

# TRADITIONAL DWELLINGS AND SETTLEMENTS REVIEW

#### JOURNAL OF THE INTERNATIONAL ASSOCIATION FOR THE STUDY OF TRADITIONAL ENVIRONMENTS



**"BEATING THE BOUNDS"** Paul Oliver

- POVERTY AS A "THEME PARK' Romola Sanval
- MEXICAN HOUSING PROJECTS AND SETTLEMENTS Elena Tamés
- BUILDING IN THE CLIMATE OF THE NEW WORLD Mary Ann Steane

REINVENTING THE CAVE Anne Toxey

BOOK REVIEWS

Morna Livingston Peter Rowe and Seng Kwan Stephanie M. Whittlesey David A. Phillips and John A. Ware Daniel Nierman and Ernesto H. Vallejc





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# TRADITIONAL DWELLINGS AND SETTLEMENTS REVIEW

Journal of the International Association for the Study of Traditional Environments

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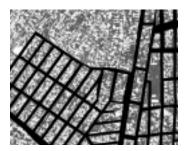
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COVER ILLUSTRATION: A typical *vincinato* in use as an outdoor communal living and work space in Matera, Italy, in 1949. Photgraph courtesy of Enzo Viti.

## Editor's Note

As I write this, the war in Iraq continues to rage. Some have dubbed it a "war on terrorism," while others see it as a manifestation of neocolonialism in a new imperial age. Those of us who study traditional dwellings and settlements are familiar with these positions. But over the past year, IASTE has also received various letters and emails asking about damage to Iraq's heritage and archeological antiquities, first during the oppressive regimes of a dictator and now under the occupation administration. Today the situation in Iraq remains too unstable to assess this, or to restart research in the country. However, IASTE plans to devote a future issue of *TDSR* to the subject. Those of you who are interested, please get in touch with us.

This issue of *TDSR* includes five regular articles covering a wide rage of themes and geographical areas. We begin with Paul Oliver's "Beating the Bounds: Switching Boundaries over Five Millennia." The article deals with the nature of boundaries in the English region of Dartmoor. Over the centuries, this "last great wilderness" of southwest England has been witness to a number of activities and territorial claims. The attempt to trace them today reveals how they are largely perceptual, and must thus be periodically rehearsed and renewed. Next, "Poverty as a 'Theme Park:' Global Norms and Philanthropic Forms," by Romola Sanyal, discusses Habitat for Humanity's newly created Global Village and Discovery Center in Americus, Georgia. This tourist site contains replicas of shacks of the urban poor from many parts of the Third World, as well as Habitat-built model replacement homes. By connecting literature on development with such concepts as the "tourist gaze," the theming of heritage, American volunteerism and philanthropy, and the appeal of the urban danger zone, Sanyal suggests that the project may best be understood as a form of "creative destruction."

Our third article, by Mexican architect Elena Tamés, entitled "Use, Appropriation and Personalization of Space in Mexican Housing Projects and Informal Settlements," analyzes two public housing projects and two informal housing settlements to understand the process by which residents appropriate and adapt spaces to their special needs. Using a well-developed mapping technique, Tamés charts these changes over time and concludes that flexible environments are not only products of design, but also of use. Mary Ann Steane's "Building in the Climate of the New World: A Cultural or Environmental Response?" then examines the transformation of a seventeenth-century building type as an example of the interplay of cultural and environmental factors in the evolution of dwelling forms. In particular, Steane shows the ways in which the English "hall-and-parlor" house was transformed into the New England "saltbox," largely in response to climatic conditions experienced by early English settlers in Massachusetts. Finally, in the "On Preservation" section, Anne Toxey's article "Reinventing the Cave: Competing Images, Interpretation, and Representations of Matera, Italy" analyzes the transformation of a UNESCO World Heritage Site according to a tourist narrative of cave dwelling. The preservation debate in Matera has taken on the usual dichotomy of tradition versus modernity, but Toxey also demonstrates how interpretations of the past can be a precedent for contemporary outside influence.

Finally, we would like to remind readers of the upcoming IASTE 2004 conference in Sharjah/Dubai. The program includes a rich array of sessions dealing with the overall theme of "Post-Traditional Environments in a Post-Global Era." A number of field trips to Sharjah, Dubai and Oman have been added to this event. We hope you enjoy this issue of *TDSR*, and we hope to see you this December in Sharjah/Dubai.

Nezar AlSayyad

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## "Beating the Bounds": Switching Boundaries over Five Millennia

#### PAUL OLIVER

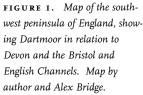
The area of Dartmoor in south-central Devon is today known as southwest England's "last great wilderness." Yet, as if to defy this categorization, this territory has known nearly four million years of human occupation. Today, to the trained eye, signs of human habitation, utilization and exploitation are everywhere. This article reviews the history of Dartmoor, particularly as conflicts over its possession and use have led to its being etched by boundaries. These boundaries, however, are not natural or self-evident; rather, they are a matter of perception. And through the years, as the land has served many purposes — commons, royal forest, private enclosure, mining site, military training ground, national park — these perceptions have had to be rehearsed to be properly remembered and passed down from one generation to the next.

One of the oldest customs in Britain is the "beating the bounds" of ancient parishes by priests or officers, who annually traced them with local youths or children to remind them of the limits of the parish in which they lived. In the past the youths were generally "switched," or lightly beaten with a bundle of thin sticks or reeds, to make the occasion still more memorable. In some parishes it was even the custom to hold the male children by the ankles, or wrists and feet, and lower them till they made contact with the "bond-marks," or boundary stones; few forgot the boundaries of their parishes after this experience.

The tradition of beating the bounds still persists on a seven-year cycle in some parishes, including Belstone and South Tawton on Dartmoor. After many centuries certain boundaries between these parishes are still disputed, notably on Cosdon, one of the highest and largest "downs," or hills, on Dartmoor. At the "beating of the bounds," a major boundary stone on Cosdon is a significant focus of the ritual, and it is here that young teenage boys are lowered in the manner described. The event, which is local and in no way directed to tourists (who are few in this part of the moor), was witnessed by children of the parishes the last time the bounds were beaten, in July 2000. They will follow the ritual seven years after, when they come of age.<sup>1</sup>

**Paul Oliver** is a Professor of Architecture at Oxford-Brookes University and editor of the Encyclopedia of Vernacular Architecture of the World.





Of course, all this begs the question, "Where and what is Dartmoor?" Dartmoor is a region in south-central Devon, on the southwest peninsula of England (FIG.I). The third largest county in England, and considered by many to be the most beautiful, Devon lies between the Bristol and English Channels. Undulating moors occupy a considerable proportion of the land, including the "Lorna Doone" country of Exmoor to the northeast, and the "Hound of the Baskervilles" country of Dartmoor to the center and south. Dartmoor is often referred to as "the last great wilderness in southern England" and is generally characterized as a mass of igneous rock with thin grass cover. Though technically mountains, its bleak hills are not particularly high, rising only to 2,012 feet (650 meters). Some, called "downs," have a broadly curved mass, but others, the dramatic "tors," are crested by immense outcrops of granite.

Geologically, the bulk of the moorland is composed of a gray granite mass of a coarse grain which contains porphyritic feldspar, mica and quartz crystals, but intrusions of fine-grained "blue" granite and of black tourmaline are evident in exposed faces and in quarries. Around four hundred kinds of granite and related stones exist on the moors. The processes that took place during their formation and subsequent weathering through geological time led to immense deposits of kaolin at Lee Moor to the southwest, and lodes of tin elsewhere. Copper, lead, arsenic, iron and zinc, among other minerals, are also to be found, especially at the edge of the granite margin, where the approaches to the moorland plateau are steep. Though it is a part of the great granite vein wh ich extends from Scandinavia through Scotland and Wales to Brittany and northern Portugal, it remains a singular region.<sup>2</sup>

Covering nearly 370 square miles (approx. 1,000 sq.km.), the oval shape of Dartmoor embraces much more. Several rivers wind between the hills, most flowing south like the Dart and the Plym — though the Okement and the Taw flow north. From springs in the open moor, they meander through wooded valleys and over small waterfalls, becoming torrents following heavy rains. To the west of the moors is the river Tamar which acts as the boundary between Devon and Cornwall, while to the east is the Teign, which discharges into the sea at Teignmouth. In popular usage these define the outer limits of Dartmoor, but for many people the "real Dartmoor" is marked by the meeting of the outer fringes of the cultivated field systems with the open land and rolling landscape of the moors. Here may be seen the black-faced sheep and wild ponies which typify the "last great wilderness."<sup>3</sup>

In effect, "natural boundaries" provide convenient definitions of the limits of Dartmoor. But natural boundaries, though frequently cited, are largely perceptual. Thus, a river does not flow as a boundary, but as a unifying element which gathers its waters both from its source and from the valley slopes on either side of the course it takes to its outlet. Similarly, the ridge that links the peaks of some tors runs at the apex of the inclination on either side, the result of an upthrust in primordial time rather than the boundary of a terrain. Drawing the edge of a landscape or terrain is purely arbitrary, and rarely, if ever, does it express an ultimate truth. The difficulty of such a boundary determination applies even to the seacoast, which shifts with the tides, and is often additionally defined by such arbitrary devices as a "ten-mile limit," or its equivalent, invented for the purposes of customs and excise, or to meet international agreements regarding the fishing industry. What is defined is a perception, based on the concept of a boundary, rather than a tangible reality.

#### PERAMBULATING THE FOREST

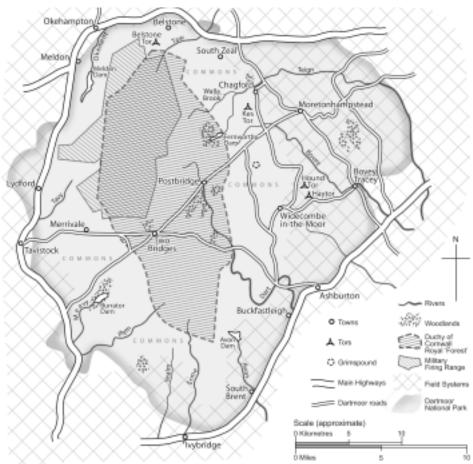
While geography and geology help define Dartmoor, they do not explain what the "bounds" are, nor the "beating" of them. One must go back nearly eight hundred years to get a relatively clear picture of these, although there are important factors that are much older.

In the year 1216 King John of England — the signatory of the Magna Carta - declared central Dartmoor a "royal forest." Most people assume a "forest" to be dense woodland and are puzzled by its application to the largely treeless moor. In fact, the word is derived from foris, which means "outside," or "beyond the bounds" of cultivated land, and was applied to the "hunting forests" of the king. A dozen years later, despite John's proclamation, Dartmoor was "disafforested" by King Henry III, who ordered a "perambulation" to redefine the forest and examine existing landholdings and commoner's rights. Manorial lands had been granted in Saxon times — and after the Conquest, by the Normans, to 37 "knights." But "commoners" also had title to portions of the area. Many were farmers, or "villains," whose claims were of unknown pre-Norman origin (dating back "to times immemorial"), for which they paid a small fin venville, or

nominal rent, to the Crown. Others were small-holders and "serfs" who had rights to "peccary" (fishing), "turbary" (digging turves or peat sods), grazing animals, or to collecting wood or surface stone.<sup>4</sup>

Following Henry's orders, twelve knights eventually made a perambulation of the bounds of the forest in 1240, which they surveyed on horseback and subsequently defined as, for example, "Hogam de Cossdonne," "Parva Hundetorre," "Thurlestone," "Woresbrokelakesfote," "Heighstone," "Langstone," "Turbarium de Aalberysheved," "Wallebroke," and so on. These downs and tors are still identifiable as Cosdon Down (mentioned above), Little Hound Tor, Thurlston, Woodlakehead, Longstone, Walla Brook, etc., but in tracing them, the problem of recognizing any precise bounds becomes evident (FIG.2).

After the perambulation, Henry III gave the forest to his brother Richard, Duke of Cornwall. But Henry also declared it a "chase," which meant that the rights were not exclusively those of the Crown. Subjects could own part of it, or have rights to its use, though as part of the Duchy of Cornwall, it reverted to the Crown at intervals under certain conditions. Today, this sector of the moor is still within the Duchy lands, under the demesne of the Prince of Wales.<sup>5</sup>



Dartmoor Sketch Map. Produced by The Werld Atlas of Vernacular Architecture Contographic Unit, Oxford Brookes University.

FIGURE 2. Map of Dartmoor. The lands of the royal forest of the Duchy of Cornwall are shown, as are the military areas, Stannary towns, and some features mentioned in the text. Map by author and Alex Bridge.

Later perambulations in 1609 and the 1840s confirmed and reconfirmed the bounds, and found few encroachments by commoners. Indeed, it was in the interest of those with venville (villein's) and commoner's rights, to ensure that the bounds were respected. Commoners were, and are, farmers and pastoralists who shared land "in common" and did not - and still do not - define boundaries within the "commons." Even today little on the ground indicates where the boundaries of the Duchy lands are, and they appear identical to the common lands. But at intervals one still does see "standing stones" like the one mentioned on the boundary between Belstone and South Zeal. Many such granite monoliths were placed following the perambulations. Others have initials carved into the stone indicating the limits of the ecclesiastical or civil parishes, which often are of earlier, (even Saxon) date, and do not necessarily correspond (FIG.3). Often, there are no other signs on the landscape of these boundaries. Nevertheless, it was important to know which lands were royal, which had to be maintained, which could be used for a fee, which could be taxed, and which parishes or users were responsible.6

Of course, the very indeterminacy of such limits has at times led to conflict between neighboring parishes. Thus, in the instance already cited, the parishes of Belstone and South Tawton have always disputed the bounds on the upper slopes of Cosdon, and in the nineteenth century this even led to fighting between the parishioners.

By now it should be apparent why "beating the bounds" is a custom that is many centuries old. Following this practice, the parishioners, commoners, and those with venville rights could affirm their respect for the bounds while ensuring that their own rights were learned by the younger generations.



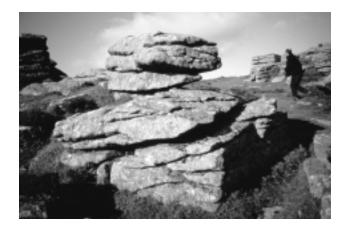
**FIGURE 3.** Standing stone. This one, about ten feet high, stands on Shovel Down and is used to mark adjacent parishes.

#### RINGS AND REAVES

If the eight centuries or more of commoner's rights and royal forest seem a very long time for boundaries to be defined and respected, it is still a relatively short period in Dartmoor's history of human occupation. The "last great wilderness" bears the evidence of more than four millennia of habitation, utilization and exploitation. But by no means all the evidence is of boundaries, although they are very significant where they can be seen: it is also of the utilization of its natural phenomena. On Dartmoor one can discover such information oneself, and make contributions to solving problems that continually engage archeologists. After viewing prehistoric sites in Europe and the Americas, it would be reasonable to expect modern boundaries, designed to protect the sites from being destroyed or plundered. But there are virtually none, and no signposts or on-site interpretation centers exist to condition how they are seen, experienced or comprehended.

Why the Dartmoor sites are so open to both casual visiting or scholarly examination is due in part to the considerable size and intractability of blocks of granite, which frequently can weigh several tons. The risk of removal, defacing or damage today is minimal, though in past centuries there was little awareness or respect for their historic importance. There is another factor which is frustrating to archeologists: the extreme acidity of the soils of Dartmoor breaks down wood and fabrics to the extent that troves of artifacts, weapons or jewelry are rare, and even the discovery of single items is uncommon. The durability of the granite has resulted in some of its uses surviving in the open landscape for thousands of years, though the tors have been subject to physical weathering by frost action since the Pleistocene period. One effect of such weathering is the partial collapse of some granite crests of the tors, causing boulders to slip and fall, which reduces the weight on the remaining granite mass and creates "stress release," resulting in the lateral splitting of the rock into flat layers (FIG.4). Fallen boulders, some the size of a house and thousands more of lesser dimensions, are spread on the tor slopes as "clitter," which provides rocks of sizes that can be manhandled and used for building.7

The earliest signs of human presence on Dartmoor are the rock or earth-covered cairns termed "barrows." Though many were destroyed by house-builders who wanted to make use of the stone, a number have been excavated. Chambers with ashes from cremations indicate their use, and imply developed social organization and systems of belief. Others have stone coffins called *kistveans*, with slab sides and massive granite slab tops, which date from the third millennium BCE. Of similar age are the stone circles, like the impressive Scorhill or the double circle of Grey Wethers, over thirty meters in diameter, which were almost certainly of religious importance (FIG.5). The oldest appear to have been multiple



**FIGURE 4.** Kes Tor rocks. A typical granite tor crest, showing lateral splitting by "stress release."

rings, as at Shuggledown, Chagford, which has a *kistvean* in the center of four concentric stone rings and three lines of double rows of stones in parallel that lead to it. This suggests that the rows defined processional routes to the burial place of a leader.<sup>8</sup>

Even if they were not edge boundaries, such markers indicate claims over the land that were intended to be permanent. While most of the grave sites have been plundered in the past, a number have been examined by archeologists who have found finely made flint arrowheads and shaft-hole battleaxe heads, which indicate the presence in Britain of the post-Neolithic Beaker People (named for their typical pottery) from southern Europe. Dating and ascription is difficult, and the purpose of the stone rows remains problematic. Some may be a mile or more in length and may be aligned to the setting sun of the midsummer solstice, as at Merrivale; others terminate with a marker stone. These sites, which would have taken years to erect and required great coordination of manpower, clearly indicate social organization. But where did their builders live? While it is not always possible to identify the dwellings with specific religious sites, many traces of settlement exist. The bestknown of these is Grimspound, a cluster of "hut-circles" or rings of stone slabs on the saddle between two tors, through which runs a stream. Each hut is around 12 feet in diameter, and several have stone sleeping platforms and hearths. In some cases the huts have curved sheltering walls to deflect the winds, and nearby are small "pounds" for animals (FIG.6). The whole of Grimspound settlement is embraced by a great boundary wall of stone, presumably defensive, with monoliths defining the entrance.<sup>9</sup>

At least two thousand hut circles have been identified on Dartmoor, and many are within stone enclosures, of which the largest is Riders Rings at an altitude of 1,200 ft. (366 m.). It protects 36 hut circles in a pear-shaped enclosure and various animal pounds or garden plots - the whole covering some 6 acres (2.4 hectares). Dating from the early to middle Bronze Age, the huts were small and probably had conical roofs covered with turf or thatch, as no traces of stone roofing have been found. By the late second millennium BCE larger hut circles were raised, such as the grand examples that are generally hidden by the Fernworthy Reservoir, built in the 1940s. Fortunately (for the archeologist), these are exposed when the water level drops in drought conditions, as it did in the summer of 2003. Others, ten meters or more across, are at Foale's Arrishes, which are almost hidden by bracken fern for much of the year, but which reveal parallel boundary walls when the bracken dies back in the winter.10

By the middle of the second millennium BCE field systems to the east of the moors were already being established, with grids of boundaries overlying or accommodating earlier curvilinear shapes. On Mountsland Common the largest pre-



**FIGURE 5.** Part of the early Bronze Age Scorhill circle. Some of the stones were removed in previous centuries.



**FIGURE 6.** Remains of a circular granite-walled dwelling in the Grimspound settlement. Archeologists believe that a central pole supported a conical wood and thatch roof.

historic field system in Britain, extending to more than 3,000 hectares, employed "parallel reaves," or walls of stone cleared from the fields and covered with turves. Such reaves, which defined the limits of a farm, were also used as boundaries to larger territories. To view these definitions of terrain and space today can involve penetration into the lesser-known parts of the moor. And even then, good light, a sharp eye, and strenuous walking may be required to trace them (REFER TO FIG.3)."

At Mountsland Common a Bronze Age axe-head was found which was of Central European type, affirming that the remarkable pan-European trading links extended to Dartmoor settlements. Bronze artifacts were imported, for at only one site, Dean Moor, have hints of prehistoric tin smelting been found. By Kes Tor is a late prehistoric field system with rows of parallel stone boundary walls, below which is an impressive site of hut circles made of large stone slabs. Known as "Roundy Pound," this was once believed to have been a Bronze Age tribal chief's compound. But excavations in the mid-1950s revealed that the main hut had contained an iron smelting furnace, a forging pit, and piles of slag. Probably a unique example of reuse, the forge dates from around 500 BC, heralding the Iron Age; no other evidence of Iron Age settlement or use of the inner Moor has been located.<sup>12</sup>

Following these times, a dramatic decline in the climate of the region made the moorlands virtually unoccupiable for some eight centuries, although Celts may have attempted settlement around their periphery. As many as twenty hill-forts, with inner enclosures and defensive ringed boundaries or ramparts, such as Cranbrook Castle at Moretonhampstead, were erected during the period, at an average of four-mile intervals, encircling the moor. This suggests a systematic defensive system; but today these structures are heavily overgrown, and have not been excavated, even though slingshots have been found. Such forts may have been abandoned with the coming of the Romans, who established a legion of five thousand men at Exeter. Apart from driving a road through it, the Romans made no use of Dartmoor. But with their departure and a marked improvement in the climate, it was gradually reoccupied.13

#### RETURN TO THE TORS

Saxon invaders from North Germany in the second half of the seventh century AD penetrated Devon and Cornwall, some settling on Dartmoor. Unlike Cornwall west of the Tamar, however, there are few surviving Celtic place names on the moors, with the exception of the names of rivers. Some local names do indicate a measure of Saxon settlement and cultivation; however, this is thought to have only encompassed scattered farms and a few villages. Since Saxon farms were built of wattles and covered with turves, little remains today beyond the hard "pans" of the floors for archeologists to use to identify their former sites. If such scattered dwelling sites have been located by some and questioned by others, there is no doubt as to the walling of the town of Lydford, situated on the western fringe of the moors, in the ninth century by King Alfred the Great. Possibly Celtic in origin, Lydford was further developed as a defensive frontier post against Danish raids. Here, the steepsided Lydford Gorge formed a natural barrier, and a town of some twenty acres was eventually encircled by a ditch before a wall of turves faced with granite.

In 997 AD, a hundred years after the death of King Alfred, the Danes destroyed the Benedictine Abbey of Tavistock and attacked Lydford. Though damage was inflicted, the walls repelled the Danes on this occasion. Today, a long stretch of the wall and the Saxon grid pattern of streets can still be seen in what is now a village. The town was important enough to issue its own coinage made from local tin. But hundreds of examples are in Danish museums, evidence of the eventual dominance of the Danes, and payment of *danegeld*, or tribute money, to the invaders.

Lydford, in whose parish the royal forest was situated, also became a major religious center, and people from many parts of the moors were required to worship there. Others worshipped at the "Cathedral i' the Moors," at Widecombe. To direct them, a number of granite crosses were erected which acted as waymarkers. Some were reused by farmers, but many are still standing, like the forest bond-marks and prehistoric *menhirs* which still help people locate themselves when they are lost in the unpredictable fogs and clouds that can engulf the moorlands.<sup>14</sup>

Dartmoor offered pasture for the livestock of farmers from most parts of Devon, who paid a minute sum for each grazing animal, provided that they were "depastured" at night. Commoners overcame this problem by building "pounds" or "folds," large circular enclosures where animals could be enclosed. These were also used to retain herds during the "drifts" or big census drives, in which all commoners were obliged to take part.

Settlement on the moor was not discouraged, and excavations in the 1960s and 70s revealed early groups of stone farm buildings dating from the twelfth century AD (FIG.7). The hamlet of Hondtor Vale, on a saddle site between tors, reveals the origins of the Devon longhouse. This type, which was built for more than four centuries, consisted of a farm building on an incline, with a domestic "livier" at the upper end, and a "shippen," or cow byre with a drainage channel, below. A cross-passage served both parts, which were ranged in line under one roof. The Hound Tor complex consisted of eight longhouses, three barns and three corn-drying kilns the land, including the nearby stream and fields, being enclosed by a wall. Built of granite blocks and often with roofs raised on great timber cruck frames, the Dartmoor longhouses are an impressive vernacular tradition. Health legislation in the 1920s, however, forbade the sharing of the same building by people and farm animals, so many long-



**FIGURE 7.** One of the medieval house sites at Houndtor Vale, showing the cross passage, and at the left, the shippen for cattle.

house owners converted the shippens into extra domestic accommodation (FIG.8). Many still stand — especially in Widecombe parish — including a small number with shippens in their original condition.<sup>15</sup>

Arable land in the higher moorland is limited, and it is the lower slopes and more fertile border lands that are cultivated today. Before and after the Norman Conquest in the eleventh century agriculture was undertaken by solitary farmers who surrounded their farms with irregular fields. In the fourteenth century the "open-field" system was adopted, using enclosures, strip farming, and subdivision of the fields by mutual agreement. The Duchy rent-collectors assessed a "ferling," or about 32 acres, as sufficient to support a farmer and his family. The regularizing of measurement was also reflected in the length of the "furlong," the 220-yard furrow ploughed by an ox-team. On the hill slopes the land was stepped by plowing along the contours against banks which contained the soil, called "lynchets," as on Challacombe



**FIGURE 8.** Sanders, a Dartmoor longhouse at Lettaford, near Chagford. The "livier," or domestic end, is on higher ground than the "shippen."

Down, where the turn-rows for the oxen can still be discerned. The ferlings of the open fields and the parallel lynchets of the slopes were defined by field boundaries, built of free-stone, or granite clitter cleared from the land to be cultivated. An entire area cultivated by peasants working for a landed "copy-holder" would be contained by a "ha-ha," or bank-and-ditch boundary, which deterred the royal deer from entering the tenement.<sup>16</sup>

Those farmers who had "ancient tenements," or lands over which they had rights that dated back before the perambulation of the forest, and who wished to cultivate more lands, were entitled to build walls around "newtakes" or previously unenclosed fields up to eight acres in extent, if they could use the land productively. Taking more land than was officially permitted was by no means uncommon, the most notorious case being that of Nicholas Slanning who appropriated thousands of acres in the mid-sixteenth century before being discovered. However, the Duchy itself was not innocent in this respect, both royalty and commoners gaining or losing by the vagueness of the forest bounds. In fact, rental fees from the land and from dues for summer grazing eventually became so small (£25 per annum) that their collection by the Duchy lapsed: there was far more to be gained from industry.17

#### DIGGING DARTMOOR

By the eleventh century, tin had been discovered on the moor and was being regularly mined and worked. Open-cast mines were mainly used in the early years of the industry, the exposed streams of black cinders being traced back to the lodes. Where necessary, trenches were made to reach them, but shaft-mines were not dug. Though the precise origin of the rights of the tinners is not known, they were recognized and protected by the Crown when the forest bounds were defined. Tinners were permitted to continue extracting ore, pulverizing it, smelting the tin, and exporting ingots - the taxes paid on the product making a substantial contribution to the royal purse. As there was no coal on Dartmoor, a support industry of peat-digging to provide fuel developed, and water power was also extensively used. For a couple of centuries Dartmoor's production of tin became the major source of the sought-after metal in Europe. But production was carefully regulated: the metal had to be assayed, taxes paid, and strict rules of extraction, processing and marketing enforced.

Tinners also had special rights, and the large settlements of Tavistock, Ashburton and Chagford were declared "Stannary towns" for the assaying of tin and collection of taxes. They were permitted to establish their own Parliament, which met twice a year on Crockern Tor until the end of the eighteenth century. They also had their own courts, and defaulters were incarcerated in the formidable cubic stone prison known today as Lydford Castle.<sup>18</sup>

Tin extraction was highly lucrative, with an annual average of two hundred tons of tin being produced in the first half of the sixteenth century. This brought considerable income to the Crown. Within fifty years some tinners were also able to buy their freedom from taxation. One indication of the former scale of the industry is today provided by the remnants of artificial watercourses, or "leats," which were dug across the moor. These channeled continual streams of water for cleaning the tin, and in the fourteenth century they also provided water power to operate multiple hammers to pulverize the ore, and to pump bellows to keep the smelting furnaces roaring. Only fragmentary remains of the industry are to be seen today, but tinners' leats, some of which were several miles long and also functioned as boundaries, still flow across the moors (FIG.9). Many have medieval "clapper bridges" made of great granite slabs, which facilitated movement. Tinners also built reaves to further define their workings - complicating the identification of moorland boundaries. However, by the late seventeenth century tin mining declined on the moor, largely because of the competition of cheap tin mined in Malaysia.<sup>19</sup>

Agriculture in general in Britain had deteriorated by this time, and in the eighteenth century many of the commoners lost their lands, as enclosure acts allowed wealthy landlords to bring modern methods of cultivation to the unworked commons. Already the Duchy had begun to lose interest in the forest, and for some forty years in the mideighteenth century supervision was withdrawn, and land grants were given to favored recipients, usually knights of adjacent manorial estates, who began to enclose them. During this period of lax administration, the Prince of Wales granted more than 14,000 acres of the commons on long leases, and more than 5,000 acres of newtakes were also approved. By contrast, the ancient tenements represented less than 3,000 acres. But many landlords, with serious plans for development, had no knowledge of the peculiari-



**FIGURE 9.** A Dartmoor granite monolithic clapper bridge crosses a "tinner's leat," or artificial stream.

ties of Dartmoor soils, and so their "improvements" often failed. Finally, a bill was drafted which, if it had passed Parliament, would have divested the Duchy of its forest entirely in favor of those who sought to exploit the moors. Fortunately, advisors to the Duchy successfully demonstrated that, by so doing, the venville and some commoner's rights would have been breached.<sup>20</sup>

No enclosure act included the Dartmoor commons, but encroachments on both the Duchy and common lands continued, often by the deliberate misreading or exploitation of the ambiguities of the forest boundaries as defined by the perambulations. One landholder, hoping to add many acres to his land, even renamed a hill "Little Hound Tor" and had granite blocks moved to the crest to make it appear convincing. Yet, already, large areas of the moor had been appropriated. For example, two of the gentry illegally enclosed 3,000 acres of common land in the center. And an Irish beneficiary brought a team of barefooted laborers to build a wall to enclose a part of the western moor, south of Okehampton. The men of Belstone, however, waited until the laborers had built the structure, and then tore it down; today, the remains of the "Irishman's Wall" are still to be seen on Belstone Tor. When the commoners of Gidleigh found that their lands were being enclosed illegally they, too, destroyed the boundary wall. However, a new one was raised with less encroachment, and new initials were carved on invented bond-marks to give it apparent authenticity.21

Most leases or encroachments were of lands intended for agriculture, but some of the lands gained by these and more legal means were obtained with a view to exploiting other resources. While there was a brief revival of tin mining in the early nineteenth century with the introduction of tin plate manufacture, the Stannery towns lost their power and their Parliament. At the same time, lead extraction developed, with Wheal Betsy and other such mines coming into operation from the 1790s. Different minerals, including manganese, arsenic and tungsten, were also obtained, and copper mines were worked for well over a century. A total of 70,000 tons of copper ore were taken from the Marytavy, Belstone and Ramsley mines on the moorland fringes. Other industries have been more recent, and also more striking, in their impact — notably the quarrying of granite and the extraction of china clay.22

Though Dartmoor stone has been extensively used for millennia, the material has only been quarried since the early nineteenth century. So abundant was the clitter that the opening of quarries was hardly necessary until its large-scale use — for example, for the building of the British Museum in London, or for the edging of pavements (sidewalks) in Victorian towns — made it commercially viable. From Hay Tor quarry a tramway was constructed to ship out the stone, with the rails, and even the points, being worked in granite (FIG.IO). Massive rocks were split, and from the debris enclosing walls were constructed using large stones. These



**FIGURE 10.** A section of the "granite tramway" that served the Haytor quarries.

extensive quarries closed a century ago, but those at Meldon and Merrivale continued working until recently, their impregnable rock boundaries still remaining.<sup>23</sup>

By far the largest and most lucrative industry on the Moor today is that of kaolin, or china clay, which has been extracted from pits to the southwest since the 1830s. Such pits are devastating to the landscape, with the Lee Moor pit alone extending to more than 100 acres and being some 300 feet in depth. Immense clay dumps rival the tors in size, for the pits can produce up to a half a million tons of china clay of the highest grade in a year, and generate some four million tons of waste in the process. Three-quarters of the production is exported, with the clay being used for many purposes, from porcelain to paint, plastics to paper filler. As such, clay mining is both lucrative and land consuming. Two companies relinquished their permissions to work Blackabrook Valley and Shaugh Park in 2001. Only with the most strenuous efforts was some measure of protection given to a few of the many archeological sites that have been engulfed by the industry, though access to them is restricted. Around the pits are warning notices hung on the high steel fences that defy the freedom that the making of Dartmoor into a National Park was intended to ensure.24

#### PARK, PROBLEMS AND PERCEPTS

Too numerous to detail, or even to list, are other present-day uses of various parts of the moor. Of these, military training is among the most evident, having been introduced at the time of the Napoleonic and Crimean wars and having grown to large-scale maneuvers by 1873. An annual camp was established in the Okehampton sector, and in 1895 the Duchy granted a license to the War Office to build a permanent camp and to use the northwest quarter of the moor, when required, as a training and firing zone. The agreement continued until the end of World War II when half of Dartmoor was used for these purposes, with inevitable damage to some sites. A demand to increase the ranges after the war to more than 70,000 acres, of which the public would be admitted to only 20,000, was rigorously opposed. Today, the army still trains on some 40,000 acres in four ranges, with stated boundaries marked only by occasional flags. With fewer visitors in this area the army has, in some respects, contributed to its conservation, but military use is still inimical to the moors' existence as a public amenity.<sup>25</sup>

In the face of growing exploitation, the Dartmoor Preservation Association was founded in 1883, and soon after, it recommended preservation of the moor as a National Park on the American model. More than half a century was to pass before this became a reality, in 1951. In the meantime there were many intrusions, including the afforestation of open moorland, which was mainly undertaken after World War II. The planting of conifer forests at Fernworthy and Bellever, apart from being inappropriate, also resulted in the smothering of archeologically significant stone rows and circles, creating forest boundaries that bore no relation to the past. Much of the planting was privately owned, encouraged with government grants. But these were not the only violations of the National Park status: more permanent and irreversible has been the building of dams to create reservoirs that could supply Devon's coastal towns.<sup>26</sup> It may be noted that some of the towns close to Dartmoor were embraced in the National Park's own boundaries, which extend beyond the moors in places, and these too, require water supply.

As early as 1591 Sir Francis Drake built a leat to supply fresh water to the ancient port of Plymouth. This served the town until a dam was built and a reservoir engulfed several farms and over a hundred acres of land. Enlarged in 1928, the dam and reservoir now provide Plymouth daily with ten million gallons of water. Other reservoirs have also been built to supply the towns of Torquay and Paignton, the former securing rights to create the Fernworthy Reservoir already mentioned, begun in 1934 but completed in 1942. Fortunately, grandiose plans to build reservoirs for eight hydroelectric plants were defeated. But approval was given for the Avon dam a year before National Park status was granted. Plans to make a reservoir at Taw Marsh were countered in 1957 by permitting the boring of wells and the building of a semi-underground pumping station. A bigger intrusion in the Park was the building of the Meldon Dam as recently as 1970 (FIG.11). Parliament gave its overriding approval to this project, despite the objections of conservation bodies, the Park authorities, and even of the Duchy.27

Too numerous to detail, even to list, are the many other uses to which Dartmoor has been subjected. Captives from the Napoleonic wars were incarcerated in the purpose-built and still functioning Dartmoor prison; explosives were made in powder mills near Bellever; and ice was made and stored on Sourton Down. All the examples that have been discussed,



**FIGURE II.** Meldon Reservoir, looking towards the Meldon Dam, constructed in 1970.

and many more, emphasize the need to defend Dartmoor from further exploitation. While this awareness has led to the founding of the National Park, park status has not offered total protection. For example, still greater problems arose when a bypass around the town of Okehampton was constructed within the Park's limits in the 1970s, even though a number of alternative routes had been proposed. Now the bypass itself is effectively the northwest boundary of Dartmoor.<sup>28</sup>

It would be facile to attempt to define the nature of boundary from the Dartmoor example. On the contrary, a remarkable, even unique, aggregation of circumstances and conditions make Dartmoor a palimpsest of human occupation, beliefs and symbols, enterprise and utilization, ownership and inheritance, rights and obligations, exploitation and evasion, claims and justice, cooperation and tension, industry and recreation, worth and waste, and much, much more, over five millennia. As such, it bears the evidence of the multiple switching of land demarcation, division and boundary definition, and reveals the diversity of interests and the complexities of occupation. While we may challenge past boundaries, our redefinition may be as lasting or as transitory as any on the moor. So we are confronted with the question as to whether the natural limits of Dartmoor are the only "boundaries" that have any significance throughout.

From the conception of limits arises the percept of the edge or limit of a terrain, and this in turn may be culturally regarded as a "boundary." It is the core of my argument here that all boundaries may be traced back from the cultural expression, whether it be wall or wire, to the percept of limitation, and ultimately to the concept that inspires it. When and wherever the "beating of the bounds" takes place, as in Bovey Tracey in 2004, it is the perception that is being awoken, the concept that is being inculcated; the physical boundary remains nonexistent. The evidence of Dartmoor affirms that while, literally or metaphorically, the land bears the scars on its surface, ultimately, those who seek to define its bounds will always be "beaten."

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All images are by the author, except where otherwise noted.



# Poverty as a "Theme Park": Christian Norms and Philanthropic Forms of Habitat for Humanity

ROMOLA SANYAL

Habitat for Humanity's newly created Global Village and Discovery Center presents visitors with a stark contrast between replicas of poor urban housing and new Habitat-built model homes. Inadvertently dubbed a "Slum Theme Park" by its creators, the village and center, on 2.5 acres just outside the organization's international headquarters in Americus, Georgia, is intended to provide middle-class Americans the chance to personally experience conditions of poverty in the developing world. It is also intended to gather funds and attract volunteers for Habitat's international housing efforts. This article explores the meaning and practices of the Global Village and Discovery Center and attempts to understand its principal motivations. It engages different attributes of the project using a variety of theoretical models: the concept of the "tourist gaze"; the theming of entertainment and heritage parks in general; notions of American volunteerism and philanthropy; and the idea of the urban danger zone as a tourist site. In attempting to connect the literature on development with that on tourism, it concludes by suggesting the project may be viewed as representing both forms of "creative destruction" and "destructive creation."

A voyage is now proposed to visit a distant people on the other side of the globe, not to cheat them, not to rob them . . . but merely to do them good and make them as far as in our power lies, to live as comfortably as ourselves.

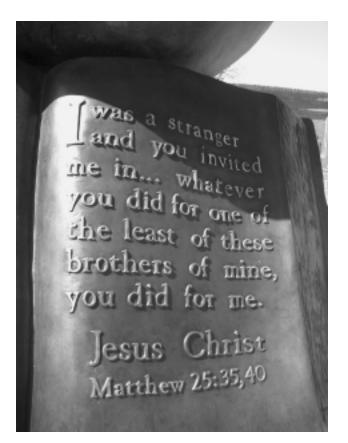
Benjamin Franklin<sup>1</sup>

Americus is a small town tucked away on the plains of Sumter County, Georgia. After passing through vast stretches of empty fields and quiet houses, the town, with a population of approximately 17,000 people, provides a sharp contrast to its rural surroundings.

**Romola Sanyal** holds degrees in City Planning from the University of California, Berkeley, and Geography from the London School of Economics and Political Science. She is currently pursuing a Ph.D in Architecture at the University of California, Berkeley. The county seat, it also contains a few banks, a community college, and several hotels. According to the last census, however, Americus and its surroundings are one of Georgia's poorest areas, with almost 28 percent of its population, who are predominantly African American, living below the poverty line.<sup>2</sup>

The most important buildings in Americus are scattered over a number of city blocks that constitute the world headquarters of Habitat for Humanity. A Christian charity group engaged in building and improving housing around the world, Habitat was founded by Millard and Linda Fuller in 1976.<sup>3</sup> Since then, it has built more than 150,000 houses, providing shelter for about half a million needy people around the world. As the organization has expanded its operations worldwide, it has also expanded its presence in Americus. Today Habitat workers declare proudly that their organization has been able to eradicate substandard housing from Sumter County. As one drives through the quiet streets near its international headquarters, one notices entire areas consisting only of Habitat for Humanity offices and dormitories for visiting volunteers. They give weight not just to the organization's operations, but to its importance to the city itself.

At the end of one street is a site that is sure to catch anyone's attention: a collection of dilapidated shacks and squat-



**FIGURE 1.** Bible sculpture at the entrance of the Global Village and Discovery Center.



**FIGURE 2.** A quilt showing all the countries where Habitat projects are located hangs in the entrance to the Discovery Center.

ter-like structures enclosed by a metal fence. This is part of Habitat's newest visitor attraction, the Global Village and Discovery Center. Inaugurated in June 2003 by former President Jimmy Carter, it was inadvertently later dubbed a "Slum Theme Park" by Habitat cofounder Millard Fuller.<sup>4</sup> However, its entrance might rival any corporate lobby. Beyond the parking lot, visitors walk through a circular space marked by donor walls meant to display the names of anyone who has pledged a hundred dollars or more to the project. The idea is to make the act of donating more appealing to middle- and lower-income groups. Surrounded by these walls is a sculpture of an open Bible, inscribed with a passage from the Book of Matthew (FIG.I).

The Discovery Center building stands only a few feet away — a large space with images and displays that document Habitat's work around the world (FIG.2). From here, a \$5 donation allows one to visit the Global Village. Guides are assigned to groups, while individuals are encouraged to take a self-guided tour; all are handed a Habitat for Humanity "passport" with the names of all the countries represented in the village (FIG.3A,B,C).

The tour begins on a dirt path that winds down to the cluster of dilapidated shacks, or squatter housing, mentioned earlier. This is the poverty-housing section of the Global



**FIGURE 3.** A) Cover of Habitat for Humanity passport for the Global Village and Discovery Center. B) Inside of Habitat of Humanity passport. C) Map of the Global Village and Discovery Center as presented in the passport.

Village. Each shack here is meant to represent the conditions under which poor people live in selected developing countries (FIG.4). The structures, themselves, however, are built with the relatively sturdy American system of 2x4 stud walls, covered with an ad-hoc sheathing of rusted corrugated metal and other materials (FIG.5). Various signs here, both inside and outside the shacks, describe the diseases, pests, and climatic conditions that real residents of such countries are subject to, and pieces of furniture or equipment, often imported from the countries themselves, are carefully arranged to give a better sense of the life there. It is obvious great pains have been taken to authentically replicate the living conditions of poor people in developing countries. In one instance, a pile of tar lies abandoned by the side of a walkway. In another, metal pails filled with water are left under a poorly constructed water tap (FIG.6). Together, all these components aim to re-create the total environment in the villages, or slums, of the developing world.

At the far end of the Global Village, the dirt path emerges into an open field. Here a large sign welcomes visitors to the other part of the Global Village, that which displays Habitat for Humanity prototype housing from around the world. Most of the "Slum Theme Park" is, in fact, devoted to this showcase of Habitat for Humanity housing (FIGS.7-II). Each house represents the model that Habitat has developed for a particular country, with its cost and construction materials listed on a signboard outside, which indicate a range of costs from \$3,000 for a one-room house to \$6,000 for a four-room house. Inside, each house contains culturally appropriate furnishings. Each also contains a stamping seal so each person's "visit" to such countries as Kenya and Haiti may be recorded in his or her complimentary passport.<sup>5</sup> In addition to the individual houses, there are also general exhibits. For example, a hand-operated machine displays how bricks can be made. And, toward the end of the tour, visitors are shown houses still under construction,



**FIGURE 4.** Shacks in the poverty-housing section of the Global Village.

**FIGURE 5**. Shacks built as standard 2x4 stud construction.



such as the prototype Indian and the Sri Lankan houses. Signs outside these list the cultural considerations taken into account during the building process itself.

From every angle within the prototype areas, the squatter settlement looms in the background, a tumbledown centerpiece surrounded by sturdy, well-kept structures. Visitors are told that more prototype housing will be added to the Global Village in the future. However, the only proposed addition to the slum-housing section will be an example of American poverty-housing consisting of a run-down trailer home. This will be matched with a small, but sturdy tract house (FIG.12).



**FIGURE 6**. Simulated poverty in the Village. At the end of their visit to the Global Village, visitors are led back to the Discovery Center. Here two adjacent rooms show continuous videos, and display flashing images of poverty around the world, matched by images of philanthropic work being carried out by Habitat's international volunteers. Finally, before leaving the center, visitors pass a small gift shop where they can buy souvenirs.

Throughout this journey, the slum/squatter settlement is referred to as a village. However, by the end of a tour it becomes evident that what are being portrayed are not rural dwellings but the slum and squatter-like dwellings of the urban poor (FIG.13).

After leaving the Global Village and Discovery Center, one is left asking why Habitat would build such a theme park here, and what purposes the park serves for the organization. Clearly, the park is intended to play a major role in the future economic life of Americus, plagued with some of the lowest per-capita incomes in the state. But the "Slum Theme Park" also seems intended to play an important role in the life of the organization itself.

#### INTERROGATING THE SLUM THEME PARK

This article attempts to answer the questions above and explore the more general meaning and practices of Habitat's Global Village and Discovery Center. The materials used here to understand Habitat's intent include printed documents and brochures, the various signs placed on the site, and material posted on the organization's official websites. In addition to reviewing this literature, the article will engage



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**FIGURE 7.** A) Welcome signs to model homes of Latin America. B) Welcome signs to model homes of Africa and the Middle East.

the Slum Theme Park using a variety of theoretical models. These will include the concept of tourist gaze, the theming of entertainment and heritage parks in general, notions of American volunteerism and philanthropy, and the idea of the urban danger zone as a tourist site. One possible narrative that emerges from these four concepts allows the Habitat theme park to be viewed as a "development" project. Literature on development presents a wealth of case studies of how nonprofit organizations in the West potentially serve the urban poor of the global South. But such literature remains very sketchy in terms of relating these issues to discourses on tourism. The Slum Theme Park is an excellent site to begin making these connections.

Through an analysis of issues of theming, the article also attempts to unpack the ways Habitat encourages volunteerism — a practice which may be seen as implicitly absolving the state of its responsibility to provide basic shelter for its citizens. Simultaneously, however, through its theming of poverty, the park exploits images of poverty without addressing its root causes. In doing so, the park confuses slums with squatting practices, in the process dismissing the complex socioeconomic and cultural factors by which the poor overcome poverty. Through such practices, Habit for Humanity has also fed into a conservative agenda of charitable giving to the deserving poor. Ultimately, therefore, the Slum Theme Park represents not only a perversion of poverty conditions but a reassertion of a neoliberal agenda of altruism, which seeks to cushion the effects of globalization rather than challenge them.

Finally, this article engages in a discussion of the specific biases that may possibly be inherent in the practices of American philanthropy as applied to the field of development



FIGURE 8. Botswana Housing.



FIGURE 9. Tanzania Housing.



**FIGURE 10.** Papua New Guinea housing.



FIGURE II. Model of shared public toilet solution.

with regard to the urban poor of the Third World. Issues of citizenship and the role of First World volunteers in addressing poverty are also problematized. Overall, therefore, the article hopes to explore the complex relationship between First World do-gooders and the Third World needy (FIG.14).

### THE SLUM THEME PARK AS A CONCEPT AND REALITY

The financing and construction of the Global Village and Discovery Center has been an arduous task for Habitat for Humanity. Contributions of \$1.3 million have so far supported the effort since construction began in May 2002, and this number is expected eventually to reach \$5 million.<sup>6</sup> The organization stresses the fact that none of this money was siphoned off from its work overseas. Rather, special donations have been used to construct the park. Credit has, of



FIGURE 12. A reminder of poor housing in America too.

course, been given: those able to finance an entire prototype house have had their names printed on the appropriate marker signs (FIG.15). Those who have pledged smaller amounts have had their names inscribed on the donor wall.

As a "theme park," the Global Village and Discovery Center would seem an unlikely tourist attraction. Every year, however, 10,000 people visit Habitat for Humanity's headquarters. Many are retired people or members of school groups, coming to learn about poverty housing. Others visit while touring sites related to former President Carter.<sup>7</sup> The organization hopes the theme park will allow it to attract more people, particularly from the latter group.<sup>8</sup> Many people are unaware of Habitat for Humanity's work, and the park is designed to encourage them to get involved in housing the poor of the world.<sup>9</sup> Of course, not everyone is enthusiastic about the park and its ideals. According to tour guides, many people who come through the park are skeptical about the organization's mission, and about poverty-alleviation in general.<sup>10</sup>



**FIGURE 13.** Squatter shacks, not slums, serve as the real inspiration for the themed poverty housing in the park.

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FIGURE 14. Habitat's projects around the world.

In addition, Habitat sees the park as a way to boost the local economy. A special train that connects various tourist sites in Georgia will soon make a stop at Habitat for Humanity. This should not only dramatically increase the number of people visiting the Global Village and Discovery Center, but it should provide a boost to other businesses in Americus. Addressing concern for a lack of audience, Millard Fuller has anticipated that approximately 70,000 people would visit the park in its first year of operation. And according to its executive director, most people traveling through that part of Georgia are socially aware because of their interest in Jimmy Carter, and would find it worthwhile to visit the park." Already, the park has welcomed some 10,000 visitors, and it welcomes approximately 1,500 to 2,000 new visitors per month which, according to its executive director, is right on target. With the introduction of the special train, this number should double. The University of Georgia has anticipated the park could have a \$7.7 million annual impact on the local economy of Americus and Sumter County. And in its promotional material, Habitat has claimed the park is intended to benefit both itself and the local economy and tourism industry.<sup>12</sup>

Nevertheless, marketing the Global Village and Discovery Center as a place to learn about Habitat for Humanity and global poverty has been a challenge. Initially, the organization attempted to describe the park as a museum of housing issues. And, ironically, it was not until it moved away from the term "museum" to the more catchy "Slum Theme Park" — at first only as part of a casual reference by Millard Fuller — that tourism reporters became interested and began writing reviews of it for their newspapers.<sup>13</sup> The organization, though uncomfortable with the term, continues to use it as a way to provoke increased visitation.<sup>14</sup> Once visitors are on site, the organization hopes to change their views and entice them to either donate to the organization or join one of its programs.

One tour guide mentioned how it is technically inappropriate to call the Global Village and Discovery Center a Slum Theme Park. "It doesn't have rides and it is not meant to be only fun. It is meant to show Americans how most of the world lives."15 She went on to explain how the new model homes of the Global Village may appear primitive, but that Third World residents today live in much the same way Americans did during the eighteenth century. Habitat is attempting to improve their standard of living to the equivalent of America in the early twentieth century, she said.<sup>16</sup> The guide, however, revealed a very important aspect of the park - that the squatter shacks had to be rebuilt several times to finally withstand the weather. This underscored how theming lies at the heart of the operation. To maintain structures built with corrugated sheet metal and 2x4s is easier than using more authentic materials such as thatched roofs.17



**FIGURE 15.** South African model house — cost \$5,700. Sponsored by Dow Chemical Company.

#### THEMED ENVIRONMENTS AND THEME PARKS

As with any themed environment, the Slum Theme Park attempts to simulate reality in a sterilized environment. Fuller, in an interview recorded for the Habitat website, claims that because people cannot go to countries such as Kenya, Tanzania and India, the organization must bring aspects of those countries to America.<sup>18</sup> In this simulation of various countries and their substandard dwellings, however, the actual inhabitants are absent. Instead, pictures of inhabitants living in such poor areas and ominous signs stating such facts as "1.2 billion people live in poverty around the world" are presented to visitors. The park thus enables poverty to be viewed from a safe distance. Visitors may travel through the countries and their "slums" without having to encounter any real danger - or, for that matter, having to confront the real people who live in these environments. In this way Habitat for Humanity is able to manipulate the tourist experience to gain visibility and solicit donations.

In fact, it would be detrimental to allow real people to live in the park. Aside from having to meet building codes, real slum dwellers would create a negative experience for visitors. In a similar vein, making the place too authentic would also be deeply problematic.<sup>19</sup> In one newspaper interview, a park official noted,

We had to make sure it didn't look too nice, but it also had to be safe. At a certain point, we had to stop making it too realistic. We can't have stagnant water and naked children running around.<sup>20</sup>

One gets an uncanny feeling walking through this socalled slum. Dilapidated buildings and streets strewn with fake tar are experienced without any unpleasant odor or the possibility of stepping on unsanitary or dangerous objects. Even protruding hazards are neatly labeled to draw attention to the sorts of things slum dwellers must live with daily. Poverty is thus created as a sanitized theme through which people can construct modern identities vis-à-vis an underdeveloped other.

Scott Lash and John Urry have argued that the experience of modernity is fundamentally based on the experience of movement, and central to this experience has been the social organization of travel. This includes not just the aspect of moving people from one place to another, but packaging places for the consumption by visitors.<sup>21</sup> In this regard, Mike Robinson has pointed out that tourism is a First World ideology, and that most of the people engaging in tourist activities are overwhelmingly from the First World. There are global impacts to this hegemony of First World tourism:

Tourists, by virtue of their ability to "gaze," effectively reaffirm the cultural dominance of consumption and its capitalist framework. Indeed, one can cynically argue that inequalities — the very presence of poverty, underdevelopment, and the perceived threat of environmental degradation — can add to the tourist experience.<sup>22</sup>

In fact, it is precisely this ability to consume places of difference that allows for the full realization of the experience of modernity. Dean MacCannell has argued that it is through production and consumption of tourism that the modern subject is created. Thus, the growing attraction of disparate areas of urban centers, or of violent acts of crime, are central to the creation of an "us vs. them" dichotomy or as MacCannell has put it, that allows the "insider/outsider" dualism to play out. The performance of tourism, therefore, is not simply about the consuming of places, but about Orientalizing the other in order to create one's own identity. As MacCannell has pointed out:

A touristic attitude of respectful admiration is called forth by the finer attractions, the monuments, and a no less important attitude of disgust attaches itself to the uncontrolled garbage heaps, muggings, abandoned and tumbledown buildings, polluted rivers and the like. Disgust over these items is the negative pole of respect for the monuments. Together, the two provide a moral stability to the modern touristic consciousness that extends beyond immediate social relationships to the structure and organization of the total society.<sup>33</sup>

The idea of what tourists consume and who they are has been the subject of research by many distinguished scholars. For example, John Urry has captured the complexity of the encounter between visitors and locals both in the everyday and the extraordinary practices of public space.

Tourism results from the basic binary division between the ordinary/everyday and the extraordinary. Tourism experiences involve some aspect or element that induces pleasurable experiences which, by comparison with the everyday, are out of the ordinary. This is not to say that other elements of the production of the tourist experience will not make the typical tourist feel that he or she is "home from home," not too much "out of place." But potential objects of the tourist gaze must be different in some way or other.<sup>24</sup>

Urry has also discussed the importance of tourists being able to see everyday aspects of social life carried out in unusual contexts, or ordinary activities taking place in unusual environments. Hence, the character of the gaze is central to tourism, and is linked more generally to the character of consumption. The objects of daily use placed in the houses by Habitat for Humanity, therefore, attempt not only to capture the lives of the absent inhabitants, but also to present them as objects of consumption for visitors.

Urry has further written that what is important in seeking satisfaction is not so much the consumption of products, but the anticipation stemming from imaginative pleasureseeking.<sup>25</sup> Hence, post-Fordism plays a key role in the development of theme parks and themed environments. But this gaze, as Nezar AlSayyad has pointed out, differs from place to place. In particular, AlSayyad has called the process by which people engage with the built environment, and are engaged by it, "engazement." He has defined this as "the process through which the gaze transforms the material reality of the built environment into a cultural imaginary."26 While the desire of people to view environments vastly different from theirs is not a new phenomenon, the proliferation and scale at which environments are being themed and designed today to lure consumers is far greater than ever before. In a post-Fordist economy, and particularly a consumer society, consumption of objects and people has become an essential part of everyday life.<sup>27</sup> The Slum Theme Park, therefore, is readily accepted by many people as a space where those who cannot afford to travel can "discover" the world and "learn" about the social and cultural conditions of different countries.

David Clarke has described the ways in which current forms of consumption differ from those exercised before. In making the connection between society and consumption, he noted:

Consumption is no longer just one aspect of society amongst others. In a fully fledged consumer society, consumption performs a role that keeps the entire social system ticking over.<sup>28</sup>

Indeed, the shock factor associated with looking at "authentic" depictions of the appalling conditions in which many of the world's poorest people live is fundamental to not only bringing tourists to the Global Village, but also encouraging them to contribute to Habitat for Humanity. In this regard, the so-called slums are representations not only of poverty, but also of un-modernity. Volunteers, therefore, not only bring hope to "God's people" (as the promotional video states), but progress to the materially backward and politically repressed. Because of this, it is equally important to recognize the historical realities and political economy behind the rise of theming and heritage discourses.

AlSayyad has also noticed that while the First World and Third World are both interested in the "other," they have fundamentally different motivations. He attributed this difference to earlier relationships of colonialism, political nationalism, and economic dependency. In particular, "the First World appears more interested in consuming the cultures and environments of Third World societies by reminding us that the First World nations, organizations and individuals are the main advocates and financial patrons for the preservation of Third World built environments as part of a 'universal' heritage that the 'natives' may not appreciate." Yet in doing so, these same organizations are also uncomfortable with many of the social practices within those societies whose traditions and norms they claim to want to preserve. This is especially the case when these diverge from "established Western standards of human rights, gender equality and environmental sustainability."<sup>29</sup> It is possible in this vein to view Habitat for Humanity as such an organization which is engaged in "doing good" for the unfortunate Southern "other."

### PROBLEMATIZING THE SLUM THEME PARK IN AN AGE OF CONSUMERISM

How do we start to experience poverty, and how do we start to relate to the housing conditions of the world's poor? I will now shift the analysis to a framework based on development studies. Jorge Haroy and David Sattherwaite have pointed out that housing is only an aspect of poverty, not the cause of it. Thus, the poor are more concerned with improving their overall economic condition than they are with paying full attention to their form of shelter. Housing is thus best understood as an ongoing process of improvement over time.

Policy-makers and so-called "housers" who place emphasis on a finished product misunderstand this relation between poverty and housing when they insist on an instant finished product.<sup>30</sup> What is even more problematic with regard to Habitat for Humanity is its stated goal "to eliminate all substandard housing from the face of the earth."<sup>31</sup> This is not just unrealistic in scope and scale, but naïve in its understanding of housing processes and policies and the complexities of poverty and informality.

Janice Perlman has long argued that urban residents labeled "marginal" are not disenfranchised from the city around them. In fact, they are a deeply integrated part of urban society, and strive to improve their lives continuously. Squatting is one practice these so-called marginals employ in their attempt to make a living.<sup>12</sup> The Habitat theme park, however, fails to represent any of this sense of agency on the part of poor people. In part by invoking the label "Slum Theme Park," rather than "Squatter Theme Park," Habitat is thus creating the illusion that the housing conditions of poor people in developing countries are caught in an irreversible process of deterioration.

By formal legal definition, slums are areas of cities whose structures do not meet building codes. They may have acquired this status because the structures have deteriorated over time, or because the code standards themselves have risen. But the very notion of a Slum Theme Park would seem to involve a concept of housing whose capacity for change and improvement is limited, and which rests on an implicit assumption that housing for the urban poor is a static physical reality, not a vibrant urban process. Indeed, in its representations at the theme park, Habitat does set housing up as the product of a never-ending cycle of poverty. According to this view, as a manifestation of permanent poverty, the house can only be upgraded through the help of Western philanthropy.

Reconciling the aims of a housing theme park with a real discussion of agency among the urban poor would indeed be an arduous task. It might even conflict with the purposes of an organization that believes that improving housing conditions is a way to break the cycle of poverty. The subtext of the Habitat Discovery Center and Global Village is that people in developing countries have the same hopes and aspirations as people in America. And the only way to realize their hopes is to be able to live in a decent, finished house.

#### VOLUNTEERISM AND PHILANTHROPY

By the middle of the last decade of the twentieth century there were almost a million American philanthropic nonprofit bodies . . . the combined income of these organizations was more than \$400 billion. Together they accounted for 6 per cent of the American GDP . . . and employed 8 million people.<sup>30</sup>

In the developing countries of the South, the so-called Third World, there has recently been a tremendous expansion in the number of voluntary self-help organizations. Today these nonprofit organizations help shape the discourse on poverty and the role of wealthy nations and individuals in the development of the urban poor.

In particular, Robert Bremner has written that ever since the beginning of the Republic, "Americans have regarded themselves as unusually philanthropic people."<sup>34</sup> During the twentieth century the celebration of American philanthropy reached great heights, as documented in newspapers and other chronicles of American public life. One may even say that the idea of "Doing Good in the world," is a fundamentally American principle of life.<sup>35</sup>

Many consider Cotton Mather (1663–1728) to have been the father of American philanthropy. Mather regarded the performance of good works as an obligation owed to God, rather than a means of salvation. He argued that to help the unfortunate was an honor, a privilege, and an incomparable pleasure.<sup>36</sup> In this sense, Habitat for Humanity's theme park may be seen as a reflection of early-twenty-first-century American philanthropism. However, it is equally possible to see it as an example of how volunteer and nongovernmental organizations engage in projects to help the poor elsewhere, while preserving the self at the core.

According to a promotional video, the Global Village allows people to experience Habitat's programs firsthand. And in describing these, one volunteer even invokes the philosophy of a "global ministry," of a Biblical philosophy of helping others by carrying a "neighbor's burden."<sup>37</sup>

However, philanthropy today also provides a moral platform for Christian Westerners to engage in civilizing the East. Gayatri Spivak has argued that one basis for the colonial project was the idea that white men had the capacity to save brown women from brown men.<sup>38</sup> In its efforts to improve the lot of the poor, the work of Habitat for Humanity is little different. Indeed, one may view its emblematic programs as a way for white middle-class Westerners, particularly in the U.S., to engage in saving the brown or black poor from their bureaucratic national states and failed housing apparatuses.

Such volunteer programs also allow the white middle class to achieve a sense of national identity vis-à-vis their dependent other. Thus, in a political system that gives tremendous tax breaks to the rich, the social welfare of the urban poor is left to faith-based groups under the rubric of "compassionate conservatism."<sup>39</sup> And volunteerism gives those who are haunted by their religious conscience an opportunity to reclaim their sense of lost citizenship from a political process that has marginalized them.

Volunteerism, itself, may be prompted by a number of factors. Among these are benevolence, justice and reciprocity, enlightened cherishing, respect for persons, self-direction, and moral leadership.<sup>4°</sup> However, it may be most appropriate to view the kind of volunteerism that distinguishes Habitat for Humanity as a continuation of the ideals of Jane Addams. A distaste for pauperism, as defined by the philosopher M.W. Martin, may best explain the work of Addams — and a century later that of Millard Fuller. Pauperism may be defined as a dependency of philanthropic recipients on the charity they receive. One result of such dependency is a lack of interest on the part of the recipient in any work or other activity that might improve their lives. This is precisely the attitude that Habitat for Humanity seeks to erase.<sup>41</sup>

A key element of Habitat for Humanity's program is the use of sweat equity by the charity recipients themselves in addition to the contributions of the organization's own volunteers. Habitat is explicit that their model of partnership requires a minimum input from the would-be owners. Its narrative is that the residents, alongside the volunteers, spend over 3,000 hours building a house. Habitat then "sells" the house to them at cost by means of a no-interest mortgage. Thus, not only are the new owners/residents required to invest their own sweat equity, they are obliged to make regular payments for their house over next twenty years. Default on a payment technically gives Habitat the right to foreclose and sell the house on the open market. And this is the case not only in the U.S. but in all of Habitat's projects around the world. Hence, instead of getting assistance from the state, individuals end up indebted to a private philanthropy instead of a commercial bank.

One way to see the success of such a program is that it results from a convergence of social and political forces. On the one hand, the governments of many developing countries want to shift the burden of the urban poor onto the private sector. On the other, disenfranchised and predominantly middle-class Americans are offered a philanthropic activity (building houses for poor people in foreign lands) that allows them to reclaim their sense of citizenship. Coupled with globalization processes and austerity policies, the Third World poor are left at the mercy of such projects, as the state continues to withdraw from any obligation to provide social services. A climate is thus created where philanthropy not only becomes a means by which middle-class volunteers may lay claim to American citizenship and Christian morality, but where volunteerism and philanthropy become the modus operandi for developing the global South.

### THE SLUM THEME PARK AND THE TROPE OF THE URBAN JUNGLE

Observers of the contemporary city have described the late capitalist urban condition as characterized by a trend toward aestheticization, where the primacy of the visual and the centrality of the image have reduced the city to a landscape of visual consumption, an object to be gazed upon, or a spectacle. Current urban design practices are said to nourish this appeal or the embellishment of the material world by giving precedence of the facade to the creation of urbane disguises, thereby reducing the effect of much architecture to two dimensions.<sup>44</sup>

It is also possible to view Habitat's Global Village and Discovery Center through the trope of urban danger zones, using the growing literature on the effects of political instability and violence on tourism, particularly to Asian cities.<sup>43</sup> The majority of this work has focused on the rearticulation of touristic images, conceptions and fantasies about postcolonial Southeast Asia.<sup>44</sup> Kathleen Adams, for one, has argued that the narrative images produced by "urban danger zone" travelers have recast the cities of the Third World as urban jungles.<sup>45</sup> "Urban-danger-zone tourism is very much a product of the global era," she has written. Fueled by global politics, the itineraries of danger-zone tourists are inspired by the imaginary of tumultuous zones of poverty. As such, they have the capacity to subtly shift the sensibilities of their participants.<sup>46</sup>

It is possible to view the Slum Theme Park's visitors as participants in this project. But unlike real travelers, visitors to the park seek to experience the local places of the poor urban Third World in simulated environments which will enable them to escape the repercussions of actual experience. The sense of authenticity and difference such people receive, therefore, consists entirely of visual experience, sanitized in every respect from other unpleasantries — olfactory or otherwise — that visitors to real urban danger zones encounter.

Adams used a passage from a novel by Alex Garland to capture the mindset of many danger-zone tourists:

I wanted to witness extreme poverty. I saw it as a necessary experience who wanted to appear worldly and interesting. Of course witnessing poverty was the first to be ticked off the list.... Then I had to graduate to the more obscure stuff... tear gas... hearing gun shots fired, a brush with my own death.<sup>47</sup>

It is unlikely that the visitors to Habitat's Slum Theme Park are interested in an equal level of danger, otherwise they would seek out the real slum sites that have inspired the park. However, one cannot ignore the fantasy allure of the urban danger zone as a possible motivation for their visit.

### CONCLUDING THOUGHT: CREATIVE DESTRUCTION OR DESTRUCTIVE CREATION?

The representational aspect of human agency, or its absence, in the Slum Theme Park can be viewed as an application of the Marxist concept of creative destruction.<sup>48</sup> But viewing the park outside of Habitat for Humanity's own broader agenda would be inappropriate.

However, one may equally view the well-meaning efforts of Habitat for Humanity and its volunteers in the selective building of houses for poor families in the Third World as "destructive creation." In this respect, the negative impact of philanthropic intent may be seen to outweigh the significance of actual physical structures added to the housing stock. By insisting that poor people in the Third World have the same aspirations as middle-class Americans, Habitat for Humanity is in effect collapsing all modes of survival into a linear understanding of "progress." In particular, in this context money that could have been allocated by a poor family to other economic pursuits must be used to pay off the costs of a complete structure when there may be more pressing and immediate life demands.

One might liken the impact of the Slum Theme Park in this regard to that of a shopping mall. The suburban shopping mall, according to Margaret Crawford, managed not only to channel investment away from older urban areas, but to invert public space within an enclosed space of surveillance. In the process, it caused the degeneration of consumer space in the city center. However, the very process that once weakened downtown areas was ultimately reversed, as cities decided to incorporate the strategy of building malls into downtown revitalization plans.

Crawford's example adds a twist to the straightforward application of the concepts of "creative destruction" and "destructive creation" to the case of the Slum Theme Park. Here also may lie the positive possibilities of Habitat's park. The exercise of appropriating the culture and physical environments of the other (Third World squatters and Third World slums) to allow a volunteerist American middle class to achieve a sense of self-satisfaction and self-realization can ultimately be looked upon positively if it helps the margin or the periphery revitalize itself by mimicking some of the strategies of the center or the core. But this is only possible if one were to view the relationship between the shacks of the theme park and the slums that inspired them in the same way one might view the positive impact of a regional mall within a campaign of inner-city revitalization.

When Habitat for Humanity completes a house, there is always a ritual Christening that involves the presentation of a Bible to the new owners at a moving-in ceremony. Similarly, by signing on to a mortgage program for the house, the poor recipients of philanthropic largesse are portrayed by Habitat organizers as the "lucky ones" or "the lucky family." However, similar acts of philanthropy toward the neighbors are contingent on repayment of the original "loan," because without such repayment, the local affiliate will run short of cash to fund similar projects in other parts of a settlement. The organization emphasizes that the provision of each unit is only a "small drop in the bucket." But this may also be looked upon as a small drop of destructive creation in the bigger bucket of what is ultimately a process of creative destruction.

One can almost imagine the expressions of people traveling to Americus from one of the developing countries whose housing is depicted in the Global Village. However, history offers lessons here, for one may argue that a similar situation took place more than one hundred years ago at the Paris World Exposition of 1889. Among the many regular and symmetrical pavilions scattered over those exposition grounds one stood in strange contrast to the rest (FIG.16). The Egyptian exhibit was not only unusual in its "crooked" layout, but also because of its uncanny ability to represent the authenticity of Cairo by reproducing parts of the city down to their minutest detail.<sup>49</sup> So accurate was the translation of Egyptian urban space to the Paris exhibition that the Egyptian delegation traveling to the Eighth International Congress of Orientalists were disturbed at the ability of the French to import not only donkeys, but also dirt with which to plaster



FIGURE 16. The Egyptian exhibit at the Paris Exposition of 1889 portrayed traditional Egyptian poverty. From Delort de Gleon, La rue du Caire: l'architecture arabe des Khalifes d'Egypte a l'Exposition universelle de Paris en 1989 (Paris: Plon, 1989).

the buildings to make them look more "authentically" Cairene. However, upon entering a mosque, the Egyptian scholars found that the carefully replicated facade hid an interior space containing a café with men and women dancing to music. And eventually the Egyptian visitors, themselves, like the Egyptian exhibit, became subsumed by the European gaze — objects to be appreciated for their unusual nature.<sup>50</sup>

Might foreign visitors to the Slum Theme Park, presented with a depiction of poverty and squalor which supposedly represents their home environments, not go away with similar feelings of resentment? But perhaps these foreign visitors do not matter after all. Like the Paris exposition of almost a century and a half ago, those who matter most are the local people. This time they are having the world of poverty brought to them to experience in their own backyard.

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48. The term "creative destruction" was actually coined in 1942 by Joseph Schumpeter in his work, *Capitalism*, *Socialism and Democracy*, to denote a "process of industrial mutation that incessantly revolutionizes the economic structure from within, incessantly destroying the old one, incessantly creating a new one." It builds on Marx's idea of creative destruction, which very broadly discusses the destructive power of capitalism and its view that in order to create something you have to destroy something. Schumpeter used the the term "creative destruction" in his criticism of Marx.

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# Use, Appropriation and Personalization of Space in Mexican Housing Projects and Informal Settlements

ELENA TAMÉS

Given the great need for housing, there is today in Mexico a low-income housing construction boom, which is favoring the development of large, standardized projects. At the same time, informal settlements continue to expand and consolidate, providing flexible environments and opportunities to those who cannot access "formal" options. This study aims at understanding how each of these built environments facilitates or hinders the fulfillment of different needs. It analyzes two housing projects and two informal settlements, and concludes that flexible environments have more potential to fulfill the needs of low-income families.

As in most developing countries, today in Mexico there is a great need for housing. The shortage is estimated to be around seven million dwellings, and continues to grow each year. People who cannot afford a home through the market or through traditional mechanisms of lending, have two options. The first is the "formal" option, which consists of applying to programs or projects provided by state housing institutions. Projects built as part of these programs must comply with existing zoning and building codes; and in order to obtain a unit there, people must meet given criteria established by the institution. In these programs standardized housing production has been seen an ideal way to reduce costs and produce dwellings in large quantities.

Today, even though many alternatives have been devised in the last four decades, all one has to do is look at an aerial photograph of Mexico City to see how predominant this model of formal housing production has been. This government-sponsored low-income housing boom has been encouraged by a number of factors, including the transformation of housing institutions into financial entities, the availability of credit, and the potential for profit by private developers. This formal housing option was estimated last year to have produced around 430,000 units — which, while a significant number, is still insufficient to meet the great housing demand that exists in the country.<sup>1</sup>

Elena Tamés was born and raised in Mexico City. She is a graduate of the Universidad Iberoamericana and the University of California at Berkeley, and has worked for a several architectural offices in Mexico City, and for FOSOVI, an NGO dedicated to low-income housing in Mexico. In the face of the great demand for housing in Mexico, however, many other people have settled (in some cases by choice and in others for having no alternative) for a second option. This is to live in some type of "informal housing" a term which includes a wide range of alternatives that do not comply with building, zoning or legal codes. Within this range of informal housing types, "squatter or informal settlements" may be defined by the following characteristics: the land used has not been zoned for residential development; land tenure is insecure; the state is tolerant or ignorant of the settlement; speculative capital is involved (i.e., the land is not free); and the building process is of a self-help nature.

#### THEORETICAL DEBATE

The importance of informal settlements has been recognized since the 1960s and 1970s when their size and rapid expansion and the increasingly large percentage of the population they housed led to a new field of research. People from many disciplines tried to explain the reasons for their existence and the mechanisms and actors involved in their creation, as well as who was living in them and why. Early on, the prevailing notion was that informal settlements were marginal to the rest of society, and those living in them were seen as vicious, criminal, and politically radical, unable to break free from the "culture of poverty." Janice Perlman was the first to challenge this notion, which she called "the myth of marginality." She argued that inhabitants of informal settlements "... have the aspirations of the bourgeoisie, the perseverance of pioneers, and the values of patriots. What they do not have is the opportunity to fulfill their aspirations."2 In 1989 Martha Schteingart estimated that informal settlements, combined, represented at least 50 percent of all housing in Mexico City.3

At the same time, people began to recognize the shortcomings of "formal" mass housing projects. John Turner broke new ground in 1976 when he explained how people who built in informal settlements followed a different set of priorities than those imposed by public housing programs. Using "housing" as a verb rather than as a noun, he tried to make clear that the function of a person's home went beyond meeting building codes and physical standards, and that other factors, such as access to jobs and flexibility, were also important.4 When people were in control of the building process, they could weigh the different alternatives that were available to them, and this more varied set of priorities led to more appropriate environments. From Turner's ideas emerged a new "self-help" paradigm, which gave the central role of decision-making to the users, and which cast the different financial and housing institutions largely in a supporting role. Programs such as upgrading, sites and services, and core housing were accordingly devised as a new approach to the housing problem.5

This new and innovative approach was soon subject to criticism by left-wing academics, however. They argued that rather than contributing to a long-term solution, self-help programs not only failed to address the roots of the housing problem (which could only be solved by promoting income redistribution) and helped reproduce the status quo<sup>6</sup>, but they also burdened their recipients with labor and shifted responsibility from the government to those in need. Indeed, many self-help programs did misinterpret "participation" to include only "labor." And, as Turner pointed out, "... the obligation to build your house could be as oppressive as being forbidden to do so - the corollary of the freedom to build your house is the freedom not to have to!"7 Perlman also recognized this misinterpretation: "To the users, participation in housing relates to choice over the decisions that affect them. . . . Once this is controlled and organized as part of a 'housing project,' the point is defeated."8 The real meaning of "participation" then should be clarified, since this marks a crucial difference between a self-help approach that is "empowering" and one that is merely "enabling."

While it remains important to address the issues presented in this debate, as Peter Kellett has noted:

Despite the theoretical eloquence of many of the above views, the reality on the ground demanded more practical responses. The proportion and scale of the urban population throughout the world living in informal housing areas was accelerating rapidly. . . . In addition, conventional housing approaches, which led to the demolition of informal housing and its replacement by "Western" models of state-subsidized and state-planned social housing projects, were proving both socially and economically expensive. As a result, receptivity increased to what was soon to become the new self-help orthodoxy.<sup>9</sup>

Eventually, Turner's ideas were even adopted by the World Bank, and became a widely accepted form of housing delivery. Evolving from these ideas, nowadays the United Nations defines Community Empowerment as one of the criteria that defines a "best practice."<sup>10</sup> Ismaïl Serageldin has also proposed an "architecture of empowerment" as a "built environment which responds to the needs of the poor and destitute, while respecting their humanity and putting them in charge of their own destinies."<sup>11</sup>

The self-help housing debate then, is fundamentally an ideological and theoretical debate between the Marxist point of view and Turner's conservative anarchism (as he positions himself). It centers itself in the political, social and economic realms, leaving the spatial dimension largely in the back-ground.<sup>12</sup> Given that the first three areas of analysis are the realms in which change can happen — and that change does not happen through the spatial realm (as environmental determinists have proposed) — it is understandable that the spatial dimension has been neglected. This study by no means aims to solve the housing debate by analyzing its spatial dimension. But it does seek to rescue the physical and morphological analysis that has been obscured by more theoretical approach-

es. I will therefore focus on those issues within the housing debate that affect built form directly — in particular, the contrast between centrally administered housing systems and informal or "spontaneous" systems.<sup>33</sup> As Turner has noted:

Centrally administered housing systems are inevitably and necessarily standardized with regards to their procedures and the goods and services they provide. Housing schemes have to be financially viable, and this means limiting the number of alternative locations. The units built must be highly standardized; and often most importantly, the systems of financing and the forms of tenure are also standardized and imposed . . . extremely rigid systems are also imposed on extremely variable demands.<sup>14</sup>

By contrast, flexibility is the key characteristic of the informal settlement's built environment. Indeed, it is the main reason why this form of production can accommodate variable demands and adapt and transform over time as needed, as opposed to more rigid centrally administered systems.

For those of concerned with the spatial dimension, I believe there are valuable lessons to be learned form the ways in which the built environments resulting from these two different modes of housing production are used and adapted by their users — lessons that could be applied to different political contexts and housing production models.

#### THE STUDY

How are people's needs met in different environments? Which practices are present in all settlements, and which are rather a mechanism of adaptation to a particular environment? How do people manipulate and change their environments to meet their needs? What do these uses and transformations tell us about their residents, their needs, and their aspirations?

It is possible to study the similarities and differences between mass, standardized housing projects and informal settlements from many different angles. Authors such as Castells, Turner, Perlman, Peattie, Lommnitz, Schteingart and Duhau have documented the economic, social and political dimensions of informal settlements. Others such as Rapoport, Kellett and Napier, Drummond and Opalach have focused on their spatial dimension, usually as a subcategory of vernacular architecture. A few (Caminos, Turner) have focused on the efficiency of informal settlements in terms of infrastructure costs and use of land. Meanwhile, studies of public housing projects have mainly focused on the satisfaction of residents. Among these are studies by Schteingart, Weisenfeld, Villavicencio and Cooper, to name a few. Other authors, such as Tipple and Tawfig, have examined the physical transformations people make to public housing to enable their units to better meet their needs.

This study aims at integrating these points of view in order to achieve a greater understanding of the built environ-

ment. It will focus on the relationship that the user establishes with his/her built environment, and it will analyze how the built environment in turn reflects some of the theories that have been put forward about the characteristics and processes that informal settlements incur over time - and about the people who live in them. In general terms, the findings here confirm the importance of factors that have been identified with regard to other Latin American cities. Among these are the heterogeneity of the residents of informal settlements (Perlman in Brazil); the importance of income-generating activities in the dwelling (Kellett in Colombia, and Perlman in Brazil); and the practice of sharing the dwelling with kin, which also applies in countries of Africa and Asia (Tipple). However, rather than trying to find generalized practices across different environments, the relevance of this study to other cities is that it has devised a methodology to analyze not only the similarities but the particularities of different contexts in relation to each other. The purpose of this study therefore is to go beyond supporting or defending any one mode of housing production, to understand the specific mechanisms through which a standardized vs. a flexible environment can support or hinder certain activities, intentions and relationships.

This study is particularly relevant at a time when Mexican housing policy favors the continued development of large housing projects, some containing as many as 11,000 units.<sup>15</sup> It is important today to analyze whether these large developments respond to the needs and priorities of their inhabitants. At the same time, it is now possible to study informal settlements in their later stages of consolidation which means that many of the constraints they initially faced have been overcome, and a fuller understanding of their potentials and shortcomings can now be realized. This study calls for reflection on whether this mode of solving the "quantity" of the housing problem is not creating one of "quality."

#### METHODOLOGY

Fieldwork for this study began in 1999 and was complemented by further analysis and fieldwork during the summer of 2002 (observation) and spring of 2003 (interviews and surveys). The work began as part of my thesis to obtain the Licentiate in Architecture at the Universidad Iberoamericana.<sup>16</sup> It was continued as part of a 2003 Master of Science in Architecture degree, which I received from the University of California at Berkeley.<sup>17</sup>

The work consisted of comparing two housing projects and two informal settlements. Such a dual comparison was thought to be useful because it would enable questions generated at one half of each pairing to be asked at the other. This would help determine whether a pattern or trace observed in a given project or settlement might represent a generalized practice or a mechanism of adaptation specific to that environment. The main strategy used during the fieldwork was the observation and analysis of physical traces. This yielded information on *behaviors*, and thus on the ways people use, transform, appropriate and identify space. The observations made were recorded on a map and accompanied by photographs. The following major categories of analysis emerged from the observation.

*Public vs. Private.* The built environment was examined to discern how boundaries were established to separate public and private realms and control the use of space. These realms were also related to notions of ownership and territoriality.<sup>18</sup>

*Personalization and Adaptation for Use.* This included examination of a number of factors: state of maintenance, litter, missing traces (used vs. abandoned areas), appropriation of public areas, displays of self (identification and group membership), graffiti, government and political party propaganda, patterns of differentiation, and ways dwellings were similar or different in each settlement.<sup>19</sup>

*Use of Space*. This included identification of activities as they were made evident through facade design and public messages.

The method chosen presented two main shortcomings. The first was that it dealt with images, and the force of concrete visual impressions can be very powerful. Thus, an image from an occasional observation, especially if taken out of context, can be misleading. The second was that this method made it very easy to elaborate a hypothesis about causes, intent and sequence, when the trace alone was not enough to prove the hypothesis. To avoid being misled in this sense, a detailed registration of the frequency of the traces was made, and emphasis was placed on those patterns and traces that were most frequent.

Eventually, all the hypotheses that emerged from the physical analysis were tested through focused interviews, surveys, and literature reviews. In-depth, focused interviews lasting around two to six hours each were made with five families or head of families in each of the informal settlements (ten total). In order to answer questions of mobility, given the contrasts in levels of consolidation found in the informal settlements, 70 surveys in Dos de Octubre and 58 in Lomas Altas de Padierna were carried out.<sup>20</sup> Ten to fifteen focused interviews of approximately one hour each were carried out in the housing projects.

#### THE CASE STUDIES

The area composed by Cuautitlán Izcalli, Coacalco, Tultitlán and Tultepec has grown mainly through housing projects sponsored by state housing institutions. This has made it possible for these municipalities to achieve higher levels of infrastructure and basic services than the median for the co-urbanized municipalities.<sup>21</sup> The housing projects studied were both located in this area of great housing project growth (**FIG.I**).



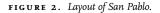
Mexico City's Metropolitan Zone

**FIGURE 1**. Location of the settlements studied. Original map taken from Villavicencio et al., "Condiciones de vida y vivienda de interes social en la Ciudad de Mexico" (UAM, unidad Azcapotzalco, edit. Porr[ua, 2000). Reworked by author.

The first project, San Pablo Tultepec, is located at the edge of the municipality of Tultepec. It was promoted by the CTM, Confederación de Trabajadores de México (Mexican Worker's Confederation), and built between 1982 and 1986. It covers an area of 80.7 hectares and has a total of 3,858 units. The project design and layout follows the superblock and multifamily apartment ideas derived from the Modern Architecture movement (F1G.2). It is organized in forty superblocks, each containing sixteen three- and four-story buildings with six and eight units respectively. In the center of the project, and along one of its edges, several areas are subdivided to contain twostory duplex homes. In general, the buildings are also situated in a way that creates interior plazas in a chessboard layout.

The second project, La Palma, is an example of a new type of housing being built (in the last ten years) by private developers. It is located in the municipality of Coacalco, very close to San Pablo. Developed by Casas Geo and finished in 1993, it covers an area of 40.54 hectares, with a total of 1,873 dwelling units (FIG.3).

Casas Geo is one of the most important private lowincome housing developers in the country, and the one which has the most solid and explicit architectural and urban proposals. Geo's design principles have taken into account the criticisms of superblock layouts, and instead provide small duplex houses, clustered around parking, with a securi-



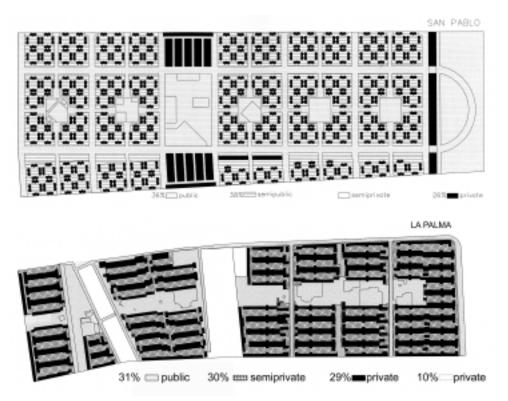


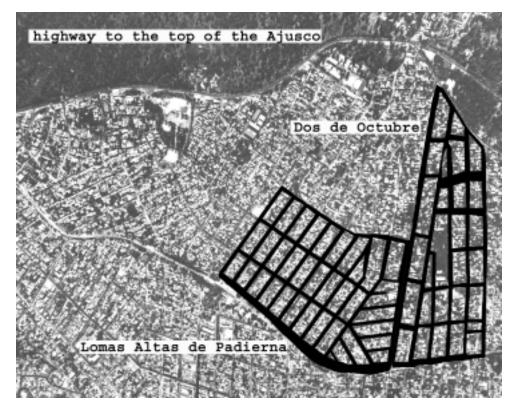
FIGURE 3. Layout of La Palma.

ty control house at the entrance. There is a pedestrian service corridor in the center of the project, along which schools and commercial establishments are located.

The area called "Ajusco Medio" is located on the skirts of Ajusco hill in the Tlalpan Delegation at the south of the Federal District. Two neighborhoods in this area were chosen for study: Dos de Octubre, and Lomas Altas de Padierna (FIG.4). In the 1960s and 70s the city began to grow to the south, toward the hill, and at this same time the families of *ejidatarios* in the area had grown extensively and needed additional housing space.<sup>23</sup> Although *ejido* land is designated for agricultural purposes and cannot be sold, the *ejido* members may demand land for their own housing. Originally, this was intended to be only a small "urban *ejidal* zone." But when the number of new house plots created exceeded the number needed, the law allowed the *ejidatarios* to sell them to "*avecindados*" (people who are not members of the *ejido*). Throughout Mexico City this is a frequent mechanism by which the door may be opened to widespread urbanization of *ejido* land.<sup>24</sup> And in Ajusco the creation of this new urban zone, together with the pressure for growth in this sector of the city, eventually created a speculation process in which persons outside the *ejido* — and even the authorities participated. Thereafter, the complete urbanization of Ajusco was carried out through a series of forceful invasions, violent removals, frauds, and direct purchases from the *ejidatarios*. The number of actors and the complexity and juxtaposition of mechanisms used to obtain land made this a conflict-ridden, violent area during these early stages of urbanization.

In an interview, one woman described how she experienced those first years:

The bad persons were those who came to invade. When we bought from Rena, they had already drawn everything from the railroad tracks to the highway, and each person had their plan.<sup>35</sup> But the invaders came overnight and they drew their own plans and their street layout as they wished, and he who opposed got in trouble with them. When the people from Rena disappeared, we knew we had been defrauded, and now we were being invaded. At that time, we were not living here, but if you left the plot alone, you came back and found someone else living in it. A man who lived in front left with his daughters when they invaded because he was scared, and when he came back someone else was already living there. So I came to stay here by myself so they wouldn't invade our plot. I was terrified at night, and slept with a knife under my pillow and a machete under my bed. . . . I turned the **FIGURE 4.** Aerial view of the Ajusco and location of the two study neighborhoods. Aerial photograph bought from Aerofoto S.A. de C.V. Reworked by author.



radio on so I wouldn't listen to them. Finally, we got together with people from Bosques, Dos de Octubre, Mirador, and Cruz del Farol against Belvedere. Everything finally stopped when the leaders were killed. There were many censuses because the neighborhood kept on expanding. The one in 1984 was the good one because they had already killed the leaders of the invaders who were very mean people.<sup>56</sup>

#### PUBLIC-PRIVATE SPACES

As the accompanying figure shows, one of the great differences between the public housing projects and the informal settlements chosen for study is the amount of private space (FIG.5). Private space was found to be notably higher in the informal settlements (54 percent and 63 percent), compared to 29 percent and 26 percent in the housing projects. As the most valuable resource in any informal settlement, land is efficiently allocated to provide the most possible "private" area, and there is rarely any residual or "wasted" public space. Also rare are squares and plazas, since land use is prioritized for dwellings.

The amount or size of individual private spaces was also found to be dramatically different between the formal and informal paradigms. In the informal settlements studied, people typically obtained 200 sq.m. of land, over which they could build up to three stories, or 420 sq.m. In the housing projects they obtained a dwelling of around 60 sq.m. (in La Palma a two-story duplex, in San Pablo an apartment), with no possibility of expansion.<sup>27</sup>

The larger size of the private spaces in the informal settlements, the fact they embody areas of land instead of built

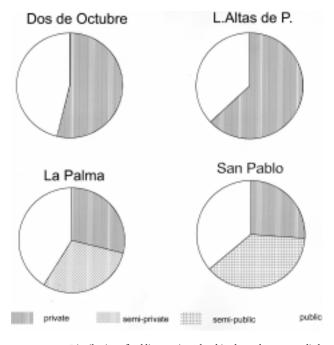


FIGURE 5. Distribution of public vs. private land in the settlements studied.

space, and the fact they are owned outright present many alternatives and advantages. Most important is the opportunity to improve, extend or subdivide the private area over time, which helps foster such practices as plot sharing with kin, the development of storefronts for rent or home-based enterprises, and the creation of private open spaces such as patios or yards.

All of these possibilities are strongly constrained in the housing projects - which does not mean they do not happen. For example, extension to a third level is hindered in the duplex houses of La Palma by the slanted roof, and in San Pablo because they are apartments. Nevertheless, studies in other parts of the world have shown how even under these physical circumstances, people manage to extensively transform and extend their apartments in public housing complexes (i.e., by building over public areas, or by extending their apartments with cantilevers).<sup>28</sup> Residents in the Mexican housing projects studied here may not have transformed their dwellings as extensively, but in certain instances they had torn down facade walls to created storefronts, sacrificing their living rooms; and they had extended their units horizontally by appropriating immediately adjacent open spaces. These transformations suggest that no explicit controls against alterations exist in the projects.

The total amount of nonprivate open area (which includes semiprivate, semipublic and public areas) adds up to 68 percent in La Palma and 74 percent in San Pablo. Spaces with intermediate grades of privacy predominate in the housing projects: semiprivate cloisters in La Palma (30 percent), and semipublic plazas in San Pablo (38 percent). The rest of the open areas are public. They include the streets (8 percent) and a pedestrian service corridor (20 percent) in La Palma; and public squares and an urban center (8 percent) and streets (26 percent) in San Pablo.

The amount of open space in the housing projects could be seen as one of their advantages. In up-market areas of the city these green, common areas are well maintained, and they attract people and activities, creating lively spaces. However, in these neighborhoods, people (or the local governments) have the economic means to hire maintenance personnel. In the housing projects, the reality is that common maintenance of these large spaces is problematic due to lack of resources. Organization to maintain them by individual residents is also difficult because their ambiguous limits make it difficult to define who might be responsible for which area. This means that much of the open space in the projects remains underutilized and even abandoned. And abandoned, ambiguous space often becomes a no-man's land, which due to the lack of surveillance and use becomes ideal for sheltering antisocial behavior.<sup>29</sup> Furthermore, when activities and people are dispersed over large areas, the effect is to inhibit the overlapping of activities that could enliven a smaller open public space.30 Only the semiprivate cloisters in La Palma (30 percent), and the semipublic plazas of San Pablo that give access to their surrounding buildings (30 percent), are in a good state of



FIGURE 6. Abandoned urban plaza in San Pablo.

maintenance and are used constantly. This means that less than half of the total open area is well used and maintained (FIG.6). However, it is important to note that the study did not conclude that open, green areas are inappropriate in housing projects. As will be shown later, if allocated in the right way, neighbors can maintain and create beautiful, lively green areas. But it is important for designers and planners to understand the socioeconomic reality of the residents, and to allocate smaller open spaces that are easier to maintain.

By contrast to the public housing projects, the configuration of the urban layout allows only a very small amount of "public" space to exist in the informal settlements. The intermediate grades of privacy predominant in the housing projects also do not exist there. For this reason, the streets, which represent 34 percent and 29 percent of the total area, have become the main and most important public areas. All the activities that happen outside the private realm happen in the street, which also serves as the main access to the dwellings, helping to explain their active nature (FIG.7).



**FIGURE 7.** Active Durazno Street in Dos de Octubre. A market on wheels settles here each Thursday and Sunday.

The different amount, configuration and organization of private spaces in the two types of environment also entails a fundamentally different type of tenure. In the informal settlements, each family owns a private piece of land; in the housing projects, tenure is in condominium, which means that people need to get organized and work together to maintain their common spaces. One interviewee's comments from Dos de Octubre serve to illustrate feelings about these different kinds of tenure:

I wouldn't like to live in a public housing Project because it is like a disguised vecindad.<sup>31</sup> There is no privacy. I close the windows here and I do as I please. If you get a groundfloor apartment, you get lucky, because then the floor belongs to you. But the ceiling and the walls do not belong to you. They offered us an apartment from FOVISSTE but we declined. I tell my daughters that here they are the queens and masters of the house. In public housing you can't do parties. Here we dance. People who like to live in conjuntos are old people or couples with one kid or two, tops.<sup>32</sup>

It is common to associate informal settlements with communal activities, ownership and spaces. But as I found in the case studies, a much more individualized type of ownership is given in informal settlements than in housing projects. As documented in other studies, my interviews also reflected a decline in communal participation among neighbors in the informal settlements.

#### PERSONALIZATION

Personalization is achieved through different mechanisms. In public housing projects everything is finished in the first phase. Only afterwards, and from homogeneous prototypes, do people begin to personalize and modify their own apartments and facades to suit their tastes and aspirations. One could say that this is a process of adaptation and transformation. By contrast, in informal settlements, personalization is inherent to the very process of construction, and is specific to each household and plot. Usually, it also follows a process of upgrading, which is normally considered one of the main advantages of informal settlements.<sup>33</sup>

In my analysis, all signs of individualization and identification, such as change of color, facade improvement, vegetation and so on, were considered signs of personalization. Appropriation referred to cases where people took a piece of public land and made it their own, not only by personalizing it, but also by demarcating it and restricting access to it.

Personalization in the housing projects was normally characterized by the emergence of a transition space, achieved through the appropriation of nonprivate areas contiguous to the dwelling unit. This transition space often serves to fulfill needs of privacy, security, identity and open space. In contrast, in the informal settlements, these needs are largely met within the boundaries of the dwellings and plots themselves. Thus, privacy is obtained by avoiding visual contact from the street to the private areas;<sup>34</sup> identity and pride are created through the building process itself; open space is obtained by the size of the plot; and security may be improved by building a fence or wall. In the housing projects, appropriated transitional spaces provide the additional benefit of beautifying and enlivening the semipublic or semiprivate areas that they face. Thus, the best-maintained open areas in both housing projects were often the small gardens or front porches tended or decorated by the individual residents.

A small pedestrian path in La Palma provides a good example of how such spaces may help enrich public spaces. The path is located where several cloisters meet, and serves as access to several homes. It has a fringe of soil and grass, with a paved walkway in the center. The residents of the dwellings that face this path had each taken over the fringes of soil that faced their houses and created small front yards. This is a beautiful green, varied, and well-maintained area — which contrasts to the service corridor, which is in a very bad state of maintenance (FIGS.8,9). In general, the difficulty of main-





**FIGURE 8. (TOP)** Vandalized play equipment and high school wall in La Palma's service corridor.

**FIGURE 9. (ABOVE)** Pedestrian path in La Palma appropriated and beautified by the neighbors.

taining open public spaces is what turns designated "green areas" into dirt areas, later abandoned. But this pedestrian path in La Palma serves to illustrate how, if allocated in the right way, well-maintained green areas can exist where budgets are low. The key principle is that it is easier for each person to care for their own small space than for them to get organized and maintain a larger area. Also, the existence of different "owners" ensures this space will be varied and lively.

Given the benefits that these appropriated spaces provide, it is important to ask how the built environment hinders or facilitates the appropriation of such spaces. Two conditions were found to be essential: available open space, and direct access to the dwellings. In both housing projects it was found that people chose to personalize only those areas contiguous to access from their homes. By contrast, windows — or eyes on the street, which are considered by many authors as crucial for people to relate to their immediate environment — were not found to have an influence on people's appropriation of space.

San Pablo presents a good example of this condition. Here, the buildings alternate with plazas in a chessboard layout. The plazas are all identical in shape and size, but some give access to all four facades surrounding them, while others do not (in some cases remaining blind to their surrounding buildings, and in others with windows facing onto them). In this condition, each apartment faces two plazas, one of which gives access to the dwelling and one of which does not. In every case, appropriation was present only on the plazas that gave access to the buildings, and not on the noaccess plazas. The importance of immediate access to the surrounding buildings was found to go beyond the opportunity for appropriation. Indeed, it provided a determinant of activity in the contiguous open space. Thus, the no-access plazas were initially provided with basketball courts or playgrounds, while the others were not. But the great majority of no-access plazas were abandoned, vandalized and undermaintained, and were seen as dangerous spaces by the residents. By contrast, the access plazas, even when contiguous to the no-access plazas, presented well-maintained, beautiful and varied green spaces (FIG.10).

Direct access to buildings was therefore found to be crucial in activating contiguous open spaces. In the case of residential uses, it may even be the key issue influencing people's decision to appropriate them. The ideal solution would be to provide these spaces and allocate them in the design phase.

The case studies of informal settlements allowed observations of a variety of personalized dwellings. The control that each family has over the building process allows great opportunity for personalization. In the initial stages, the forms and shapes of homes may be similar, given the widespread use of concrete-frame/cement-block construction. But personalization reaches its peak when a house is ready for finish materials. Such materials offer the possibility to express different styles and tastes, and thus their installation

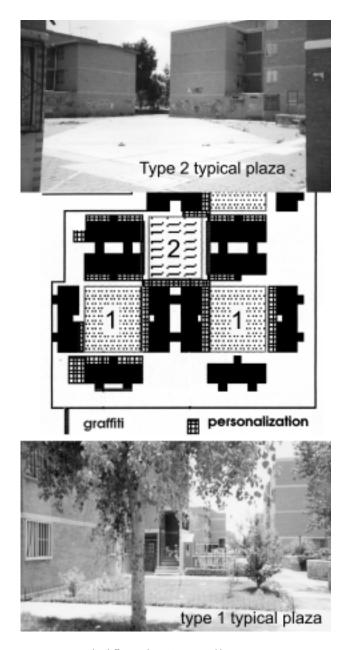


FIGURE 10. The different plazas in San Pablo.

is often the moment when the greatest level of differentiation begins to appear between dwellings.

The first thing that becomes evident when analyzing the built environment of the *colonias* of the Ajusco is the great contrast that exists from one house to the other. Levels of consolidation vary greatly from one plot to the next. For example, a three-story house with luxury finishing may exist next to a temporary cardboard and corrugated-metal shack. Overall, however, a good percentage of the lots exhibit some medium level of consolidation, in which the houses are built of permanent materials, many with second floors, but with the walls still bare (FIGS.II,12).





**FIGURE II. (TOP)** Contrasts in levels of consolidation in Lomas Altas de Padierna.

**FIGURE 12. (ABOVE)** As if walking in time, three levels of consolidation in Dos de Octubre. On the right, as in the early stages of settlement, with no structure and waste materials. In the center and average level of consolidation, with permanent materials and structure, but awaiting finishing materials. To the left a four-story apartment building (awaiting the fifth floor!), an extreme case of consolidation.

These contrasts serve to illustrate Perlman's point regarding the "enormous heterogeneity within the settlements in terms of income, education, occupation, size and materials of the dwelling units and reason for being there."<sup>35</sup> But these contrasts between levels of consolidation also raise the question of whether public infrastructure and service improvements to the settlements have increased land values and caused poorer households to be displaced. In order to answer this question, a correlation was made between levels of house consolidation and the number of years a household had been in the neighborhood. The goal was to find out if the more consolidated houses belonged to newcomers or to original settlers who had improved their condition. The analysis did not seem to show any correlation between level of consolidation and time of residence. This seemed to indicate that, of the original settlers, some are able to consolidate; some weren't, but stayed in the neighborhood; and others (around half) left the settlement at different points in time. The data therefore did not bear out the common hypothesis that initial residents leave after a settlement is upgraded, since they cannot put up with the costs. Neither did it show that most residents improve their dwellings over time within the settlement. Rather, it showed that variety and mobility are typical within these settlements.

In the informal settlements there did not seem to be a pattern of appropriation of public space, as in the housing projects. This might be explained, as mentioned earlier, by the fact that many of the needs the appropriated space would seem to fulfill are met in the plot and dwelling themselves. Meanwhile, sidewalks here function as transition spaces between the public and private realms. The were often personalized, but not appropriated.

#### HOME-BASED ENTERPRISES

In the study it was important to observe any evidence of dwellings being used for purposes other than residence. Such evidence would challenge the notion that houses serve only residential purposes. In this regard, home-based enterprises emerged as the most important alternative use in a dwelling.

Government programs usually — if not always — characterize dwellings as space for residential use exclusively, and home-based enterprises are rarely considered an integral part of a dwelling in housing projects. However, as Kellett has noted: "Home-based enterprises demonstrate the close symbiotic relationship between housing and work, and the fundamental economic role of the dwelling."<sup>36</sup> Perlman has also found that "the dwelling is more often than not, used as the base for income producing activities, other than rental income."<sup>37</sup>

Even in the flexible environment of informal settlements, the government's intervention with upgrading programs does not support home-based enterprises. For example, in the Home Improvement Program, no loans may be given to build spaces for rent, for commercial establishments, or for workshops. For the government, the existence of a storefront, or even the suspicion that commercial space may exist in a home, may mean automatic ineligibility for such a loan. Since preference is given to households that are less well off, the reason given is that the presence of a storefront indicates better economic standing. However, the presence of home-based enterprises and storefronts in all four case studies here shows that this practice emerges independently of whether the built environment supports it or not. At the same time, the ways in which such spaces emerge and the different spaces they occupy in each settlement help demonstrate how the built environment facilitates their



**FIGURE 13**. Storefronts in Dos de Octubre with median grade of consolidation.

emergence in informal settlements, while complicating their emergence in housing projects.

In the informal settlements, the flexibility of plot size and the laxity of building and zoning codes make it possible for storefronts to be built specifically for that purpose without having to sacrifice other spaces within the dwelling (FIG.13). In the housing projects, however, people have to sacrifice one of their already limited spaces to accommodate a storefront (FIG.14). In this context, the transformation of part of the dwelling into a home-based enterprise, despite space constraints, reflects their great importance. The contrast of flexibility vs. rigidity also means that more than one storefront can exist on a site in an informal settlement, while only one at the most can be accommodated within a dwelling in a housing project.

The ways that "unplanned" storefronts appear in the informal settlements and in the housing projects have much to teach architects and planners about the appropriate location of these commercial establishments. Most importantly, commerce concentrates and locates in areas where there are flows of pedestrians. In other words, the stores go where the people are, and pedestrian traffic is strongest on paths between two points of intense daily activity, such as a school, a marketplace, or a bus stop.

In Dos de Octubre, since the early stages of the settlement, businesses have been concentrated on Durazno, the street along which the schools are located, (REFER TO FIG.7). Also, the reason Tecax Street in Lomas Altas de Padierna seems to have acquired its commercial nature is that it is one of the few streets that crosses directly to the other side of the railroad tracks. A market is also located at one end of this street, and vehicular traffic is heavy, as is pedestrian flow.

In San Pablo, informal storefronts are concentrated along a street that leads from the elementary school to the high school and the market, and along the street that gives access to the settlement (FIG.I5). "Planned" commerce was ironically intended to be concentrated in the "urban center." But today this large piece of underutilized land serves as a prime example of how little this project's designers knew about successful storefront locations (REFER TO FIG.6). By contrast, there are very few storefronts in La Palma. The grouping of dwellings in cloisters there does not create a pattern of paths which lead to other areas of the settlement (FIG.IG). By restricting access to possible clients, this layout gives businesses little chance to survive. The storefronts that do exist in La Palma are all located facing streets, in places where customers have access to them (REFER TO FIG.14). In La Palma, not only the size of dwellings, but also their grouping in cloisters has constrained the emergence of storefronts.

An example of how points of strong activity draw and create a flow of people is illustrated by the accompanying visual analysis of an active residual space (FIG.17). All the spaces of a similar type were found to be abandoned and in very bad



**FIGURE 14**. Small storefront achieved by the opening of a blind wall to face the service corridor in La Palma.



**FIGURE 15**. The street that leads from the school to the market is very active, and informal storefronts are concentrated in this area. People have opened their ground-floor patios and converted them into storefronts, with means that they have sacrificed not only the patio, but also light and ventilation into an important part of the apartment.



**FIGURE 16**. Closed cloisters in La Palma with restricted access (fence and police stall at each entrance). While enhancing the feeling of safety for residents, they restrict access to possible clients and thus hinder the emergence of storefronts.

shape. But in this one space there were children playing and a few candy stalls. The reason was that the otherwise enclosed space had been opened up so as to create a shortcut to the *tor-tillería* (a store of daily use), and this had created a strong pedestrian flow. The relationship between the concentration of storefronts and greater flows of pedestrians indicates that businesses respond not only to need — as is commonly assumed for home-based enterprises — but also to opportunity.

In terms of typology, two kinds of storefronts were found in the informal settlements. In one, a single room in a dwelling was transformed into a commercial space, constituting an integral part or an extension of the dwelling. The other type was configured as a mixed-use building, having more than one storefront on the ground floor, with the dwelling either on top or in back, or both (FIG.18).

It was expected that most commercial establishments would be home-based enterprises, managed by a family — and therefore that a deep relationship would be established between work and home. However, the existence of more than one storefront, especially when more than two existed, suggested that these spaces, rather than sheltering a home-based enterprise or activity, might be purpose-built as rental spaces. Indeed, of the storefronts in our sample, 60 percent in Dos de Octubre and 38 percent in Lomas Altas de Padierna were rented out. Only 15 percent of the businesses in Dos de Octubre, and 30 percent in Lomas Altas de Padierna, were managed entirely by resident families. The rest were a combination of rented and family management (when more than one storefront existed).

In these communities storefronts were not only important as a means by which individual families might earn additional income. They also benefited the community at large by helping provide supplies within walking distance. It is a fact that the limited resources of low-income families make access to transportation difficult. When asked if the quality and prices of the neighborhood stores were good, people recognized that most of their shopping was done in the neighborhood — even when prices were higher. But to shop at the big chain supermarkets, they had to take public transportation.

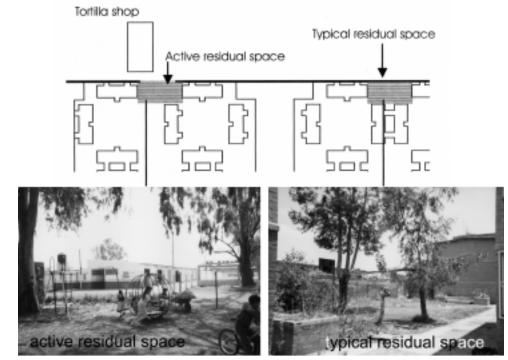


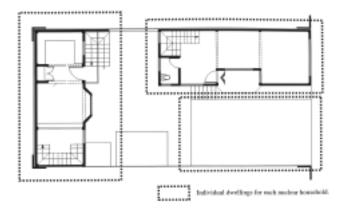
FIGURE 17. Example of an active residual space. Neighbors have torn down the fence to access the tortilla shop.



**FIGURE 18**. Example of a consolidated mixed-use dwelling, with five storefronts on the ground level and the residence on top.

#### PLOT SHARING WITH KIN

Although not evident from the streets, floor-plan samples and census data indicated that plot sharing with kin is a very common practice in the informal settlements of the Ajusco (FIG.I9).<sup>38</sup> Ten out of 24 of the case studies in the sample had more than one dwelling per plot, each belonging to a different nuclear family — who were related, usually as parents and children. The census data further indicated that I.5 dwellings per plot exist in Lomas Altas de Padierna, and I.6 in Dos de Octubre. By contrast, in the housing projects, since people only possess a dwelling unit, the only way to have more families per unit is to subdivide it internally, and thus overcrowd it. The size of the dwelling represents a big constraint to inhabitation by extended families in the housing projects, while the plot of informal settlements provides the opportunity to give each family their own private space.



**FIGURE 19**. Example of typical multifamily plot. Three individual dwellings on one plot.

Despite these constraints, sharing of public housing units does occur in other parts of the world. For example, Tipple found that the median number of households per public housing unit was three in Bangladesh and Zimbabwe, two in Ghana, and one in Egypt. Since the units concerned were usually apartments, extensions needed to accommodate a greater number of people were often difficult to achieve. Yet, despite the constraints, people managed to extend their apartments.<sup>39</sup> In Mexico City, Ward has also predicted that ". . . housing tenure and *plot-sharing* arrangements are likely to become more heterogeneous by 2025, and by that time nuclear home owner households may be the exception rather than the rule."<sup>40</sup> I also believe this practice will become more common, since as land gets scarcer, people will subdivide their lots in order to accommodate their relatives.

Plot sharing can be seen in two ways. On the one hand, it offers second-generation families living space without paying rent. The plot is thus the most important patrimony a family can acquire for future generations. In this respect, the notion of acquiring "land" instead of a dwelling is very important, because it offers the possibility of subdivision in the future. Yet, on the other hand, it remains to be documented how much this practice is welcomed by new families, especially when sharing a plot with in-laws. Are they there because they have no other choice? Or are they there because they benefit from the social and economic networks created with their kin? While interviewing one young resident and her mother-in-law, the resident kept saying how grateful she was and how she liked it there. But when the mother-in-law left the room, I asked her, "Tell me the truth, do you really like living with your in-laws?" She smiled and whispered, "If I could, I would prefer to live somewhere else only with my husband . . . but we would never be able to afford a place of our own."

While keeping in mind how feasible it might be for each new couple to have a home of their own, the point of view of the second generation should also be contrasted to that of the first generation. In most cases the older generation put up with the social costs of consolidating ownership of a plot. And they did so to be able to house their children, even when they form their own families. This practice could also represent a form of commercialization, or a source of additional income for the parents by renting out the piece of land to their children, or by having help with their expenses in exchange for use of the land.

#### SPACE FOR TEENS

The presence of graffiti as well as answers given on questionnaires and in interviews revealed that there are two distinct types of spaces in which teenagers prefer to hang out. In the housing projects teens generally take over abandoned and ambiguous spaces and make them their exclusive territory. In the informal settlements, teenagers share the

#### 46 TDSR 15.2

streets with all the other residents, although they tend to concentrate on the quieter streets.

What functions better, then, an anonymous space that teenagers can take over and mark as their territory, hidden and separate form other activities; or having the streets be their territory, sharing the space with many other users and uses?

These questions need to be addressed through many different points of view. Which makes the residents feel safer? Where do teens feel more identified? Hidden and anonymous spaces make it more comfortable for antisocial behavior such as drug consumption, robberies, and gang fights to occur. Sharing the streets might make it less likely that such antisocial behavior would develop, but it also puts other residents more at risk when it does occur.

A deeper understanding, which would require more detailed ethnographic study of teen spaces in each settlement, would be needed for an accurate evaluation and analysis. These questions also tie directly into the nature and extent of teenage and youth problems, and thus go far beyond the scope of this study.

#### SUMMARY OF FINDINGS

In their initial stages, without doubt, the dwellings provided in the housing projects present a better alternative in terms of construction quality, availability of services (such as water, sewage and electricity), and the opportunity to own a home and stop paying rent or living crowded in with relatives. However, the disadvantages they present — such as location (where land is cheap, and thus, in many cases, far from jobs); the size of the dwelling; the difficulty of extension or improvement; and the difficulty of living near relatives — are characteristics that cannot be overcome over time.<sup>44</sup>

In some cases by choice, and in others for not having an alternative, people who come to live in informal settlements put up with the social costs of living in substandard temporary dwellings with no services or infrastructure, and with the insecurity and complicated political environment that surrounds their creation.<sup>42</sup> However, over time, these characteristics, that constitute their initial disadvantages, are slowly overcome, and the potential they offer to better meet the needs of low-income families is realized. With these statements, I do not intend to romanticize or argue that informal settlements constitute the ideal housing solution. The purpose of this article has been to understand the potential that the flexible environments of Mexican informal settlements have toward meeting the housing needs of low-income families.

In all the case studies analyzed, the built environment does more than provide shelter. For example, the study identified how the dwelling helps provide privacy, identity, security, and additional sources of income. In this regard, there are several important differences between the flexible environments of Mexican informal settlements, and the rigid environments of housing projects. Among these are differences in the distribution of public and private spaces; the ways in which pubic and private spaces are related to each other; the type, size, amount and tenure of the private spaces; the existence of intermediate grades of privacy and the emergence of transition spaces only in the housing projects; the flexibility provided by the large size of the plots in informal settlements; and the difference in the active nature of the public space in the informal settlements, as opposed to the underutilized and sometimes abandoned public spaces of the housing projects. The emergence of storefronts and home-based enterprises and their concentration around spaces of pedestrian flow are practices common to all four case studies. In the housing projects the appropriation of nonprivate space was also found to be an important mechanism of adaptation to the lack of privacy, identity, private open space and security.

The accompanying diagrams are intended to summarize these findings and illustrate the underlying structure of each of the built environments studied (FIG.20). The illustrations represent the distribution of private vs. public space, their relationship, the plot's flexibility and capacity to accommodate several uses, and the creation of pedestrian flows.

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 J.F.C. Turner, Housing by People: Towards an Autonomy in Building Environments (New York: Pantheon Books, 1976).
 Sites and services is a well-known pro gram in the housing field, in which people are given a piece of land that has water, sewage and electricity connections, and are allowed to build their own homes.
Sometimes they may also be given a "core house," which they can expand.
6. R. Burgess, "Self-Help Housing Advocacy: A Curious Form of Radicalism," in P. Ward, ed., *Self-Help Housing: A Critique* (London: Mansell, 1982), pp. 56–98.
7. P. Kellett and M. Napier, "Squatter

Architecture? A Critical Examination of
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Settlements with Reference to South America
And South Africa," *Traditional Dwellings and Settlements Review*, Vol.VI No.2 (1995).
8. Turner, *Housing by People*, p.128.
9. Perlman, "Six Misconceptions about
Squatter Settlements."
10. The Dubai International Award for Best
Practices to Improve the Living Environment
is granted every two years to outstanding con-

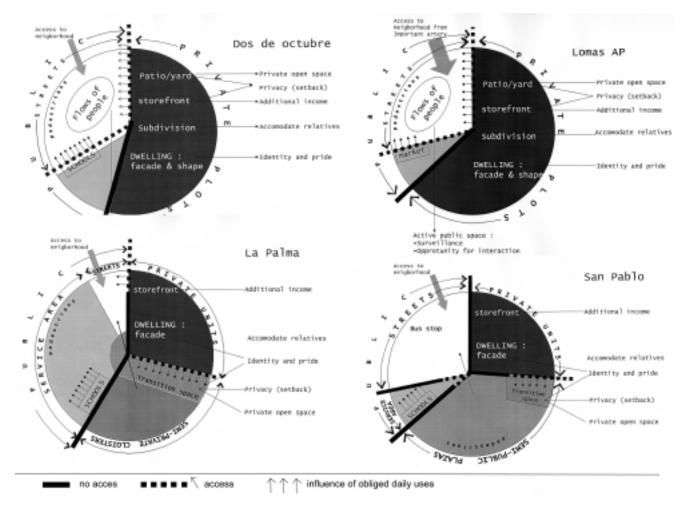


FIGURE 20. Conclusion diagrams.

tributions to improve life in cities. The submitted practices are part of the UN-HABITAT best practices database. Criteria taken from "Submission Guide and Reporting Format for the Year 2004," downloaded from http://www.blpnet.org/awards/2004/guide\_e n.pdf, page 5.

II. I. Serageldin, "The Architecture of Empowerment: A Survey," in I. Serageldin, ed., Architecture of Empowerment (London: Academy Editions, 1997), p.8.

12. For a detailed description of this debate, see P. Ward's *Self-Help Housing: A Critique*, in which Turner and Burgess advance the fundamental issues that surround the selfhelp housing debate.

13. In the past, institutions like INFONAVIT centrally administered the housing projects, from construction to financing and allocation processes. Nowadays, the government's housing institutions have increasingly limited their role to being a financial entity, leaving the actual construction to private developers. However, the same type of standardized layouts continue to be preferred, for the same reasons, as well as for economic reasons. Turner pointed out with regard to centrally administered systems.

14. J.F.C. Turner, Freedom to Build: Dweller in Control of the Housing Process (New York: MacMillan, 1982).

15. One of the largest developments built by GEO, one of the leading low-income housing private developers.

16. The title of this unpublished thesis is "Influencia del diseño de espacios públicos en la calidad de vida de los usuarios: análisis de dos conjuntos habitacionales" ("Public Space Design's influence on the Life Quality of its Residents: Analysis of Two Housing Projects").

It can be found in the Library of the Universidad Iberoamericana in Mexico City. 17. The title of this thesis is "People and the Built Environment: Use, Appropriation and Personalization of Space in Spontaneous Settlements and Housing Projects in Mexico City" (UC Berkeley, 2003). For further detail of this study and other areas of analysis, such as the current Mexican housing policy, please refer to this thesis which can be found at the UC Berkeley Library. 18. The different grades of privacy are defined as follows. Public: a space to which any person has access, with no barriers for entrance. Semipublic: a space in which access is not restricted but which is shared by a precise number of households and hence, when a stranger enters he or she is noticed. Semiprivate: a space that belongs not to one but to several households and

which has a restricted access to those who belong. Private: a space that belongs specifically to one family or household, and which has a restricted access to that specific family. 19. Especially in informal settlements, since the housing projects are composed of standardized prototypes.

20. This is the number of useful surveys, hence the variance. Originally, 80 were applied in both neighborhoods. 21. M. Schteingart, Vivienda y Vida Urbana en la Ciudad de Mexico: La acción del Infonavit (El Colegio de México, 1998). 22. A. Gilbert and P. Ward, Housing, the State and the Poor: Policy and Practice in Three Latin American Cities (Cambridge: Cambridge University Press, 1985). 23. Ejido is a piece of agricultural land that has communal tenure to a group of families who have the right to use the land, but not to sell it. The ejidatarios are the members of the ejido. The law has been recently changed to allow these families to sell their land, through a complicated process of transforming the ejido into private land. 24. Schteingart, Los productores del espacio habitable.

25. Rena was a real estate company that subdivided and sold plots illegally.26. Testimony from interview.

27. Considering a standard of 30 percent of open space within the plot, people can build up to 420 sq.m. in three stories. However, it is

important to remember that the size of the plots in the informal settlements in the case studies should not be generalized to all informal settlements, and that they represent a rather uncommon example particular to the Mexican context. Nevertheless, the possibility of expansion is a general characteristic in informal settlements, given that in most cases homeowners obtain a plot of land, which, however narrow, may be expanded upon vertically. 28. G. Tipple, Extending Themselves: User-Initiated Transformations of Government-Built Housing in Developing Countries (Liverpool: Liverpool University Press, 2000). 29. For example, drug dealing can be easily performed in these unobserved spaces, and vulnerable teenagers easily fall into addiction. 30. Some authors attribute the failure of highrise public housing projects to this matter alone. Oscar Newman developed the concept of "defensible space" after observing the ambiguity, abandonment, and antisocial use of public space in high-rise superblock projects. 31. Vecindad is a very common type of lowrent tenement that exists in the central city. Usually they consist of one- or two-room units organized around a long, narrow central patio. This is now considered a very traditional space, and is represented in many movies, TV shows, and songs.

32. Comment from a resident in Dos de Octubre in an interview elaborated for this study. 33. Not always, as shown in our sample, many households continue to have their homes in the same state as it was in the early stages of the settlement. (See, for example, figures 11 and 12.)

34. 54 percent of the houses in Dos de Octubre and 72 percent in Lomas Altas de Padierna do not have windows directly facing on the street, but rather a wall with a *sagúan* (big entrance door), with the house set back from the street. 23 percent and 19 percent of the houses, related to the street through storefronts.

35. Perlman, "Six Misconceptions about Squatter Settlements," p.48. 36. Kellett and Napier, "Squatter Architecture? A critical Examination." 37. Perlman, "Six Misconceptions about Squatter Settlements," p.42. 38. These floor plans were elaborated for the home improvement program. 39. Tipple, Extending Themselves, p.48. 40. P. Ward, "Future Livelihood in México City: A Glimpse into the New Millennium," Cities, Vol.15 No.2 (1998), pp.68. 41. Given the allocation process, not all households or members in the family meet the criteria to obtain a loan. 42. As found in the interviews for this study.

All drawings and photos are by the author unless otherwise noted.

# Building in the Climate of the New World: A Cultural or Environmental Response?

### MARY ANN STEANE

The relationship between appearance, available technology, and environmental context is one of the central concerns of Amos Rapoport's famous *House Form and Culture*.' This essay examines the evolution of a particular seventeenth-century building type, the English "hall-and-parlor" house, in response to new climatic and cultural conditions experienced by the first English settlers in Massachusetts, and its subsequent transformation into the New England "saltbox." In this review of the impact of environmental factors on cultural assumptions, attention is given both to the layout of individual houses and to larger settlements. The essay underlines that a response to the demands of a new climate can engender or reinforce significant cultural change.

[T]he Lord hath been pleased to turn all the wigwams, huts, and hovels the English dwelt in at their first coming, into orderly, fair, and well-built houses, well furnished many of them, together with Orchards filled with goodly fruit trees, and gardens with variety of flowers. . . .<sup>2</sup>

Most analysis of the early colonial architecture of North America makes reference to the issue of climate response. It is not surprising, given the cultural complexity of a situation which saw groups of colonists from different regions attempting to found settlements in the face of an unfamiliar climate, that this analysis has largely chosen to follow the architectural history of the different national colonies, whether English, Dutch, Swedish or German. What has remained unclear is the degree to which, and the manner in which, new house types that emerged in each colony were a continuation, an evolution, or an abandonment of "old-world" models. If, initially, ideas concerning what a "fair house" should look like, or how it should be constructed, were a fusion of different regionally derived opinions, in what way did these ideas evolve subsequently?

The "orderly, fair and well–built houses" referred to above in Edward Johnson's depiction of the neatly ordered landscape into which the wilderness of New England had been transformed by the end of the seventeenth century resembled, but were not of identical form or construction to those the colonists had left behind in England. In particular,

Mary Ann Steane is Lecturer at the Department of Architecture, University of Cambridge, England. the "saltbox," a typical colonial house type of the period, was recognizably different from the models on which its construction had been based. Importantly, it was able to offer a very different level of protection from the climate than the houses which had preceded it in the colony.

Recent scholarship on the architecture of New England has focused on the adoption of new or previously unusual construction methods and on the increasingly substantial size and complexity of the houses, rather than on the issue of climate response per se.<sup>3</sup> In contrast, the earlier work of James Marston Fitch and M.S. Briggs discussed climate issues in greater depth.<sup>4</sup> This earlier work has provided the spur for this more detailed speculation on the aspects of historical development attributable to the need to make climatically more appropriate buildings. Here, an analysis of differences between the climates of England and Massachusetts that draws on both contemporary descriptions and more recent data will be used to preface a discussion of the way in which the concern to survive the winter dictated both changes in building practice and the manner in which houses were organized and inhabited.

This analysis of the gradual improvement in environmental performance of English colonial architecture (characterized by Johnson as the difference between dwelling in a hovel and "a fair house") also underlines the way in which changes in house form influenced settlement pattern, and the social structure which it articulated. Finally, it attempts to demonstrate the inevitable reciprocity between cultural and climatic adaptation that underlines the difficulties inherent in approaches driven by climatic determinism or arguments concerning "style" alone.<sup>5</sup>

#### "SEPARATISM": REJECTION OR CONTINUATION OF ENGLISH TRADITIONS?

The majority of early English settlers in New England were Protestant "separatists," who were driven to leave England by a wish to practice their form of religious observance without fear of persecution. Defining this "persistent localism," Breen has suggested that their principal concern was to re-create in America an age-old rural way of life which had been thrown into turmoil by the meddling political, military and religious initiatives of the Catholic Charles I.6 In December 1620, the Colony of Plymouth was founded when the first 102 colonists stepped ashore in Massachusetts from the Mayflower. Given the ramshackle character of their initial dwellings, winter living conditions were extremely harsh, and after three years the Plymouth settlement consisted of just twenty dwellings, housing the sixty original colonists who had survived. Yet, twenty years later, following a series of milder winters that accompanied the period of the "Great Migration" in the 1630s, the colony was on a much firmer footing, with a population numbering 26,000.

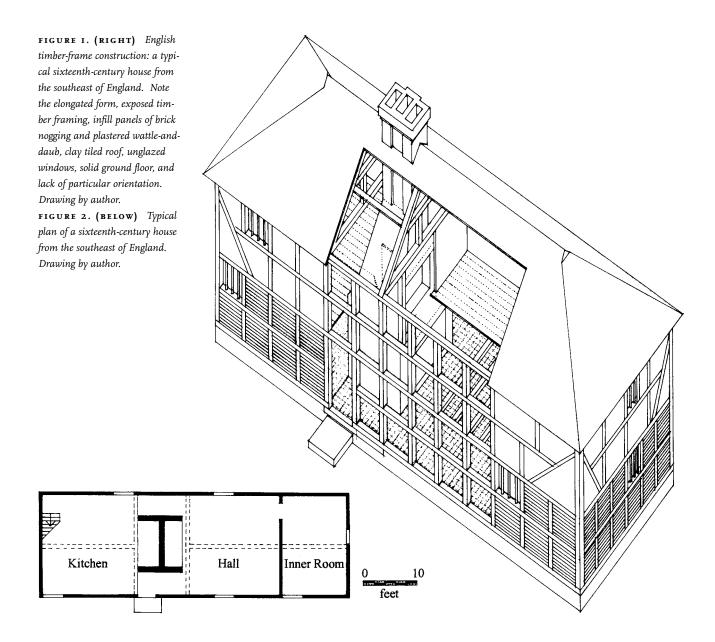
Many of the settlers came from Essex and the surrounding East Anglian counties, though there were others from farther north and west in England, from Yorkshire and the West Country. Unlike the English colony in Virginia, these people were a mixture of middle- and working-class folk, with no aristocracy and few gentry among them. They came over in families or small, close-knit neighborhood groups that tended to resettle together after arrival. Most of those from the lowlands in the southeast of England would have been familiar with compact, two-story houses of timberframe construction, whereas those from the colder, less fertile uplands of the north and west would have known smaller, lower, stone-walled houses of more linear plan.

As R.W. Brunskill and A. Quiney have pointed out, a number of different English plan types of this period can be identified, all of which include at least one chimney stack.<sup>7</sup> Widely adopted in English dwellings by the sixteenth century, a chimney stack allowed smoke from the fireplace to be vented directly out of the house, and thus created interiors which were less smoky, and therefore easier to keep clean. The most common plan types in the East Anglian region have been described as "halland-parlor" houses. In such houses, a chimney was located at the center of the plan, or on one or both end walls. The availability of brick generally allowed the former, but if only stone was available the stack needed to be of greater size, and this tended to mean that end-of-room locations were more appropriate.

Both chimney locations had evolved from the medieval hall house over the previous century, and necessitated a shift in domestic arrangements that left the decorum of dwelling somewhat confused. Despite the less obvious spatial hierarchy, it seems clear that life in these houses still centered on the fireplace in the "hall," now a single-story room that retained the name more on account of its use than its scale. The parlor, or inner room, a space for sleeping but also for more formal use, generally lay at the "upper" end of the hall, while the "lower" end was usually occupied by a service room. The upstairs rooms were bedchambers.

The most widely accepted form of this type in southeast England by the end of the sixteenth century was well-suited to timber framing (due to the compartmentalization of the plan made possible by a bay structure), and featured a tight lobby/entry space beside the central chimney stack (FIGS.1,2). This was the principal model that the settlers imported to New England, along with the tools and skills to build it.<sup>8</sup> Though many families desired a house exactly like those they had left behind, the colony was home to a limited number of master carpenters. The only option for most settlers was to accept the design offered by whichever carpenter was available, whether they were familiar with the same building methods and house type or not. It is this fact which explains, to a degree, the remarkably uniform house designs developed in New England.

Once in Massachusetts, settler families needed to express a minimum two-year commitment to the colony, which took the form of a readiness to share expertise and work collectively in the erection of settlements. Following an initial period in one of the older, more firmly established communities, groups of colonists might then expect to acquire a slice of territory



known as a "town" from the colonial government, which they could divide up to provide each family with land. Agricultural practices imported from England tended to dictate the location of settlements. As a result, most townships were concentrated along the coast and in the major river valleys, which provided marsh hay for livestock and fertile soil for cultivation.

As David Grayson Allen has underlined, English attitudes to the land were both benevolent and presumptuous.<sup>9</sup> Assuming that they might occupy and work the apparently vacant land, the colonists justified their possession of it on the basis of natural right. This was a widely recognized principle in England from the medieval period onward, according to which all men might exploit "waste" land that had not previously been possessed. The right of Native Americans to the land was thus deemed by the settlers to extend only to the territory on which they grew crops. Indigenous cultural attitudes to land ownership and settlement could not have been more different. The Native Americans of this region believed that land could only be held in common by the tribe. They had no conception of fixed boundary lines or of exclusive rights to natural resources such as timber or water. Their dwellings were also very different to those which the colonists had previously experienced. Local tribes practiced a form of communal living that put little store in the right to privacy, but which ensured that the weak did not go hungry as long as food was available.

The indigenous house form typical of this area, the wigwam, was a lightweight demountable shelter constructed from poles that were fixed in the ground before being bound together and covered with mats. Heating was provided by a central fireplace located below a smoke hole in the roof. Reed mats formed its inner and outer walls, providing both insulation and protection from wind and rain. Typically dome-shaped or of more elongated elliptical form, it provided housing for a number of family groups.

In the context of this study it is interesting to note the comments on Algonquin villages offered by Captain John Smith in 1624. These indicate that the New England colonists were almost certainly aware that despite its makeshift appearance, the Native American house provided a surprisingly high level of comfort. According to Smith, the houses were "so close covered with the mats, or the bark of trees, very handsomely, that notwithstanding either wind, rain, or weather, they are as warm as stoves."10 In contrast, John White's earlier account of Powhatan houses noted the ingenious way in which mats were removed in favorable conditions in order "to admit as much light and air as they may require."<sup>II</sup> Exploiting seasonal diversity by means of mobility and subsistence cycles, the Native American tribes also moved from summer residences among their corn fields to winter quarters deep in the forests. This migratory existence was an intelligent strategy in climatic terms, ensuring that their dwellings were given additional protection from cold winds. Yet it was a way of life much different in character to that with which the colonists were familiar, and so it failed to provide the colonists with any lessons on which they could build.

#### NEW ENGLAND CLIMATE

In both early descriptions and later commentaries, opinions differ on the extent and impact of differences between the North American and English climates. It is possible that the first accounts, with their indications of a country rich in natural resources and mild and hospitable climate, were influenced by the desire to encourage settlement. One of the first detailed reports on the weather conditions in New England, published in 1634, made light of the difficulties of getting through the winter:

[O]nly the northwest wind coming from the land, is the cause of extreme cold weather, being always accompanied with deep snows and bitter frosts, so that in two or three days the rivers are passable for horses and man. But as it is an axiom in Nature, Nullum violentum est perpetuum, No extremes last long, so this cold wind blows seldom above three days together, after which the weather is more tolerable, the air being nothing so sharp, but peradventure in four or five days after, this cold messenger will blow afresh, commanding every man to his house, forbidding any to outface him without prejudice to their noses: but it may be objected that it is too cold a country for our English men, who have been accustomed to a warmer climate, to which it may be answered, (Igne levatur hyems) there is wood good store, and better cheap to build warm houses, and make good fires. . . .  $^{12}$ 

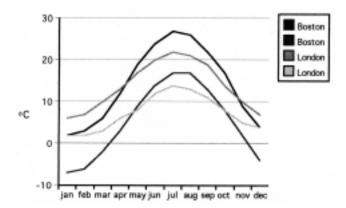
In a report on his voyages to the colony between 1638 and 1663 John Josselyn noted both the more extreme cold and the more frequent sunshine of the Massachusetts winter:

Cold weather begins with the middle of November, the winter's perpetually freezing, insomuch that their Rivers and salt-Bayes are frozen over and passable for Men, Horse, Oxen and Carts: Aequore cum gelido zephyrus fert xenia Cymbo. The North-west wind is the sharpest wind in the Countrie. In England most of the cold winds and weathers come from the Sea, and those seats which are nearest the Sea-coasts in England are accounted unwholsome, but not so in New-England, for in extremity of winter the North-east and South-wind coming from the Sea produceth warm weather, only the North-West-wind, coming over land from the white mountains (which are alwayes (except in August) covered with snow) is the cause of extream cold weather, always accompanied with deep snowes and bitter frosts, the snow for the most part four and six foot deep, which melting on the superficies with the heat of the Sun, (for the most part shining out clearly every day) and freezing again in the night makes a crust upon the snow sufficient to bear a man walking with snowshoes upon it.<sup>13</sup>

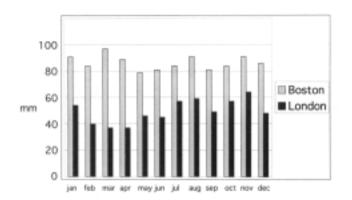
Though it is generally agreed that the climates of England and Massachusetts today are not as cold as those experienced in the early seventeenth century, a comparison of the two using current data still usefully illustrates the difference between them. Recently published climate information for Boston and London indicates that on both a daily and annual basis the air temperature variations in Massachusetts are greater than in southeast England, with an annual average temperature range that is greater by 10 degrees C (FIG.3).<sup>14</sup>

While the greater heat and humidity in the summers might be expected of the more southerly latitude, the cold and length of the Boston winters is perhaps surprising. Annual precipitation levels are higher, with more violent rainstorms, occasional hurricanes, and heavy winter snowfall (FIG.4). For several months each winter snow covers the ground, sometimes until as late as May. Winter winds, and with them driven rain and snow, are a major cause for concern, particularly when they blow from the northwest, bringing arctic conditions southwards. Even today wind chill remains a subject of particular concern in New England, as a result of the fact that strong winds can rapidly cause severe exposure outside, even in relatively mild conditions.

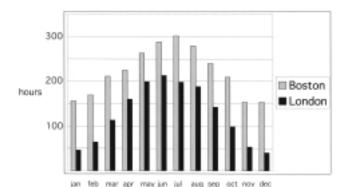
Away from the milder maritime climate of the coast, winter conditions are more extreme still. Occasional respite from these bleak conditions is, however, available: Massachusetts generally enjoys a considerably greater number of hours of winter sunshine than England (FIG.5). This appreciably affects comfort for those people, or within those spaces, that are exposed to it.



**FIGURE 3.** Average daily maximum and minimum temperatures in London and Boston. Boston experiences a ten-degree greater swing in the annual average range of air temperatures than London. Graph by author.



**FIGURE 4.** Average monthly precipitation in London and Boston. Boston experiences greater levels of precipitation than London. The very strong cold winds from the northwest and the northeast make driven rain and snow an issue that New England building construction needs to address. Graph by author.



**FIGURE 5.** Average monthly sunshine hours in London and Boston. Boston experiences considerably more hours of sunshine than London, particularly in winter. Graph by author.

### FIRST SHELTERS

Many of those who came out intent on making this their new home were ill-prepared for the hardships they had to face. Considerable numbers died as a result of ill-health brought on by the sea voyage or their inadequate first shelters. According to one chronicler, they had to

... burrow themselves in the Earth for their first shelter under some hillside, casting the Earth aloft upon timber; they make a smoky fire against the Earth on the highest side; and thus these poor servants of Christ provide shelter for themselves, their wives and little ones, keeping off the short showers from their lodgings but the long rains penetrate through to their great discomfort in the night season.<sup>15</sup>

Later, given a timber lining that improved their thermal performance considerably, these "dugouts" were able to take advantage of the greater thermal stability of the ground (ground temperatures are higher than air temperatures in winter, but lower than air temperatures in summer). Alongside them, the early reports also mentioned "cabbins" and "wigwams," which were more lightweight constructions built by driving stakes into the ground. These frames were then either given an infill of a wattle and daub or covered with mats, pressed bark, or skins to provide temporary shelter. Opinion differs as to whether the settlers' use of the term "wigwam" indicates that they were willing, at least initially, to adopt a form of dwelling employed by the local indigenous peoples, or that the similarity in appearance between the "wigwam" and a type of shelter constructed by English shepherds and charcoal burners prompted the use of this term for what was in fact an imported building tradition.16

The settlers were not long content with this state of affairs. They set about building more substantial houses with remarkable energy, beginning with the back-breaking task of clearing the ground of trees. It became rapidly obvious that the most important resources that New England had to offer for this project were an abundance of wood, many fast flowing streams, and limitless "vacant" land. Good building timber had become increasingly scarce in England during the previous two centuries, but in Massachusetts, one settler noted, "wood grows so fast at every man's door that after it has been cut down it will in seven years' time grow up again from seed to substantial firewood; and in eighteen or twenty years 'twill come to be very good board timber."" On the other hand, a chronic labor shortage significantly affected building practice. Thus, the early establishment of sawmills - prior, indeed, to any in England - was prompted by the lack of manpower, and mitigated against the manufacture and widespread use of brick in rural areas.

Of the first proper houses that were built, there remains only limited written evidence. It seems that they were of the

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simplest English construction, "huts" in Johnson's terms, of one-room plan type, with a large chimney stack at one end. They were of crude timber-frame construction throughout, including the chimney, and wall infill was of lath and daub, protected either by boards laid flush, or by hand-split cedar clapboards. Most reconstructions indicate that their steeply pitched roofs were covered with thatch. This roofing material is rarely mentioned again in later years, however, and it seems probable that it could neither effectively withstand the heavy rain and snow, nor resist catching fire, adjacent as it was to the flimsy wattle-and-daub chimney.

#### THE NEW ENGLAND SALTBOX

Over the first eighty years of the colony a number of significant developments in house-building practice took place, engendering a form known as the saltbox (FIGS.6,7).18 A detailed description follows, with the aim of evaluating the degree to which its evolution was climatically inspired.

Most of the english and many others, have their houses made of nothing but clapboards, as thay call them there, in this manner: They first make a wooden frame, the same

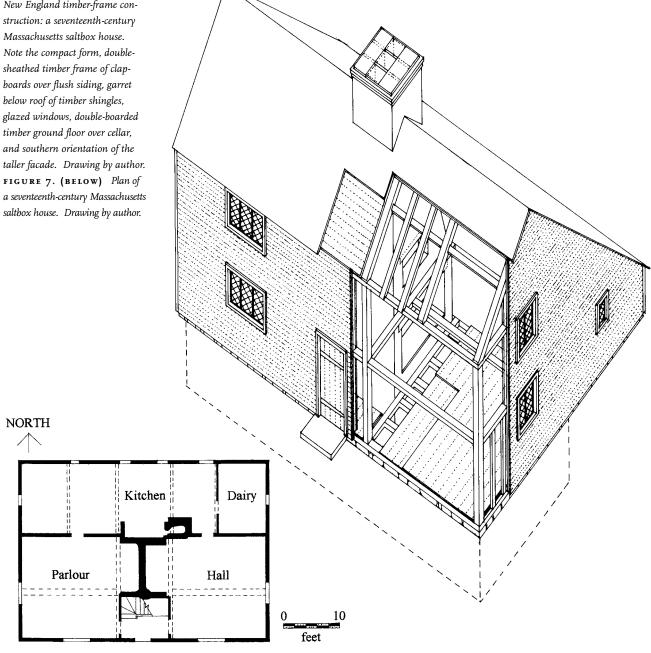


FIGURE 6. (RIGHT) Typical New England timber-frame conas they do in Westphalia, and at Altona, but not so strong; they then split the boards of clapwood so that they are like coopers' pipestaves, except they are not bent. These are made really thin, with a large knife, so that the thickest end is about a pinch (little finger) thick, and the other end is made sharp, like the edge of a knife. They are about 5 or 6 feet long and are nailed on the outside of the frame with the ends lapped over each other. They are not usually laid so close together as to prevent you from sticking a finger between them, in consequence either of their not being well joined, or the boards being crooked. When it is cold and windy the best people plaster them with clay. Such are most all the English houses in the country, except those they have which were built of other nations.<sup>19</sup>

This contemporary description is extremely useful because it indicates what was unusual, and therefore worth reporting, about the construction methods of the English colonists. Chief among these is that it identifies the use of clapboarding. Such cladding protected and braced a timber frame, which was vulnerable to movement and cracking due to the extreme temperature variations in New England. Brunskill and Briggs both noted the extremely restricted use of clapboards or weatherboards in domestic building of this period in England.<sup>20</sup> Their use was confined to southern East Anglia and Kent, and even then mostly for barns and other agricultural buildings.

The colonists used a tool called a froe to split the clapboards from logs of cedar, oak or pine. Split or riven timber is less prone to mold decay than sawn timber — an important factor in America, where exposed timber was employed more frequently. They were then secured with wooden pegs or, on occasion, with hand-forged nails. Even unpainted clapboards were a more effective protection against wind and rain penetration than the external plaster covering common at this point in England, and for which the lime was, in any case, rare.<sup>21</sup> In later years the insulating capacity and air-tightness of such a wall was improved still further by nailing an extra flush layer of boards, or "sheathing," directly to the studs.

The roofs of these early clapboard houses were simply pitched and generally covered with wood shingles, also riven by hand with the froe, and fixed over a layer of boards.<sup>22</sup> Dormers and other complicated roof forms that might have led to problems of damp penetration were rare in the seventeenth century.<sup>23</sup> Eaves were also close clipped to prevent wind damage. Once it was discovered that snow slid more easily off it, a steeper roof pitch began to be employed.<sup>24</sup> And once the colonists discovered that shingles rotted more quickly in the shade, they also consistently located their houses away from tree cover.<sup>25</sup>

In plan, the most compact form of the English lobby-entry, hall-and-parlor house was favored, with its central chimney placement. A single story of extra service rooms were added, however, at the rear (rather than at one or other end) producing the familiar saltbox form, with a roof lower to the ground on one side than the other.<sup>26</sup> The stair was also located centrally. These features gave the house a low surface-area-to-volume ratio and an organization that helped to prevent draughts.

The argument that this choice of plan indicates a climate response rather than merely the continuation of a culturally acceptable practice is bolstered by a comparison of these houses to English colonial building in Virginia. There, the compact lobby-entry plan was not commonplace. Instead, in response to suffocatingly sultry summer conditions, a more open plan was employed. This included a through passage, or "breezeway," which meant that chimneys needed to be located at either end.

As in England, the two largest ground-floor rooms in the New England house, the hall and the parlor, had different functions. The hall was both the symbolic center of the house and the main hub of everyday indoor activities. As a symbol of its importance, it contained the only fire that was kept burning continuously throughout the day. Here, initially at least, much of the cooking and a range of domestic chores were carried out (spinning, mending, buttermaking). The hall also served as the main dining space, and the arrangement of seating at the large table at which meals were taken was highly symbolic of social status and seniority within the household. Lord of his "Little Commonwealth," the male head of household presided over family meals from a position of authority in a great armchair usually located at the end away from the fire. Other family members sat on lower benches, stools, or smaller chairs without arms.

By contrast, the parlor served both as the master bedroom and the room in which more formal ceremonies or conversations took place. Meanwhile, the two upstairs chambers varied in use between storage (of either textiles or grains and tools) and sleeping, depending on the number and age of the members of the family and the domestic roles they fulfilled. Finally, beneath the apex of the roof lay a cramped garret that, like the cellar in the basement, was predominantly used for food storage.

As time went on, just as in England, a greater level of spatial differentiation was achieved, principally by displacing noisy kitchen activities from the hall to a lean-to at the back. This allowed an increasingly formal character to be given to the two front rooms. While the hall continued to be used for dining, and indeed became the "best room" (a kind of second parlor that could be used for entertaining and even for sleeping), the settlers' desire to impose their own idea of order on the wilderness could now be articulated even more forcefully by the actual parlor. Considered a surprising luxury by some, given the frontier conditions, it provided culturally necessary privacy and an ordered presentation of the wealth of the household. As Robert Blair St. George has underlined, the refinement of the imported bed hangings, looking glasses, and display of metal plate both distanced it from the ordinary workaday domestic realm and presented a stark contrast to the untamed landscape outside.27

At the heart of the saltbox was the enormous chimney stack constructed of fieldstones, which often measured as much as 10 by 12 feet. As already mentioned, it differed from the normal English practice of locating stone chimneys in end walls. And within, it contained as many as five flues - the upstairs chambers normally having fireplaces of their own above those of the hall, parlor and kitchen. The scale of such stacks was not unfamiliar in England. What made them remarkable was their size relative to the low-ceilinged rooms they had to heat. In New England second-floor chambers were given ceilings, and were therefore of smaller overall volume than those in an equivalent English house. Above them a low, undivided garret ran the length of the plan.<sup>28</sup> Despite being "a thief of warm air" as a result of the convection currents (and thus draughts) it induced, the massiveness of the stack did at least have the advantage of absorbing the heat of the flue gases and re-radiating it at the center of the house. Fireside seats or "settles," designed to counteract the draughts and make the most of the heat by giving all-around protection to the arms, back and legs, could be moved around to provide more comfortable conditions, if necessary.

A further indication of the importance of climatic factors in the design of the New England house was that its small, shuttered casement windows were generally given glazing from about 1650 on, despite the high tax on the importation of this material. The significance of glass as a means of achieving greater levels of heat retention and air-tightness was also reflected in the fact that wills might occasionally bequeath glazing separately from the house to which it belonged. In England at this period glazing was still relatively unusual, particularly in rural situations. Oiled paper, a much cheaper alternative that was considerably less effective at restricting air movement, was used instead. During the seventeenth century the size of windows in New England houses also gradually increased, allowing the interiors to become brighter — though not all these windows were operable.

Normally, saltbox houses were built with cellars, an unusual practice in England. In this sparsely populated colony, where winter travel was sometimes extremely perilous, cellars were needed to store supplies that ensured survival. Their darkness proved ideal to protect one of the colonists' staple foodstuffs, root vegetables, from both the heat of summer and frost of winter. Where the stone foundations emerged from the ground (beneath the sills of the main timber frame) they were given protection from the frost by piling up autumn leaves. Above these foundations, the fact that the ground floor was constructed with two layers of wide oak boards over the floor joists was a further indication of the general tendency to establish higher levels of insulation. In England at this period it was still usual to have earth floors, either stabilized with cattle blood or given a lining of bricks. In addition to providing an area for food storage, cellars helped ensure that the main rooms of the house were better cocooned, and that in winter the colonists themselves were never in direct contact with the cold ground.

Externally, the weather also dictated new approaches to site layout and building detailing. For example, the planning of a farmyard needed to take account of the pattern of snow drifting. To give greater protection against the elements in winter, covered walkways were also sometimes constructed between the house, the barn, and other outbuildings. Likewise, to counter the heat of summer, south-facing facades were often given shade by way of pergolas planted with vines.<sup>29</sup>

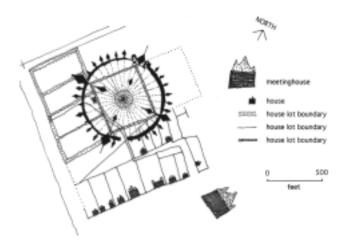
This incremental evolution in the colonists' approach to construction techniques, detailing, and farmyard organization was accompanied by a further significant break with English tradition. By the start of the eighteenth century many of these saltbox houses were being given a specific orientation: the two main front rooms, the hall and the parlor, faced south, and the long sweep of the roof at the rear faced north. This orientation allowed the hall and parlor, the rooms in which people spent most of their indoor waking hours, to make the best use of their small windows to gain warmth from the sun in winter and light throughout the year. It also meant that the dairy was given an appropriately cool location to the north. It is not without interest that the adoption of a particular orientation seems also to have prompted a shift in room nomenclature away from dialectderived names based on function to a universal system based on location in relation to the points of the compass.30

Depending on its precise siting, this kind of orientation would also have meant that the house as a whole was less exposed to the worst of the winter winds. And this protection was enhanced by a judicious arrangement of the farmyard. Thus, the back of the barn took the brunt of the northwest wind (the animals' stalls were normally located on the south and east walls). The house, in turn, sheltered the kitchen garden, which lay beside it to the south. Evidence has even been uncovered that so much importance was sometimes attached to orientation that the entrance to a house might face directly away from the road.<sup>31</sup> This break with traditional settlement patterns speaks of an increasing self-determination and independence of thought among settlers no longer constrained by their cultural inheritance. It also illustrates well how the evolution of a cultural norm the idea of a "fair house" — engendered by the new climatic conditions, contributed to cultural change: the development of American self-reliance or "frontier spirit."

The climatic response that influenced the evolution of New England colonial architecture came primarily in reaction to extreme winter conditions. House designs suitable to the relatively mild, damp climate of eastern England had to undergo adaptation to provide adequate shelter in the New World. And though living patterns within the home changed little, building methods needed to evolve to better exploit the possibilities of hewn and sawn timber construction. Within a half century, the typical New England house was constructed almost entirely of wood; it featured higher levels of wall and floor insulation, glazed windows, and large fireplaces within large chimney stacks; and it made use of a method of wall construction that offered better protection against wind and rain penetration. Its compact plan represented a further step away from the English open-hall medieval type, since there was no longer any sense of a "lower" vs. an "upper" end to the hall. All these changes speak clearly of the higher relative importance colonists attached to combating the climate in a situation where accepted cultural practice could more readily be challenged.

#### "FRONTIER SPIRIT"

At the outset it was understood that each New England town should have at its center a church or meeting house and a village common, surrounded by house lots distributed along the roads nearby. Each house lot was typically large enough only for a garden, an orchard, a barn, and pasture for a small number of cows (FIG.8). But each individual also owned and farmed strips of land in the common fields that surrounded the village. An unsigned, undated document, probably from the 1630s, entitled "Essay on the Ordering of Towns," illustrates these early assumptions about the reciprocity of spatial order and social structure in colonial settlements.32 It described the ideal New World township as a series of concentric circles within a six-mile square. The meeting house served as "the centor of the wholl Circomference," which was to be surrounded by houses "orderly placed to enjoye the compfortable Communion." In the third ring, at a distance no greater than one and a half miles from the center, were the common fields farmed by most of the town's inhabitants, while in the fourth lay the larger 400-acre lots of individuals. Though farmsteads in the latter were inevitably more isolated,



**FIGURE 8.** Early Massachusetts settlement patterns. Ipswich, founded in the early seventeenth century, was a relatively compact settlement. Drawing by author, based on 1717 map of Ipswich, held in the Essex Institute, Salem, Massachusetts.

even these were not to be built more than two miles from the center. The fifth circle was composed of common land, of swamps and "waest grounds . . . which harbor wolves and . . . noyesom beasts and serpents." The outer circle was land which was owned but not occupied by the town, and was thus designated as wilderness.

Local differences in attitudes toward land management, farming practices, and social structure ensured that subsequent patterns of settlement within the towns tended to differ depending on the inhabitants' regional origins. As time passed, each group wished to shape the landscape in a manner that reflected a way of life whose rhythms and relationships it knew and understood. Those who came from the English regions where a common field system predominated (a broad area running from the southwest of England through the midlands to the northeast) were familiar with a landscape ordered by nucleated villages set within a network of common fields. Here the manor predominated in the regulation of production, individuals owned noncontiguous strips of land in the common fields, and many farming practices were organized collectively by common consent. Those from East Anglia, in contrast, were more familiar with a landscape of consolidated farmsteads. Here many small parcels of land were often brought together to create a much larger holding, which tended to engage in more specialized production. In such areas, manors were much weaker, and local government tended to be controlled by the wealthy few.

As David Grayson Allen has pointed out, the neighboring New England towns of Rowley and Ipswich provide good examples of the two different attitudes.<sup>33</sup> Rowley, whose inhabitants were mostly from Yorkshire, retained the nucleated village form, and very little land in the town was divided during the seventeenth century. The East Anglian settlers of Ipswich, on the other hand, quickly reorganized land ownership through exchanges so that larger holdings could be created. This meant settlement reached the boundaries of the town by as early as 1643.

A significant difference between the landscapes of colony and mother country that deserves emphasis is the new scale at which the land was politically structured. Of considerably greater size than the ideal settlement described above, most of the early towns were in fact very large, with territory that varied in extent according to the topography, but whose average size was about one hundred square miles. This surprising aspect of community life was commented on at the time: "Some honest men of our town affirm that in their knowledge there are 68 towns in England, within as little compasse as the bounds of Ipswich; I knowe neere 40 where I dwelt."34 Such large size meant that land could be found within the town for the sons and grandsons of the first settlers, an aspect of colonial life which encouraged initial consolidation of the regionally derived farming practices and social structures already described. On occasion, the inhabitants of a group of new farmsteads at a distance from the

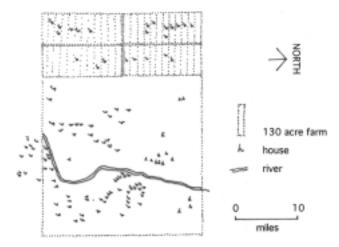


FIGURE 9. The evolution of Massachusetts settlement patterns. The original houses of Sudbury were set out on roads that separated common fields, east of the Sudbury River. Later a more dispersed arrangement of more independent farmsteads was allowed for by way of a regular layout of larger rectangular plots on the town's western edge. Drawing by author based on 1707 map of Sudbury, held in the Massachusetts Archives, Boston.

original town center might petition the colonial government for a new, more conveniently located meeting house to which they all had easy access, and a greater sense of local community might be re-engendered. But it seems clear that land division practices also began to reflect an acceptance of the growing insularity that typified life on more dispersed farms of larger size (FIG.9).

Despite the initial prominence of the colony's central government and the restrictions on local autonomy that a true "re-creation" of the conditions of archetypal English rural life should have entailed, the fact that many settlements took almost complete control of their own affairs very rapidly is worth underlining. The insularity that this engendered led to a situation in which settlement patterns were increasingly influenced by individual rather than collective needs. As colonization progressed, the form, character and siting of dwellings underwent a significant transformation in response to a process of acclimatization that dictated cultural change. Out of the mosaic of different regionally derived land-development patterns that characterized New England in the early colonial period emerged the model of a more isolated, more independent mode of existence. As individuals, the colonists wanted territory they could govern as they pleased and on which they could reestablish a familiar way of life. Yet the settlement of New England resulted in the imposition of a new kind of order on the wilderness, as individuals increasingly began to farm the land in accordance with their own needs and interests rather than those agreed upon by the community as a whole.

Certain inescapable aspects of colonial life (difficulties of transport in winter, the need to be self-sustaining in activities

for which specialized help would have been available in England), meant that individual homesteads progressively became more independent as time went on. The value placed on self-reliance was further reinforced when the need for collective action began to diminish once the first struggle to found settlements was over. Indeed, despite protests from some quarters, the dispersion of colonial settlements increased as more settlers moved west to look for land. In this situation the interconnectedness of village life ceased to have the same importance, and the home became much more of an isolated unit in the wilderness. A "neighborhood" might then consist of the area reachable by horseback or canoe within a day. "Persistent localism" may have represented its original intent, but ultimately the settlement of New England could not prevent a significant cultural shift toward a dispersion of population and the increasing insularity of family groups. As has been shown above, this also occurred alongside a seventy-yearlong transformation of the arrangement, appearance and construction of a suitable house for this purpose, largely inspired by the need to survive the New England climate.

#### PERSISTENCE AND CHANGE

In *House Form and Culture*, Rapoport underlined the primacy of socio-cultural factors over physical determinants in the shaping of vernacular building form.<sup>33</sup> His analysis also gave weight to those aspects of context which help determine the quality, longevity and transportability of shelter. These include the effects of climate, availability of building materials, and knowledge of construction technologies — though he demonstrated that these aspects are frequently of only secondary significance, and sometimes not present at all.

Three of Rapoport's conclusions regarding the role played by climatic determinism are worth emphasizing in connection with this study. First, he noted that vernacular architecture typically responds to climate very well, particularly when the climate is more extreme, and thus survival without an appropriate form of shelter is more unlikely.<sup>36</sup> Second, he noted that the evolution of vernacular architecture is typically slow — i.e., it exhibits a robust persistence of form.<sup>37</sup> Third, he pointed out that the development of colonial architecture provides a useful illustration of the way in which provision of appropriate shelter within a different climate can provoke a relatively rapid evolution of imported house types and the building traditions associated with them.<sup>38</sup>

This detailed history of one colonial house form illustrates and extends Rapoport's comments on the relative importance of socio-cultural and climatic factors. In New England, English settlers initially adopted dwellings comparable to those inhabited by the indigenous people of the region. But they subsequently rejected these forms in favor of more permanent structures based on models imported from England. This demonstrates Rapoport's main contention that in the mind of its builders a vernacular house serves principally to perpetuate and facilitate a shared *way of life.* In other words, it serves to create an environment best suited to a collective understanding of how life should be conducted and choreographed in spatial terms.

The gradual adaptation of English models also demonstrates, however, that climatic influence on the evolution of building form can be significant. It may affect anything, from the scale of individual rooms, to aspects of detailing and overall form, to the way buildings are grouped and oriented, the way available materials are used, and the way buildings are inhabited. Yet the history of the transformation of the English halland-parlor house into the New England saltbox also underlines the typically incremental character of this process of climatic adaptation. This quality often makes it difficult to say whether a particular alteration reflected new assumptions about how to live, or whether it was intended to bring about improved environmental performance. The introduction of a cellar, for example, allowed more isolated farmsteads to store food through the winter, but it also prevented direct contact of the occupants with the cold ground surface.

Indeed, it is interesting to note how the provision of an appropriate level of shelter — or, in other words, a comfortable enough set of conditions — changed certain socio-cultural assumptions but not others. In New England, ideas about the spatial arrangement of rooms, basic volumetric requirements, orientation of the building and the acceptability of building materials were transformed. But the demand for spatial differentiation, represented by our insistence on the provision of the parlor, a space only in intermittent use and therefore more difficult to heat in winter, took precedence over the provision of an even level of comfort throughout the dwelling. It is also interesting that by the close of the seventeenth century a further change of house form was dictated by the demand for greater visual order rather than improvement in thermal performance. Specifically, this had to do with unhappiness with the asymmetry of the side elevation of the saltbox. Eventually, it meant the ridge of the typical yeoman's house shifted to integrate the service rooms into a more balanced side elevation. This confirms that, even in New England, climatic concerns were not always of overriding importance.

House form shapes social interactions and social relationships, and potentially articulates shared assumptions about how the rhythms of life should be orchestrated and its settings organized. In every culture ideas about what a house should look like represent deeply held socio-cultural assumptions that normally evolve slowly over time. This study has offered the opportunity to examine the manner and time scale of a significant shift in such assumptions. Perhaps its most important lesson is that whatever the apparent urgency, a rapid transformation of widely held assumptions about the decorum of dwelling can be difficult to achieve.

One implication of these lessons today is that new ideas about "sustainable" communities cannot simply be wished into existence. Politicians, planners and architects alike need to be reminded that the social consequences of radically new forms of housing cannot always be predicted. People will always need to understand and accommodate themselves to the way of life that their form of housing determines, if these forms are to have any long-term validity. In the current drive to produce more sustainable, energy-efficient architecture, it suggests that the need to satisfy cultural norms concerning matters of appearance and spatial hierarchy should not be underestimated.

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5. In *House Form and Culture* (p.48), Rapoport adopted Redfield's broad definition of "culture" as the total equipment of ideas, institutions, and conventionalized activities of a people. In contrast, he defined "tradition" in a narrower way, as the "direct and unselfconscious translation into physical form of a culture, its needs and values," and noted that folk traditions "represent the bulk of the built environment" (p.2). These terms will be used in a comparable way in this article.

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### **On Preservation:**

# Reinventing the Cave: Competing Images, Interpretations, and Representations of Matera, Italy

ANNE TOXEY

Matera, Italy, is currently the subject of a municipal tug-of-war over image and significance. Infamy resulting from poor living conditions in its extensive cave dwellings led to the expansion and recasting of the city in the 1950s as a modernist utopia. This was followed by decades during which these areas, known as the Sassi, were allowed to deteriorate. Today, renewed interest in the historic city and an internationally visible preservation program are allowing Matera to pursue a program of tourist redevelopment as a cave city. However, tension is emerging among residents on how and what to preserve, and even whether or not to preserve. The present conflict has taken form according to a rhetoric of tradition versus modernity, but both arguments and results represent modern interpretations of the past influenced by outside perceptions.

The southern Italian region of Basilicata is home to numerous treasures that stand witness to millennia of political and cultural change. Here can be found, for example, Greek temples and theaters, Roman, Norman and Islamic towers and towns, a Jewish diaspora cemetery, and stupendous Byzantine and Romanesque churches. The only site currently singled out for UNESCO World Heritage Monument designation, however, is the historic sectors of the city of Matera: a concentration of thousands of grotto structures called the Sassi (FIGS.I,2). This recent honor has brought Matera, which had been forgotten by the world for half a century, both national and international fame.

Matera's old quarters are composed of a breathtaking, Piranesi-esque, vertical labyrinth of part-cave, part-constructed homes carved from the soft *tufo* limestone of a steep ravine (**FIG.3**). These extraordinary dwelling formations, infused with human creativity, are an architect's paradise. But what is equally compelling, and what is key to

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**FIGURE 1. (ABOVE)** Map of Italy showing Matera's position. Drawing by Patrick McMillan, 2004.

**FIGURE 2. (TOP SPREAD)** Panorama of the Sassi's northern-most sector. Visible are the constructed portions of the houses; not visible are the cave extensions piercing the hillside. Light-colored stone indicates recent preservation work. Cranes on the horizon mark new construction in the modern city on the piano, beyond. Photograph by Patrick McMillan, 2003. understanding the culture of Matera both past and present, is the story of how the Sassi's millennia of human habitation, and an accompanying peasant agricultural lifestyle, have been both "lost" and "found" in the last half century.

The story begins in the 1950s–70s, when the Italian government, citing deplorable living conditions, evacuated the Sassi and transferred the population to a new city, intended to provide these people with a more dignified, modern lifestyle. However, barely ten years after the expropriations ended, submitting to local and international pressure, the government reversed this course. It has since allowed the reinhabitation of the caves, and has even helped by subsidizing the effort. What is most important about this tale of government intervention, however, has been that the lifeways dismantled in the first move remain irrevocably lost. Thus, while considering the preservation of the Sassi today, one must also consider what is not being preserved, and why.

World attention to the Sassi contributes to the fact that, unlike most towns and villages of Basilicata, Matera's streets are lined with elegant clothing stores and sumptuous jewelry shops, and its various cultural organizations offer nightly musical concerts and poetry readings and support a thriving artist community. Matera is also home to numerous Italian dot-com companies, and many households there own personal computers — far above the average for the region. Thus, a visitor to Matera today may be entirely unaware of the poverty and preindustrial lifestyle prevalent in nearby villages. Indeed, in social and economic terms, Matera belongs less to its region than to a worldwide network of influential, affluent, artistic cities.

There are many reasons for Matera's unique position. The media keep the image of the city circulating in the nation-





**FIGURE 3.** View of the Sassi descending from the Cività (high point with the cathedral and noble palazzi) on the left to the gorge on the right. Doors and shutters on the light-colored, recently preserved structures are painted green as prescribed by the official preservation program. Photograph by author, 2003.

al and international imagination. A large number of Materans have sought university education in Bari, Rome, Florence, Milan and Venice, and have brought the cultural authority of these places back with them. Even uneducated laborers who have ventured forth from the city to northern Italian or foreign factories have returned with knowledge of distant, prosperous parts. But, most significantly, the preservation of the Sassi has brought considerable economic benefit and cosmopolitan influence. The national subvention of the preservation effort has injected large quantities of money into the local building industry. The expectation of profits from cultural tourism has inspired entrepreneurs to open restaurants, bars, and hotels (thereby providing new jobs). The promise of work from such capital investment has brought some emigrants home. And, of course, the burgeoning of cultural tourism has introduced to Matera a sophisticated (though transient) population with ties to other parts of the world.

The above effects have energized the economy in general, resulting in the construction of thousands of new housing/office units (not out of housing need — because there has been no real growth in population — but as real estate investment of excess income) (**FIG.4**). The South of Italy, in general, has also been the recent recipient of other state-financed economic development projects (for example, support for female enterprise), and the savvy Materan population has been adept at taking advantage of these. Matera, in particular, was successful in attracting a major new state-funded hospital, which in turn has brought educated, affluent medical personnel to the city. Such economic, political and social developments have fed upon each other and fueled a new dynamism in the streets of the city. Thus, not only is Matera



**FIGURE 4.** One of numerous new construction projects expanding the modern city. Although the population is not significantly growing at this time, real estate (namely, condominiums) is a preferred place of investment for the considerable surplus cash of contemporary Materans. Photograph by author, 2003.

today a member of a club of cities beyond its regional borders, but within its region it now wields considerable influence.

The new outside interest in Matera is not for the generic modern city that it became in the 1950s–70s. A few Italian architecture students may inquire about the exurban agricultural community of La Martella, designed in the 1950s by the famous Roman architect Ludovico Quaroni and his associates. The principal concern of most visitors is the city and culture that were figuratively and literally buried during the modernist era, when the Sassi were shunned and used as a municipal dump (FIGS.5,6). It is also for the recent elegant

modification and rehabilitation of Sassi structures to meet contemporary, affluent lifestyles (FIGS.7,8).

Such outside interest is being encouraged by websites, television documentaries, films, and academic, tourist, and UNESCO literature. And to accommodate outside expectations, entrepreneurs and cultural leaders in the city are not only working to preserve its built past (though largely renovated for contemporary uses), but to resuscitate some cultural practices (for example, the hand-production of stone and clay building elements). Inevitably, such efforts have led to disagreements among residents on how to preserve the culture, what to preserve, and even whether to preserve. Many feel that dredging up the past is painful and simply a foolhardy and extravagant trend. They regret the decision taken by the government to preserve the Sassi. Some staunch preservationists also oppose a majority of the work accomplished there, due to its fashionableness and lack of academic rigor.

While, on the surface, this tension appears to be one of tradition versus modernity, it might more accurately be described as involving different perceptions of this dichotomy. No one in Matera is advocating the return to a premodern lifestyle or livelihood. In fact, due to the intensity of the shame the community was made to feel fifty years ago, few, if any, residents will admit their families' roots in the Sassi. The conflict is instead over the presentation of the city's past: whether or not to look back (and what this would mean for the future); which stories to tell; and what image to give.

The magnetism developing in Matera today is also shifting the cultural focus of Basilicata away from the capital city of Potenza and the tourist center of Metaponto. From practically zero tourists ten years ago, Matera now receives 200,000 visitors per year. This surge has led surrounding towns to develop their own tourist attractions, history muse-



**FIGURE 5.** (**LEFT**) A typical Sassi family of ten congregated at the table in the late 1940s. Work and living spaces (e.g., dining area and kitchen) needing light would have been located at the front of the house to make use of natural light from the door and windows. Photograph courtesy of Enzo Viti. **FIGURE 6.** (**RIGHT**) Taken in the late 1940s, this picture shows the back portions of a Sassi house carved into the cliff. These areas housed activities needing less natural light, e.g., sleeping, storage, and sheltering work animals. Note the chicken in the middleground and the mule in the background. Photograph courtesy of Enzo Viti.





**FIGURE 7. (TOP)** This corridor connecting reception rooms of a beautiful hostel (Le Monacelle) displays antique objects found during renovation from a convent-type structure. White-washed walls and stripped vaults, as seen here, are a contemporary aesthetic. Historically, all wall and ceiling surfaces would have been painted white with lime. Photograph by author, 2003.

**FIGURE 8. (ABOVE)** Pictured here is a public space inside the elegant Sassi hotel, Locanda San Martino. Note the dual themes present in Sassi renovations: the peasant/country theme, witnessed by the chair displaced from the breakfast room; and the high-design theme of the lounge furniture. Photograph by Patrick McMillan, 2003.

ums, craft shops, and accommodations. Instead of reasserting the historical identities of town and region, however, the results of these commercial efforts are the development of new traditions and hybrid cultures that incorporate globally reproduced and transmitted values.

#### THEORETICAL FRAMEWORK

In theoretical terms, this article aims to contribute to the erosion of the dichotomy of tradition and modernity by complicating this reductive opposition. In doing so, it will invoke several complementary definitions of tradition. Among these is the view that modernity is negatively defined by tradition, and therefore that tradition is a product of modernity.<sup>1</sup> Another is the view that the meanings attributed to tradition are constantly produced according to the contexts perceived.<sup>2</sup> Third is that tradition is the creation of the future out of the past; that it is a dynamic, volitional, temporal, and continuous process situated in the present; and that it is a process of cultural construction.3 And fourth is that change is integral to tradition, which is open and not fixed.4 Using these definitions, in this article I consider tradition within the context of Matera to be a contemporary construction of selective elements of the perceived past of the city and its culture.

I adhere to Marshall Berman's definition of modernity as "the unity of disunity," reiterated by David Harvey as ungroundedness.<sup>5</sup> That said, I am dubious of Berman's and Harvey's view that the idea of modernity contains inherent contradictions (i.e., that it seeks both change [progressiveness] and nonchange [immutability]). I question this binary, as I do the oppositional relationship of tradition and modernity, which I see, instead, in filial relation to each other.<sup>6</sup>

I find that Jacques Lacan's linguistic concept of *eximité* provides a theoretical platform that resolves the difficulties located in both questionable pairs.<sup>7</sup> In this article, therefore, I refer to modernity as the *perceived* antithesis of tradition. For example, if tradition is equated with authenticity and nostalgia, then modernity may be *thought* to be novel and progressive. In fact, I believe, and will try to show, that they are complementary, i.e., that they are accomplices of change.

#### HISTORY OF THE SITE

From the city's organization around 900 AD until the mid-twentieth century, the citizens of Matera included peasants and aristocrats (both clerical and secular). All lived in the Sassi or on the projecting spit of land that bifurcated it (called the Cività), where the cathedral, castle, and leading aristocrats' homes were built. At this time the Sassi itself contained both tiny peasant cave homes and opulent *palazzi*. Beginning in the seventeenth century, however, wealthy Materans moved to the flat plain above the ravine, the *piano*; and so began a

process of hierarchical ordering of space by class. This separation continued over the following centuries, and resulted in the emergence of two antithetical worlds, the Sassi and the *piano*, which did not meet physically or interact socially. Dominating physically and economically, the elite became like spectators at the theater, watching from their windows and balconies as the peasants acted out their lives in the Sassi below.<sup>8</sup>

Due to geographic constraints (i.e., the edge of the steep ravine below and the elite construction above), the area of the Sassi could not expand; therefore, as the peasant population grew, overcrowding increased, and living conditions worsened.9 By the time the famous writer, artist, physician, and political exile Carlo Levi and his physician sister visited Matera in the 1930s, the living conditions had become deplorable, as described in his book Christ Stopped at Eboli.<sup>10</sup> Yet, despite the horror and shock expressed in these pages, Matera's poverty, ill-health, and preindustrial lifestyle were less extreme than in many other southern Italian towns and villages." What made Matera's misery and squalor more visible were its compression into the dense Sassi environment, the city's relatively large size, its political importance as a provincial capital, and the contrasting opulence of its elite architecture. In fact, the city acquired the title "la capitale della civiltà contadina" ("the capital of peasant civilization") due to its sizable populace.<sup>12</sup> Yet, apart from its extensive cave architecture, Matera could culturally and economically have been considered a typical southern Italian town in the first part of the twentieth century.

Since Carlo Levi was celebrated in both political and literary circles, his book was widely and quickly distributed upon publication following World War II. And due in large part to his negative portrayal of Matera, the town soon came to be labeled "vergogna nazionale" - which literally translates as "national shame," but which the anglophone press reproduced as "the shame of Italy." During his years in power, Benito Mussolini had attempted to improve the Sassi through the addition of a modern road and an aqueduct to replace the ancient system of collecting water in cisterns. But in national elections after the war, the Communist Party attempted to take full advantage of Matera's calumny of shame and premodernity. A growing anxiety was also present in these elections over the Questione Meridionale — that is, the Southern Question — a discourse of economic imbalance between northern and southern Italy and the resultant strain in social and political relationships between the two regions.<sup>13</sup> Following the descriptions in Levi's book, Matera became known as the "symbol of peasant misery," the very emblem of the Southern Question.<sup>14</sup> Thus, even though the Communists lost the election, the winning Christian Democrats were forced to address living conditions there, and Matera became a case study for the solution to the Southern Question.

After the elections, the Italian government passed legislation (Legge 619 of 1952), providing funds for the "refurbishment" of the Sassi. A study at the time had concluded that fewer than one-third of the Sassi were unlivable, and the Materan elite strongly argued for the rehabilitation and continued use of the two-thirds of the Sassi that were sound. Nevertheless, Prime Minister Alcide De Gasperi turned the already high-profile project into a national design project, and tied the building program to the Marshall Plan for the reconstruction of Europe. His solution to the Matera problem became the translocation of the entire Sassi population into new, subsidized, government rental housing.

Harnessed to a land-reform program already in motion, this project eventually employed famous Italian architects to design new, modern rural villages and a new, modern city for the 16,000 (eventually 20,000) people who were to be evicted from and dispossessed of their ancient, vernacular homes (FIGS.9,10). Using sociological studies and contemporary urban planning theory, these architects produced modernist, utopian translations of the local culture. Their new rural complexes attempted to bring the Sassi peasants closer to their fields to reduce transit time (which usually ranged from four to six hours per day by foot). As part of this effort, the government promised that a house, garden plot, stable, mule, and irrigated, arable land would be given to each former Sassi family. But, as often happens with such nationally funded projects in Italy, the fields and irrigation ditches never materialized, and the rural villages failed.

As new housing was completed, the evacuation of the Sassi took place from the mid-1950s to the mid-1970s. Sassi residents and ex-residents themselves were employed to carry out much of the housing construction. Meanwhile, the consolidation of fields (as opposed to their distribution) and the modernization of agricultural methods forced peasant farmers off the land. With the availability of construction work, as well as the emigration of those unable to find new work, the dwindling city population was stripped of its long-established peasant lifestyle and economy, self-sufficiency, groundedness, and self-identity. Many Materans were thrust completely and irreversibly into being an apartmentdwelling, wage-earning, welfare society dependent upon the government for work, money, housing, and even self-identity.

The transformation also meant that during the 1960s–80s the Sassi experienced much deterioration. Shunned by the new city, the old quarters were even used as a municipal dump. By literally and figuratively turning its back on the Sassi, the new building effort mimicked the pattern established in the seventeenth century when the elite rose to the *piano* level. And as they emptied, the Sassi became ghettoized as a place of crime to be avoided by upstanding Materans.

Predating the expropriations, however, and continuing through the early 1970s, academic discourse and government lobbying by local intellectuals demanded both continued residence of the Sassi and recognition of their artistic and historic value. Thus, as early as 1954 Mauro Padula had written: "In the enactment of the law for the refurbishment of the Sassi, a serious study needs to be carried out on these



**FIGURE 9. (LEFT)** These duplex-type houses (right) and barns (center) compose the postwar rural village of La Martella designed by Quaroni. This and similar villages were meant to receive the majority of evicted Sassi residents, who were land-working peasants. Due to failure of the plan, few villages were realized, and fewer still survived. Photograph by author, 2003.

FIGURE IO. (RIGHT) This is a postwar urban complex designed to receive displaced Sassi residents who were not peasants — e.g., factory workers, clerks, and artisans. Due to the failure of the rural villages and the peasant agricultural system, most ex-Sassi residents moved to these urban neighborhoods, which became far more numerous than planned. Photograph by author, 2003.

interesting beehives which are not a museum by way of being a vital part of a city but which merit being jealously cared for like a gigantic work of art."<sup>15</sup> Such persistent entreaties, spurred by several structural collapses within the Sassi in 1965, finally led to passage of new legislation in 1967. Legge 126 defined the Sassi as "a zone of historical, archaeological, artistic, scenic, and ethnographic interest."<sup>16</sup> And although not tied to new funding, it did officially transform a stigma of shame into a title of monumentality.

Following the new law, the intellectual community hosted an international conference entitled "The Sassi of Matera are our National Heritage to be Conserved and Protected." Participating in this conference in 1967, Carlo Levi described the Sassi as equivalent to the Grand Canal of Venice. Acknowledging the public's doubt in this matter, he also foreshadowed the UNESCO title by twenty-six years: "it is a question of truly defending and protecting a value which I don't know if everyone realizes is an immense value of unique urban and architectural history not only of peasant civilization but of world civilization."<sup>17</sup>

Despite officially recognizing the value of the Sassi, however, through the mid-1970s the government continued moving families out and encouraging the renunciation of the area. But the intellectual community's petitions also persisted. In 1968 Prof. Nicola Strammiello wrote:

It must be clarified that the Sassi in themselves do not constitute national shame; what is shameful is that men live — as they do in the Sassi — in unsanitary and unhygienic conditions and that they do not enjoy the comforts that our civilization has to offer. . . . We need to rescue the Sassi by creating within them a modern life in keeping with the needs of human life. In doing this the Sassi would cease to be the shame of Italy and would become the pride of Italian culture and civilization.<sup>18</sup>

In 1974 the architectural community again entered the debate with a much-publicized international design competition to discuss the Sassi's fate. The question then was much the same as it is today: leave the area as an open-air museum, or restore it for contemporary use? At that time 640 families still lived in the Sassi (not yet transferred to new housing). The conventioneers were divided on whether they should be evicted like their neighbors, or allowed to remain. The rationale for their remaining was that the Sassi should not be allowed to further degrade, becoming "a useless monument, a dead city, a Pompeii."<sup>19</sup> Politicians, on the other hand, continued to cast doubt, expressing the view that all the technology in the world would not make the Sassi livable.<sup>20</sup>

It was not until 1986 that the preservationists ultimately prevailed in this fight, when Legge 771 officially reversed the earlier forced Sassi abandonment policy. It also provided funds for Sassi rehabilitation, gave custody of the Sassi to the city of Matera for ninety-nine years, and established a regulatory power, the Ufficio Sassi. This office immediately set about designing a preservation program and preparing the infrastructure to allow it to go forward. But at first the only individuals who responded to the opportunities were a few aesthetes (mostly architects), who restored Sassi homes for themselves.

Finally, in December 1993, UNESCO placed the Sassi on the World Heritage List. Two reasons were cited: the Sassi had been a place of continuous human habitation for at least 350,000 years (averaging the established date range); and it illustrated a harmonious relationship between human culture and natural environment over a series of stages in human history. The expression of interest in the Sassi from the international community validated the history of the Sassi for many Materans. It also sparked a land and subsidy grab. The potential for tourism development represented by the neon letters of UNESCO inspired much of this activity. Today, about 50 percent of the ancient structures have been restored, while most of the rest have been claimed. And the expectation is that within the next five to seven years the Sassi will be completely rehabilitated and occupied. However, the vulnerability of the soft *tufo* stone will require constant maintenance, consolidation, and replacement.

In the forty-year battle between the intellectual elite and the national government over the fate of the Sassi, the government won more skirmishes. However, Legge 771 and the UNESCO nomination brought final victory to the intellectual community. Even the national government now proclaims the incalculable value of the Sassi and provides generously for their rehabilitation.

### IMPOSITION OF MODERNITY (PROGRESS) OVER TRADITION (THE PAST)

To understand the cultural circumstances behind the Sassi evacuation, one must view it in a fuller historical context. Italy in 1950 had been humiliated by its role in World War II. And it had been stigmatized for grinding poverty, disease, and primitive living conditions. Many areas had no electricity, gas, water or sewerage, and overcrowded living spaces were sometimes shared with mules, pigs and chickens. Illiteracy was also prevalent in the peasant South. These were hardly conditions acceptable to a country that aspired to be as modern and First World as its Western peers. Therefore, the Italian government could not simply accept the refurbishment of the Sassi. To do so would be to admit that Italians still lived in caves. No, the cave image was a blemish on the Italian national image, and needed to be extinguished.

At the time the concept of urban renewal was also young and vigorous in the United States and other Western nations. A common reformist antidote to squalor was to label old neighborhoods "urban blight," raze them, and build new highrises in their places for the displaced population. In Matera the Italian government essentially carried out this formula on a huge scale. However, due to the impracticality of building over the steep, crumbling stone bank of the Sassi's ravine, a new city was built on the piano level as an extension of the aristocratic and bureaucratic sector of town (FIG.II). At the same, time the Sassi were abandoned to deterioration. and Materans were encouraged to bury their former homes under countless layers of refuse (FIG.12). This move horizontally redefined the city's spatial social hierarchy of rich and poor on the *piano* level (the rich in the center of town, and the poor on the outskirts), a pattern that was less performative than the previous vertical, social segregation. In other words, it symbolically reunited the two classes, leaving their shared history to sink back into the hillside.

Anne Buttimer has described the mentality of the time and the use of social science as rationale for such violent acts of "renewal":



FIGURE II. Bird's-eye view of Matera, ca. 1970. The ancient Sassi sectors are outlined in white. The modern city (postwar urban neighborhoods and administrative buildings) fans away from the Sassi onto the piano. The gorge fills the base of the drawing. Adapted by Patrick McMillan from a drawing courtesy of Enzo Viti.



**FIGURE 12.** This recent photograph of a vicinato, taken from above, shows the continued use of the Sassi as a dump by many Materans. The fact that preservation work crews often discard their construction debris in neighboring, unoccupied spaces shows the persistent lack of respect of this heritage. Photograph by author, 2003.

Science and rationality had triumphed over other all-competing alternatives. That countries and places should be planned within a wider socio-spatial horizon was taken for granted. World depression and war justified managerial convictions that people and their home places should no longer be trusted to carry on in the traditional way. An old stoic idea that rational order should be imposed on nature and society became an apparently workable dream because of developments in science and technology.

When social scientists got involved as consultants either to redevelopment plans or to their evaluation, they usually brought along the older models of place identity which had been tried and tested in the twenties and thirties. Myths of "community" and "territoriality" had enjoyed a long popularity. It appeared ideologically desirable for many political authorities to sponsor such people-oriented research.<sup>21</sup>

As described here, the design for the new Matera also heavily (or at least apparently) depended upon social science research conducted on the Sassi. But the goal was contradictory: to replace static, old, harmful, irrational ways of living with new, salubrious, rational, modern ways which in some (nominal) way would also incorporate the essential regionalisms (i.e., the old ways) of the group.

The main socio-physical element of the Sassi studied by sociologists and incorporated into the new plans was the *vicinato* (FIG.13).<sup>22</sup> These semipublic courtyards were the principle social and physical organizing elements within the Sassi. Onto each opened groups of houses belonging to extended families and kin-like neighbors. Not only did *vicinati* function as exterior living spaces for the inhabitants of dark,



**FIGURE 13.** Taken in 1949, this image shows a typical vicinato in use as an outdoor communal living and work space. Serving two levels of houses, it accommodates its occupants' varied activities: domestic chores (e.g., laundering clothes), wood storage, agricultural-tool storage, rainwater collection, social intercourse, and play. Photograph courtesy of Enzo Viti.

humid caves, but they were also the location of communal work, communal water, communal assistance, and all communication. Individual *vicinati* were in turn linked to form a system throughout the Sassi by a complex network of stairways and footpaths.

Transferred to the new housing, this feature completely failed. To begin with, the scale was totally wrong. The new *vicinati* were large and meant to serve many times the number of families served by the old system (FIG.I4). Second, extended family groups had been disbanded by the translocation, breaking relationships that were not easily reformed.



**FIGURE 14**. Pictured here is the translation of the vicinato into a postwar housing complex. Increased in scale and meant to serve many more families, the space is nondefensible and has become a no-man's land. Photograph by author, 2003.

Third, in the new regime, state-dependency replaced selfdependency, and thus one of the key purposes of the *vicinati* was eliminated. The only function left for the new *vicinati* was that of communication. But lacking a system of linkage among them, not even this could be achieved. Could social scientists in the 1950s have erred this badly? Or was the design error intentional and politically and socially subversive — a desire by the government to feign concern for local culture, while in fact controlling and reshaping people by breaking their old system of strength and solidarity? Robert Mugerauer has asserted:

Given Western culture's sustained interest in the formal and aesthetic aspects of modernity, it is easy to forget or ignore today that subversive social agendas once drove much modern planning and design. Architects, planners, and designers of all sorts developed the clean forms and materials of modernity not only in response to the new industrial and social world around them, but as an explicit rejection of what they took to be atrophied traditional symbols and social systems.

To comprehend the extent of its social agenda, one need only remember what a sweeping change it was to propose that architects should design housing for ordinary and working-class people — and that even beyond housing, they should take responsibility for designing workplaces, social-service spaces, and even entire cities.

[T]he process of global domination was guided by a "social evolutionist teleology." ... "Modernity is associated with rationality, empiricism, efficiency, and change; tradition connotes fatalism, veneration for custom and the sacred, indiscipline, and stagnation."<sup>3</sup>

Regardless of government intentions, it is interesting to note that the researchers valued the *vicinati's* social element of "human communication" over their architectural character.<sup>24</sup> Indeed, these scholars and designers hardly commented on the Sassi architecture — whose intricate forms were carefully woven out of the natural stone, whose virtuoso vaulting cannot be duplicated today, and whose spatial complexity defy understanding. Instead, they espoused the environmental determinism of their time: a belief in the power of architecture to teach and improve — as well as corrupt. Thus, they held the Sassi responsible for people's social and economic debasement, and proposed modern urbanism as a remedy. Planners and architects would show these peasants a "correct" and "civilized" lifestyle (to use their terminology).<sup>25</sup>

In this act of violence, the government of Rome essentially colonized Matera. In addition to saving face among peer nations, its paternalistic purpose was to transform a self-governing, self-sufficient peasant society into Italian citizens dependent on the political and economic systems of the modern state. Thus, under the guise of social reform, the government intended to create national citizens through city planning.

Until this time, the peasants of southern Italy had considered themselves a world apart from the Italian nation — a perspective described by Levi. They believed they belonged to a different race with a different religion, different dress, different languages, and different lifestyles. For these peasants, the laws, taxes and wars of the Italian nation were incomprehensible obstacles to such an independent culture. They were the means by which "the fellows in Rome" enforced their subjugation. Not until Rome had enticed these people to leave their homes, fields, livelihoods and customs was the government able to conquer their minds and transform their beliefs and allegiances, values and ideology.

The tactic used in this indoctrination was vocally and physically expressed humiliation and shame for their past: both their former culture and its physical setting. The result was the forced forgetting of their peasant culture and "inferior" past, and the adoption of the glorious culture and history of the fledgling nation.<sup>26</sup> This policy was physically reinforced by the convenient fact that the Sassi are completely invisible from the *piano* level, separated from the new city by a wall of elite *palazzi*. According to Paul Connerton:

The attempt to break definitively with an older social order encounters a kind of historical deposit and threatens to founder upon it. The more total the aspirations of the new regime, the more imperiously will it seek to introduce an era of forced forgetting.

[T]he mental enslavement of the subjects of a totalitarian regime begins when their memories are taken away. When a large power wants to deprive a small country of its national consciousness it uses the method of organized forgetting.<sup>27</sup>

In a recent ethnographic study of former Sassi residents, Patrizia Zuccari admitted surprise in finding them proud of and happy in their present, homogenous, standardized homes and reluctant or unwilling to discuss their lives in the Sassi.<sup>28</sup> Only with embarrassment did they describe their former sacrifices, poverty, filth and degradation. Some older people outright refused to recollect, declaring an erasure of memory and incomprehension at the new attention heaped on the Sassi. The one aspect of Sassi life over which these people did express nostalgia and loss was the *vicinato*, which they described as "a place of solidarity, fraternity, and relations," lost forever in the individualistic modern world.<sup>29</sup>

Prof. Giovanni Caserta has articulated the feelings of many ex-Sassi residents. "We are not nostalgic for the water [collection system] nor the filtration system, which at the time of our childhood, brought a trickle of water into the spaces where our beds (or rather our pallets) were placed."<sup>30</sup> He has also criticized the rehabilitation and reinhabitation effort, writing: "... to think of the recuperation and inhabitation of the Sassi . . . is at this time an absurd and paradoxical idea." "[T]hey are not few who after having tasted the adventure of living in the Sassi . . . would prefer to return to the *piano*, and, therefore, to the light."<sup>31</sup> According to David Lowenthal: "Preservation holds little appeal for those whose sense of the past is sullied by insalubrious memories."<sup>32</sup> Likewise, Caserta has based his rejection of the Sassi on practical considerations. Why lament poverty and strenuous living conditions? But this attitude really represents a continuation of the environmental determinism pronounced by the government and the modernist designers of the new Matera of the 1950s: the inculpation of the space of the Sassi as the source of their residents' social and economic problems.

On an emotional level, rejection of the Sassi by ex-residents also results from social pressures to conform to modern expectations, and to embarrassment over their recent, premodern indigence. These people perceive the shame they were made to feel in the 1950s to be indelible. It hardly matters that the site was in use for millennia before them, or that it is layered with ancient as well as modern histories. Blinded by progress, social betterment, humiliation for the past, and negative recollection, they remain unable to see the cultural, historic, and aesthetic value of their ancestral homes. As reformed modernists, they look only forward, and they associate their early lives down in the caves with peasantdom, which they now feel elevated beyond, both physically and socially. I believe a case of social amnesia has resulted from the adoption of state-prescribed values. Similar scorn also caused the local language, Materano, to be largely forgotten, replaced with standard Italian.33

Tamara Haraven and Randolph Langenbach have written that "the condemnation and clearance of physical structures can be read as a condemnation of the way of life which had been lived there."<sup>34</sup> By shunning the Sassi, the former residents likewise reject and disdain their history, an act that deters their ability to return there. For them, the Sassi symbolize their subjugated, pauperized history, now permanently tainted by decades of disrespect and dumping of refuse. Developing over the past fifty years, their new ideology has been based on breaking with the past. By exaggerating the injustices of their former lifestyle, they justify their move to the *piano* and rationalize their abandonment of family memories and traditions.<sup>35</sup> In this regard, John Gillis has written:

New memories required concerted forgettings, a process Benedict Anderson describes as collective amnesia. Changes occurring at the economic as well as the political level created such a sense of distance between now and then that people found it impossible to remember what life had been like only a few decades earlier.<sup>36</sup>

As place works dialectically to create people, once the Sassi residents had moved into modern, atraditional environments, they were changed by them. Most importantly, when Sassi residents were removed from the physical place that had formed their mental maps and social lives, they lost the coordinates for their individual memories.<sup>37</sup> Culturally based like the mental maps, collective memories were similarly invalidated when the population was uprooted, dispersed, and forced to conform to a new culture and way of life.

Too close in time to their lives in the Sassi, the former residents today do not respect them as historic, or view them romantically. Their hardscrabble lifestyle there is all too fresh in their (suppressed) memories to be divorced from the place, making it difficult for them to appreciate its aesthetics or history. The thought of returning to the Sassi also dredges up the pain experienced in forced abandonment of their heritage and in coersion to conform to a new culture, language and livelihood. In other words, their embracing of modernism has been fueled both by the nostalgic pain of remembering their brutal uprooting and the family and societal closeness left behind, as well as by learned shame and humiliation for this preindustrial lifestyle. Seemingly, no amount of good press can erase the negative experience of this generation and the shame caused by bad press.

Following a trend seen elsewhere, the grandchildren of these people are likely to embrace the Sassi, use them to construct narratives of personal identity, and yearn for the past, bucolic life of their forefathers.<sup>38</sup> In fact, this is already happening today to a certain extent. One young architect accidentally admitted to me that his grandparents (and, by extension, his parents) had been moved out of the Sassi. Reluctant to acknowledge his personal connection to the Sassi due to his family's recent social and educational rise, he is, however, a Sassi-phile. While the parents and grandparents of many present-day Materans experienced the actual trauma of dislocation, feelings of loss and a sense of dislocation are now beginning to surface with later generations. Such hints of nostalgia among Materan youth are facilitated by distance be it in space or in time. They do not result from the "failure of our collective cultural confidence in the modernizing impulse."39 Nor do they result from our declining collective spirit and the privatization of our lives.40

But the issue remains: would these youth have developed an interest in the Sassi had UNESCO and the international community not done so first? And have there not been economic incentives to do so? I would venture to guess "no." Or at least the interest would not have developed as soon as it has. This confrontation with a forgotten past has been accelerated by others who have foisted significance and celebrity onto their recently forsaken homes.

My interpretation above of the former residents' perspective as monolithic and lacking agency comes from numerous interviews in which the same themes have been iterated. My initial skepticism about this consistency led me down two avenues of research. First, I tried to understand the workings of collective memory. This led me to believe that even though the former Sassi residents' experiences were not singular, their recited memories have coalesced into a single, collective narrative.<sup>41</sup> Second, I sought responses outside this norm. Thus, for example, after replying to my questions with the usual memory narratives, some respondents have answered further questioning with positive recollections of Sassi life, remembering also their considerable resistance to pressures to move and their regret at having done so.

I also located a nonvocal group of current Sassi residents who never left their ancestral homes or who have recently moved back to the Sassi.42 Generally reluctant to speak with me, and communicating partially in Materano, these people provided alternative, positive perspectives about life in the Sassi to those usually expressed. That said, they do not understand and do not support the preservation effort. They would be happy to receive the government's subventions for work on their houses. But they reject the prescriptions that accompany this money — for example, the requirement that they replace their very practical aluminum-framed windows with what they describe as absurdly impractical, wooden frames, which need constant maintenance, yet are defined as "historically accurate." They also resent the presence of tourists (like me) who peer at them and violate their privacy, and therefore do not support any cause that will bring more tourists.

#### IMPOSITION OF TRADITION (PRESERVATION) OVER MODERNITY (MODERNISM)

Forced to recognize the historical value of Sassi architecture (if not that of the lived culture), the government now supports its preservation. But the preservation of both tangible and intangible culture has been met with mixed sentiments by different sectors of the Materan population. Most people involved in the preservation effort do not belong to the evicted populace. Rather, they are members of the intellectual or financial elite who appreciate the Sassi for their artistic integrity, entrepreneurial potential, or fashionable appeal.<sup>43</sup> Even among this sector, however, the effort did not gain widespread community support until after UNESCO's 1993 designation of the Sassi as a World Heritage Monument. Still, the preservation effort continues to have many detractors (especially among the expropriated), although these people are becoming less numerous or less vocal as the financial benefits of preservation begin to reach the city at large, and as media exposure brings admiring tourists. They criticize the people moving into the Sassi as being "trendy," and as pretending to live in the past while knowing nothing of it. "It won't be long before they see their folly," is a phrase I have heard many times. Such detractors remain proud of their modern lifestyles, and they resent the imposition of tradition - whether in their own lives or in those of other Materans.

The more mercenary, however, see the current trend as a financial opportunity. And many of these people, old and young, are participating in the rebirth of building crafts. Every year, additional artisan workshops open in the Sassi. The materials worked are the local stone, clay, and to a lesser degree wood and iron. Masons have relearned stone construction methods, including the erection of vaults (FIG.15). Formerly practiced regional crafts outside the building industry (for example, ceramic repair, saddlery, and weaving), however, are not being revived. In other words, the extent of this renaissance is limited by modern needs (including tourist art). Likewise, following forty years of decline, the demand for quarried stone has dramatically increased in the past decade. The methods used in active quarries today, however, differ considerably from those used in both the recent and the preindustrial past — the only constant being the material itself.

Similar to the rebirth of artisanal crafts and the Materano language is rekindled interest in the regional cuisine, *cucina lucana*. Although many traditional dishes (for example, oven-cured olives, artichokes under oil, and *limoncello*) have never been culturally lost, many others have. The opening of new restaurants offering this cuisine has sparked a veritable craze for such forgotten dishes as fried dried red peppers, mashed fava beans, fried chicory, and sweet ricotta ravioli with savory tomato sauce. With the tourist market young, and consequently small, the major clientele for these restaurants is affluent local residents. Their enthusiasm for *cucina lucana* is even bringing its reproduction into the home, and regional cookbooks as well as anthropological studies of local food preparation are appearing in bookstores for the first time.

Another form of this retrospection is taking place in the image of the city. Appearing all over the city — from its official letterhead to the sides of new police cars (and, of course, written in all tourist literature) — is the slogan: "Matera, Città dei Sassi" ("Matera: the Sassi City"). During my last five years of observation, I have seen this slogan become



**FIGURE 15**. Using the traditional method of wooden centering, a mason rebuilds a collapsed barrel vault in the Sassi. Photograph by author, 2003.

more and more prevalent.<sup>44</sup> I asked the Chamber of Commerce if it represented an organized campaign. They professed not to have noticed the transformation; however, upon having it pointed out, they fully acknowledged its growing presence. As its claim to fame, Matera has replaced the modern architecture of such notables as Quaroni with the historic Sassi sector, and this fame is growing through the diffusion of media and through association with UNESCO.

The government-led evacuation of ancient, vernacular Matera, the site's dissociation from recent socioeconomic ties (the stones having been cleansed of the poverty they once sheltered and left only to tell the story of virtuoso masons), and its current repopulation recall Timothy Mitchell's discussion of the Egyptian government's attempts to displace the village of Gurna.

The Gurnawis were to be portrayed as ignorant, uncivilized, and incapable of preserving their own architectural heritage. Only by constructing them in this way would the architect have an opportunity to intervene, presenting himself as the rediscoverer of a local heritage that the locals themselves no longer recognized or understood. As the spokesman bringing this heritage into national politics, the architect would enable the past to speak and play its role in giving the modern nation its character. Thus, the people of Gurna could only enter into national politics by submitting to an act of violence. And to preserve their heritage, the architect had to first destroy it.... The preservation of the past required its destruction so that the past could be rebuilt. Likewise, performing the nation required that every one of its rural inhabitants be declared outside the nation, uncivilized and unhygienic, so that in rendering them civilized and clean, the nation could be made.45

This story of paternalism, villainization, expropriation, gentrification, and nationalism resonates strongly with the situation in Matera. Yet, while the cases of Gurna and Matera overlap somewhat, their timing is displaced: the case of Gurna is integrated, while that of Matera has two distinct episodes. I do believe that the Italian (like the Egyptian) government's intentions in removing the Sassi population were subversive, as suggested above; however, I do not believe that these 1950s actions forecast the current processes of preservation and reuse by a different social group.

That said, there exist serendipitous parallels between the two Materan stories. For example, in the 1950s story, the Sassi and its residents were "othered" as premodern and non-Italian — the intent being to assimilate the peasants. Now, the Sassi (without the residents) are being "othered" again, but this time as premodern and exotic (temporally) the intent being to commercialize the location and previously associated culture. In this scenario, the Southern Question is transformed from an economic problem to an economic motor and a source of spectacle.

#### PERCEPTIONS AND PROJECTIONS OF IDENTITY

Materans are quick to blame weak political power for their historical poverty and physical remoteness. Despite fifty years of promises and plans, and despite the city's prominence as a provincial capital and regional co-capital, to this day Matera is not connected to the state railroad system, and no major roads lead to it. The nearest airport is in Bari, in the neighboring region of Apulia, and the only way to reach it is by private automobile via indirect and poorly indicated roads.

Notwithstanding this geographic isolation, various media allow the city to communicate with the outside world and, in fact, place it in a realm apart from its neighbors. Besides the press, the international film industry has exploited the Sassi as a biblical film set. Scenes from the recently released, controversial Mel Gibson film *The Passion of The Christ* were filmed there. So were scenes from the 1985 production of *King David*. And since UNESCO recognition of the site, countless television documentaries on the city have been aired in Italy.

The intellectual community and a majority of preservation professionals downplay the significance of World Monument designation. They assert that their efforts had previously established the site as a national monument, initiated the preservation program, and instigated the development of cultural tourism to Matera. But, despite these proclamations, the impact of UNESCO has been undeniable. Most importantly, UNESCO's imprimatur has greatly increased the value of the Sassi in the eyes of local Materans. Clearly, endorsement by an external, objective, and wellrespected entity has had greater influence than decades of support by the local elite or official recognition by the national government. It has also placed Matera on the international map of cultural tourism. While the result of this placement has tremendously increased tourist traffic, its larger effect has been to excite entrepreneurial activity among Materans.

As with the slogan "Città dei Sassi," the image of the Sassi is collectively being developed and disseminated as the identity of both the city and the region of Basilicata, despite numerous other cultural treasures. This representation is generating expectations among cultural tourists that emphasize a marginalized and mostly forgotten historical community. In order to meet the outside expectations (and to accommodate the tourists' money), entrepreneurial Materans are actively creating a new, old Matera and establishing its identity through the renewal, reinterpretation, and commodification of lost traditions.

Such processes of identity and tourism development are ultimately causing a rewriting of the city's history (based on selective recollection and myth) and a physical transformation of its fabric. Matera is presented as "the capital of peasant civilization." Except for the frescoed Byzantine *chiese rupestri* (cave churches), which are given some attention, little mention is made of the city's past ecclesiastical glories (witnessed by its several hundred Byzantine, Romanesque, and Baroque chapels, churches, and monasteries). The same follows for its aristocratic history (witnessed by the numerous medieval, Renaissance, and Baroque palaces and castles). The peasant image is also informing decisions made on the refurbishment and reuse of areas of the Sassi meant for the tourist public. For example, most restaurants in the Sassi have peasantthemed décor, and selections of materials and structural systems are being based largely on peasant crafts — although many refurbishers are introducing modern materials and methods considered to be incompatible with traditional ones.

Application of this peasant theme is limited by contemporary aesthetic sensibilities, however. Thus, all structures that are considered ungainly, or that are arbitrarily and subjectively described as "unoriginal to the Sassi" (an undefinable term), are being destroyed. Meanwhile, in many homes being renovated for private use traces of peasant lifestyle (e.g., brick or tile floors) are being unceremoniously replaced with high-style alternatives (e.g., marble floors) (FIG.16).

The peasant theme is also limited in anthropological scope. For example, little reference is made to fields, crops, or any extramural activities that would have filled peasant



**FIGURE 16.** In a cave room that probably served previous occupants as a stable, the new owner of this private Sassi home has installed an elegant marble and tile sunken bath. Photograph by author, 2003.

life. Only domestic life is presented — and even then only when scrubbed clean of witchcraft, folk beliefs, and other questionable values. Thus, most tourist, economic or other material being produced about either Matera or Basilicata (including that to be found on a proliferation of websites) presents the same sanitized image of the city. This essentialized version of the city's history emphasizes its peasant identity and the World Heritage Monument recognition, and is usually accompanied by the UNESCO logo.

The impression of the Sassi that remains (as devoid of life as the Sassi themselves were prior to preservation) is simply one of craft and ingenuity — for example, much is made of the Sassi's extensive former water collection and condensation systems. Such a reduction of historical complexity to a few powerful images allows the past to serve the present as myth.<sup>46</sup> These enshrined images provide essentialized meanings for the community — though what these meanings are is not always apparent. As Nandini Rao has stated, when the selective and symbolic reconstruction of history gives rise to myth, "[it] lends sanctity and rightness to a course of action. Thus, creating a myth in the image of the present."<sup>47</sup>

Such a hybrid of truth and myth establishes community identity, necessary in the face of incoming tourists. It also appeals to tourists seeking an exotic, "other" world within Europe — but who do not wish to experience the full measure of preindustrial conditions. Since Materans have adopted only images from their past, and have not reverted to lost lifestyles, livelihoods and customs (except in the way of building crafts and a few culinary specialties), Matera offers the impression of this preindustrial world, without the discomfort. Ironically, the world depicted (or alluded to) - that of mule-drawn plows, traditional garb, and local dialects incomprehensible to outsiders - does currently exist in the South, and not far from Matera. But these communities do not seek tourists, nor do tourists seek them. The real "other" of the South that has not been forced to modernize (as has Matera) provides no tourist amenities, hotels or restaurants. Tourists come to Matera only to find preserved images of that world, safely out of reach of the present.48 They are attracted to the dwellings that used to belong to that netherworld, now rehabilitated, modernized, and made romantically elegant. Their perception of tradition is based purely on image, not on reality.

In addition to creating the illusion of preindustrial culture for nostalgic tourists, local entrepreneurs are providing local residents with new activities within the setting of the Sassi, a sort of old, new Matera. Through the establishment of social clubs in the Sassi, bar owners are drawing the evening *passeggiata* from the *piano* level into the Sassi. This is the local custom of walking along a city's main street (the *corso*) and casually socializing with acquaintances. Many hundreds of young professionals who five years ago would never have entered the Sassi, especially at night, now fill these bars and flow into the surrounding Sassi passageways. While good for the image of the city among Materans, this development has brought Sassi residents to arms over the noise pollution.

Another cultural novelty is the addition of decorative hand-sculpted tufo architectural elements to "restored" houses. The most prevalent of these are floral vent covers and doorbell plates (modern additions themselves). Although there are few precedents for them, their artistry seems to builders and their clients to complement the historic environment. Similarly lacking for historical precedent, the Ufficio Sassi recently decreed that all doors and shutters in the Sassi should be green (or at the limit, brown). The unfortunate result is that still-functioning doors and shutters that belong to the historic fabric (though admittedly somewhat shabby looking) are now being replaced with spiffy new green ones. Many of the (multicolored) old doors that have been replaced had slots cut in the bottoms to allow cats to come and go unattended (FIG.17). Though not domestic animals, cats were once welcomed to Sassi homes as a means of rodent control. Sadly, the new doors do not maintain this feature.

To place these few examples in perspective, one needs to step back and take a larger view. Imagine ancient cave homes that were only a few decades ago filled with squalid, poverty-stricken, overcrowded misery in which one can now find posh social clubs, discotheques, sculpted decor, new matching doors and shutters, and four-star luxury hotels with elevators, private bathrooms, climate controls, DSL Internet, and high-tech entertainment systems. The choice of tradition versus modernity is not being made or being disputed: modernity has won, hands down.

What is being hotly disputed among Materans today is the *perception* of tradition versus modernity. What shades of



**FIGURE 17.** This pair of images compares an old, yet functional, brown door (left) with its cat door (blocked), and a new, industrially manufactured, green door (right) that complies with the Sassi preservation code. Left photograph by author, 2003; right photograph by Katheryn Toxey, 2000.

green will give the appearance of traditionality? What is the allowable size of a satellite dish? Should automobile traffic and discotheque music be limited? Should the Captain Morgan Pub, a bar in the Sassi, be allowed to have a pirateship theme on the inside, or is this inappropriate? Many Materans claim that the Sassi should bear only "traditional" (that is to say, "peasant") themes. Do they fear that the pirate-ship theme undermines the integrity of the mythic peasant identity, and that tourists will not buy the authenticity of the peasant identity if they see it as one of several themes — apart from the peasant transformation into highstyle elegance, like the metamorphosis of caterpillar to butterfly? It simply does not jive with the image that most other Materans are busy portraying of themselves.

#### THE RELATIONSHIP BETWEEN CITY AND REGION

Despite the fact that the main campus of the University of Basilicata is located in Potenza, which is also the first seat of government for the region, this city seems provincial next to glamorous and sophisticated Matera. Not only does Matera benefit from the agricultural produce of the rich soils around it (unlike Potenza and most of the rest of the region, which are dominated by forest and mountains), but it has also experienced an industrial boom in the past five years, and it is targeted for major expansion of cultural tourism. In addition, Matera has become a magnet for artists and musicians (it is home of the prestigious Duni Conservatory), and it is now known throughout Italy as one of the *città dei arti* (art cities), along with Urbino, Florence, Sienna, and Venice, to name a few. Recognition by UNESCO has, of course, bolstered its cultural clout. Economic power, artistic prowess, and extraregional repute all contribute to a general dynamism developing in Matera — and, in turn, this dynamism is redefining the entire region of Basilicata, despite its lack of political strength. Thus, the South's first amusement park is being constructed nearby; history and art museums and galleries are being opened in Matera and surrounding towns; state-sponsored restoration work is being carried out on a variety of other monuments; and tourist infrastructure and interpretive materials are being produced throughout the province in preparation for increased demand. Although flavored with regional accents, these services are new and are not part of the heritage and history of Basilicata. The fact of their presence (for example, the restaurants specializing in and redeveloping cucina lucana, or the hotels located in monumentalized peasant hovels) illustrates their novelty and modernity. Like the city itself, they are hybrids of traditional and modern concepts.

Due largely to forced abandonment, Matera's distinctive customs have been diffused over the past fifty years by generic modern culture. Unlike the rest of Basilicata, Matera's modernity was imposed upon it by the national government. For this reason as well, Matera has been the town in Basilicata most directly affected by extraregional influence, and it serves as the region's main point of contact with the external world. Yet, because of the region's remoteness, this communication (including publicity about its cultural resources and agricultural and industrial production) is taking place almost exclusively through television and Internet, since the region's remoteness limits awareness of its existence.

Serving as the region's intellectual and artistic hub, Matera is gaining economic and cultural significance within the region at the same time as it makes similar strides outside the region. I receive radically different responses from Italians throughout the country when I mention my classical archaeological work in Metaponto (cool acknowledgement) and when I mention my preservation work in the Sassi of Matera (warm enthusiasm). Ten years ago, most of these people either would not have known Matera and its Sassi or would have associated them with the shame of the 1950s. Positive press has completely reversed the stigma that negative press gave the city in the past. Matera is achieving the comforts of a modern city with the visual appeal of historicism: it is becoming both a *new old* city for tourists in quest of a comfortable experience of the past and an *old new* city for Materans desirous of a modern lifestyle set in the frame of the past.

#### REFERENCE NOTES

Many thanks to Patrick McMillan for preparation of my graphic materials.

 D. Upton, "Authentic' Anxieties," in N. AlSayyad, ed., *Consuming Tradition, Manufacturing Heritage: Global Norms and Urban Forms in the Age of Tourism* (New York: Routledge, 2001), p.298.
 D. Upton, personal communication, October 2000.

 H. Glassie, "Tradition," Journal of American Folklore 108 (Fall 1995), p.430.
 Ibid.; and E. Hobsbawm and T. Ranger, The Invention of Tradition (New York: Cambridge University Press, 1983).
 M. Berman, All That Is Solid Melts Into Air: The Experience of Modernity (New York: Penguin Books, 1988); and D. Harvey, The Condition of Postmodernity: An Enquiry into the Origins of Cultural Change (Cambridge, MA: Blackwell, 1990).

6. I realize, of course, that this is the way in which tradition has been presented in modern thought since at least the Enlightenment, and that it is central to the

work of Ferdinand Tonnies, Karl Marx, and Emile Durkheim, to name a few. 7. Lacan's term describes a *vin-yang* condi-

tion in which the exterior is integrally and intimately present in the interior. J.-A. Miller, "Extimité," *Prose Studies*, Vol.3 No.1 (December 1988), pp.121–31.

8. Metaphor made by P. Zuccari in "I Sassi di Matera: il luogo ritrovato?" paper presented at the conference "Sassi e templi: Il luogo antropologico tra cultura e ambiente" (Rome, February 8–10, 2001), p.3.

the seventeenth and eighteenth centuries, when Matera, like many Italian hilltowns, became an "agrotown," i.e., a concentrated farming population which cultivated the surrounding lands. Also occurring throughout the South, a second, larger population boom occurred in the late nineteenth and early twentieth centuries. G. Barker, A Mediterranean Valley: Landscape Archaeology and Annales History in the Biferno Valley (New York: Leicester University Press, 1995), p.286. 10. Trained in medicine yet devoting himself to art, Levi is best known for his political and literary contributions. An Italian Iew from Turin, he was active in the antifascism movement as a member of the socialist reform party, Giustizia e Libertà, which led to his 1935–36 exile in southern Italy. His famous book chronicling this sojourn, Cristo si e fermato a Eboli (Turin: Guilio Einaudi, 1946), was enthusiastically received in its postwar publication, and was quickly translated into many languages. On the literary front, it is credited for introducing the turn toward social realism. In social science, it opened new terrain for study by revealing a exotic Other within Europe. In the field of political economy, it was influential in the formation of a new national government and in the design of the postwar reconstruction program.

9. The first population boom occurred in

11. M. Tafuri, History of Italian Architecture, 1944–1985 (Cambridge, MA: The MIT Press, 1989), p.25. See also Barker, A Mediterranean Valley, p.298. 12. Of a total city population of 30,136, as calculated June 30, 1950, the Sassi housed 15,990, the majority of whom were peasants. F. Nitti, "Una Comunità in Cammino: Matera," *Basilicata*, Vol.II No.26 (October 23, 1955), p.3.

13. Resulting largely from the unification of Italy in the mid-nineteenth century and already identified in academic discourse in the 1870s, the conditions producing the Southern Question intensified throughout the first half of the twentieth century. The discourse was catalyzed in the interwar writings of Antonio Gramsci, which were published after World War II, like Levi's book. Although thought to have been resolved by the late 1970s/early 1980s, recent political developments show that this question continues to haunt the fragile relationship between northern and southern Italy. Volumes have been written on this topic. See, for example, J. Schneider, ed., Italy's "Southern Question," Orientalism in One Country (New York: Berg, 1998). 14. L. Rota, "Il recupero dei Sassi di Matera," d'Architettura, Vol.5 No.21 (1999), p.24.

15. M. Padula, "Problema Turistico e Igenico-Sociale per la Salvezza della Caratteristica di Matera," *Terra Lucana*, Vol.1 No.4 (1954), p.3.

16. "Legge 28 febbraio 1967, n.126," Gazzetta Ufficiale della Repubblica Italiana, No.79 (March, 1967), p.1635.

17. C. Levi, "I Sassi vanno considerati, tutelati e valorizzati al di sopra di ogni ristretto interesse locale," *Basilicata*, Vol.XI Nos. 10–12 (1967), p.36. Also quoted in Zinn, "I Sassi di Matera," p.2.

18. N. Strammiello, in "Documenti-Inchieste: Completo risanamento dei Sassi e rinnovamento delle strutture sociali della Città e del territorio," *Basilicata*, Vol.XII (1968), pp.31–32. Also quoted in Zinn, "I Sassi di Matera," p.1.

19. E. Guadiano, in "Documenti-Inchieste: Completo risanamento dei Sassi e rinnovamento delle strutture sociali della città e del territorio," *Basilicata*, Vol.XII (January 1968), p.29. Also quoted in Zinn, "I Sassi di Matera," p.2.

20. I have found little evidence of the Sassi residents participating in the discussion of their fate. The conversation appears to have been largely carried out between the city's elite and national politicians, a situation that continues today regarding the fate of the Sassi (see note 42).

21. A. Buttimer, "Home, Reach, and the Sense of Place," in A. Buttimer and D. Seamon, eds., The Human Experience of Space and Place (London: Croom Helm, 1980), pp.168–69. See also A. Horner, "The Assumption of Tradition: Creating, Collecting, and Conserving Cultural Artifacts in the Cameroon Grassfields (West Africa)," Ph.D. diss., University of California, Berkeley, 1990, chapter 1 for an exploration of this event through the tradition versus modernism debate. See also T. Mitchell, "Making the Nation: The Politics of Heritage in Egypt," in AlSayyad, ed., Consuming Tradition, Manufacturing Heritage, p. 223, who describes the case of Gurna, Egypt, where the national government has been trying for the past fifty years to displace an entire town using the rationalist, modernist model.

22. Of particular note was the work of German-American sociologist Prof. Friedrich Friedmann from the Univ. of Arkansas, who modeled the Matera project on the Tennessee Valley Authority relocation project.

23. R. Mugerauer, "Openings to Each Other in the Technological Age," in AlSayyad, ed., *Consuming Tradition, Manufacturing Heritage*, pp.92–93, n8, n9.
24. G. De Carlo, "A proposito di La Martella," *Casabella* 200 (February–March 1954), pp.v–viii.

25. See, for example, C. Aymonino, "Matera: mito e realtà," Casabella Continuità 231 (1959), p.10; C. Valle: "Pianificazione integrata," Casabella Continuita 231 (September 1959), p.8; and L. Actio, "La Sfida della Modernità: Pionieri Materani," d'Architettura, Vol.5 No.21 (1999), p.14. 26. M. Fuller describes a different yet interesting comparison in Rhodes where colonization within Europe - by Italy, incidentally - has led to feelings of humiliation and forgetting in "Good as Bread: Nostalgia and Forgivability in Postcolonial Rhodes," (AAA, 1995) paper in progress. 27. P. Connerton, How Societies Remember (New York: Cambridge University Press, 1996), pp.12,14.

28. P. Zuccari, "I Sassi di Matera," p.6. 29. Ibid., p.7.

30. G. Caserta, quoted in Zinn, "I Sassi di Matera," p.4.

31. Ibid., p.4.

32. D. Lowenthal, *The Past is a Foreign Country* (New York: Cambridge University Press, 1985), p.403.

33. Asking a Materan under the age of fifty if he/she speaks Materano is as insulting as asking if he/she were born in the Sassi. This linguistic shame may soon be reversed due to signs of a renaissance of the old language. These include the recent publication of Materano poetry, Italiano-Materano glossaries, and t-shirts printed with Materano expressions.

34. T. Haraven and R. Langenbach, "Living Places, Work Places and Historical Identity," in D. Lowenthal and M. Binney, eds., *Our Past Before Us: Why Do We Save It*? (London: The Blackwell Press, 1981), p.115.
35. J. Gillis portrays this breaking with the past as a recurrent theme, exemplified in the French and American revolutions. See Gillis, "Memory and Identity: The History of a Relationship," in J. Gillis, ed., *Commemorations: The Politics of National Identity* (Princeton, NJ: Princeton University Press, 1994), pp.3–24, quote p.8.
36. Ibid., p.7.

37. Connerton, *How Societies Remember*,
p.37, develops the idea of mental maps.
38. Such a trend was documented by
Haraven and Langenbach, "Living Places,
Work Places and Historical Identity,",
pp.116–17.

39. M. Chase and C. Shaw, "The Dimensions of Nostalgia," in M. Chase and C. Shaw, eds., *The Imagined Past: History and Nostalgia* (New York: Manchester University Press, 1989), p.8.
40. R. Williams, quoted in Chase and Shaw, "The Dimensions of Nostalgia," pp.3–5.
41. This material was presented in my paper, "Co-remembering and co-forgetting: The Dynamics of Preserving the Sassi of Matera," at the conference "Commemoration and the City" (Savannah,

GA, February 20–22, 2003).

42. I describe them as nonvocal because of their general inaudibility, and in fact invisibility, within the society and its government. Many Materans do not acknowledge their presence. The term nonvocal can be applied more broadly to the ex-Sassi residents. For example, in newspaper coverage of a citywide preservation debate in the late 1990s, the voices of elite citizens were clearly and individually presented, while objections made by the rest of the community, referred to as "the people," were lumped together sometimes under the name of a single representative, and sometimes under the anonymous title of "a southerner." I document this debate in chapter four of my dissertation.

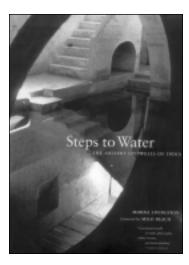
43. Please note that this article investigates the combined effect of preservation on this city and therefore addresses the preservationists as a group. Studied up close (as I do in my dissertation, in progress), I find that there is in fact no unity of purpose or method among them. I have identified at least eight subgroups of preservationists and numerous sub-subgroups arguing over this contested terrain. These include, for example, members of the social and intellectual elite, who formed the preservation initiative and who resent their loss of control to others (namely, the government); archaeologists and preservation purists who feel that the preservation carried out is destroying more cultural material than it protects; practitioners who see the government's stewardship of the Sassi as being corrupt; groups favoring alternate interpretations of the Sassi (for example, the environmental-deterministic interpretation that was accepted by UNESCO); and residents of the Sassi who are at odds with Sassi business owners over preservation legislation (for example, traffic and noise regulation). 44. Although I visited this site often during my 1990–93 summer campaigns with the Institute of Classical Archaeology at nearby Metaponto, my focused research of this topic began in 1999 when I began my preservation collaboration with the state preservation board (the *Soprintendenza per i Beni Ambientali ed Architettonici*), and when I determined to write my doctoral dissertation on the Sassi. This research has taken the form of: 1) extensive historical investigation of primary materials found in Materan libraries, museums, and archives (state, municipal, church, and private); 2) interviews of members of different social classes, present and former Sassi residents, preservation professionals, government officials, tourism developers, and tourists; and 3) photo-documentation of transformations inside and outside the city and Sassi. This research is bolstered by close collaboration with local professionals in the preservation of the Sassi.

45. Mitchell, "Making the Nation," p.221.

46. G. Bond and A. Gilliam, "Introduction," in G. Bond and A. Gilliam, eds., *Social Construction of the Past: Representation as Power* (New York: Routledge, 1994), p.16. 47. N. Rao, "Interpreting Silences: Symbol and History in the Case of Ram Janmabhoomi/Babri Masjid," in Bond and Gilliam, *Social Construction of the Past*, p.160.

48. D. Lowenthal, "Nostalgia Tells It Like It Wasn't," in Shaw and Chase, *The Imagined Past*, p.28.

## **Book Reviews**



*Steps to Water: The Ancient Stepwells of India*. Morna Livingston. New York: Princeton Architectural Press, 2002. 212 pp., illus.

Opening the color-drenched covers of *Steps to Water*, I nearly expected the smell of India to rise from the pages. So potent and saturated are the images which welcome the reader into this large quarto volume, one has a sense of entering India not simply with the eyes and mind but with the body and spirit. An impressive scholarly achievement and a stunning photographic essay, Morna Livingston's book challenges our conventions of what scholarship can do, how photographs tell the story of the built environment, and how we come to know and understand a building type, a geography, a culture, a history and a place. Such a volume is not easy to bring into existence. Livingston (the author and photographer) and Princeton Architectural Press are to be commended for the quality and beauty of this book.

In coming to understand the built environment, one often searches for the telling example, the extraordinary building or design which encapsulates a way of thinking with an unforgettable form and story of human occupation. The stepwells and stepped ponds of India are such examples — highly imageable and exotic buildings that hold secrets about the desert, about water, about human ritual and belief. However, until now sources on these buildings have been scarce and narrowly focused. Klaus Herdeg's compelling black-andwhite drawings and photographs in *Formal Structure in Indian Architecture* (New York: Rizzoli International, 1990) introduced many architects to the existence of such constructions, but then focused on formal spatial analysis. The only full volume on stepwells, Jutta Jain-Neubauer's *The Stepwells of Gujarat in Art-Historical Perspective* (New Delhi: Abhinav, 1981) preceded Livingston's by twenty-one years, but it primarily examined carvings and symbolism, which were illustrated with poor-quality black-and-white reproductions.

*Steps to Water* addresses a broad audience, from architects and cultural geographers to Indian specialists and photographers; but it does not condescend or simplify the material to do so. Its content and organization seamlessly gathers, as Anita Desai notes, "a profound world of myth philosophy, belief, beauty and understanding." Onto an historical framework, the author weaves a critical scholarship of Indian culture and politics through very specific understandings of the design, construction and use of the wells. In the process, contemporary issues of geology, climate, ecology, biology and archaeology are coupled with revelations of who built the wells, who sponsored them, who used them, and why so many of them have been abandoned. To tell the story of this building type, Livingston draws on sources as varied as government health agencies, geological surveys, historic letters and journals, village worship practices, and early Sanskrit texts. Her clarity in characterizing the types of wells and the chronology of their development is an important addition to the scholarship on Indian architecture.

With minimal illustration, the text would be a remarkable achievement. However, the photographs in *Steps to Water*, all by Livingston, deliver an equally nuanced narrative, and

could easily stand alone. As noted by Milo Beach in the introduction: "... her photographs are not mere documentation. They are superb images that are valuable independent of her other scholarly work; they make their points clearly and visually, and are not simply the documentation for or illustration of a necessary accompanying text. She considers herself primarily a photographer, it seems, but she has probed more than many scholars." The photographs in Steps to Water not only tell us of the stones and water, but of the climate, the weather, the vegetation, the people, and the living communities out of which the wells grew, and within which they continue to exist or disappear. The large number and quality of color images bring us directly into the wells, while the blackand-white photographs convey the age and touch of the stone. The measured drawings by Michael McCabe confirm the unique spatial conditions of the wells and enable us to see their structure and order as well as their beauty.

In such an undertaking, not all desires on the part of every reader can be satisfied, and it takes nothing from the book to point these out. First, the inclusion of the chronology and the two maps are extremely helpful, and I suspect these were much harder to produce than it seems. But for those who wish to visit many of the wells, more detailed maps or GPS coordinates would have been a welcome addition. Perhaps this points to a future project for the Architectural Guide Series, also published by the Princeton Architectural Press. Second, the drawings are reproduced as subordinate to the photographs, but are beautiful and carry important information. They could be larger and include more site information both above and below ground. As drawn, the wells remain vibrant, but somewhat decontextualized.

A more substantial conundrum involves the organization of such a mosaic of material. Livingston faced the difficult choice between developing individual case studies and using the individual examples to support the larger narrative. For the most part, she has privileged the compelling story, using photographs of various structures to make the case in parallel. As a result, we understand a detail or view of a well in relationship to the text, but cannot quite apprehend the illustrated well as an individual or coherent structure. At times, the critical photograph or drawing is disassociated from the text by a few pages. The individual structures are so compelling and complex that I came to desire a more systematic and complete description of individual wells.

We have all become cynical about publisher's blurbs. However, the willingness of Milo Beach to write the introduction and Anita Desai and Gita Mehta to review the manuscript and contribute their thoughts cannot be taken lightly. They promise no more than the book delivers, but they promise much: "To open this book is to open the door to a world for which, when parched, thirsty and needy, one has searched."

Susan Ubbelohde University of California, Berkeley Architectural Encounters With Essence and Form in Modern China. Peter Rowe and Seng Kuan. Cambridge, Mass.: MIT Press, 2003.

With this overarching synthesis, Peter Rowe and Seng Kuan have made a significant contribution to those seeking to understand the vagaries and vicissitudes of architecture in China during the past century and a half. They have reached beyond the conventions of either "vernacular" or "traditional" Chinese



architecture into the challenging terrain of "modern China," which is elusive, contradictory and unpredictable. With clear insights they have helped blaze a trail through that terrain, and with sensitive words they have helped push those analyzing Chinese "modern" architectural history onto new paths for future research. This book is an important benchmark in a growing field of scholars — Chinese and non-Chinese alike, for it introduces to the interested observer a multitude of architects and their works — Chinese and otherwise who remain well outside the mainstream of familiarity. Its authors helpfully underscore the roles played by culture, economics and politics in the creation of architecture in China. And because the authors express their ideas lucidly and without jargon, the book is stimulating, focused and probing. Its few weaknesses are outweighed by its many strengths.

In a brief introduction, the authors — Rowe, the Dean of Harvard's Graduate School of Design, and Kuan, a graduate student there — affirm that the book arose "from a long-standing curiosity toward the roles of tradition and modernism in shaping the architecture and architectural environment of modern China, developed during numerous trips both to and within the mainland over the years." Confronted by the overwhelming scale and scope of recent construction in China, Rowe and Kuan seek to make historical and conceptual sense out of sometimes cataclysmic building conditions.

Although Rowe and Kuan do not explicitly state their methodology, their references suggest their search for clarity from a disparate combination of Chinese and non-Chinese sources. For example, one of the book's major contributions is to bring to light (in English) the viewpoints and research results of heretofore largely unknown Chinese scholars who have also struggled to understand constantly shifting, Chinese architectural environments. The authors' conclusions, couched in a largely narrative, chronological framework, are grouped within eight chapters and two appendices, one of which is an extremely helpful set of "profiles of selected Chinese architects and schools." At the beginning of each chapter is also an imagined conversation among three young Chinese architects who respond to the book's points and, in so doing, provide an informal counterpoint to them.

A dominant conceptual thread running through this fabric is the tradition-modern dyad which, although it helps to cohere the narrative, is also at times confining. The historian Paul Cohen in his Discovering History in China [1984], wrote eloquently about some of the drawbacks of the tradition-modern dichotomy. Readers of this book - and of this journal, with "Traditional" in its title - would do well to read Cohen's chapter regarding this point.

At the opening of the first chapter Rowe and Kuan begin weaving with the tradition-modern "thread." Here they show its derivation in the late-Qing dynastic context from the Self-Strengthening, or Westernization Movement (Zigiang yundong) of the 1860s-1870s. At this time a key reformist challenge was posed in the doctrine of "Chinese learning for essential principles, Western learning for practical functions (zhongxue weiti, xixue weiyong)." The authors have taken the *ti-yong* couplet — where "ti" refers to "essence," and "yong" refers to "form" — as a complementary dyad of "tradition" and "modern." And throughout the book they refer back to *ti-yong* as if it were a resounding musical theme in a symphony of Chinese "modern" architecture.

Having established this theme in the opening chapter, in the second chapter the authors discuss the significance of foreign influences and the creation of the so-called "first generation (di yidai) of Chinese architects" in the 1920s. In the third chapter they turn to "four architectural attitudes to modernization" (from ca. 1900 to 1937). They continue with the "big roof" controversy of the 1950s, followed by the "struggles with modernism" beginning in the late 1950s, and "the culture fever" resulting from Deng Xiaoping's early reforms (1979-1989). They end with the "commodification and internationalization of architecture" beginning in the 1990s, followed by "modernization in China," which serves as a summary conclusion.

When I used this book as a text in a spring 2004 seminar, my students (almost all from Hong Kong) found it extremely helpful as an overview. But they also found it limiting because it did not delve deeply enough (they said) into either the architects, their works, or the conceptual minefield associated with the words "modern" and "traditional." They (and I) also were disappointed by the relatively poor quality of the photographic reproductions, surprising in a book published by M.I.T. Press. These limitations, however, should not be placed on the authors' shoulders, nor do they detract from the book's overall importance and utility. This work should be widely read, especially by those with interests in "traditional dwellings and settlements," but also by others seeking to make sense of China's ongoing architectural frenzy.

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Rivers of Rock: Stories from a Stone-Dry Land: Central Arizona Project Archaeology. Stephanie M. Whittlesey. Tucson: University of Arizona Press, 2003. Distributed by Statistical Research, Inc., Tucson.

Culture and Environment in the American Southwest: Essays in Honor of Robert C. Euler. David A. Phillips and John A. Ware, editors. SWCA Anthropological Research Paper, No.8. Phoenix: SWCA Environmental Consultants. Distributed by The University of Arizona Press, Tucson.

Cultural resources management (CRM) is an industry that owes its existence to U.S. federal government regulation. Thanks to laws like Section 106 of the National Historic Preservation Act, those, like government agencies or developers, who work on federal projects, have to at least attempt to collect and preserve information about human history before taking action that might destroy that information. There was a time when archaeological sites were bulldozed in the name of progress. Now, the bulldozers wait while CRM archaeologists and their colleagues, working under contract to those who hired the bulldozers, collect as much data as they can before the site is destroyed. Granted, not all sites recorded by CRM archaeologists are in such danger (government agencies also hire CRM archaeologists to record sites revealed by wildfires on public lands, for instance), but a great deal of the data collected under the auspices of these regulations would never have been gathered if it weren't for the American tendency to foster mammoth infrastructure.

Given this, one may imagine that there would be some impetus on the part of government agencies to share archaeological information with the general public. This seems to rarely be the case. Most CRM archaeological reports, while available to anyone who wants to see them, sit on dusty shelves in the bowels of government buildings and in the reference collections of the CRM firms that produced them. Commonly known as "gray literature," they are not intended for consumption by those with an avocational interest in archaeology. Yet so much of what the scholarly community knows about ancient peoples in the United States, we know because of these works.

Perhaps because it is a relatively young field (the NHPA passed in 1966), CRM archaeology has developed as its primary mission, protection of cultural resources. Few firms have had the resources to make their findings, fascinating as they sometimes are, available to the general public - ultimately the source of their funding. Some larger firms, however, have begun to address their responsibility to the taxpayers and produce popular volumes, which are pitched not to archaeologists and bureaucrats, but to the otherwise interested reader.

One recent contribution to this body of work is Rivers of Rock, Stories from a Stone-Dry Land: Central Arizona Project Archaeology, produced by Statistical Research, Inc., and authored by archaeologist Stephanie Whittlesey. Based on

archaeological work performed for the Bureau of Reclamation as part of the Central Arizona Project, the book does far more than present the results of Whittlesey's and her colleagues' research. It is a rich and complex tale of the water that flows into and through the Southwest and the many peoples who over the course of centuries have been subject to its capriciousness and scarcity.

The Central Arizona Project is a system of aqueducts and canals that channels the water of the Colorado River from Lake Havasu at the California border through southwestern Arizona. Begun in the 1960s, it was originally envisioned as a means to provide water for agriculture, but it now slakes the thirst of the residents of Phoenix and Tucson, watering their resorts, housing developments, and golf courses. Whittlesey uses the Colorado River as her geographic anchor and primary metaphor to relate what is at its essence a very human story. As human history is multilayered, so is the story of water in the Southwest, because it is the story of how humans have handled and been humbled by the resource.

As a result of this approach, however, the book's organization is more geographical than chronological. And because it is so ambitious in scope, this at times causes it to seem a little loosely woven and sometimes repetitive. But this can be forgiven, for it soundly achieves what it sets out to do — that is, demonstrate through archaeological methods how human attempts to control our most precious natural resource are far older than most people realize, and that the attempt to build an oasis in the Southwest's desert landscape is a project much older than the European-American occupation of the area.

Whittlesey's writing is well grounded in the popular literature of the Southwest, and she makes no bones about the influence such works have had on her profession. She includes numerous sidebars that highlight such regional and/or venerable talents as Terry Tempest Williams, Ed Abbey, and Langston Hughes. She also uses the sidebars to include oral histories, biographical sketches, and to narrate historic incidents like the Mountain Meadows Massacre. which have a tenuous yet extant connection to the Central Arizona Project. Although she lapses on several occasions into the dense and ponderous language that plagues CRM reports (particularly when describing the prehistoric archaeology of the region), her prose is, for the most part, strong and more than sufficiently clear for a volume of this nature. Whittlesey has a distinct facility for sniffing out the interesting aspects of human conflict and achievement. For instance, her narrative of John Wesley Powell's trip down the Colorado, and his subsequent efforts to bring an awareness of water's scarcity in the region to the American public, is the story of a man as much as it is the story of a journey.

*Rivers of Rock* is a volume that will appeal greatly to the members of the general public who have an interest in the archaeology of Arizona; but it will also appeal to those who care about the more recent history of the West as a battle-ground for control over water. This is a book with a long

reach; and had the author and publishers been tempted to publish it as multiple volumes, that would have been understandable. But as it stands, the reader is given to appreciate that the stories of the people of the Southwest and their water are inseparable, and that the distance between the prehistoric farmers who used hoes to irrigate the Phoenix basin and those who today build concrete canals through it is not so very far.

In the vein of public education, but targeted more toward professional archaeologists, is another notable recent publication, SWCA Environmental Consultants' festschrift, Culture and Environment in the Southwest: Essays in Honor of Robert C. Euler. Euler, who headed the Center for Man and Environment at Prescott College, was a driving force in archaeological education in the Southwest. His field-intensive approach to teaching undergraduates, many of whom went on to professional practice in regional CRM firms, has helped ensure high standards in Southwest archaeology for decades. Based on a symposium held in Euler's honor in 2001 in Flagstaff but published after his death in 2002, the volume includes both scholarly contributions and personal recollections. While the personal recollections wax fond, they are not as effective in presenting the life of the man as those contributions that demonstrate the science of archaeology as Euler envisioned and taught it. Mark L. Chenault's "The Micro-Archaeology of Hohokam Floors," to name one example, is a good account of the application of new technologies to gain the most from ancient information.

Euler's belief that science writing should be exciting, because science is exciting, is a tenet at the core of this collection, and it is evident in the best of these essays. More importantly, it is also at the heart of the popular volumes, like *Rivers of Rock*, with which the archaeological community is making itself known to a public to whom their work has been a tax-funded mystery for far too long.

#### Kathleen Corbett

University of California, Berkeley

*The Hacienda in Mexico*. Daniel Nierman and Ernesto H. Vallejo. Translated by Mardith Scheirtz-Miller. Austin: University of Texas Press, 2003.

The Hacienda in Mexico is the first architectural study of the hacienda to come from Mexico. In it, Daniel Nierman and Ernesto Vallejo, architects and professors of architecture in Mexico City, document haciendas from the states of Hidalgo, Tlaxcala, and San Luis Potosi, using drawings and both color and black-and-white photographs to accompany historical narrative and analysis of space. The artful sophistication evident in the images represented on generous-sized glossy pages provides a seductive introduction to the history and life of the hacienda. But the real gems in this book are original measured site plans, elevations, and building facades of seventeen previously unrecorded haciendas. This book will give architects and historians the opportunity to scrutinize the hacienda as a building type in great detail: its relationship to the fields, the location of the zaguan, the use of granaries, even the nature of the flooring in their interior courtyards.

As a monumental agrarian compound that reigned over Mexico's countryside from the sixteenth to the beginning of the twentieth century, the hacienda gave unique form to an emergent enterprise. Nierman and Vallejo describe the hacienda as nothing less than an establishment that "represented a moral body, a community of medieval traditions jealous of its autonomy and rights — an institution."

The authors delve deeply into the details of such compounds. For example, insights described in the chapter "Materials and Construction Methods" unpack architectural method as well as historical facts. Here they describe how traditional materials such as fieldstone, tabique, adobe, and cut stone were used in hacienda fabrication, and how the absence of appropriate wood in some areas of San Luis Potosi encouraged the development of arches. The economic status and the ecology of a place, which guided construction, resulted in many of the workers constructing their own houses, using local materials. But the hacienda's overall style is described in another chapter, "Two Forces," as both "intuitive" and "academic" — with the academic style being attributed to foreign influence. Nierman and Vallejo address the affects of this influence critically: "the result is that many times the details of the hacienda fall within the category of contrivance — an architecture that emphasizes form and distances itself from its context, when it imports foreign models that are far removed from their cultural and autochthonous roots."

The function of the spaces — the ostentatious Big House, the Spaces for Production, the Compound, and the Chapel (the only place where caballero and peon might cross paths) organize the remaining chapters — except for "The World of the Haciendas Reflected in its Architecture." In this chapter the statement that a "convivial relationship between proprietors and workers is reflected in constructions such as big house, workers' quarters, patio de campo . . ." begs for more historical research. The depravity of the workers quarters and the decadence of the big house, as shown in Nierman and Vallejo's seventeen plans, testify to a colonial power whose history has created a maelstrom within current scholarly debates. There is a political agenda behind viewing the colonial enterprise as providing an escape from poverty and famine. If you make a house built for a peon, a person becomes one.

It is because of this debate that Nierman and Vallejo's celebration of the hacienda as a Mexican architecture impregnated with a "national identity" successfully opens a "road toward an awareness of our architecture." But we must now ask whose history is represented in this magnificent architecture? The hacienda produced goods and protected peons from famine through severe regulations, reinforced by physical boundaries. The hacienda's architecture, in a sense, then, legitimized a life of lawless and irrational disparity. Nierman and Vallejo's book thus paves the way for a more critical history of the hacienda, as a place which protected the indigenous people of Mexico through enslavement. The hacienda thus represents both the transmogrification of indigenous people in their land and a source of national pride inspired by enduring beauty and architectural invention.

#### Sarah Lopez

University of California, Berkeley

## **Conferences and Events**

#### UPCOMING CONFERENCES

"Sir John Summerson & Henry-Russell Hitchcock: Aspects of Architectural Historiography in the Twentieth Century," London, England: June 11–12, 2004. International conference sponsored by the Paul Mellon Centre for Studies in British Art and the American Society of Architectural Historians. In addition to the two days of papers, there will be a private reception at Sir John Soane's Museum, London, and a series of visits to buildings in London that were particularly meaningful to the two historians. In the U.K., contact: Maisoon Rehani, Paul Mellon Centre for Studies in British Art, 16 Bedford Square, London WC1B 3JA. In the U.S., contact: Society of Architectural Historians, http://www.sah.org.

**"Building Cities for Community & Identity," London, England:** June 13–17, 2004. The 40th annual International Making Cities Livable (IMCL) conference, co-organized with the School of Architecture, University of Notre Dame, Indiana, USA. The IMCL conferences are based on the premise that the city is an organism, with interdependent social and physical elements. For more information, contact: Suzanne H. Crowhurst Lennard, IMCL Conferences, P.O. Box 7586 Carmel, CA, 93921. U.S.A. fax: 831-624-5126; Email: suzanne.lennard@livablecities.org.

"2004 RAIC Festival of Architecture: The Future of Architecture — A Collective Risk?" Quebec City, Canada: June 16–19, 2004. For the first time ever, the Royal Architectural Institute of Canada will hold its Festival of Architecture in Québec City — a World Heritage Site and the cultural center of French North America. For registration and other information, please visit the Royal Architecture Institute of Canada at www.raic.org.

*"Great Parks/Great Cities," London, England:* July 10–13, 2004. The annual conference of the Project for Public Spaces, in partnership with GreenSpace and the London Parks and Green Spaces Forum. For more information, contact the events team at finm@green-space.org.uk; or visit http://www.greatparksgreatcities.com/.

*"Planning Models and the Culture of Cities," Barcelona, Spain:* July 14–17, 2004. The eleventh biennial meeting of the International Planning History Society (IPHS) will explore the historical interactions, synergies and conflicts between planning ideals and the diversity of cities. For more information, contact: F. Javier Monclus (UPC, Barcelona, Spain) javier.monclus@upc.es.

*"Global Pressures on Local Autonomy: Challenges to Urban Planning for Sustainability and Development," Louisville, KY*: September 4–8, 2004. The biennial symposium and tenth-anniversary celebration of the International Urban Planning and Environment Association. Information available at http://cepm.louisville.edu/IUPEA6/index.htm.

*"LIMITS," Melbourne, Australia:* September 26–29, 2004. The 21st annual conference of the Society of Architectural Historians, Australia and New Zealand, will address issues of architecture as an art that operates within and responds to key nominated or historically situated limits and constraints. For conference information and updates, refer to the SAHANZ website: http://www.sahanz.net; or write to Hélène Frichot, sahanzo4@rmit.edu.au, or Prof. Harriet Edquist, Harriet.Edquist@rmit.edu.au.

*"Folklore and the Cultural Landscape," Salt Lake City, UT*: October 13–17, 2004. The American Folklore Association annual meeting will be held at the Little America Hotel. The theme considers the many possibilities suggested by both literal and symbolic understandings of space and place in the context of folklore and cultural production. For more information, contact: Dorothy Noyes, Mershon Center, Ohio State University, 1501 Neil Avenue, Columbus, OH, 43201-2602. Fax: 614-292-2407; email: noyes.10@0su.edu.

"Magic, Science and Religion," San Francisco, CA: Nov 17–21, 2004. The annual meeting of the American Anthropological Association will bring together those who applaud the evolutionary presumptions embedded in these texts and those who are

appalled by those presumptions to address the political and social framework which gave rise to them and the practices they interpret. For more information, contact the program chair: Tanya Luhrmann, Committee on Human Development, University of Chicago, 5730 S Woodlawn Ave, Chicago, IL, 60637. Tel.: 773-702-2496; email: tluhrman@uchicago.edu.

#### CALL FOR PAPERS

- *"The Sustainable City 2004," Sienna, Italy:* June 16–18, 2004. The third International Conference on Urban Regeneration and Sustainability aims to address the many interrelated aspects of the urban environment from transport and mobility to social exclusion and crime prevention. Abstracts will be accepted up to one month before the conference. For more information, contact: Amy D'Arcy-Burt, Conference Secretariat The Sustainable City 2004, Wessex Institute of Technology, Ashurst Lodge, Ashurst Southampton, SO40 7AA, U.K. Tel.: 44 (0) 238 029 3223; fax: 44 (0) 238 029 2853; email: adarcy-burt@wessex.ac.uk.
- *"City Limits? The European City, 1400–1900," Winnipeg, Canada:* October 1–2, 2004. This interdisciplinary conference will consider sociopolitical, economic, cultural, religious, material, or physical aspects of the pre-twentieth-century European city, as well as the challenges facing researchers removed not only in time but also in space from archival and material sources. For more information, contact: City Limits Conference, Department of English, 625 Fletcher Argue Bldg., University of Manitoba, Winnipeg, MB, R3T 5V5, Canada; or city-limits@lists.umanitoba.ca.
- "Architecture and Identity: The Making of Cultural Identity in Contemporary Architecture, Berlin, Germany: December 6–8, 2004. Intentional conference sponsored by the Habitat unit at Berlin University of Technology aimed at revealing the mechanisms of constructing the "own" and the "foreign" through architecture. The conference will present and discuss the results of regional studies prepared in a recently completed research project. Additional interdisciplinary contributions are invited. Abstracts must be submitted by June 15, 2004. For more information, contact: Conference Papers, HABITAT UNIT A 53, TU Berlin, Strasse des 17. Juni 135, 10623 Berlin, Germany. Email: info@architecture-identity.de; or visit http://www.architecture-identity.de.
- "International Conference on Future Vision and Challenges For Urban Development," Cairo, Egypt: December 20–22, 2004. The global economy has greatly affected the provision of affordable and appropriate end products such as housing, utilities, and basic urban services. For more information, contact the conference secretariat: 87 El-Tahrir St., Dokki, Giza 11511. P.O. Box 1770, Cairo, Egypt. Tel.: +202 761602, 3351564; fax: +202 3351564, 3367179; email: confhbrc@hbrc.edu.eg.
- *"ARCHCAIRO 2004: Architecture, Communities and Settings, Globalisation and Beyond," Cairo, Egypt:* February 22–24, 2005. This conference will address the following topics: architecture and community (urban) design and development; architectural and urban criticism in developed and developing settings; revitalization of "contextuality" and regionalization; heritage (cultural and physical) conservation; appropriate technology and environmental design; housing and shelter; the urban poor; community planning; and resource management. For further information, contact: Department of Architecture, Faculty of Engineering, Cairo University, Giza, Egypt. Tel.: 002 02 774 0748; fax: 002 02 572 8967; web: www.archcairo.org.

#### RECENT CONFERENCES

- "Architecture and Landscapes of the Pennsylvania Germans, 1720–1920," Harrisburg, PA: May 12–16, 2004. Sponsored by the Vernacular Architecture Forum. What does "Pennsylvania German" mean? What has it meant in the past? For more information, contact: Nancy Van Dolsen, 9 AM and 7 PM eastern time, 252-243-7861; or woodhamfarm@msn.com.
- "The Teaching of Architecture & Urbanism in the Age of Globalization," Lisbon, Viseu, Tomar, Portugal: May 5–9, 2004. International conference sponsored by the Council for European Urbanism (CEU). For information, contact: José Franqueira Baganha, CEU Steering Committee coordinator in Portugal, at zebaganha@sapo.
- "Archipelagos: Outposts of the Americas," Miami, Florida: March 18–21, 2004. The ACSA's annual meeting aimed to sound out both master narratives and counter-narratives of the Americas, offering a platform for its growing cacophony of alternative voices, as well as for the myriad venues through which they might be heard. Conference information available on the ACSA website: http://www.acsa-arch.org/meetings/.

## **Guide for Preparation of Manuscripts**

#### 1. GENERAL

The editors invite readers to submit manuscripts. Please send three copies of each manuscript, with one copy to include all original illustrations. Place the title of the manuscript, the author's name and a 50-word biographical sketch on a separate cover page. The title only should appear again on the first page of text. Manuscripts are circulated for review without identifying the author. Manuscripts are evaluated by a blind peer-review process.

#### 2 LENGTH AND FORMAT

Manuscripts should not exceed 25 standard 8.5" x II" [A4] double-spaced typewritten pages (about 7500 words). Leave generous margins.

#### 3. APPROACH TO READER

Because of the interdisciplinary nature of the journal, papers should be written for an academic audience that may have either a general or a specific interest in your topic. Papers should present a clear narrative structure. They should not be compendiums of field notes. Please define specialized or technical terminology where appropriate.

#### 4. ABSTRACT AND INTRODUCTION

Provide a one-paragraph abstract of no more than 100 words. This abstract should explain the content and structure of the paper and summarize its major findings. The abstract should be followed by a short introduction. The introduction will appear without a subheading at the beginning of the paper.

5. SUBHEADINGS

Please divide the main body of the paper with a single progression of subheadings. There need be no more than four or five of these, but they should describe the paper's main sections and reinforce the reader's sense of progress through the text.

*Sample Progression*: The Role of the Longhouse in Iban Culture. The Longhouse as a Building Form. Transformation of the Longhouse at the New Year. The Impact of Modern Technology. Conclusion: Endangered Form or Form in Transition?

Do not use any numbering system in subheadings. Use secondary subheadings only when absolutely essential for format or clarity.

#### 6. REFERENCES

Do not use a general bibliography format. Use a system of numbered reference notes as indicated below.

A condensed section of text might read as follows:

In his study of vernacular dwellings in Egypt, Edgar Regis asserted that climate was a major factor in the shaping of roof forms. Henri Lacompte, on the other hand, has argued that in the case of Upper Egypt this deterministic view is irrelevant.<sup>1</sup>

An eminent architectural historian once wrote, "The roof form in general is the most indicative feature of the housing styles of North Africa."<sup>2</sup> Clearly, however, the matter of how these forms have evolved is a complex subject. A thorough analysis is beyond the scope of this paper.<sup>3</sup>

In my research I discovered that local people have differing notions about the origins of the roof forms on the dwellings they inhabit.<sup>4</sup>

The reference notes, collected at the end of the text (not at the bottom of each page), would read as follows: I. E. Regis, Egyptian Dwellings (Cairo: University Press, 1979), p.179; and H. Lacompte, "New Study Stirs Old Debate," Smithsonian II (December 1983), pp.24–34.

2. B. Smithson, "Characteristic Roof Forms," in H. Jones, ed., *Architecture of North Africa* (New York: Harper and Row, 1980), p.123.

3. For a detailed discussion of this issue, see J. Idris, *Roofs and Man* (Cambridge, ма: міт Press, 1984).

4. In my interviews I found that the local people understood the full meaning of my question only when I used a more formal Egyptian word for "roof" than that in common usage.

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Illustrations will be essential for most papers in the journal, however, each paper can only be accompanied by a maximum of 20 illustrations. For purposes of reproduction, please provide images as line drawings (velox, actual size), b&w photos (5" x 7" or 8"x 10" glossies), or digitized computer files. Color prints and drawings, slides, and photocopies are not acceptable.

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In special circumstances, or in circumstancesnot described above, follow conventions outlined in *A Manual for Writers* by Kate Turabian. In particular, note conventions for complex or unusual reference notes. For spelling, refer to *Webster's Dictionary*.

#### 11. WORKS FOR HIRE

If you have done your work as the result of direct employment or as the result of a grant, it is essential that you acknowledge this support at the end of your paper. *Sample acknowledgement*: The initial research for this paper was made possible by a grant from the National Endowment for the Arts [NEA]. The author acknowledges NEA support and the support of the sabbatical reasearch program of the University of Waterloo.

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Submission of a manuscript implies a commitment to publish in this journal. Simultaneous submission to other journals is unacceptable. Previously published work, or work which is substantially similar to previously published work, is ordinarily not acceptable. If in doubt about these requirements, contact the editors.

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If you have prepared your paper using a word processor, include a floppy-disk version of it in addition to the printed versions. Please indicate the hardware and the software used. We prefer *Microsoft Word* on an IBM PC or a Macintosh.

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Contributors are usually notified within 15 weeks whether their manuscripts have been accepted. If changes are required, authors are furnished with comments from the editors and the peer-review board. The editors are responsible for all final decisions on editorial changes. The publisher reserves the right to copy-edit and proof all articles accepted for publication without prior consultation with contributing authors.

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