USE OF COLLECTIVE SPACE IN PATAN AND OTHER HISTORIC TOWNS OF THE KATHMANDU VALLEY, NEPAL

There are two main reasons why the towns of the Kathmandu Valley are of special relevance to the study of collective urban space in historic settlements. On the one hand they have preserved ancient patterns of urban space-use with a purity and intensity that has few equals anywhere in the world. On the other hand they are paradigmatic in the way they now face many of the problems that beset cities in developing countries where a pre-industrial way of life with strong traditions suddenly confronts the ways and means of twentieth century industrial society. In other words, the towns of the Kathmandu Valley with their intriguing parallels to the medieval cities of Europe are both an ideal field of study for the urban historian and a dramatic field of battle for the urban planner, designer and conservator.¹

The Kathmandu Valley (longitude = 85°20' East, latitude = 27°40' North) (fig. 1) is a fertile subtropical area in the heart of Nepal, at an average altitude of nearly 1,500 feet above sea level. The author gratefully acknowledges financial assistance from the J.D.R. 3rd Fund and from the Milton Fund of Harvard University which made it possible to complete the urbanistic conservation study of Patan Durbar Square.

¹ In this connection the research of Gerhard Auer, Niels Gutschow, Bernhard Koelver, Wolfgang Korn, Jean Pieper, Carl Pruscha, John Sanday, Mary Slusser, David Snellgrove, the Danish Bungamati team and the French Panauti team must be mentioned. Their investigations supplemented my fieldwork that was carried out during four visits between 1962 and 1978; in addition I had the benefit of help from P.D. Shrivastava and Gauri Jhaulpur, and from my former students and assistants Bharat Bansal and Michael Doyle who stayed in the Kathmandu Valley in 1964 and 1977 respectively. Without the active support of H.M. Government Departments of Archaeology, and of Housing and Physical Planning, as well of UNESCO and UNDP in Kathmandu, my work would have been impossible.

1. Map of the Kathmandu Valley
altitude of 1330 m but ringed by higher mountains and within sight of the high Himalayas. It is comparatively small with an extension of 19 km North-South by 25 km East-West; this is comparable, for example, to the greater Paris region between St. Denis and Sceaux, Versailles and Vincennes. Such a small size makes the Valley extremely vulnerable to crowding by additional construction. As it is, the landscape with its rivers and terraced hills, compact villages and towns, and dominating sanctuaries is extremely appealing and harmonious, at times of overwhelming beauty. In addition the area is studded with historic monuments; almost nine hundred are classified in the Protective Inventory of 1975. In 1971 the Valley had ca. 619,000 inhabitants with 286,000 Newars as the single most important ethnic group, closely followed by 279,000 members of the Indo-Nepalese caste system. Sixty-two percent of the working population were employed in agriculture. Three major towns exist: Kathmandu (1971: 130,000), Patan (60,000), and Bhaktapur (40,000).

Kathmandu, because it has the largest share of modern additions, is not amenable to historic preservation measures for the entire city. However in an overall program of rehabilitation, development, and sanitary improvement, the protection and conservation of selected areas of historic, urbanistic significance has a rightful place. The H.M.G.-UNESCO Hanuman Dhoka Conservation Project was a successful beginning in this direction.

Bhaktapur compared to Kathmandu stands at the opposite end of the conservation spectrum; here change and growth have been small. In Kathmandu 15% of the population worked in agriculture in 1971 and 56% was literate, in Bhaktapur 65% worked in agriculture and 27% was literate. Traditions are tenacious in this predominantly Newar (99%) and Hindu (85%) city which possesses more Hindu priests' houses.
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exists that on the Patan side no unbuilt land willting main roads that not onlyserve as pratical (F. Steiner) 1976, 68 fr,

be left to form a buffer zone between Katbmandu links to the rest of the Valley and its ancient trade 13 N. Gutschow, "Kathmandu –Symbolik einer Stadt... in: Fo/ia Rara, Wiesbaden (Barrie & Jenkins) 1975, 52 fr.

tbe rest (fig. 3). In addition the greatest danger clearly organized around a cross of two intersec-

A Ritual Map from Nepal" in Fo/ia Rara, Wiesbaden (Barrie & Jenkins) 1975, 52 fr.

bown are still of remarkable visual homogeneity Patan is centrally located in the Valley (fig. 1.) "Three Cities of Nepal " in P. Oliver et al., Sheller. Sign and Symbol, London (Barrie & Jenkins) 1975, 52 ff.

context. The North-South (more exactly NNE-SSW) axis in its continuation not only leads to the most important ancient sites of Deopatan and Chabahil with their sanctuaries but beyond them perhaps points in the direction of Shivapuri, the highest mountain on this side of the Valley*. The four cardinal points of the axial roads are actually marked by four stupas at the boundaries of the city (fig. 5), and a fifth is said to have existed in the centre. These are attributed to the great protector of Buddhism, King Ashoka himself, and they remind us of the doctrinal notion of fivefold bhuddhahood with Adibuddha in the centre surrounded by the Buddhas of the four directions 10.

Early Hindu treatises on architecture and town planning 11 also recommend the layout of towns with a cross of oriented main streets. They equally suggest other features that, mutatis mutandis, are found in the physical reality of Patan; for example, a site that slopes toward North and East, regular block sizes and road widths, and a social arrangement of inhabitants according to occupation and proper caste-location, though naturally the caste system no longer prevails officially.

Like other Newari towns 12 Patan is imbedded in the spiritual landscape of the Valley in more than one way. As Nils Gutschow has pointed out 13 the sanctuaries of the Ashtamatikras, the eight mother deities, or rather the eight aspects of the Great Goddess, form a network of protection that completely encircles the city and relates to the central temple of Taleju, protectress of the Royal

(Maths) than any other town. The substance of housing is of remarkable homogeneity and clearly organized by a network of paths and nodes with religious buildings playing an important role; the main temples unequivocally dominate the city which in its totality, with clearly defined boundaries, makes a powerful image. Total urbanistic conservation is feasible here and the German-Nepali Bhaktapur Development Project has gone farr in demonstrating how this can be done; how at the same time buildings can be restored, spaces cleared up, and sewers and water supply provided 1.

While Patan (fig. 2) is not as completely preserved as Bhaktapur it has kept much more of the old environment and ways of using it than Kathmandu. In 1971 36 % of the population was engaged in agriculture 4 and 38 % was literate. The inhabitants of Patan are 83 % Newar and renowned for their craftsmanship and artistry. The town itself is considered the most ancient among the three main cities of the Valley. It is 58 % Buddhist and 42 % Hindu and has a special wealth of Buddhist monastic buildings (viharas) some of which function as important cells of urban social organization. Considerable areas of the town are still of remarkable visual homogeneity but even in the centre there are quite a few recent buildings that are out of scale and out of style with the rest (fig. 3). In addition the greatest danger exists that on the Patan side no unbuilt land will be left to form a buffer zone between Kathmandu and Patan.

Patan will serve as our example for the discussion of use and arrangement of urban space, but much of what is found here can be used equally to illustrate the typical Newar settlements anywhere in the Valley which all share a trend to compactness and high density (Patan City = ca. 530/hectare 5), organization along and around intensely utilized public spaces and a definite flair for attractive urbanistic arrangement. These features are even found in smaller villages such as Bungamati (fig. 4) and Khokana and clearly characterize a common Newar usage for which a number of reasons can be given. Among them is the tightly knit social structure with extended families, castes and Guthis 6 — a system that circumscribed the extension of permissible areas of habitation for certain groups; there are also ritual considerations and practical necessities such as the avoidance of encroachment on good agricultural land and, in the past, defence against outsiders. It is tempting to assume that beyond all such rational reasons a particular spatial sensitivity is also involved; the kind of aesthetic sensitivity that accounts for the fact that the Newars were renowned as artists and craftsmen throughout recorded history.

Patan is centrally located in the Valley (fig. 1.) and of great antiquity. Its plan has been compared to the "chakra", the symbolic wheel, and it is clearly organized around a cross of two intersecting main roads that not only serve as practical links to the rest of the Valley and its ancient trade routes but also ritually tie the city into a greater

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* According to information kindly provided by Mr. Shanker Man Pradhan of H.M.G. Dept. of Housing and Physical Planning the area of Patan City is 111.6 ha.


2 A. Guthi, like a medieval confraternity in Europe, unites members of a certain group for a specific purpose that may be religious, charitable or social. The word Guthi may also describe an endowment.


Air view of Patan Urban Preservation District. Where the main roads intersect in the centre the Durbar Square can be seen. Circles mark three of the four so-called Ashoka Stupas at the outskirts of the town; the fourth is not visible in this view.

Other ritual networks include processional routes that permit a systematic visit of all sacred sites, and various perambulations. Processions thus form an integral though intermittent part of urban space-use as they have done in western cultures during Antiquity and Middle Ages. In Patan an important procession of several days' duration occurs during the chariot festival of Rato Mantsyendranath just prior to the onset of the rainy season, while another major procession occurs on the occasion of the Matya festival of lights, when the so-called 1400 Chaityas (small stupas) are visited. In view of the purpose of a Buddhist chaitya or stupa as a commemorative monument, such a festival clearly re-enacts the city as repository of collective memories.

A processional route once a year also connects all Bahals and Bahils, the Buddhist monasteries that form a complex organizational subsystem in the organism of the city where one great establishment such as the Hiranya Varna Mahavihara, popularly known as Kwa Bahal or Golden Temple, may have numerous smaller dependencies throughout the city, and a total membership of several thousand people. As a building type the Bahal is nothing but a monumentalized courtyard-house and at times next to a Bahal a larger courtyard is formed that is known as Nani around

\[\text{M.B. Joseph, "The Viharas of the Kathmandu Valley", Oriental Art xviii (1971), Nr. 2, 1 ff.}\]
6. - The large pond in the SW quarter of Patan.

7. - Patan Durbar Square, looking N from point 4 on the plan fig. 9.
which the houses of individual families are arranged.

Beginning with the open shelter (Pati) and the house as smallest building units, Patan is made up from comparatively few urban elements, typologically standardized and linked by a graded network of roads and paths. The arteries of communication are mostly accompanied by three-storied houses with pitched, overhanging roofs (figs. 13, 16). Brick, tile, and wood are the prevailing materials with brick or stone originally used for paving where it occurs (many paths are left unpaved). As a consequence, the gamut of colors and textures that are in evidence is limited and, except for modern intrusions, (figs. 3, 17, 19) pleasantly unified.

Room sizes and heights are very small, with rooms less than three metres deep and two metres or less high which means one has to stoop under doors and beams. Everything is related to human users with minimal standards for the physical occupation of indoor space; windows and doors often appear more appropriate with children than when they frame grown-ups. The very intimate scale that results from the small size of the basic elements sets the tone for the whole city and makes it easy for the monumental buildings to appear dominant despite comparatively limited absolute sizes.

The entrance to a house may be centrally located and richly carved or it may be a mere passage that
the large so-called Taleju Bell in Patan Durbar
Square (N° 29 in fig. 14).

- Heavy lorry blocking the street at the N end of
Patan Durbar Square.

13. - Children playing in Patan Durbar Square; their
toy has the shape of the chariot of Matsyendranath.

leads into a courtyard from which similar passa-
ges in turn lead to other courts — parts of an
extensive and, to the intruder, bewildering sys-
tem inside a block. Though these courts and pas-
sages are publicly accessible, they obviously
form a semi-private zone, distinct from the public
zone of the roads and the private zones of gardens
and upper floors. Considering the narrowness of
streets and lanes and the small size of the average
overcrowded house, one understands how bene-
ficial courts and gardens are in the total habitat.
Parallels to Medieval European cities easily come
to mind and as in Europe there is a continuous
danger that, owing to later encroachments on
these courts, the amount of open area available
inside building blocks becomes drastically re-
duced with an ensuing increase of density and
deterioration of living conditions.

From time to time houses along a road may give
way to garden walls, to a pond (fig. 6) or tank for
water supply and ritual as well as practical uses,
or to a communal building such as a public shelter
(Pati), a public fountain sunk in the ground (Hiti)
or one of the many types of religious buildings
with its appurtenances. Frequently the road wi-
dens on such occasions to form a little piazza or
public square (fig. 3) that may include a shrine, a
Pati, a well-head and several chaityas.

Streets are more than traffic arteries in a
Kathmandu Valley town. It is a familiar sight to
see work including the drying, thrashing and win-
nowing of grain, and all the other more or less
continuous chores carried out in the street (fig. 4)
where at the same time animals mingle freely with people and may
cause a minor stampede when, for example, one
of the holy cows becomes unruly or two bulls
start a fight. It is equally common to notice that
the care of babies and of the own body takes place
in front of the house. Many social activities also
have their locale in the streets and particularly in
the adjoining open public shelters, the Patis; here
games and music are played, gossip is exchanged,
instruction provided and business conducted;
here mendicants and travelling religious men may
rest and sleep. A bride and her dowry or an aged
man whose special birthday is celebrated may be
carried past, or a corpse on its way to the burning
ghat by the river.

In all this there is a clearly marked rhythm that
corresponds to the times of the day, beginning at
daybreak when people go to the river and offer
sacrifice, and ending after dark when the last
shops and food-shops close their wooden shut-
ters. Festival days, and there are many of them,
impose a larger temporal rhythm of their own, at
times lending a brief prominence to certain
otherwise hardly conspicuous points in the urban
fabric, at times ritually re-establishing in proces-
sion significant paths and boundaries throughout
the city.

The Durbar Square with its concentration of
monumental buildings — temples and the former
royal palace — is the functioning core of the city
(figs. 7-19). It appears to have been laid out ac-
cording to a geometric ordering scheme probably
endowed with esoteric significance. It has its
own set of lively activities generated by the
sanctuaries, the much frequented public foun-
tain, and such public buildings as city-hall, law
court, police station and post office, not to men-
tion all the commercial undertakings on and
around it. Well-defined territorial domains can be
recognized: from the local health practitioners at
one corner to the silversmiths at another, or from
the area of the textile merchants to that of the
workers in brass and copper (fig. 9). In addition

13. - Heavy lorries blocking the street at the N end of
Patan Durbar Square.

12. - Children playing in Patan Durbar Square; their
toy has the shape of the chariot of Matsyendranath.

11. - The large so-called Taleju Bell in Patan Durbar
Square (N° 29 in fig. 14).
Mass tourism and the motor car symbolically can stand here for the whole complex of new problems that the last quarter of a century has brought to the Kathmandu Valley. They are the well-known problems of a developing economically poor country, though strongly coloured by the special historic circumstances of Nepal that for a long time kept the social and physical environment free from prolonged contact with the industrialized world. This is why until recently landscape, villages and urban environment could interact so harmoniously in a balance that had been slowly achieved over centuries. It is this harmony that comes across visually and makes the Valley so unforgettable and comparable to those few enclaves in other parts of the world where equally special conditions lead to the comparable conservation of environments that mirror an integrated culture.

To preserve such enclaves is clearly in the interest of all mankind and in this sense the Kathmandu Valley takes its place side by side with Venice or the Athenian Acropolis and deserves the fullest possible instrumentation of conservation measures and techniques at our disposal. The U.N.E.S.C.O. Master Plan for the Conservation of the Cultural Heritage in the Kathmandu Valley of 1977 was drawn up in this spirit and has been recently adopted as official government policy. It deals with legal and organizational measures and with the actual planning and implementation of conservation in rural and urban areas, including the necessary restoration of decaying buildings, the removal of unsightly installations, the establishment of pedestrian precincts, and the improvement of infrastructure related to monuments and historic urban spaces.

All this concerns Patan very much, for it has its full share of problems; scale and harmony of the Durbar Square are being destroyed by ill-conceived recent additions (figs. 10, 17, 19) while some of its historic buildings, and many others elsewhere, threaten ruin; (fig. 14) the roof construction of the prestigious Golden Temple, for example, is dramatically losing its stability. Funds have been lacking to cope with such emergencies and at the same time disturbing new constructions keep cropping up. Around the fringes of the town a Nepali version of suburbia continues to grow, specially along a recently completed wide ring road. Another outer ring road is envisaged that may well provide new incentive for further building activity in more outlying formerly agricultural areas.

certain precincts, perhaps marked by a low platform, may assume special significance during a festival when a ritual dance or a ceremony of purification and sacrifice is performed. At all times the Durbar Square is not only a place for the exchange of goods and labour but equally a place of ritual and commemoration with numerous images (figs. 7, 8) and inscriptions, invisibly surrounded by a dense web of myths and stories. It is equally a place of communication through sounds and signs, from the large bell (fig. 11) and the many smaller temple bells and wind-activated chimes to printed posters on walls and the occasional display of thangkas (painted scrolls) in a nearby Bahal. Two schools abut the Square and the young and very young play a conspicuous role in the never-ending spectacle of urban life that is performed here (fig. 12). The intensity of activity and interchange here is not only due to the concentration of important buildings and functions in and around the Square but also to its location at literally the crossroads of the city (figs. 2, 5): in many cases the shortest or most convenient path from one end of the city to the other leads through the Durbar Square. This fact unfortunately also brings the motor car into the Square (figs. 7, 13) with increasing frequency and it is as disturbing as can be, wrong in scale, colour and texture and much too brutal in behaviour — not to mention the damage it does to the frequently weak walls and foundations of old buildings. At times no less disturbing than the car, but welcome for obvious reasons, are the many tourists that come to the Square. They form a most important component in the economic life of Patan and they have caused a number of shops to spring up along and to the NW of the Durbar Square where their habitual route takes them to the Golden Temple (fig. 9).
15. Patan Durbar Square: transversal section.

17. - Patan Durbar Square: W Elevation. Buildings higher than three storeys and superclevations above the cornice line are of recent date.


19 a, b - Patan Durbar Square: houses behind Krishna Mandir (N° 14 in fig. 14) in 1968 and 1978.
These changes to the detriment of the physical environment are of course symptoms of incipient deeper-reaching changes in the structure and character of society. Urban spaces invariably make something visible and there is no urban form worth calling by that name that is not a significant form, a form that communicates something other than its own appearance. All great urban spaces — whether the Campo in Siena or the Durbar Square in Patan — are symbolic spaces. What makes the Nepalese ones so stunning is the realization that they subsume a culture that with its spiritual values and rites to a large degree is still as alive as it was when the spaces were created.

A culture changes when its basic assumptions and conditions are faced with new forces that act upon them and at that moment its environment is likely to change also unless very powerful interventions take place to prevent this. One cannot turn away from these facts of life in romantic nostalgia, and people in a poor developing country are realists, not romantics, when it comes to the environment. They want a raised standard of living and such amenities as are taken for granted in industrialized societies: pure water and proper sanitation, decent housing, ease of communication. Conservation, everybody agrees, must not occur at the expense of the well-being of local inhabitants who are affected by it and it is here where some formidable questions and contradictions present themselves as a few familiar examples may demonstrate.

Many younger people in towns of the Valley are dissatisfied with traditional living arrangements; they want more privacy than the extended family living under one roof can provide, and they object to the low room heights. But will not the extended family mean the need for new housing for which land must be found, while the cumulative negative side-effects of tourism? Is there not a threshold as far as admissible numbers are concerned, beyond which mass tourism would simply overwhelm the culture of the Valley by swamping it in a wave of "commercialization" and "profanation"? In 1966 a total of ca. 9500 visitors came to Nepal, in 1974 the figure was ca. 90,000, in 1978 reportedly it increased to ca. 156,000 (!) — a figure comparable to the total population of Kathmandu.

The real and imagined advantages and opportunities of urban life prove as strong in the Kathmandu Valley as elsewhere. But what will happen to the landscape once the villages at the end of tracks are absorbed into an urban agglomeration with easily travelled asphalt roads? In summation, many desirable changes are possible in the living conditions of the Valley's population. But must their price be that ultimate nightmare: a greater Kathmandu that fills the whole Valley with its new roads and buildings, and preserves a few historic urban spaces as isolated open-air museums — useful tourist attractions and quaint reminders of a strange past?

I believe this need not be the case because the people who inhabit a historic environment can choose to keep it viable and vital as an act of their collective will and there is a reasonable chance that the right decisions will be made in the Kathmandu Valley. Many factors influence such decisions but in the long run none more than public education. Urbanistic conservation will remain a palliative unless the coming generations in the Valley can be convinced about it by their teachers — which also means convincing them about some simple truths the industrialized world has learned or is learning painfully, truths about genuine and spurious values and about man's proper attitude toward the environment. Perhaps in Nepal there is a predisposition to accept such truths because they fit well with traditional culture.

Positive solutions can be found as answers to all the questions raised above. Needed housing can be created by filling gaps in the existing urban fabric rather than by building at the fringes. Dwelling designs can be worked out which, by very careful planning, provide greater room heights without significantly altering the existing scale and appearance of a street. Face to face contact and work in the collective urban spaces need not disappear, if some effort is made to encourage their continuation. The flow of tourism is amenable to various controls and so is the flow of investment that in the long run decides whether life in the villages can remain attractive and buildings are put in the right places and given the right form.

There are hopeful signs — new legislation and administrative measures as well as an increase in international assistance. In 1978 a pertinent agreement was signed with UNESCO and later the same year the General Conference voted to initiate an international campaign of support, and recently a model urbanistic conservation plan (figs. 1, 2, 9, 10, 14-17) has been prepared for the Monument Zone of Patan Durbar Square. But at the same time alarming signals of warning persist as the deterioration of physical environment and cultural heritage continue. As far as conservation is concerned, the future of the Kathmandu Valley and its historic urban spaces today hangs in precarious balance. One must hope that those responsible for it will resist the kinds of needlessly sweeping changes that would destroy what may well be the last historic example of its kind.

Eduard F. Sekler

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Data from the statistics of H.M.G. Dept. of Tourism; figure for 1978 kindly provided by Mr. Shanker Man Pradhan.
utilización de los espacios colectivos en Patan y en otras ciudades históricas del valle de Katmandú

Las ciudades del valle de Katmandú, en el Nepal (las principales son: Katmandú, Patan, Bhaktapur) han conservado una imponente herencia cultural y esquemas de utilización del espacio urbano que son de gran pureza. Ahora, con la modernización, la industrialización y el turismo las ciudades están enfrentadas con problemas agudos.

En el futuro habrá que solucionar problemas como el de la construcción de alojamientos que se integren en lo antiguo, como el de la circulación automovilística, como el de la conservación de los espacios colectivos que guarden su verdadera significación social, como el de evitar el exodo que conlleva hacia la población. Un trabajo muy positivo ha sido realizado en la conservación histórica de Hanuman Dhoka, Katmandú y en diferentes zonas de Bhaktapur. La UNESCO ha lanzado una campaña internacional de sostenimiento a la cual diferentes países han prestado un esquema de conservación urbana para la Plaza Durbar ha sido propuesto.

Sin embargo es evidente que hay una deterioración continua del aspecto de la ciudad y, como presiones enormes se ejercen, el porvenir de esos espacios urbanos quedan bastante inciertos.