

ALGERIA

Such migrations mean that space is used with a freedom unusual in modern life and in the West. Recent correspondence from Mounjia Abdeltif-Benchaabane, a professor of architecture in Algiers, describes how rooms there have not traditionally been organized with regard to individual use or established purpose.

A living room becomes a sleeping room at night. Closets are full of mobile furnishings. In the morning everything is hung near windows to air out under the sun before being reused, perhaps in a different room. The kitchen is a multifunctional space. They cook on the floor even if they have modern tools!



Street Layout in Jaisalmer, Rajasthan: The north-south-running street assures that only a narrow front of each house is exposed to the most critical summer sun that comes mainly from the east and west. Tall houses facing each other across the narrow street also provide a mutual shield. (*Paradigms of Indian Architecture* by G. H. R. Tillotson 1998, 162.)

A long-established Arab concern with privacy, in conjunction with the custom of migrating through the house, established the texture of some old cities like Baghdad. Since the roof is used for sleeping during nearly half of the year and the privacy of the family at night is fundamental, no house could look down upon its neighbor nor could one house look into the courtyard of another. The result was an effective building height control with advantages for solar access; no house could overshadow another, thus assuring wintertime light and heat to upper living spaces.

INDIA

Similar migrations and freedom of spatial use are found in the *haveli*, the traditional courtyard houses of Rajasthan, the northwesternmost state of India. This driest part of India has very little rainfall with hot summers and mild winters. Days are hot for most of the year, but nights can be quite cold.

Orientation of the house and street is important to maintaining comfort. In Rajasthani towns such as Jaisalmer, urban houses are usually narrow and deep, sharing the long wall. The street usually

runs north and south, thus only the narrow face of the house is exposed to the critical summer heat gain from the east and west. The result is a much cooler interior than outside in the street during the oppressive summer.

As in Iraq and Algeria, the traditional houses of Rajasthan generally have two or more stories and are built around a central courtyard. Flat terraces occur at the roof and at intermediate floor levels. The family lives at different levels in the house during separate times of the day and seasons of the year.

The typical urban house of Jaisalmer draws its sustenance from the courtyard, usually the most complex part of the house because it connects other spaces both horizontally and vertically. The lower levels are closed for privacy from the street, but as one moves upward, each successive level is more open to sunlight and air. Besides being open to the central courtyard, upper-level spaces are also open to private roof terraces. "These terraces are almost like courtyards at different floor levels, since they are designed spaces and not left-out roofs."¹²

Studies of sunlight entering interior courtyards and adjacent spaces show important seasonal differences from floor to floor. Only the midday summer sun is high enough in the sky to reach deep into the tall central court. There, at the ground-floor level, a small area of sunlight first emerges and takes less than 2 hours to pass quickly across the courtyard terrace where it vanishes on the opposite side. Otherwise, no direct sunshine reaches the courtyard terrace for the rest of the year.

In contrast to the subdued light at the ground

Sunlight in Urban House of Jaisalmer, Rajasthan: Summer midday (upper) and winter midday (lower). The central courtyard extends from ground floor to roof. Two flanking courtyards occur only at the upper stories. (Computer generation by Kavita Rodrigues based on a section view of a house in *Paradigms of Indian Architecture* by G. H. R. Tillotson 1998, 166.)

