

The Germans were most familiar with building in stone, and found plenty of it in the Delaware River Valley and along its tributaries. The sandstones and shales of the area were used most often as "fieldstones," the rocks being picked up as they were are used in their rough state. Some stone was roughly shaped and dressed, particularly for use on creating corners, or quoins, and for shaping window and door lintels and sills. The solid stone houses with thick walls typically rose two full stories. They often had a four-bay façade, and a plan comprised of two good-sized rooms side by side. The Germanic tradition gave direct outdoor access to all principle rooms of the house, and so it is not unusual to see houses with side-by-side front doors in German settled areas. These were not built as duplexes but as a single family homestead, with a door from the front leading into the parlor or "best" room, and another leading into the adjacent kitchen.

The colony of New Jersey was remarked upon by Benjamin Franklin to be "a barrel bunged

A stone house in the German-American vernacular tradition in the Finesville-Seigletown Historic District, Hunterdon County, New Jersey

upon both ends," for even in the 18th century, the state was a busy crossroads between the cities of Philadelphia and New York. Although some claimed with left the state without its own identity, in truth, from colonial times, it has had a distinctive identify made up by the accumulation of many peoples and cultures. The vernacular architecture of the colonial era is one manifestation of that phenomenon. In future articles, we will explore how the location between two major urban centers made New Jersey the early center for development of distinctive "American" architecture after the Revolution.

ABOUT THE AUTHOR

Janet W. Foster is Associate Director for both the Historic Preservation and Urban Planning Programs at Graduate School of Architecture, Planning and Preservation. She studied historic preservation at the Columbia University program, and worked in the field for nearly 20 years before returning to the university. Ms. Foster's own research work is focused on American vernacular architecture and particularly the role of pattern books and periodicals in the transmission of architectural ideas in the nineteenth century. She has two books related to the topic, *Building By the Book: Patternbook Architecture in New Jersey*, co-authored with Robert Guter, and *The Queen Anne House*.

Janet Foster is also interested in traditional paints and their use in American architecture. She has done paint analysis for many historic houses, museums, and private clients throughout the New Jersey and New York region. Her preservation consulting practice has allowed her to work on Historic Structures Reports, National Register nominations, and Tax Credit applications for buildings as disparate as a vernacular Dutch-American farmhouse and an early 20th century concrete factory building built by Thomas Edison. Current projects include development of preservation guidelines for a community in New Jersey and paint analysis for a perfect Downingesque cottage.

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