(Almost) Square with the World

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Memories of two traditions, both emphasizing being “square with the world,” are embedded in our own house in Manhattan, Kansas, finished in the spring of 1989. The most immediate tradition is that of the Midwest foursquare farmhouse. Equally important to us, because of our many years of research and experience, is the tradition of Roman architecture and urbanism. Through interpretation and adaptation these memories have been applied to our house using current materials and construction techniques.

The late 19th and early 20th century midwestern Foursquare or Prairie house is indigenous to the American prairie. In a world of distant horizons, orientation by the sun and compass is imbedded in the thought, language and rituals of the frontier. The popular phrase “square with the world” reflects this common worldview. Prior to mechanized agriculture, farmhouses were typically centered within a section of land framed by a one-mile grid of country roads. Before the introduction of contour plowing, fields were plowed in rows square with the world. In Roman times as well, the centuriation of farmlands and similar canonic ordering of nearby towns comprehensively connected man, land, and settlement to the larger world.

Orientation, centering, and geometry are three closely related principles essential to the design of our house. Orientation to the cardinal points and to the path of the sun is of great importance. It is through observation of changing light patterns at different times of day and seasons that one can be oriented with respect to both time and place. Manhattan, Kansas is ordered by a grid oriented to the cardinal points. House and garage are treated as separate entities oriented to different needs. The garage and driveway align with the city grid. The house responds to the particular horizon of the site. Facing fifteen degrees east of due south, the house is almost square with the world. Oriented towards a distant view of the Konza Prairie, the house also takes better advantage of morning sun.
The concept of centering, of establishing 
domains, at a variety of scales, is also im-
portant in both the foursquare and 
Roman traditions. Reinforcement of 
centering occurs through the use of layers 
of encirclement which articulate par-
ticular relationships between the center 
and its surroundings. The house pro-
motes an outward view from a tranquil 
and secure center.

Related to both orientation and centering 
is the geometry of the square. Square with 
the world has direct geometric connota-
tions in the traditions of vernacular and 
Roman architecture. We wanted to experi-
ment with such geometry in our own 
house design. The square is a centered 
form which can be oriented with respect 
to the world. It has two axes, and is both 
directional and centered at the same time. 
The square provides a unified frame of 
reference which can be subdivided in 
ways which insure the commensurability 
of its parts. The square, and divisions of 
the square, permeate many scales of the 
design of the house.

The most forthright single-story ver-

nacular foursquare houses have a room in 
each corner and partitions at the cross-
axes of the square plan. A central 
masonry chimney projects through the 
pyramidal peak of the roof. In contrast to 
this use of a central mass, the Roman 
domus uses the atrium as a central space. 
Crossaxes are developed as visual cor-
ridors and the vertical axis is marked by 
the frame of the compluvium opening in 
the roof and its reflection as an impluvium 
recessed within the atrium floor plane. 
Similar patterns of spatial ordering can 
also be found in Roman urbanism, where 
the crossing of cardo and decumanus is 
marked by either a significant space or 
monument.

The disposition of rooms combines the 
foursquare strategy of corner rooms with 
the insertion of a vertical stair tower in-
spired by qualities of the Roman domus. 
The vernacular dormer atop the stair 
tower serves as a light well, analogous to 
the atrium as the material means of 
creating a luminous center within the 
house. The large foursquare dormer win-
dow offers a connection to the sky and a 
view to the distant prairie.

The design utilizes regulating squares at 
successive scales beginning with the site 
and proceeding to the house plan, eleva-
tions, individual rooms, and details. 
Through proportional strategies similar 
to those of the Roman domus, areas of 
major rooms are simple ratios of the 
master regulating square.

As with the Roman decumanus and the 
medieval street, the principal east-west 
partition of our second floor serves as a 
datum for gathering and ordering the in-
terface of public/social and private/fami-
ly activity. Like the earlier streets the daily 
and seasonal patterns of light and shadow 
upon this wall marks the passage of time 
and provides a clear sense of orientation.

The geometry of the square and its com-
mensurable subdivision serves to struc-
ture the orientation, enclosure and center-
ing of the design. In the larger sense it 
serves to reflect the spatial qualities of the 
environ and represents a particular way 
of being between earth and sky. Tradi-
tional methods of making temporal and 
timeless connections to the larger world 
are joined by those of today and provi-
sions for the future. Opposite the dormer 
view of the distant prairie lies the collec-
tive memory of our slide collection. Op-
posite the large bay window of the living 
room is the television/VCR cabinet placed 
in the wall of the house decumanus and 
articulated like a Roman shrine. Connect-
tions to today's world also come from 
mass communications and memories of 
our ancestors are now stored on video-
tape. Within the vertical spine of the 
house is an empty conduit for fiber optic 
cable or other connections in the future.