

UNESCO – WORLD HERITAGE CENTRE -  
UNIVERSITA' IUAV di VENEZIA,  
*Master in Urban and Regional Planning in Developing Countries*

## **KATHMANDU VALLEY WORLD HERITAGE SITE**

### **IN THE LIST IN DANGER:**

#### **BHAKTAPUR AND PASHUPATINATH MONUMENT ZONES**

- 1) INVENTORY OF RECENT CONSTRUCTIONS AND DEMOLITIONS
- 2) EVALUATION OF THE IMPACT OF ECONOMIC AND DEVELOPMENT PRESSURES ON THE TRADITIONAL URBAN FABRIC

### **2003 MISSION REPORT**

By

Enrico Fontanari – Giorgio Gianighian

*VENICE, March 2004*

**The information and opinions stated in this Report represent the views of the mission participants and not necessarily of UNESCO World Heritage Centre.**



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WHC/74/416.1.1.2/03/FJ/YCH/02  
2003

22 September

**Subject: UNESCO WHC - University of Venice mission to the Kathmandu Valley World Heritage Site, Nepal**

Madam,

I would like to inform you that the state of conservation of the Kathmandu Valley World Heritage property was examined by the 27<sup>th</sup> session of the World Heritage Committee (Paris, 30 June to 5 July 2003). The Decisions of the World Heritage Committee are being finalized by the Rapporteur of the session and shall be sent to you and your authorities shortly.

As an immediate follow-up action to the Decisions of the 27<sup>th</sup> session of the Committee, the UNESCO World Heritage Centre is organizing an expert mission to the property to assist your authorities in:

- 1) preparing an inventory of recent constructions and demolitions within the Bakhtapur and Pashupatinath Monument Zone and;
- 2) evaluating the impact of economic and development pressures on the traditional urban fabric of the Pashupatinath and Bakhtapur Monument Zone.

I am pleased to inform you that the following international experts from the Institute of Architecture of the University of Venice, together with their students, have been identified to undertake this mission between 15 September and 15 November 2003.

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Mr Cesar Augusto Varela Sanchez (Colombia)  
Ms Federica Voltolina (Italy)

The international travel costs and the living expenses in Nepal will be financed under the UNESCO Italian Fund in Trust Agreement within the framework of an Activity-Financing Contract established with the World Heritage Centre. I would be most grateful if you could kindly arrange for site visits to the above-mentioned Monument Zones of the Kathmandu Valley World Heritage property for mission participants. Should you require any further information concerning this activity, please do not hesitate to contact my colleagues Mr. Feng Jing (e-mail: [f.jing@unesco.org](mailto:f.jing@unesco.org)) and Mr. Hidetaka Kinami of the Asia Region Unit at the Centre.

I take this opportunity to thank you for your co-operation and continued interest in safeguarding the heritage of humankind.

Please be assured, Madam, of my highest consideration.

[signed]

Francesco Bandarin  
Director  
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# REPORT

The report has been edited under the care of  
Enrico Fontanari and Giorgio Gianighian, by appointment of the UNESCO-WHC

## ACKNOWLEDGEMENTS

The UNESCO - UNIVERSITA' IUAV di VENEZIA (Venice, Italy) joint mission was organised by the WHC and the Master in Urban and Regional Planning in Developing Countries, under the responsibility of professors Enrico Fontanari and Giorgio Gianighian, from September to November 2003.

Professor Gianighian conceived the project of assessing the quality of heritage preservation in the seven Monument Zones of Kathmandu, as a stage opportunity for some of the students of the above mentioned Master. He carried out a first preparatory mission in Nepal in September 2002, with two postgraduate students of the Master, architects Kreshimir Petkovic and Grazia Sparacino. He then organised and directed the 2003 project for the stage of the Master programme.

Mr Michele Miegge acted as teaching assistant for the IUAV mission in the Fall 2003. He was responsible of following the work of the students, and of checking the field survey in Pashupatinath and Bhaktapur, under the guidance and assistance of Dr. Ing. Niels Gutschow, Architects Biresh Sha and Deepak Pant. In the field work the students were helped by three architecture students from Tribhuvan College of Engineering, Ms. Roseleen Thapa, Ms. NhasalaTuladhar and Mr. Vivek Bdr Shah.

Mr Miegge had also the task to make a photographic survey of the urban fabric in the two MZs: he made most of the photographs in the report, with the help of the study group, and especially of Architect Cesar A. Varela

The report has been written and edited by Fontanari and Gianighian; contributions by other persons are signed (M.M. = Michele Miegge. M.F.S. = Maria Florencia Sbarra).

*Biresh Shah e Dipak Pant*

- helped the working team in Nepal
- edited the contributions of the Kathmandu Seminar

The postgraduate students of the Master in Urban and Regional Planning in Developing Countries

*Jamal Abueid*

*Diana M. Cruz*

*Sarah Djediga Djebbar*

*Enio Pavone*

*Gino Maurizio Pratesi*

*Maria Florencia Sbarra*

*Cesar A. Varela*

- carried out the surveys, the photographs involved in the surveys, and the gathering of the materials.

**FEDERICA VOLTOLINI**

- edited the bibliography and helped in the surveys and interviews

**Massimiliano Bigarello and Andrea Mancuso**

- edited the GIS maps

**Andrea Mancuso**

- edited the printing of the report

In the two missions we were able to pursue our research because of the generous help of the governmental authorities and staff, local authorities and staff of Kathmandu Valley, professors and students of Tribhuvan University. Among them we would like to remember in particular Professor S. R. Tiwary for his unforgettable lecture and his precious guide and advice in all stages of our mission. A special gratitude we express also to Dr. Ing. Gutschow, for his constant advise and help.

Many other have helped us in every possible way: they are too many to be remembered personally, but in the text of the report many of them are present. To all of them, including the owners and tenants of the houses we surveyed, our deep gratitude.

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## **INDEX**

1. What happened before
2. Identification of the problem and inscription to the List in Danger
  - 2.a About the nomination (1979)
  - 2.b The inscription to the List of Heritage in Danger
3. The appointment to the IUAV and the research project
  - 3.a The physical survey
  - 3.b The socio-economic survey
4. The results of the surveys
  - 4.a The results of the physical survey
  - 4.b The results of the socio-economic survey
  - 4.c The results of the research: a first approach
5. Conclusions
  - 5.a The results of the Seminar in Patan (September 2003)
  - 5.b Recommendations
6. Annexes
  - 6.a UNESCO WHC – UNIVERSITA' IUAV: Seminar proceedings
  - 6.b Interviews and case studies
    - 6.b.1 PADT
    - 6.b.2 DoA
    - 6.b.3 Former Ambassador Jha
    - 6.b.4 Mayor Shrestha
    - 6.b.5 Former Mayor Suwal and Chairman NWPP
    - 6.b.6 Mr. Phoju
    - 6.b.7 List of illegal buildings in Bhaktapur
7. Bibliography
8. Maps
  - 8.a Bhaktapur
  - 8.b Pashupatinath
9. Photographic documentation



## **1. WHAT HAPPENED BEFORE**

In 1979 Kathmandu Valley was inscribed in the World Heritage List: from then on the interest and intervention of international bodies and co-operation, moved gradually from the main monuments of the historic heritage to the worried attention to what was happening to the built residential heritage that is called minor, or vernacular.

The first period, in the Eighties, saw the attention focus mainly to the restoration and conservation of the monuments included in the Seven Monumental Zones (MZ), enlisted in the WH List. In the meanwhile, though, the price of cement for building started to decrease, becoming competitive on the market, in Nepal. To this factor must be added the growing, fast immigration from the mountains to the rich central Valley of the country: this explains why those years put the foundation for the heavy transformation of the residential heritage.

From the Nineties, as the historic residential buildings more and more were subject to alterations, more and more the international bodies moved their attention from the conservation of monuments to the care for the decay and demolition of historic minor buildings. In 1993, for the first time, an international Seminar organised for a UNESCO mission ends up suggesting the opportunity of inscribing the sites of the Valley in the List of World Heritage in Danger.

This first cry of alarm is taken up only ten years later, bringing the situation to today crisis. The intermediary mission, on work in 1998, did not pick up that preoccupation and only multiplied recommendations to the local authorities and gave new operational guidelines, with very little effect.

Eventually, in 2003, UNESCO and WHC representatives carried out the last mission: after having visited all the MZ and analysed the economic situation, having found the heritage in a very dramatic condition under the stress of uncontrollable transformation processes, they decided to propose the inscription of six out of seven sites in the List of danger.

This is the situation that a group of master students of IUAV, with their professors, decided to study. The WHC appointed them to try and find a solution, or at least some clues to get out of these difficult problems, taking the two monumental zones of Pashupatinath and Bhaktapur as study-cases.

## **2. IDENTIFICATION OF THE PROBLEM AND INSCRIPTION TO THE LIST IN DANGER**

### **A. ABOUT THE NOMINATION (1979)**

When the Valley was inscribed in the WH List, it was a special moment for the country. The hippie season was in its last hours, having helped to spread around the world the news about this beautiful kingdom at the edge of the world; the Valley was still untouched from western civilisation, and a peasant society looked happy and innocent from technological progress: few cars, few hotels for tourists, few factories.

The place appeared perfect for nomination, not only for the exceptional interest of a heritage both relevant and widespread, but also for its being almost untouched, if decayed. It is in coincidence with the Nomination that the first buildings with a reinforced concrete frame start to appear. This is the medium that allows a dangerous hybridisation.

The seven Monument Zones include: the three Darbar Squares of the royal cities (but in the case of Bhaktapur the all city is included), and some places of cult of high importance. Pashupatinath is one of the main Hindu sites of the world, and there the urban texture mixes up with the landscape. Swayambunath is sacred both for Hindus and Buddhists, and occupies the whole of a hill, separated from the city at the time of the Nomination. Equally remote was Boudanath, the great Buddhist temple, a gem isolated in the middle of rice paddies, while Changu Narayan was the centre of a tiny historic centre, once again on top of a hill. The choice was well balanced, from the point of view of the quality of the objects, but risky, for the extension of the total area involved and of each single zone. Moreover, the sites were different in their character, managed by different bodies, with different religious requirements and involved with different ethnic realities.

In fact, the supposedly ideal conditions, that were possibly a consequence of general poverty, were fated to disappear in time, with the increasing of technology and of the process of "westernisation". The consequences were the same as in so many other developing countries: the heavy urbanisation and the passage from rural to urban economy generated a fast erosion of the built, urban and environmental heritage.

On this scenery the then Nepali ambassador at the UNESCO, Mr. Jha, commented with words of high significance, pronounced in the course of an interview in October 2003 (see Annexes).

"The misunderstandings between UNESCO and DoA (Dept. of Archaeology), and through it the Nepali Government, started from the very beginning, mostly about the meaning of the inscription on the WH List, and on this point the WHC carries as much responsibility as we do. They did not explain the secondary effects produced by the inscription. They did not make clear our duties and the problems that we were going to have to confront with. Nepal is a country that, since that time, is undergoing a strong development and we did not realise that the historic towns were going to be subjected to a very high pressure. In 1979 UNESCO launched a campaign for the conservation of Kathmandu Valley, and we thought that this would have helped us or even that they (the UNESCO people) were going to take care of everything. But unfortunately nine tenth of the UNESCO budget were used to pay for the various missions and only one tenth went to works in the Valley."

One example of the many misunderstandings will make the matter clear enough: the Report of 1993 contained sixteenth recommendations, indicating that private dwellings were to be considered as protected heritage, together with monuments. This concept reached the DoA only in 1993: up to this date, they never thought that private residences were to be protected.

## **B. THE INSCRIPTION TO THE LIST OF HERITAGE IN DANGER**

(downloaded from the web)

**27 COM 7 (b) 52 Kathmandu Valley (Nepal)**

*Documents: WHC-03/27.COM/7B*

*WHC-03/27.COM/INF.7C*

The World Heritage Committee,

1. Expresses its appreciation to the Government of Nepal for receiving the second High level Mission;
2. Notes with grave concern that the *traditional* vernacular heritage of six of the seven Monument Zones had been partially or significantly lost since the time of inscription, resulting in general loss of authenticity and integrity of the property as a whole;

3. Notes furthermore with concern that although the concerned authorities have made efforts with some positive results, the threat of uncontrolled development has persisted, which continuously decreases the urban landscape and architectural fabric of the property;

4. Decides to inscribe the Kathmandu Valley property on the List of World Heritage in Danger, and simultaneously recommends the State Party to legally redefine the core and support zones of all Monument Zones, accompanied with management mechanisms to adequately conserve the *remaining World heritage values of the property* in the long-term, to make possible the removal of the property from the List of World heritage in Danger. Corrective measures should continue to address the illegal activities in the future core and support zones;

5. Requests the World Heritage Centre to organize a mission to Kathmandu Valley to assess the *remaining World Heritage Values of the property, the state of conservation of the monumental ensembles and the urban vernacular fabric within the property, and for the report of this mission to be presented to the Committee at its 28<sup>th</sup> session in 2004;*

6. Decides to consider whether or not to delete the property from the World Heritage List and the List of World Heritage in Danger at its 28<sup>th</sup> session in 2004, upon examining the report from the World Heritage Centre and Advisory Bodies mission and the assessment of the loss of World Heritage values at Kathmandu Valley.

27 COM 7 (b) 107

The World heritage Committee,

1. Noting with concern, during the examination of the state of conservation of properties inscribed on the World Heritage List, the multiplication of imitation architectural forms which falsify history,

2. Invites, in consequence, the State Parties to encourage a contemporary architecture of quality, respectful of the past, which integrates harmoniously with its environment.

### • 3. THE APPOINTMENT TO THE IUAV AND THE RESEARCH PROJECT

#### A. THE PHYSICAL SURVEY

A first survey was carried out in the MZ of the Valley and in particular in the two zones of Bhaktapur and Pashupatinath: object of the survey was to analyse some samples of preserved historic architecture and some of the changes recently intervened. The final goal of the survey was to define the building models in the historic cores under study and to produce a classification of the types of transformation active in the areas.

This first step of the sample survey, carried out by the persons responsible of the filing, produced the classification of the building types to be inserted in the file. Here follows the classification.

### **Classification of building types (M.M.)**

The main categories understandable, the first are those that maintain their original aspect, while the second have undergone material alterations.

#### **Unchanged types: Historical Buildings (H) (M.M.)**

This group includes all the historic buildings built before the earthquake of 1934. This means: all the houses built in Newari, Malla and Rana styles. This is the most precious sector of the historic heritage. The Malla dynasty ruled the country from 1382 to 1769 (in Bhaktapur), while the Ranas lasted from 1867 to 1951. As for the Newari, they are the main native people of the Valley.

All the historic types have a bearing structure in bricks and timber floors; traditional pitched roofing, covered with tiles; the buildings have a strong relationship with the outer space. In the Newari architecture, the house has a three bayed façade, with wooden windows finely decorated: the *Shan jhya* marks the central axis of the façade. The Rana buildings' main feature is a whitewashed façade, with neo-classical decoration. A more detailed description of Nepali styles can be found in the specialist literature (photos p. b1-b2).

This category is further subdivided into:

- Unchanged historic buildings: those not subjected to serious restorations or repairs;
- Preserved historic buildings: those subjected to serious restorations or repairs.

#### **Unchanged types: post-earthquake (PE) (M.M.)**

This category, groups all the buildings built after the earthquake of 1934, but before the introduction of concrete frames, dating approximately between the end of the Seventies, beginning of the Eighties. It has to be underlined that, due to the difficulty of precisely dating each building, there could be some inaccuracy. The buildings are put into this category mainly on stylistic ground, according to the following features (photos p. b3-b4):

The building has a bearing structure in bricks and wooden floors, traditional pitched roof, covered with tiles. The medium height is of three storeys (from two to four). The façade is of a simple composition, with a rhythm of this kind: a-a-a, or a-a. It often has no decoration and no cornices.

The relationship width- height is mostly of the kind: 1:1 or 2:3. The storeys are often higher than the traditional ones, but these buildings do not normally appear in a tower-like aspect, as is the case with later ones.

Windows are wide, larger than the traditional ones, with a square shape. The window-frames are in wood, with glass panes and normally not decorated.

#### **Hybrid types (H+PE) (M.M.)**

Many of the historical and many of the post-earthquake buildings have been changed from their original form, but only in some degree, maintaining the general appearance of the original building. This type of process is here defined as "hybridisation". This category is subdivided in two groups, according to the importance, the sustainability and the reversibility of the changes. Here follow the types of hybridisation to be found in each category:

Light hybridisation (photos p. b8):

3. Tin or other non traditional material for the roof;
4. Traditional sheds, covered with tin or corrugated iron;
5. Small metal sheds, at street level;
6. Plastered, painted or variously coated;
7. Timber elements painted and plastered (frequently at the ground floor);

8. Changes to windows: grills, mosquito nets and glass panes are inserted.

Heavy hybridisation (photos p. b5-b7):

- Addition of new storeys;
- Dormers;
- Terraces inserted in the roof;
- Addition of flat terraces, often jutting out;
- New balconies in timber or concrete (less frequent);
- Public or semi-public places are closed;
- Insertion of a Rana façade over an earlier building;
- Addition of a front body for commercial use
- Increase of the size of the windows.

**Modern types: buildings with a reinforced concrete frame (RCF) (M.M.)**

This category includes the buildings built after the introduction of concrete and before the drawing up of the building bye-laws for the MZ. Most of this works have been carried out between the end of the Seventies and the beginning of the Nineties. Because of the general inability to enforce the building regulations, these buildings are made even now (photos p. b9-b10).

The bearing structure of the building is a concrete frame, often filled up with bricks; the roof is a flat terrace, sometimes jutting out.

The sizes of these buildings are very varied: the traditional urban scale disappears. The buildings become higher, in comparison with their plan; shapes become more complex, façades have more elements, there are frequently jutting out parts.

The bricks are used as a decorative element; heavy cornices and decorations around the windows mark the façades of the earlier buildings, while in the latest ones the concrete structure is often visible. Traditional elements, like window frames, columns and corbels, taken from demolished historic buildings, are frequently inserted in the new structure.

Very evident are the long balconies with showy balustrades. Windows are large, with glass panes, and often covered with concrete sheds. Complicate grills and window frames become decorative elements. The ground floor is often used as a shop, with wood doors and windows, then with metal shutters. At this point, the relationship with the public space, obtained in historical buildings through open galleries, is lost, and the outdoor life moves to the terraces, where utilities find their places (water tanks, solar panels etc.).

**Modern types: Neovernacular (NV) (M.M.)**

In this group are included buildings answering to the requirements of the building rules for MZ, issued around the half of the Nineties (photos p. b11): they represent the main tendency of today development in the MZ. The bearing structure is a concrete frame; the main façade is layered with *dachi appa* (a type of traditional local bricks) bricks, while on the side façades the structure, filled with bricks, remains visible. The roof is flat, hidden by coverings imitating the traditional type. Cornices are in decorated bricks. Windows and doors frames have carved wood decorations, trying to mime the traditional motives, but in fact simplified and of a low quality, when compared to the real thing.

**A few comments on the building types(M.M.)**

The type defined as PE, thanks to its simple shapes and the materials used, is easily absorbed into the urban pattern, and doesn't strike the eye. Neighbouring buildings have often of the same height, both total and of each storey; this feature helps to preserve a unity in the streetscape (photos p. c2).

The 'Reinforced concrete frame' type came to light in a period of unchecked development and represents today the major factor of decay in the MZ. Too large, incoherent for shape and colours, it breaks up the cityscape, takes away light from the courtyards and occupies public spaces. These buildings, made before the approbation of the bylaws, are not indictable today. A few examples only, built in the poorest areas of the city and comparable, in their appearance, with the PE, are acceptable (photos: 5,6,7, p. c5, c2).

It is worth giving a careful consideration to the NV type. These buildings originated from an interpretation of the building bylaws drawn up at half of the Nineties and give rise to some interesting questions.

The bylaw tries to offer the model for a building that refers to the traditional way of building but, on the other hand, it implies that the old building could be demolished and replaced with a new one.

The pseudo-traditional brick façade is plastered over a concrete frame and this is a fake that shows dramatically in the side façades, left uncovered.

There is a great difference between the traditional building and the NV type, imitating it. If one would wish to make a comparison between them, these would be the most obvious differences (photos, p. c1):

The NV façades present a number of features, one next to the other, imitated from different periods. They are flat, while the traditional ones have tri-dimensional elements (*Shan jhya* and wooden elements).

The *dachi appa* brick, once upon a time reserved for major buildings, is today used everywhere.

If some minor examples of these NV buildings could, in the future, be assimilated to the PE, and will not be of damage for the general view, the major of them (often hotels and commercial buildings) have a very strong visual impact.

The local authorities believe the NV to be the right compromise between the demands of conservation and the requests of a tourism still rather uncouth. The people ask for higher buildings and higher storeys, more inner space and more light.

These buildings, when conforming to the local regulations, get grants for tiles and bricks from the municipality (photo p. c3).

The spreading of this type of buildings produces a deep modification in the urban pattern that should be carefully analysed. In some way, there is a tendency to transform the city in a movie set: the two large statues, made of fibreglass, placed at the entrance of Bhaktapur City Hall, are part of this same scene (photo 5, p. c1).

It should be remembered that the new building of Bhaktapur University, with courses teaching heritage conservation, looks like a huge neovernacular, completely out of proportion with the surrounding cityscape. (photo 6, p. c1)

### **Something good: examples of conservation in Kathmandu Valley(M.M.)**

Works of restoration carried out by private people are not frequent; still the culture of conservation is somehow spreading around the Valley. Those involved in this practice are mostly high class, both socially and culturally. Some invest in conservation as an income source, in the same time trying to promote conservation as a positive social value.

We find some interesting cases of protection and conservation made by private owners in the material of the competition "Lalitpur Heritage Award" organised in Patan in the context of the UMEPD-Asia Urbs project. Some of the projects presented to the competition could be judged

slightly naives, but they show a growing interest for the protection and conservation of heritage and are interesting experiments.

On the same line, interesting is also the activity of Patan Tourism Development Organisation, represented mostly by Mr. Dilendra Shrestha (photos 6-8, p. e2).

The "Shrestha House" project, for the restoration of a Newari building, meant to become a Bed and Breakfast place, is the first experiment of this type in the Valley. The restoration, almost completed, has been stopped because of some problems in the management, but the people involved confirm that every difficulty will be soon overcome.

Other projects are going to start: a project for "Amatya house" for the restoration and new use as tourist accommodation of a house in the MZ of Patan (this is a UMEPD Asia Urbs project). Then there is a UNESCO-PTDO project for the renovation as restaurant, party-palace and B. and B., of another building, next to the previous one. In this last case, it is of special interest that the new facility will be mostly intended for local people. Both projects are running according to new contracts with the owners, drawn with an eye to the Shrestha experience.

In Bhaktapur, Mr. Rabindra Puri is one of the very few people of entrepreneur investing into conservation. He restored two houses for private use in Bhaktapur, and is now working on the restoration of building in Panauti, that will then be sold. He has been able to prove that a restoration can be cheaper than a new building (photos 2-4, p. e2).

In Kathmandu, Mr Bharat Basnet, hotel owner and tourism entrepreneur, has restored a Rana palace in Dilli Bazar, putting it to use as a restaurant setting a good example of combining tourism and conservation.

Finally, some works carried out by foreigners, who reside in the Valley, are worth remembering. Goetz Hagmueller's house in Bhaktapur is an admirable example of conservation; interesting is also the restoration of a rural house, with a new annex, of Niels Gutschow, in Bhaktapur. In the same city, some old restorations, carried out in the context of Bhaktapur Development Project, offer good example of hybridisation. They are definitely 'modern' works, but they succeed in respecting the old building and they fit well in the historic urban tissue. (photos p. e3)

#### **The pattern of contemporary architecture (M.M.)**

Contemporary architecture in the Valley develops mostly following patterns from western countries. They could possibly be defined as "post-modern", under North-American influence (photos 1-4, p. m). In alternative to this imitative tendency, there is the "traditional style", borne from a free interpretation of historic styles, but more decorated than the neovernacular ones. These buildings have mostly a concrete frame, with a superimposed brick façade

A beautiful double row house made in the context of Bhaktapur Development Project has not found followers: like other, more important, buildings borne in the same context, it is made in timber and bricks and uses an architectural style which is modern, but careful to the surroundings. (photo 7, p. m)

Architect Wolfgang Koellisch has recently created a model house in Dulikhel, where he experimented anti-seismic technologies, with timber and bricks (photo 8, p. m). The project is brand new and its impact should be evaluated.

The influence of these model-buildings is generally rather limited, not being transmitted through the media channels, today the most influential.

#### **How the physical record is organised**

The field research has been limited to residential buildings, excluding the monumental heritage, both residential and religious, while the bahal and the buildings managed by the Ghutis are included.

The physical survey takes into account only the outer appearance of the building, what the surveyor can see: in concerns, therefore, façades, outer spaces belonging to the house, general conditions of the building.

The record has 82 fields, including *ward* and plot, number of floors, height at the gutter, UNESCO individuation codes, use of space (section A), typology, style or date, alterations, if any (section B). A detailed analysis of the façades follows (section C), with all the finishing elements, materials and details; then an evaluation of the state of conservation of the building (section F) and of each part of it (section E).

The use of fields has made it possible to directly pass all the data in a GIS, as the basis for any following elaboration.

In Bhaktapur 916 buildings have been recorded, 886 of which are valid records. At Pashupatinath the recorded buildings are 356, with 299 valid records, not considering, of course, the demolished buildings (32), the institutional (17) and religious (8) buildings.

## **B. THE SOCIO-ECONOMIC SURVEY**

The transformation processes of the historic built heritage that the last UNESCO reports denounced, are obviously related to a transformation process in the socio-economic sector happening in the country, and in particular in the Kathmandu Valley. Because of this consciousness, we thought fit to elaborate, next to the physical survey, a survey of the main socio-economic features affecting the people living in the MZ.

Purpose of this sector of the survey is to check how the built heritage is used in the MZ, identify its users, understand the type of ownership and their intentions, verify the dynamic of the transformation and the changes in the resident population.

The hypothesis to be verified is that the urbanisation process that involved Kathmandu Valley in last twenty years, together with the changes in the local population, had direct consequences in the MZ areas. These are not isolated monuments, but part of cities, therefore participating to the urban transformation happening in the other parts of the same cities. It also appears that the rapidity and the size of the transformation are similar to what is happening in other capital, or major, cities in developing countries.

Nepal has a quite high growing ratio (2.4% per year), and has today a population of more than 23 millions; from the Seventies, the population more and more concentrating in the Kathmandu Valley (more than 8 millions). As a consequence, the Kathmandu population is growing to, reaching today over one million of inhabitants.

The Country still has a mainly rural character (urban population barely reaching 12%), but the urbanization process is still operating, and had relevant effects on the way of living and on the conservation of the residential built heritage.

It is to be supposed that the wish to go and live in the city, having there a new "modern" house, is the propeller for the transformation process of the heritage, more than the pressure derived from the increasing of tourism of the last twenty years. It is not to be supposed that the tourist pressure doesn't exist, but did not produce the micro-transformation of the built heritage that is slowly eroding the traditional urban tissue of the Valley.

The town planning system gives evidence of a new direction in the management of the city, though unable to keep in control the transformation processes. There is a Kathmandu Town Planning Office, some proposals for a metropolitan plan have been issued and some bylaws have



been passed, to try and check the urbanisation process and the illegal houses, sprouting everywhere in the Valley.

Since 1973 a Town Development Committee (TDC) is active, and it issued some Acts, with proposals for the control of buildings: these Acts, though, could rarely be implemented<sup>1</sup>, even if the municipalities, the DoA and other bodies in charge of planning matters, have always been involved in the preparation of the plans and in the issuing of the regulations. From 1976 to 1990 the TDC issued several bylaws, following proposals of the municipalities of the metropolitan area. The last of these has been recently issued (2002) and is under approbation. One of these bylaws concerns specifically the MZ and has been issued following a proposal of the DoA, in 1988.

The last significant planning action, in agreement with the international trend of the last few years, was the preparation, in 2002, of a Strategic Plan for Kathmandu Valley that has just started its legal iter and should give a reference frame to the Development Plan, approved by the Government. According to Nepali system of planning, the DP is then implemented by municipalities that, in turn, must produce their own DP.

This sequence of plans does not provide for a specific planning instrument for the definition and control of conservation areas that are kept under control through the traditional bylaws approved by the TDC, on proposal of the local government and of the DoA, for the MZ.

All the efforts produced through several bylaws have not produced results<sup>2</sup>, mostly because of the lack of control and the impossibility for the responsible public officers to enforce penalties in case of illegal building transformation. This happens as a consequence of a technical insecurity and of the lack of a political will to enforce the local regulations. In 1997 the Government passed a 'Local Self Government Act', as a strategy to empower local governments, but still we are in presence of a low technical skill and a scarcity of resources on the part of the Government and of the public administration.

To be able to implement politics and interventions in urban conservation, it is necessary to create programmes of institutional capacity building, and to start programmes of mobilisation of local financial resources, mostly private.

Confronted with this picture of limitations of the existing planning legislation, of transformation processes and of new roles for private and public operators, in the field of protection and conservation of the built historic heritage, we thought it useful to carry out a survey on the socio-economic features of the residential sectors of the MZ.

#### **The socio-economic file**

The team for the gathering of data for the file was composed by two IUAV students, with a young Nepali architect<sup>3</sup>, helping both as interpreter and surveyor. The research has been conducted through a direct survey of the type of use (especially for the ground floor), and an interview to the residents (owners and tenants) for other information.

The file is organised in five parts:

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<sup>1</sup> For instance, the last *Building Act* issued in 1998, cannot be implemented because a new law for Kathmandu Valley is under discussion.

<sup>2</sup> Despite the regulations issued, the estimation is that inside the Ring Road there are about 4000 illegal dwellings.

<sup>3</sup> They were young graduates from the Architecture faculty of Kathmandu University, chosen among those that, during their University years, had already participated to similar investigations in the field of planning.

- First: gathering of general information (ownership, number of resident families and dwellers, how many owners).
- Second: types of use and utilities of the dwellings. For the use, a distinction has been made between the use of the ground floor, surveyed more particularly, (as the part more subject to transformation, mostly for tourism or commerce), and use of the upper storeys, surveyed more synthetically, reporting the main use. In this field has found place also a question about the previous destination, going back for 20-25 years previous to the enlisting in the WH list, with the purpose of trying and get some information on the dynamics of the transformation. The survey of the utilities has taken into account the connection to the electricity and to the aqueduct and the hygienic facilities. The information about the number of kitchen has the purpose to understand if a family clan is or is not divided in separate families: this information is a useful indication for a possible future subdivision of the surveyed building, with subsequent physical alterations.
- Third: title of occupation of the building. It contains information both on the resident-owner's family and on the tenant's (if any). Information has been gathered on the age of ownership and on the place of origin of the owner with a view to verify how many are the original owners. Also the social status of the owner has been defined, on the basis of the family name that gives information on the caste to which one belongs. For the tenants, information has been gathered about the average rent and about the origin of the families and about the duration of their residence on the site.
- Fourth: the position of the owner head of the family, his occupation and place of work, to survey the permanence of their staying.
- Fifth: an interview to the owner about his intentions on the building. In case he means to transform it, trying to understand how and which parts he intends to change.

#### 4. THE RESULTS OF THE SURVEYS

Here follow the results of the surveys carried out in the two MZ of Bhaktapur and Pashupatinath. The survey has been made on residential, tourist, commercial buildings, leaving out the monuments (shrines, temples, Royal Palaces etc.) and involved 1185 buildings.

To make it possible to connect each record to the right building plot, the MZ area of Bhaktapur has been divided in subsections, on the basis of the existing division of the city into several *wards*<sup>4</sup>. The wards included, at least in part, in the MZ are altogether ten. The surveyed buildings were 886, and include practically the entire built heritage of the MZ (except for the monuments) of Bhaktapur.<sup>5</sup> The main urban sites of this MZ are, moving eastward, the two neighbouring Darbar and Tamaudhi squares, the Main Street and Dattatreya Square.

In the urban centre of Pashupatinath the MZ has, again, been subdivided in subsections, to make the correspondence of records and territory clearer. In this case, three areas have been defined (area 1, 2, 3) and each of them has a number of pertaining records. The surveyed buildings are 299 and they include just the residential built heritage of the MZ of Pashupatinath.<sup>6</sup>

In the MZ of Pashupatinath, we can identify two main zones: a core area at the west side (area 1), with a few non monumental buildings, large open spaces (a result of heavy demolitions carried out by the Pashupatinath Area Development Trust – PADT)<sup>7</sup> and the sacred area, with temples and other religious buildings; on the east, the residential area (areas 2 and 3), where most of

<sup>4</sup> A ward is similar to our census zones and is the basis for demographic surveys regularly carried out by the local government. The boundaries of wards, unfortunately, do not coincide with the boundaries of the MZ, making it impossible to use their data.

<sup>5</sup> See the map "Bhaktapur – Survey area".

<sup>6</sup> See the map "Pashupatinath – Survey area".

<sup>7</sup> See annexed maps.

the survey has been carried out. The non residential buildings surviving in the core area have also been surveyed, but are very few.

The comments of the data obtained from the surveys follow after the presentation of the results of the two surveys. Then a crossing between the two types of records has been made, to understand the relationship between the socio-economic features of the resident people and the relevant building transformation.

## A. THE RESULTS OF THE PHYSICAL SURVEY

The obvious difference of the urban centres involved in the research suggests a separate analysis of the results of the survey.

Bhaktapur is a municipality in its own right, separated from Kathmandu, and maintains a rural character still clearly perceptible. Pashupatinath, on the other hand, is basically a religious centre, inserted in the urban area of Kathmandu, strongly conditioned by the character of the place.

### Bhaktapur (M.M.)

#### *Classification of the buildings*

##### *Historical (H) and post-earthquake (PE)*

There are 311 historical buildings and 325 post-earthquake. These two categories together are the traditional built heritage of the city, which counts 636 buildings. Of these, 50 (5.65%) only of the total (886) are not altered.

##### *Hybridisation*

The 90.35% of the historic buildings and the 93.85% of the PE are hybridised. This means that the 92.14% of the buildings that in some way contribute to the maintenance of the character of the historic city is composed by hybridised buildings. The importance of this result must be underlined. The culture of restoration is not very common in the Valley, while the spontaneous works of the people, meant to ameliorate the building, are a very important phenomenon that would be worth studying.

Going into details, we find that the 41% of the total of the historic and PE hybridised buildings, are subjected to heavy hybridisation and the rest (59%) to light hybridisation. Of special interest are the works of light hybridisation: they have a great diffusion<sup>8</sup> and are meant to guarantee the use of the building. The appearance of the house can be worsened, but these low cost "amelioration" allow the conservation of buildings that would be, otherwise, lost: moreover, these works are easily revertible. (photo p. b11)

##### *Reinforced concrete frame buildings*

In percentage, modern buildings are not so many, in comparison with the historic and PE (168 versus 311 and 325). This type forms approximately the one fifth of the entire built environment, which is not terribly high value. But from a visual point of view, these buildings have a very heavy impact: one of these too-large structures can spoil an entire square or break a

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<sup>8</sup> It must be underlined that the buildings undergoing heavy hybridisation, are also subjected to light hybridisation.

perspective of a street. Today they are forbidden by urban regulations but, in view of the obvious difficulties met by the enforcing of the laws, the process doesn't stop.

### *Neovernacular*

This type has an even lower weight, having only 35 elements. We must take into account, though, that this type has only a very recent life, and only in the last few years the municipalities have started promoting it, giving grants for the construction of this type of new buildings. The 'traditional style' is a new fashion and is spreading all over very quickly. Many buildings that are today under construction in Bhaktapur are going to be tiled with bricks on the main façades. Many buildings are undergoing demolition, thanks to the lack of controls in consequence of the quick shifting of mayors: this is happening both in the MZ and in the core area. In place of demolished buildings, neovernacular ones will rise (photo p. c4)

### State of conservation

The general state of conservation, for all the surveyed categories in the MZ, is mostly good or fairly good. The 43.79% is judged mediocre, while the 42.55% is good or very good. If we divide this datum by building type, the trend is confirmed: the prevailing classes are those of 'medium' or 'good'.

The analysis of the map obtained from the socio-economic survey about utilities corroborates the impression of a fairly good state of conservation of the built heritage of this small town: a good number of the buildings enjoy both electricity and water. Only the 30% of the universe of valid answers (575) declare not to have running water in the house but only electricity.

It is worth noting that the buildings of this last group (no running water) are placed in the two most popular areas, with a dominant presence of residential and artisan functions: the peasant area, at the north-west, and the artisan area, at the south-west.

### Illegality

The buildings with illegal works are homogeneously placed, with no special concentration, not allowing the identification of areas subjected to special pressure for transformation. Illegality is everywhere: near the monumental squares, along the Main Street, in the east area.

The same is true for illegality limited to the number of storeys or to modifications of façades.

The total of the buildings with illegal modifications, not respecting the existing laws, amounts to 535, corresponding to the 60.38% of the total.

If we disaggregate the total of the illegalities, considering that one building can have more than one kind of illegality, this is the result:

- 2,43% alterations to the material of the doors;
- 65,98% alterations to the façade walls;
- 29,35% alterations to the windows;
- 51.21% excess of height and number of floors.

Just as an example, the buildings which have two kinds of illegality, for height and for façade walls, are 152, representing the 28.41% of illegal buildings.

**Pashupatinath (M.M.)**

### Classification of the buildings

The reading of the data of Pashupatinath is partly conditioned by the high number of modern or recently built buildings, because the percentages of the survey tend to give a generally good picture. To avoid this possible deformation, we have, whenever possible, disaggregated the data making percentage for each typology of buildings.

### *Historical and Post-earthquake buildings*

Buildings that can be properly defined as historical (Newari and Rana) are not many: 32, or the 10.70% of the total of the survey. If we sum to these the PE buildings, 105 in number, the category of the built traditional heritage rises up to the 45.82%. In this area, the number of new buildings (of the type 'modern= RCF' and 'neovernacular') is on balance with the heritage buildings.

More interesting is to look at their space distribution: recent buildings occupy almost the entire Area 3, while the traditional ones are mostly in Area 2 and a few in Area 1, where all the monuments and religious buildings are placed.

### *Hybrids*

Only the 51.09% of the traditional buildings (H+PE) have undergone a process of hybridisation. Of the historic buildings, 19 out of 32 can be classified as hybrids; for the PE type, hybrids are 51 out of 105 (48.57%).

It appears that in this area the hybridisation is less trendy and the owners, if they decide to carry out any work, tend to demolish the property, rather than transform it.

### *Recent buildings*

Neovernacular buildings are only 11: summing them up with those classified as 'modern' (151), we reach the figure of 162, or the 54.18% of the total of the survey for Pashupatinath.

Most of these buildings, as we noted above, are to be found in Area 3. Some are also present in Area 2, but only a few and spread around. In a north sector, a kind of left over of the monumental area, we can perceive a slight tendency towards concentration of this type, as alongside the route to the monumental area. Area 3 appears, therefore, to be a highly modified area, where there is a strong tendency to substitute the historic heritage with recent buildings.

### State of conservation

Also from this point of view, the general condition of Pashupatinath appears to be rather good, even if with the meaningful presence of recent buildings. The 51,17% of the surveyed buildings are in good or very good state of conservation, and in mediocre 34,45%; but if we take into account only the traditional heritage, the percentage of good and very good goes to 31,39%.

The main number of decayed buildings is located, as could be expected, in Area 2 and in the part of Area 3 neighbouring it. As for recent buildings, they are, of course, in good state of conservation.

### Illegality

In Pashupatinath area it is the PADT to be responsible for the control over the enforcing of the regulations on building. The total of the buildings with illegal modifications, not respecting the existing laws, amounts to 157, the 52.51% of the total, equally localised in both Area 2 and 3.

If we disaggregate the total of the illegalities, considering that one building can have more than one kind of illegality, this is the result:

- 49,68% alterations to the material of the doors;
- 54,22% alterations to the façade walls;
- 14,65% alterations to the windows;
- 22.93% excess of height and number of floors.

Just as an example, the buildings which have two kinds of illegality, for height and for façade walls, are 9, representing the 5.73% of illegal buildings.

## B. THE RESULTS OF THE SOCIO-ECONOMIC SURVEY

This survey gives a rather different picture for the two study areas; we will therefore comment the data separately and then analyse the aspects that are common to both places.

### Bhaktapur

The main features obtained from the survey are:

- many of the owners are also residents in the buildings;
- the main type of occupancy is residential, especially in the upper storeys;
- a relevant presence, even today, of peasant families, living in the historic monumental area.

#### Land use

If we look at the maps detailing the present use of land, we can see how the residential use is still prevalent in the MZ, especially in the upper storeys, where it covers more than the 91.17% of the total, whereas the number of hotels is inferior to what expected, being the 2.28% of the surveyed total, and are mostly placed near the two monumental squares.

The situation is different for the ground floors, where the residential use is less general, reaching only the 28.13%. It is slightly higher in the wards 10 and 13, the remotest sectors of the monumental zone, in ward 8 and 11, next to the Main Street, where it is sparse but still meaningful and in ward 3.

The main use of the ground floor is for tourism and commerce: a restaurant, hotels and tourist handicrafts, together with tourist shops, this category covers the 47.97% of the survey. Looking at the relevant map, it is clear that the Main Street has a commercial function, while the main tourist and commercial activities are gathered around Darbar and Tamaudhi squares, and even more in the streets connecting them together and to the Main Street.

At the ground floors, only the 19.7% of the total are the non-used spaces, often a sign of possible future alterations.

Institutional activities tend to concentrate around Darbar and Dattatreya squares, while the religious ones tend to gather around the residential areas and the larger ones are also found along Main Street.

About the change of use, we can say that the residential use is still the prevalent one in the historic core<sup>9</sup>, particularly at the upper storeys. In the last twenty years changes have involved mainly the ground floors that have been transformed from spaces for residential use to tourist and commercial destinations. Not so important have been the changes from residence to hotel.

<sup>9</sup> See the map "Change of use".

continent, has limited the activities connected with the regular tourism, like hotels, restaurants, local handicraft and the like.

### Demographic aspects

There are approximately 2300 inhabitants in the Pashupatinath MZ, 585 are the resident families surveyed, but it is to be supposed that families are in fact a little more than 600 and residents about 3000.

It is worth noting that here the buildings with one or two families are the most common (63.76% and 16.16%, respectively), but there are also some buildings with more than eight or nine families. These are buildings belonging to religious communities, where families live for long periods, but normally in rotation.

There do not seem to be, in this MZ, variations in the density of inhabitants, except for a higher concentration of residents in area 2, which is easily understandable, as this is the sector nearest to the religious centre.<sup>19</sup>

### Type of occupancy

Here too, as in Bhaktapur, the main aspect for the type of occupancy is the prevalence of resident owners. These are 216 and represent the 78.54% of the total (which is given summing owners=42.18% and owner/rent= 36.36%). Important, obviously, the presence of religious ownership (8.36%).

Very few are the buildings used only by tenants, but altogether tenants are several, if we take into account the buildings used both by owners and tenants. In many instances, they are buildings owned by societies connected with religious activities (as the Guthi) or with close relationships with the neighbouring sacred place. As a further evidence of this, it is to be noted that most of the buildings with tenants is located in Area 2, the one nearest to the temples zone.

The location of the buildings with resident owner is more balanced in the two areas<sup>20</sup>, while those belonging to religious or institutional bodies are concentrated in area 2 or 1, where there is no private ownership.

As for the origin of the owners, they are almost exclusively native of Pashupatinath (more the 91.32%), disproving the hypothesis that a change of the original ownership is happening. Most of them, though, do not work in the religious area or even in Pashupatinath, but mostly in Kathmandu or in the surrounding area.

The projects of the owners about possible works in their buildings, show in this centre a very strong inclination for the conservation of the existing structures. 68.65% mean to keep their building, while only the 15.14% intend to demolish or rebuild; a similar percentage (16.21%) would like to modify or sell the house<sup>21</sup>.

<sup>19</sup> See the map "Number of families".

<sup>20</sup> See the map "Type of occupancy".

<sup>21</sup> See the map "Owners' intentions".

## C. THE RESULTS OF THE RESEARCH: A FIRST APPROACH

To be able to interpret the transformation which is happening in the historic built heritage and in the socio-economic context of the two MZ, we need to analyse the results of some data-crossings among the most significant variables of both the physical and the socio-economic surveys.

The only datum that is common to both MZ is the type of illegal works: in both the study-cases the most important of these are: changes of façade materials (and this is the most common illegality) and excess of height have approximately the same percentage weight in both places.

As for the other elements, being the two centres very different, it seems suitable to analyse separately the data of the surveys.

### BHAKTAPUR

The picture of the situation inside the MZ of Bhaktapur seems quite clear. The main feature is the certain level of surviving of heritage buildings<sup>22</sup>, if compared to other places in the Valley and especially to the results for Pashupatinath; the new buildings, both in reinforced concrete frame and neovernacular are still a minority (203). But what appears undoubtedly as the most interesting phenomenon, if we want to evaluate the level of persistence of historic characters and values in this urban tissue, is the hybridisation happening in heritage buildings. Hybridisation of buildings of heritage value, considering "Light" and "Heavy", represents the 92.14% of the total.

As said before, the "Light hybridization" is compatible with the persistence of historical values of heritage buildings: therefore the situation at the present moment is not so compromised.

Another important factor is the type of ownership: in Bhaktapur we found a strong persistency of the original ownership. Owners belong mostly to the higher castes, or are peasants: they have expressed, in the interviews, a strong propensity for the conservation of their buildings, slightly higher for the first group. But a closer inspection shows that this propensity refers mostly to owners resident in hybridised buildings, in a mediocre or good state of conservation. On the whole, owners of heritage buildings mean to preserve them, and only when the building is in a bad state of conservation the owner declare the intention of demolishing and rebuilding.

Another interesting feature is that high castes show a stronger tendency to carry out works of heavy hybridisation, with change of use at the ground floor for commercial purposes, while the peasant families tend to use light hybridisation for residential purposes.

The resident owners, both of high castes and peasants, are mostly Bhaktapur citizens, interested in the conservation of their heritage, even if transformed with hybridisation works. The owners who intend to demolish and rebuild are those owning a building in a bad condition, while few are those that want to demolish a historic building in fairly good conditions that they feel to be inadequate for today living standards.

As for the relationship between use and transformation, from the crossing of data we can deduct that heavier transformations happen at ground floors for tourist and commercial use, and at upper floors for residential use. These transformations often happen together: the need to adapt the residence to today living style is an occasion to put to use spaces at the ground floor that were derelict or used for animals. This means that the pressure of tourism can produce heavy transformations and not only light ones, as we had initially supposed.

Another important factor for change comes from the practice of vertical subdivision of the property. 131 cases of subdivision have been surveyed, and most of them happened in hybridised buildings: so the subdivision of ownership is a significant cause of physical alteration.

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<sup>22</sup> The heritage buildings are defined by the historic buildings (Newari, Malla, Rana), together with the Post-Earthquake.



The comparison between ownership and state of conservation reveals that buildings with tenants are, in general, in good conditions, also in the case of historic buildings. Letting out a property or part of it does not, therefore, produce neglect from the owner but, on the contrary, is a form of investment.

#### *Bhaktapur: some special urban zones*

There are, inside the MZ of Bhaktapur, some urban areas that have a certain level of integrity, where residential function and historic residential heritage are still significantly present, but are highly vulnerable.

The first one is the peasants' area in the north-west, where a traditional popular character is maintained: it is strongly defined by the presence of peasant families, owning one of the houses in the historic core and working in the fields near Bhaktapur. The buildings are mostly in a mediocre state of conservation with a relevant amount of light hybridisation, but in many cases the traditional features are still preserved. At the ground floors the residential use includes sometimes a space for animals. This area is subject to transformation pressures, being placed along one of the accesses to the MZ and seems to be fragile, for the poverty of the residents, who are not able to preserve in the best way the heritage, towards which they have, anyway, an attitude of conservation.

The second zone is at the southwest of Darbar Square, with a prevailing residence of craftsmen, mostly carpenters. It still has a strong residential destination, with a lesser presence of tourists and characterised by a system of pedestrian passages inside the residential blocks (courtyards, underpasses etc.), that is in alternative to the vehicle routes and quite similar to the system existing in historic Kathmandu. The main features of the area are the presence, in the edge sections towards the squares, of new tourist and commercial uses at the ground floors (signing the beginning of the erosion of the residential uses), and, on the other hand, of a high density of inhabitants. This feature is the cause of the high level of hybridisation of traditional buildings, of the vertical subdivisions and of the raising of buildings, with an increase of decay and a general worsening of the state of conservation. We can definitely consider this area as at risk, from the point of view of urban decay, even if a significant number of owners express the intention of preserving their buildings.

The third is at the northeast, around Dattatreya Square. It has a relevant amount of historic or traditional buildings, in a fairly good state of conservation, and an obvious residential calling, in keeping with the zones outside the MZ. It has a central role in the larger residential area in which it is situated and this role, together with the increasing presence of tourists, explains the several commercial uses at the ground floors. These have been increasing in the last few years and are directed mostly to the tourist market. The rising pressure of tourism is the factor of risk for this area, that has been able, up to now, to preserve an interesting level of integrity and homogeneity.

#### **Pashupatinath**

The type of ownership is, here, just the opposite of Bhaktapur, for the high presence of tenants. One has to remember, though, that in Pashupatinath the religious centre needs temporary dwellings that find place in the residential area nearby.

In the matter of building works on the historic heritage, as shown by the data on hybridisation and on the intentions of the owners, the problem in Pashupatinath is not the transformation of buildings with hybridisation works, either heavy or light, but the tendency of the owners to demolish and rebuild traditional buildings.

It can be said that here the owners would rather substitute the traditional buildings than try and make them more "modern" through hybridization.

The main specificity of Pashupatinath is undoubtedly due to the management pattern of this MZ and to the heavy demolitions effected by the PADT in the core area. The management pattern operated by the PADT is very interesting: this body made a program and a Master Plan, in order to rule the interventions in the area and plan the future activities. It is able to manage the funds coming from the entrance fees to ameliorate the facilities in the MZ and promotes a fund raising with other donors, both national and international. This last task is made easier by the importance of the site for the Hindu religion.

The reverse of this is that the hierarchic relationships with other institutional agencies, and especially with the DoA, is not very clear, so that the PADT has a too high level of independence: it doesn't have to answer to anybody for its actions and this means that sometimes its initiatives are in contrast with the purposes of heritage conservation that it should pursue, as manager of a MZ.

This situation induced the PADT to carry out the unfortunate demolition of more than 100 houses in the core zone, so irreparably altering both the urban and the social character of the area. It must be underlined that it seems that this operation has worked as a model, directly influencing the owners of the nearby area, who declare their intention to transform the heritage on a larger scale, in comparison with owners of area 3.

## **5. CONCLUSIONS**

### **A. THE RESULTS OF THE SEMINAR**

All the presentations and the subsequent interventions (see Annexes) can be gathered in three different groups:

#### **A) MZ conservation is possible**

The legislation exists, but its regulations are not enforced by the authority and, what is even worst, nobody knows how to enforce them. Mr Prem Suwal, a representative of this group, produced the example of Bhaktapur, explaining that the law was enforced, with good results. The solution will consist in following Bhaktapur example in the other 6 MZs, but political support is required, providing power to the local municipalities: without empowerment, nothing can be done.

This group agree that, apart from monumental conservation, urban conservation is a possible task, combining restoration and, when necessary, new constructions in neovernacular style; they suggest that the existing craftsmen on duty be trained in traditional style and in the use of traditional building materials.

The benefits of conservation must go to the people living in the MZ where the conservation is implemented: they should not just bear the cost that in many cases is relevant.

#### **B) Conservation is possible with some common sense.**

In the MZs, the conservation of monuments is a task that the DoA is well equipped to carry out; much more difficult is the conservation of the urban grain, because a living area requires buildings updated with contemporary facilities and even new buildings, according to the desires of the people living in that area. A certain degree of alteration is necessary, and a strict conservation policy is impossible. Nobody explained how and how far the transformation would go, making only clear the need of rehabilitating heritage buildings, inadequate to contemporary needs. More natural light is required; the height of ceilings is also considered inadequate, and so forth. But not a word was spent on how to alter heritage buildings, only underlining that conservation is too expensive.

The only suggestion concerns rehabilitation, with much sympathy for the neovernacular style. About urban conservation, the group tend to think that the solution could be found in façadism.

C) Conservation is only possible in limited areas.

The members of this group are quite few, and they support the idea of limiting the extension of MZs areas. They think it would be advisable to utilise a European method, giving power to Boards of Monuments to control every building licence granted in the listed heritage areas

To this group belongs Dr Niels Gutschow, a leading expert in scholarly research and conservation of Nepali traditional architecture, from more than 30 years. He presented two statements for the seminar, the first preliminary to it, and the second as a conclusion. Given the deep knowledge of Dr. Gutschow on the problems of Kathmandu Valley WHS, from its Nomination up to the present day, it is worthwhile to transcribe them both:

“Dr. Ing. Niels Gutschow, Architectural Historian, Bhaktapur, Nepal.

24<sup>th</sup> September 2003

Statement concerning the World Heritage Sites of the Kathmandu Valley

Are the World Heritage Sites in danger? What are the threats?

Since the mid-eighties a growing development pressure made itself virtually *visible* within the Monument Zones. Abandoning pitched roofs, introducing cantilevers and more total height of structures, as well as an increasing volume started to replace the historical urban fabric. Building permits were reduced to harmless papers, because no police force could be mobilised for any enforcement of building laws.

In the nineties demolition permits became compulsory and detailed guidelines were promulgated to retain the remaining fabric and introduce a neo-vernacular style depending on veneer bricks, standardised cornice and standardised window formats.

In 2003 the neo-vernacular spread across the Monument Zones like mildew. My Nepalese friend calls it the “nakali” character: structure, appearance and function makes one feel that there is something “wrong”, not genuine (to avoid the term “authentic”). What is new to the core of these cities: plots are traded, houses become a commodity. Lower status families (like Dhobi/ laundrymen, Kusle/tailors-musicians) sell their plots to investors, who pull their inconspicuous houses down, to replace them with standardised hotel/restaurants, at least doubling the previous volume. Monument Zones became tourist zones. The neo-vernacular ensures the “local” backdrop as required by the unknown “general tourist”.

All these problems are not problems specific for Monument Zones in Nepal. The global trend is the change of historic areas into commodities that ensures profit.

Demolition, replacement and tourist use are inevitable. We may deplore this situation, but nothing can be done about this continuing process.

Is there a remedy? What can be done to slow the process down?

Some countries (like the Netherlands) have demonstrated that the best and probably only way to preserve the historic fabric is to establish ownership by concerned trusts, which rent the property out and thereby control the use. In Nepal this strategy is unrealistic.

The best intentions, the best guidelines, turn out to be futile if enforcement is beyond reach. Conservation issues are of low rank within Nepal’s political agenda, democracy was to allow the individual to reach for a maximum of profit, instantly of course. This tendency can be softened only politically. Enforcement of building regulations is based on political support. Within the near future, there will be no support as the country has more pressing problems.

Improvements are only in sight in technical terms. Planning tools will have to be introduced to control volume and coverage of the plot on the basis of detailed development plans.

Guidelines for façades produce the mildew I mentioned. Design is a living process that needs professional actors, not guidelines. The elite of Nepal's architects should adopt projects within the Monument Zones and offer personal guidance. The present practice of overseers producing designs which they later sanction, in their capacity of staff of the concerned municipality is unbearable. Based on controlled volume, the minimum of compliance will have to be the pitched roof with a consistent overhang – the water tank certainly within the roof, not on top. As the replacement of (in many cases) not maintained structures is inevitable, it is the continuity of scale that is imperative.

“Dr. Ing. Niels Gutschow, Architectural Historian, Bhaktapur, Nepal.  
1<sup>st</sup> October 2003  
Statement – Subject: Seminar at the Institute of Engineering, Patan.

The contributions of the participants addressed a number of issues, but not a single one the issue of the WHC-IUAV mission. This reveals a misunderstanding about the inherent problems of the World Heritage Sites: a lack of insight into the quality of an urban site and the intentions of urban conservation.

Mr. Sangache and Mr. Basnet regard the entire Valley as a World Heritage Site. Both of them did not address any problem of the Sites, but kept saying the “haphazard development” should be controlled in order to maintain the cultural landscape. To broaden the scope is certainly one way to obscure or even hide the problems of today.

Mr. Tripathi (DoA) understands the criticism of UNESCO as a kind of order to demolish “400 illegal structures” or transform them, in harmony with the historical environment. This is a total misunderstanding. None of these can be demolished and probably nothing can be reversed.

Mr. Karna Shakya and others brought the issue of “traditional” versus “modern” materials and techniques. He wants clearly cut guidelines. These exist, but unfortunately there has not been a creative discussion between architects, investors and DoA. Earlier missions kept abusing “cement” and modern technology. The urban problems were not discussed.

Awareness and participation of the people, often called “local people”, were addressed, their poverty and their missing vision and appreciation of the historic urban environment. Probably none of the participants know details: poor owners make a fortune by selling their property to investors, who won't live in the Monument Zone but dream of generating profit from restaurants and hotels (although the political situation is unstable and the number of tourists is rapidly decreasing). Investors don't miss either awareness or subsidy. They are rich and are only interested in making profit by doubling the historic volume of the plot. Their greed can only be curbed through legislation and ruthless enforcement. As local developments are missing as well as executive power, the discussion is narrowed down to the provision of bricks for a traditional cornice.

Everybody made it a point to say that Bhaktapur municipality performed fine. Obviously nobody feels the huge new constructions to be inappropriate in the Monument Zone. This reveals a total lack in understanding of “scale”.

#### Summary

The seminar was not a dialogue. Rather, two parties spoke different languages. Not a single real “case” was discussed. The seminar was taken as an opportunity to talk about general issues like awareness. We must acknowledge an unprofessional attitude towards the issues at stake. I do not know how to bridge the gap. UNESCO has to comment in much detail what the listing “in danger” means. The press release sounded very careless.

My personal advice is to narrow the scope of World Heritage Sites, make them smaller and prepare development plans for those and return the ball to the court of Nepalese planners: let the municipalities develop zones of some kind of protection which has to be defined on local level. Further zones can in no way be incorporated into World Heritage Sites.

Issues of material and technology have to be addressed professionally.”

## B. RECOMMENDATIONS

Having classified the buildings, it is now the moment to try and present some thoughts, in view of the proposals for remedies.

The general figures of the two surveyed MZs are the following:

In Bhaktapur the historic heritage (historic buildings, post-earthquake and light hybrids) cover the 47.20%. The contemporary built fabric (heavy hybrids, reinforced concrete frame and neovernacular buildings) cover the 52.80%.

In Pashupatinath the historic heritage (historic buildings, post-earthquake and light hybrids) cover the 39.13%. The contemporary built fabric (heavy hybrids, reinforced concrete frame and neovernacular buildings) cover the 60.87%.

In Bhaktapur the figure of 50% has been bypassed by the contemporary buildings: not a great result for the combined efforts of local administration, UNESCO and GTZ to preserve the city, Bhaktapur holding a leading position for the conservation in Kathmandu Valley. The result is disappointing. Apparently, most of the other MZs are in worse conditions: the values of authenticity and integrity of the heritage have been greatly eroded. Of course, one could ask if the maximum acceptable level of transformation is really beyond the fatal 50%, under which a site loses its value and decays.

The evaluation should follow purely mathematical criterions, or should risk other routes, before deciding for the heritage loss of Kathmandu Valley? We must know that the cancellation of the sites from the WH list will imply a much faster erosion of the heritage that could also become a kind of national reprisal against the UNESCO. One has to keep in mind that the delisting, as appeared from most of the speeches and interviews, is felt as a wound to the national pride. Total cancellation would be seriously felt as an offence to the Country.

What else could be found, as a mean to save, at least for some time, the Kathmandu Nomination?

First of all, I would like to recall the world trend of heritage erosion. This does not intend to be a general absolution: everybody is guilty, no one is guilty. But history could, sometimes, be teacher: are we sure the initial contract between UNESCO and Nepal Kingdom was fair? The difficulties and drawbacks involved in the nomination of such a large area of a developing country had been sufficiently explained? In this matter, the interview with ambassador Jha was very interesting.

A certain local naïveté, together with subsequent excessive expectations, also from a financial point of view, made the situation even more difficult, up to the present dramatic crisis.

The game is not played only with private residential buildings, but includes the monuments, an important factor both for quantity and quality: their state of conservation is generally from good to very good. This point has been made in all the meetings, interviews, seminar speeches, courtesy call with the Minister, as one of the most important aspects of the conservation in the Valley.

This matter would imply a redefinition of the monument zone, that is to say to limit the MZs to the parts where more monuments are gathered.

During our staying in the Valley for our research, though, another, very important, aspect of the heritage came into light: the religious and ritual side of the city. The visible and invisible heritage mix, here, in a rich and complex layer, still alive and felt, through which the place is made sacred, in all its extension, no matter if it is preserved or hybridised.

This goes against what maintained above, about limiting the MZs, as the ritual routes are used everyday, if more during the major festivals. The whole of the city is dedicated to worshipping, and this is a further heritage element, to be added to the rich endowment of the city.

Major monuments and small temples, stones apparently forgotten in the middle of the street, only signed by some paint, a flower, some rice grains, the city in its entirety is scene of a religious life miraculously preserved.

Professor Tiwari underlined the importance of urban daily religiosity that gives us historic and archaeological information without books and digging, as the routes of the processions repeat the same, ancient tracks, in a city deeply changed.

Altogether Bhaktapur is perceived, as said before, as "particularly well preserved" and "little affected by intrusive modern development"<sup>23</sup>, even if data do not exactly confirm this. Niels Gutschow complains about neovernacular and out-of-scale new buildings, but considers Bhaktapur as one of the greatest city in the world. This means that we accept the fact that the heritage erosion of this living city is around the 50% of the whole: we still consider Bhaktapur an example of preservation.

This step is particularly important for a statement, which could be addressed to the other MZ in the Valley. The "wise blindness" which occurs to skilled and unskilled eyes while admiring the beauty of Bhaktapur, seems to disappear in Patan, or Hanuman Dhoka Darbar Squares, or in Pashupatinath or in Bauddhanath and in the other MZs?

Maybe the amount of alterations is superior compared to the one in Bhaktapur, or there is something else which strikes and disturbs the visitor, both professional and simple tourist? Or the area of other MZs is smaller, and the erosion is more evident, not being diluted in larger dimensions as in Bhaktapur? Maybe there are other aspects of the heritage, which enrich or deprive the MZs characters: the use of the area in time, the silence or noise, the amount of traffic and the pedestrianisation of some areas, the cleanness of the air and the pollution. All this factors could add or remove values and beauty to any single MZ.

Bhaktapur is not polluted; the air is clean and the little traffic admitted in the core area doesn't disturb the heritage. During the seasons, day and night, according to festivities and worshipping, the city becomes the stage of religious and social performances, in which people and city become a powerful unity. The combining of values, tangible and intangible, contribute to keep the general feeling of a well preserved city, despite the many alterations we have surveyed. It means that the value of a listed area is strongly affected by other factors, which are not simply related to the physical evidence of the heritage, and that contribute to the feeling of a site, in positive and negative way.

It may be of some help to describe an experience of our two missions with students (graduate students, mainly architects) in the past two years, as a test about the assessment of authenticity in MZs.

During our mission, twice, in 2002 and 2003, we experienced the visit to several MZs under the ban (the general strike, under which there were no cars in the all of Kathmandu). With no traffic, no noise and no danger, a visit by bike to Bauddhanath, from Thamel, was quite an experience for all of us. In the group, only two persons had previously visited the site and could make a comparison between the present situation and the one of the previous year. For the rest of our group, composed mainly from architects from overseas Countries, the experience was magic, and the alterations effected in the past did not affect the positive evaluation of the MZ. Not knowing the beauties of the past, the site appeared to the group authentic and beautiful, and the erosion not so terrible.

In other words the alterations were not considered so heavy, as from the UNESCO-ICOMOS-HMG 1998 Mission, to modify the judgement of value of the site. It was felt as a fantastic stupa, very authentic indeed, with the precious space it created along its boundary by the built ring of houses and shops, and the alterations to the buildings, with new shop windows, terraces on top floors, restaurants and bars, were considered in some way compatible with the general historic value of the MZ, which anyhow, even partially transformed, kept its values also in the light of the concept of picturesque.

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<sup>23</sup> Report of the joint mission UNESCO-ICOMOS-HMG of Nepal 1998, p. 83.

We were not here, in the golden times of the Nomination, and we are not able to compare the present with the past, but we can say that, despite the erosion, which is clear to all of us, a tremendous value is still there, and it is given, as in Bhaktapur, by a combination of factors, typical of a living area in an expanding city.

A certain degree of alteration is expected in every heritage site in the world, especially in the living context of a living city in a developing country's capital city, like Kathmandu conurbation.

It is clear that in 1979 the concept of protecting the jewel – the stupa- and the built ring around it, separated, as it was, from the urban growth, was important. But was it feasible, in every sort of developing city in the world? Or it was just a dream, a desire of keeping the jewel as it was in the old days as long as possible?

It was clearly impossible, for the several reasons so well known to all the professionals involved in planning in developing countries. And another question is: why something that is impossible in the rest of the world should be possible in Kathmandu Valley? Was it correct, culturally, economically and politically, to ask to this Country to fight the pressures towards development and welfare, or even to suppose that this Kingdom could be able to control them more than most of the other countries are capable to do? Do not most of our western countries try and combine profit and conservation?

The answer of our experience seems to be that who knew a heritage site as it was a certain amount of time ago tend to judge more severely the situation; who sees the same site for the first time, finds it still interesting and worth of admiration.

A suggestion could come out from this: every assessment mission should be composed by two members, and old expert and a one fresh to the site, so that the tension between the two positions might give a more balanced opinion over the state of conservation, or change, of the site.

Another important experience we had was the seminar we organised, which gave a general view of what were thinking and feeling the people concerned with heritage conservation in the Valley. It produced a number of interesting issues and point of views, more than answers, to the proposed questions.

A summary, two statements by Dr. Ing. N. Gutschow and the complete transcription of the interventions of the participants can be read in attachments.

Over the future of Pashupatinath as a MZ a clear statement must be made: the conspicuous and vast demolitions of heritage buildings, as described before, have compromised and ruined the morphology of the entire area, at least in its western sector. The demolitions must be stopped, at every possible cost, at least to preserve what little morphology has survived, and a new perimeter must be traced, for a smaller area, in which the compromised western portion should maintain a certain degree of protection. The new boundaries will run to the East, embracing temples and other religious structures, including the ghats and the river, and, as it is now, the entire hillside.

Special care should be taken to preserve the few surviving historic buildings and to ensure that the contemporary ones do not get even worse, especially in terms of height and volume. In this respect, some mitigating actions (landscaping) could be studied, to reduce the visual impact, in order to ameliorate the general conditions of the area.

It is evident the need of good quality design, both urban and architectural, to reorganise a derelict space.

In the other hand, we can appreciate the good quality of the restorations carried out on the monuments.

The UNESCO-IUAV mission task was to survey the state of illegality in two Monument Zones, Bhaktapur and Pashupatinath. On the basis of the Building Bylaw, it has been easy to identify illegal buildings, also because we surveyed the height of all the buildings in the two areas with laser distancemeter. It must be remembered, though, that some of the buildings that appear

today illegal, could have been built before the publication of the Building Bylaw of 1994, and be therefore entirely legal. To this purpose, we would need a more detailed survey

This is something that must be taken into consideration, because we surveyed and represented in the attached maps all those buildings as illegal, as they are in the light of today law. It is impossible, at the present moment and with the available data, to figure out the exact number of what is to be defined as illegal (or, more correctly not respondent to the enforced Bylaw), in opposition to what as been built, with a regular licence, before the publication of the Building Bylaw.

Speaking about building licences, it is necessary to say that a full scale research should be done to clarify all the aspects of the construction of new buildings in the MZs of the entire Valley, as well concerning every kind of transformation over the built environment. This research was impossible to accomplish during our mission, for reasons of time and staff, but also for the difficulties posed by the insufficient transparency of the offices in which the records are kept. What we were able to do in this regard, presented in some interviews attached at the end of the report, is enough to understand that more research work is required, that should be effected by local teams, like teaching staff and students of local universities.

It is crucial to get them involved in this kind of surveys, first of all because the heritage belongs to them, and it will be an excellent way of arising awareness and competence amongst them. The involvement of universities is one of the major issues to be discussed in the near future, because there is a great need of good quality local professionals, and a reorientation of teaching and researching toward conservation, is required with urgency.

Some already existing experiences of restoration of heritage buildings should be divulged, amongst private professionals – architects and engineers - and universities, involving the public, represented by young professionals, last year and master students, and the craftsmen. On this regard, the experience of Mr. Rabindra Puri, who was recently awarded by HM the King for the restoration of a historical house in Bhaktapur, demonstrates the public value of such conservation work. By the way, Mr. Puri assured that the cost of the restoration was lower than the cost of demolishing the old building and rebuilding it. If the statement will be published and divulged in the press and in magazines professionally oriented, the fact may be of enormous help from the promotion of low cost conservation of privately owned historical buildings in the Valley.

As a final statement of our mission, we declare that the entire research will be divulged (as a CD easily opening) to anybody, private or public board and institution, upon request, after obtaining the permission from UNESCO-WHC. Transparency and diffusion of the data of our research is the chosen way to help the conservation of the heritage in the seven Monument Zones of Kathmandu Valley World Heritage Site.



## **6. ANNEXES**

### **A. UNESCO WHC – UNIVERSITA' IUAV: SEMINAR (PATAN – SEPT. 2003)**

**“Why was KVVHS put in the List in Danger? Consequences and remedies.”**

#### **SESSION ONE**

**Designated speakers present their prepared responses to the two questions posed.**

##### **Prof. Giorgio Gianighian, IUAV, Head of UNESCO-IUAV Mission:**

He introduces the Mission and its purpose. He informs UNESCO has placed the Kathmandu Valley in the list in danger. The seminar will try to find answers as to why the Valley has been put in the list in danger, and what will be the consequences as a result. He notes that we don't have an exact answer to these questions. Erosion of Heritage has taken place significantly in the Valley in the last decade, due to a variety of reasons, and this seminar will try to bring views and opinions on this subject from a variety of sources. He expresses his gratitude to doctor Niels Gutschow for his suggestions and to Professor S.R. Tiwari for his help.

The task of the mission is to study this problem in a non-traditional way. The mission wants to give a true answer to UNESCO. And it will be the mission's endeavour to be non-formal and non-diplomatic. We want to do our work in an open and honest way. A series of speakers will follow and they will have about five minutes each to give their presentation.

##### **Mr. Tripathi, Department of Archaeology:**

Subsequent to the listing of Kathmandu Valley as a World Heritage site, the historical environments of the areas surrounding the Monuments were also included in the Monument Zones. It is these surrounding areas which are in Danger, due to modern constructions. The Monuments themselves are not in danger. The public monuments consisting of Durbars, Squares, and Temples etc. are in better condition and better preserved than they were before being nominated World Heritage; the only reason for the World Heritage Centre to place the Valley in the list in danger is that the surrounding zones of the monuments are in danger.

The DoA has listed 400 buildings in the monument zones that have been improperly transformed. To correct these changes so as to make them coherent with the preservation norms is virtually impossible for the DoA. We hope that this mission will survey these buildings which have been changed and give us proper suggestion regarding future management.

The consequences of this decision means that we have to amend 400 houses to bring them back to the desired architectural design. It takes a long time but nonetheless we have to do it. And in this regard, we are eagerly expecting precise and useful suggestions from this mission.

##### **Mr. S.B. Sangacche, Member-secretary of the Kathmandu Valley Town Development Committee, KVTDC:**

He feels privileged to speak as the representative of the main urban development planning organization of the Valley. The KVPT is also the body in charge to prepare the 2020 Development plan of the Valley, which also involves the cultural and historical significance of the Valley. While the Kathmandu Valley World Heritage Site includes seven monument zones, the Valley is a unique

cultural phenomenon of Nepal, and consists of more than 30 very important religious and historical sites, for tourists and the domestic cultural life of its people. It also consists of 29 traditional settlements (like Saankhu, Bungamati, Khokhana), which represent the architecture, culture, urban character of the Valley.

We don't yet have a heritage management plan for the Valley. We should have had such a plan when the Valley was listed as a world heritage site.

The other issue is that the community has not been generally involved in the conservation of heritage (except Bhaktapur) so far. Unless the local community is involved, sustainable conservation is not possible.

The traditional culture of the Valley is directly associated with agriculture and farming. In this regard, the Kathmandu Valley 2020 Plan prioritizes preservation of farmlands. The Proposed Land-Use Plan in this document envisages a 40% built-up area, 30% Farmland, and 30% forests.

The future Heritage Management of the Valley should consider the following:

-Preparation of a Heritage Management Plan for the whole Valley and not just the seven sites.

-An investment plan, how and who will finance various activities;

-Community involvement is a must, with special emphasis on benefits that must flow directly to the local community and not only to outside tour managers;

- A proper and effective implementation of existing laws and regulations is required, the current laws are adequate and new laws are not needed.

#### **Prem Suwal, ex- Mayor of Bhaktapur Municipality:**

Thanks the mission for this invitation to discuss heritage conservation in the Valley. He questions the validity and effectiveness of the *Ancient Monuments Act*. Feels it is uncertain about the ownership of the heritage: who owns a heritage property, and who manages it.

Heritage conservation work is subject to too many overlapping jurisdictions of government institutions, with unclear definition of responsibility and accountability. Currently heritage conservation can be subject to the jurisdiction and action of DoA, Guthi Corporation, The Chief District Officer, The Municipality and the Palace Area Maintenance Office (part of the DoA); separately and simultaneously.

Local governing bodies like the Municipality, should be given executive powers, similar to the powers enjoyed by the Central Government. In this way the Local Government could be made accountable for heritage management, and also given credit for good work.

Governance in general is ineffective, since projects undertaken by central government are not known to local government.

Unless the local government is strengthened and taken into confidence by the Central Government, This will be limited to only an intellectual discussion. It is the people who should know the real value of heritage.

Ancient Monuments Act is useless and should be revised. Local Governments should do conservation works, instead of redundant central governments departments, where officials are assigned only to fill up bureaucratic posts.

#### **Niels Gutschow, Architect-Scholar, Bhaktapur:**

He came to Nepal in 1971, and became involved in the first conservation project, the Bhaktapur Development Project. He has made Nepal now his first home. Refers to S.B. Sangaache, regarding a paper that was signed with UNESCO, which recognized that the Heritage of the Valley was in Danger. It took ten years after that to put the Valley in the List in Danger.

He referred to a letter to the editor, a week ago, in the Kathmandu Post (a national news daily) about the invasion of Swayambhunath Monument Zone. It referred to a Minister coming to

the site and letting his people do any kind of construction in the Monument Zone, in utter disregard of the regulations. How can D.O.A. sit back and allow such blatant violations of the rules to take place?

He asked who would ensure the implementation of Law, if high officials themselves do what they please and the Police look the other way.

He also referred to a remark made by Mr. Tripathi of the DoA regarding the concerned authorities with respect to Lumbini, another World Heritage Site in Nepal. He asks what he means by concerned authorities. Whose concern heritage conservation is, if Ministers of the Government violate rules?

He also questions Prem Suwal's (ex-mayor, Bhaktapur) suggestion regarding more executive power to the Local government. It does not mean much, since even in the case of Bhaktapur, where all the new buildings being constructed are approved by the Municipality; some very poor buildings have been built. He feels that more local power is in itself insufficient, unless it is backed by developing instruments of good planning to ensure good building and proper implementation.

He questions the rise of so-called neo-vernacular architecture that seems a fake, unreal.

He invites Prof. Sudarshan Raj Tiwari to enlist his students of the Institute of Engineering, department of Architecture, to take up the challenge of working with the Local Governments of the Valley to preserve the heritage.

**Karna Shakya, Hotel owner, Former president of Nepal Heritage Society:**

He remembers that he has been involved with the preservation of heritage for the past 30 years. He is very sceptical about the currently accepted definition of Heritage. Built heritage can be conserved with proper skills and resources. But the dynamic element of the social fabric, which is the living heritage, is very difficult to preserve. For example, if the production of certain special agricultural should disappear, this would be a great loss.

He reflects that the lifestyle is changing very rapidly these days. Culture is like a lake, where water has to come in and water has to go. Therefore, healthy change has to be integrated in the definition of Heritage.

Buffer zones around monument zones are essential. Like in the National Park, where the buffer zones serve as community forestry.

He also observes that heritage conservation is not a priority of this government. Practical policies and realistic approach has to be adopted. He assures that he is not advocating modernization, but people should be at the forefront of preservation.

He suggests that it is time to bring fresh perception to the definition of heritage sites.

**Giorgio Gianighian:**

He underlines the introduction of the concept of dynamic development into conservation.

**Niels G.:**

He suggests that in the concept of the lake, it is better to talk about little islands in the lake. In this way, we can preserve a couple of islands in the lake. Otherwise, islands like Swayambhunath are on the brink of a major change.

**Shaym Jha, Administrator of Pashupatinath Area Development Trust (PADT):**

He explains that the PADT is working as according to its Master Plan, which the Trust itself prepared in the recent past. He lists the major focuses of the Master Plan:

1. Conservation and renovation of the old monuments in the Pashupatinath Area.
2. Provision of facilities for pilgrims
3. Preservation of the cultural, social and religious aspects of the Pashupatinath area.

He observes that within the Pashupatinath Monument Zone, there are four hundred and ninety-two monuments, each having its own archaeological and historical importance. A large

number of these monuments are not used as per their scheduled functions, due to various reasons including encroachment.

More than 150 monuments were illegally occupied, and now these monuments have been taken over by the TRUST.

The major concerns of the PADT are cultural, religious and social, but the religious one has special importance. Therefore all the PADT activities are geared towards providing services to pilgrims, whose number is increasing, although he asserts that the PADT is very serious about the recommendations of the UNESCO.

He explains the activities of PADT as follows:

- Reoccupy all the monuments in the Monument Zone.
- Acquisition of land in the core area.
- Conservation of various monuments.
- More than forty such monuments have been conserved, and fifteen are currently under conservation works. But the conservation of all the monuments is a very heavy task.

He observes that, when defining Conservation activities and parameters of heritage the religious component has to be taken very seriously into account.

He notes that such interactions are very useful and informative. Sufficient interaction with concerned authorities before recommendations are prepared is critical for their effectiveness.

**Bharat Basnet, tourism entrepreneur, Kathmandu:**

He notes that he has been in the tourism business for 20 years, and has learned the importance of heritage to his business sector. He has tried to bring the awareness of heritage to the younger generation, especially school children.

He asks why is the KV in the list in danger and notes that for the last years there have been only discussions. He notes that we are ignoring quite clear rules and regulations and building indiscriminately in the monument zones.

He observes that in Western Cities, like Vienna in Austria, where the inner cities are conserved well, substantial income is generated for the local activities, through a variety of activities.

He feels that this aspect should be stressed in the conservation of Heritage Property in the Monument Zones of Kathmandu Valley.

He notes that we should involve people, make them learn about the economic benefits of proper heritage preservation and also develop programs to improve the quality of life in the inner cities. Current environmental status in the core areas is quite pathetic. He underlines how he has tried to do his bit, by taking ministers and officials to these sites to show them the problems.

**Prof. S.R.Tiwari, Institute of Engineering, Tribhuvan University:**

In talking about why the KV has been placed in the list in danger, he underlines that the UNESCO only points to the loss of vernacular architecture that is the buildings only: they do not talk about the cultural environment. He is worried about the possibility that this announcement may work only as a feast laid out for the conservation experts. There is a danger that this listing will become a job opportunity for more international experts.

He notes that loss of vernacular buildings does not mean that the builder is always at fault. We should accept that the rules may sometimes be faulty too. We should recognize that these Monument Zones are inhabited by people who have been there for a very long time. It is not fair to expect that these people will live in a frozen architecture. Life styles have changed dramatically since these houses were built. Originally, since most people spent most of their time outside the house, they could do with small windows, while now people are spending more time indoors, children are studying in the rooms, and they need larger windows.

He maintains that the traditional built environment should be allowed to undertake metamorphosis.

He notes that in 1992 there was talk of monitoring the Heritage after the construction of the Patan Museum, Patan Durbar, where totally different materials and style were used. Although this was a controversial work, it further demonstrates that some kind of metamorphosis of design has to take place.

We have to identify commercial activities that are kind and compatible with the heritage properties. Planning interventions are critical in terms of services with respect to current urbanization and social conditions.

He notes that as pointed earlier, it is important to be able to attribute the responsibility and the blame to one given entity.

She notes that the Kathmandu Valley WHS consists of seven Monument Zone; we should recognize that all seven zones have totally different characteristics.

In the Case of Pashupatinath Area Development Trust, there is an implicit understanding about placing religion over history and culture.

In the case of Baudhanath, for example, it is today overwhelmed by the surrounding development of Tibetan communities. It is important that we recognize the fact that each site requires a different treatment as far as the conservation effort is concerned

It is important that benefits be distributed among local population, and not only to the big tourist operators.

Resource and income sharing with local communities is very essential.

People would value their heritage a lot more if it improved their well being. We should refrain from taking a purely technical approach to heritage conservation and recognize that the private house owners of the monument zones need to live in the 21<sup>st</sup> century as well.

**Prof. Giorgio Gianighian** announces the close of the speakers' session and the opening of the second part of the seminar, with the short interventions of the other experts invited to the seminar.

## SESSION TWO.

### **Karna Shakya:**

He notes that all conservation programs coming in the Valley are following charters drawn up elsewhere, in Venice, Australia, Malaysia. He questions why this happens, when the local situation is so different. Why can't we have a Nepalese charter to suit our heritage conservation, in cooperation with UNESCO?

**G.Gianighian:** He refers to the Nara Declaration and points out that it does not have any method for conservation written in black and white, but it has several shades of grey. This greater flexibility resulted from the position of the Far East and the western Countries, agreeing on the fact that the predominant theories of conservation have been produced from the West. In 1994 it had become clear that these theories don't necessarily work in the East.

He notes that the most important issue coming from the current discussion is that monumental conservation is easy while urban conservation is difficult. For example, the increasing of vehicular movement in the traditional cores, has led to the loss of open space for children playing, their fore flat terraces are created by replacing the tiled roof. It seems to be the problem of limits of transformation of the city to accommodate change and deliver conservation together.

He refers to the phenomenon of hybridization of vernacular. Layering of different periods is embellished in hybrid architecture. It is important how we can appreciate and teach the hybrid architecture.

He notes that in this seminar, we may have the beginning of a process to write our very own Charter in the Valley.

**SRT:** He points out that in this session; first we should raise agreements and disagreements with the speakers, before we lead to new ideas.

**Barat Sharma:** Architect-Landscape planner. Former Deputy Director General of Department of Housing and Urban Development for Kathmandu Valley

He notes that the crux of the problem is how to relate the living and the non-living aspects of the Monument Zones, linking the tangible and the non-tangible.

He notes the fact that Professor Eduard Sekler of Harvard University, wrote to the last King that the areas surrounding the monuments are under threat.

He maintains that, if UNESCO people put the whole Valley under the same blanket, it means that they are living in an ivory tower not recognizing the good work done in one site, namely Bhaktapur.

He points out where the UNESCO Pundits have made mistakes, as follows:

- UNESCO forgets that by looking at only the Islands, we tend to forget the whole Valley.
- Sometimes so-called experts make ad-hoc efforts to conserve, like the Cyaslin Mandap in Bhaktapur Durbar Square.
- Good work carried out by Bhaktapur Municipality is not recognized, while it should have been recognized as a success story.

**Tiwari:**

He adds that vernacular architecture cannot be preserved unless you use local methods.

**Gianighian:** He adds that this aspect is written in every conservation manual. He cites that Neo-vernacular is acceptable to everybody, but not necessarily the best way to preserve or rebuild.

**Karna Shakya:**

He further notes that Nepal is in a seismic zone. Since conservation is an expensive work, he adds that it is impossible not to use modern technologies/materials in conservation projects. He does not subscribe to hard purist conservation, and has seen with favour the use of steel in the conservation of Borbodur.

He wonders which level of traditional façadism is acceptable in the conservation of heritage buildings and how much of new technologies should be allowed in the conservation works.

He notes that it is important to find an answer since we cannot rebuild every time an earthquake hits the Valley.

**Prof. Dr. Jiba Raj Pokhrel, former Dean of IOE:**

He notes that he saw the use of concrete in construction of Doric/Ionic columns in Western countries.

In the conservation of traditional Nepalese architecture, struts and posts can easily be pre-cast in concrete. Although timber is the best option, its supply is rapidly depleting. There is room for the use of new materials in making traditional facades.

He notes that work at the IOE has already started in assisting the local government in conservation of core area. Prof. Tiwari and his students have been making street facade developments, and the results are given n to the concerned municipalities.

**Biresh Shah, Assistant professor, IOE:**

He asks how we can reconcile the ideals of conservation norms as prescribed by UNESCO, with the rise of a global consumption-driven culture in an economy with an income of \$300.00 per capita per year. How useful does it then become to cite success stories from the West, with an income around \$20,000 per capita?

**S.B. Sangacche:**

He notes that when we talk about conservation, urban pressures in core areas need to be considered. We need to have a Development Plan and a Conservation Plan simultaneously. There is a need to consider all the Sites in the Valley, not only the seven Monument Zones. Local people need to be made aware of the Value of these sites. It is important that local people should benefit directly from conservation. He adds that new areas in the Valley need to be developed to absorb the current urban pressure for housing, in which there is need to improvise the traditional settlement patterns and materials. Consideration of the critical factor is critical. It is important to use methods which build on local skills, and generate employment. It is also important to improve the overall quality of life in these settlements, by bringing new amenities.

**Prayag Raj Joshi, UDLE:**

He opines that in his experience he has used timber for structures in restoration work, and this is deemed good in seismic activity.

He is a proponent of use of Concrete in structures and damp proof course, but it should be hidden. He believes that given the choice, people will always go for cheaper materials. If the Government can make the timber easily available and cheap, then people will use it.

**Hans Bjonness, Professor, NTNU:**

He notes that the urban structure of the old town is still intact even in a rebuilt city, namely, the street grid and open/public spaces. However, as so many 5-story RCC buildings are being built in the core areas, there is a good chance that private open spaces like the Chowks (Courtyards could easily disappear in the future).

He points out that the Government has to urgently address this problem.

He refers to the Masters' course, he has been running at NTNU, which addresses:

- Social Responsibility
- Environment sustainability.
- Ecological Balance
- Cultural Continuity.

He also suggests that we have to begin to address the demographic realities of the Valley today, and accept the challenge to think of a pluralistic society beyond the Newari.

He refers to the suggestion of SB Sangacche on looking at other sites in the Valley as well, beyond the Monument Zones. We cannot just preserve small islands.

He refers to the good work of the DoA and other INGO's, but if we look at the urban scenario. Things are really serious.

UNESCO should consider the scope beyond the seven sites of the Valley, currently listed, and look at the Valley more realistically.

**Dr. Suwal, Principal, Khwopa College, Bhaktapur:**

He questions why UNESCO is not saying anything about Bhaktapur and Changu Narayan, which are in good condition. He feels conservation programme is in its infancy, here.

In most engineering programs, there is no effort to familiarize the students with the strength and construction of traditional Materials.

**Hema Gurung, UNESCO Office, Kathmandu:**

She refers to the press release by UNESCO, which says that only six sites are placed in the list in danger, Bhaktapur is not included. Although the final details from the World Heritage Centre is still awaited.

She feels that there is a confusion regarding the seven sites. She stresses that the whole of Kathmandu Valley is one World Heritage Site, consisting of seven monument zones. Therefore, even if one site is in danger, then everything is put on the list.

She notes that maybe the Government (in this case, the DOA) should all seven sites as separate World Heritage Sites. It is up to the Government to seek this change.

**Prof. Enrico Fontanari, IUAV:**

He feels that the main problem seems to be the transformation of the urban fabric of the Monument Zones.

He cites that there are many cities (and just sites) in the world are listed in the World Heritage.

He refers to two important questions.

How can we link the management of Heritage with that of urban management? (Seminar in Europe on this issue).

Who is in charge of urban management? In most cities elsewhere it is the city authorities who are responsible. But in Nepal, it seems it is the DoA which is in charge.

He asks if it is the social capacity building problem, and refers to the questions of local knowledge.

**Prem Suwal:**

He reflects that seminar has been a big learning experience for him. He complains that the DoA office is fast becoming a channel for all kinds of big expenditure for small works of conservation in the Bhaktapur context. He questions the motive behind such phenomenon.

Currently, the World Heritage site monument zone consists of area around the three squares only, namely the Durbar square, Taumadhi and Dattatreya.

However, to conserve the entire city, the Municipality has taken the initiative to place the entire core city under the same zoning. This he feels is a significant local initiative to conserve the city.

He believes that traditional technologies and materials should be upgraded for seismic activity and not be replaced by new materials.

People's participation and sharing of benefits is very important. The Municipalities has taken the initiative to provide timber and bricks to local builders.

He notes that it is very important for us to learn from successful examples in other countries. Local government much be strengthened to take up urban conservation work.

He also requests that Bhaktapur be nominated as a cultural city. He also notes that since urban pressures of housing are a major cause of loss of heritage, urban development should be decentralized to move to cities outside the Kathmandu Valley.

**GG:**

He urges everybody to focus the discussion on the monument zones. He believes that Local authorities should help us focus and understand realistically localized problems in the monument zones.



He feels it is difficult to enlarge the problem to planning of the whole Valley. The important thing is to focus on how we get out of the list in danger.

**SRT:**

He ponders the fact that the seven sites have the same regulations, but only Bhaktapur achieve something which others could not. And this points out to the fact that same rules can be used satisfactorily, and that there is not much wrong with the Rules and regulations.

Experts may think that Bhaktapur is a small city and does not possess the same pressures as Kathmandu and Patan.

Some think, it is successful because it is different politically (and the municipality has greater determination).

So maybe Bhaktapur does not possess the same development pressure. In fact the UNESCO document cites the loss of the ability of the monument zones to offset Development pressure.

He feels we also need to address the issue of Heritage conservation with the issue of poverty. It is important that we see our achievement against this issue.

He requests for concrete suggestions.

**SB Sangacche:**

He again points out that the discussion addresses the seven monuments only. He stresses that these zones are part of the whole valley's urban structure. It is important to see it in totality.

He advocates that these monument zones should be looked as integral part of the whole Valley's Development. There is a need to develop the old city and the new city together.

He feels the major cause for this current loss is a lack of commitment. The Bhaktapur Municipality is an exception, where the commitment of the municipality has produced results.

**GG:**

He asks if Sangacche is sure if by enlarging the scope of the current problem he is narrowing the problem.

**Bharat Basnet:**

He feels there has been a contradiction between conservation, preservation and development in the past. But now all three have to go hand in hand, otherwise resulting development is a disaster. He feels that the entire Valley should be declared one conservation zone. Issues of haphazard urbanization, seismic danger and pollution must be considered. He feels we are lucky that we can still discuss the problem if these seven sites. Building code and planned urbanization is very important. We should accept that mistakes have been made and restart our efforts fresh.

Vernacular architecture, Eco-tourism, skill development, economy, and conservation will benefit people at large.

**Bharat Sharma:**

He asserts that chaotic urban growth has deteriorated the urban fabric around the monuments. In the Nepalese context, don't we need to see life as being ephemeral? Don't we need to see that with time the built environment will change? If we don't consider this, we will end up retrofitting everything.

**Bhim Nepal, Department of Archaeology, former chief of the Protected Monument Zones Unit:**

He refers to the decision of the World Heritage center regarding Kathmandu Valley.

He notes that in six sites a big loss of vernacular architecture is reported. But he is not sure, if the exception of the seventh site refers to Bhaktapur or Changu Narayan.

He draws attention to the nature of the property listed. All monument zones except Changu Narayan) are located in the centre of cities and are commercially very active.

In fact the first Supermarket in Nepal is owned by the Government and was built directly next to the Hanuman Dhoka Site.

The properties in the monument zones are either Government or public owned properties. The rest is owned privately.

He notes that during the time of nomination, all the public monuments were presented to the UNESCO by His Majesty's Government (HMG).

After the listing of the sites, the whole surrounding area was declared as protected monuments' zone in 1984.

During the declaration, HMG said that all private houses, streets, lanes linked to the monuments will be a preservation zone.

\*For preservation of vernacular architecture for future generations.

\* For the Historical, physical characteristics of the monument zones.

In his experience management of Heritage anywhere is through two channels.

Firstly, the direct channel of the government through its institutions. Secondly, once a site or an area has been declared as Heritage by UNESCO, the second channel is UNESCO.

In his experience, from 1979-1993, subsequent missions of UNESCO raised several questions regarding the condition of the vernacular in the monument zones. During this period, no mission raised this question about loss of character in the urban fabric. UNESCO and our representative in Paris were never informed about this change.

He notes that of the 55 recommendations received for abetting this loss in Heritage in the monument zones, 40 recommendations have already been taken up. He further notes till date the DoA has not received any technical/financial assistance with regard to the recommendations, since 1998, which was agreed in the tripartite agreement.

He sees the consequences of this listing as visits by new missions, more seminars, in the short-term. In the long-term we are unable to conserve our heritage properly; loss of vernacular architecture; effect on tourism will be small, since main properties are intact.

He feels the DoA is doing its job well. It is important that we should not include more areas in the World heritage Site, since the management of even seven areas is proving to be difficult.

He notes that it is time to redefine the Monument zone limits to be more realistic. This should be done in addition to revising existing building bye-laws, legal instruments and incentives for people to preserve.

#### **Prem Suwal:**

He offers a clarification that the Bhaktapur city did not oppose the Bhaktapur Development Project in the 70's. What the city was unhappy about was the lack of involvement of Local people in the early phases of the project. He points out to the virtue of conservation taken up by the Guthis, in earlier times.

He notes that all work related to heritage conservation should be undertaken in place/institutions. He thinks that the whole Kathmandu Valley should be declared as a cultural and political centre, in order to preserve it. He cites that such steps have already been taken in other countries.

**GG:**

In his closing remarks, he points out that this seminar is a stone thrown in that Lake. He notes that we are here discussing, arguing UNESCO policy. And maybe it is difficult to have universal language in conservation. For example: the context of the city of Venice and Kathmandu are very different. He notes that with regard to the listing, Bhim Nepal's was a very of suffering. This seminar should not sound like a fight between various views, but should lead to a mutual understanding, which is workable and practical. We need to retrospect if what has happened is acceptable to us.

He observes, that in case of an earthquake, most new buildings will disappear, but the old buildings will resist. The New urban fabric in the Valley is very vulnerable.

He assures that as UNESCO Mission and School of Architecture Venice, we will try to be strictly impartial in our reporting, despite all the previous reports that we have read. We are mapping the Sites in a scientific/realistic way, and not like typical conservation experts. He warns of the danger when typical conservationists will read his charter and the builder will just go on to build his own way, since there is no dialogue. Therefore, dialogue is a must for all the actors involved.

## **B. INTERVIEWS AND STUDY CASES**

### **B.1 Interview to the persons in charge of the Pashupatinath Area Development Trust**

The PADT is an agency created in 1958 and recognised by the Government with an Act of 1959. This Act, issued directly from the Royal House, that gave also its patronage to the action, given the high religious value of the area, formally appoints the PADT as the only manager of the monumental site, with planning and administration tasks. The powers given to the PADT with this Act, make it independent even from the decisions of the DoA. The main tasks of the PADT are the following:

1. conservation and restoration of the monuments of historic, archaeological, religious and social importance;
2. development of the infrastructures for the area;
3. cleaning of the water of Bagmati river;
4. control of illegal works and actions;
5. arrangement and management of parking places and vehicle accesses to the area;
6. management of solid and liquid waste;
7. help the relationship among man, nature and culture;
8. revitalisation of the religious environment in the area;
9. help the growth of social and religious activities.

PADT has also drawn a Master Plan for the area, according to which the area should be divided into three zones, with different priorities of development:

1. the core area, or central zone, where are located all the great temples and the main religious buildings and where runs the sacred river;
2. the consonant area, or buffer zone around the central area;
3. the continuum area, including the remaining sector, having a lower religious value but a high urban value, as an area that could reduce the pressure on the central zone and avoid occupation of its space.

Purpose of the Master Plan is to help the development of the religious activities and, most of all, make easier the access to the temples and the stay of the pilgrims that could, in some occasions, be very numerous. There is an average of five thousand pilgrims in the neighbourhood of the area, while the non religious visitors, those who pay the ticket, are between 100 and 300 per day. When there is a special festival, the number of pilgrims can rise to 100,000 people in two days, and this creates crisis situations that the PADT has to try to confront.

The research for the solution of this problem goes in two directions: on one hand, thanks to the government support, the PADT tries to increase the ownership of land in the area and in the surrounding zones, with new acquisitions. On the other hand, it contributes to the creation of guesthouses, also privately run: this need of more space is the reason for the heavy demolition effected in the core zone (more than 80 buildings, but they belie the previous number of 119). To be able to manage these works and the process of transformation of the area (projects of new accesses, new parking lots, etc.), the PADT drawn the Master Plan and involved the local population, the religious community and the municipality into its management (Partnership in Development).

The PADT expects that the municipality could take care of the areas nearer to the city and farther from the religious centre. The PADT people realise the difficulties and their own technical inadequacies: therefore they urge the UNESCO, in particular, to give technical help and programs of capacity building. For the technical help, they think it important that the co-operators be able to go on the site and stay there for a long period, helping to form new staff.

## **B.2 DoA Officer, Central Office, Kathmandu**

Asked to describe the procedure to obtain the building permit in protected areas.

The owner submits the project together with a title of ownership. With the request, he pays to the municipality a certain amount of money per square foot of building, for the urbanisation cost: it is a small, almost nominal, sum.

The request is submitted by a professional (architect or sub-architect), and at the end of the proceeding the signature of a professional recognised but the municipality is requested.

If the submitted project falls into a Monument Zone, it is passed over to the DoA, provided it has accomplished all the prescribed formalities.

At this point, a special Committee examines the project (Ancient Monuments Preservation Helping Committee). The Committee is composed by: an archaeologist, an architect, a DoA officer, an architect from the Town Planning Office, a member of the District Public Police, an engineer of the Municipality, an Officer from Chief District Office and an administrator, sometimes a representative of the Guthi, or from the Guthi-Trust (this is a semi-governmental body).

The Committee surveys the site and decides if the building is or is not to be demolished and presents a report to the DoA. The architects of this body give their opinion and, if necessary, on recommendation of the Committee, they operate the needed corrections. They try to discourage people from demolishing buildings for reconstruction.

If a building has already been heavily modified, it is easier to get a demolishing permit.

At this point the project is sent back to the Municipality: the all process takes at most one month.

The usual period for building starts immediately after the monsoon season.

To the DoA is also entrusted the task of establishing what is antique (more than one hundred years old).

Monitoring the building activities is the task of peripheral offices of the DoA (Maintenance Office: one in each district, with 8-9 members).

## **B.3 Mr. Jha, Former Ambassador of HMG of Nepal at UNESCO**

Mr. Jha maintains that the inscription of the MZs in the "list in danger" is correct, as the Nomination was accomplished a long time ago, and in the meanwhile the WHC gave several warnings, with no intervention on the part of Nepali authorities.

He traces a short history of the meetings that brought to the inscription in danger:

- 1993 - UNESCO sent recommendations in 16 points to the Government, for the protection of MZs. It was only then that the UNESCO reports started to underline the gravity of the situation.
- 1998 - A control about the 16 points is carried out: nothing had been done.
- 1999 - UNESCO advances the first hypothesis of inscription to the list of "Heritage in danger".
- 1999 - Meeting in Morocco. Other recommendations issued.
- 2000 - Forty points of the recommendations have been followed.
- 2003 - Inscription of the MZs to the list of "Heritage in Danger".
- Nepal heritage is divided in seven areas, and they form a single heritage unity. Therefore, they go all together into the danger list, even if some of them are better preserved.

The site most in danger is Bhoudanat. Here the DoA had a house demolished; the owner, very rich and powerful, rebuilt it during one night, mobilised politicians to obtain what he wanted. Body guards went to the DoA and threatened the officer who ordered the demolition. From then on, the DoA only advanced formal protests and the new building went on.

#### Misunderstanding in the relationship DoA-UNESCO

The WHC shares responsibility with Nepali authorities. In 1993, the 16 points indicate that the private dwellings are part of the heritage to be protected. Up until then, the DoA did not know this. It is important, though, to note that ignoring a law is not a valid justification for the DoA (and for the government). There had been a misunderstanding between UNESCO and government about the meaning of being enlisted in the WH.

In 1976, UNESCO did not make clear the secondary effects of the enlisting. They did not explain us our duties and the problems connected. Nepal is quickly developing, and in those days we did not realise the strength of the pressure that would invest the historic centres.

In 1976 UNESCO launched a Kathmandu Valley Preservation Campaign. We thought that UNESCO would have helped us, but the 9/10 of the available funds was spent to pay the missions.

#### What to do?

We need:

- more practical rules, and a better understanding of the country;
- an inventory of the minor heritage;
- money for the people caring for the heritage;
- politics of compensation;
- campaigns for the awareness of the people, who have no pride for the historic heritage;
- to cancel certain areas and keep those that are recoverable (Changu Narayan, Patan), sacrificing the others (like Bhoudanath);
- favour the professionals who could take advantage from the inscription in the list in danger;
- give more power to municipalities. The new generation of local administrators is very sensitive to the problems of protection.

Patan municipality has a lot of information about the historic centre that could be useful. The mayor is member of the Rotary Club Lalitpur, very active in the field of conservation. He signed 99 orders of demolition, but no one has been enforced. Judges are corrupted, and they claim that the projects have been approved by the municipality (true, but they have been executed differently).

The local authorities should have at their orders teams of 50 people who:

- confiscate building materials;

- wait for 30 days for the owner to demolish;
- demolish if necessary.

According to the Bhaktapur Declaration of 2001, the DoA must become DoA and Conservation and a new independent Ministry should be created for the culture. Today the DoA depends from the Ministry of Tourism, Civil Aviation and Culture, that has no time for culture.

The delisting would be a problem for tourism: tourists do not come for concrete buildings.

#### **B.4 Mayor Shrestha – Bhaktapur (07/11/2003)**

*WHC considers Bhaktapur the best preserved amongst the 7 MZ. How do you want, or intend to implement the conservation policy?*

I became acquainted with the problems related with the Nomination only recently. Therefore I will set up a commission of experts in order to study the problems. I will wait the results and I will present my position, in three months time.

*And in the meanwhile how are you going to act?*

I will promote a strict conservation policy, respecting UNESCO requests in the best way, even if DoA has its own rules. The interventions will be related to the characters of different areas in the core area.

*Are you satisfied with the previous conservation policy, run by Mr Prem Suwal?*

Bhaktapur is the less in danger between the seven MZ. The 80% of the buildings are built or restored according to UNESCO rules. The fact is very important, because the city is a tourist city, and it is its heritage that attracts the tourist. Therefore we must follow UNESCO rules.

*Are you happy to follow those rules?*

Yes!

*Which are the problems that may create, or may have created a strong conservation policy?*

The problem arises when someone wants to build a new house often at variance with the rules, mostly for economical reasons, as following the rules implies an increasing of expenses of the 25%. Therefore, the Municipality grants contributions for the use of traditional materials. But problems arise anyway (meaning illegality).

*The awareness of the people in the conservation of Bhaktapur can be considered strong?*

It is necessary to held meetings and seminars. The Municipality now rewards those who commit offences not too severe against the conservation rules. There will be a project meant to give incentives to those who have respected the Building Rules in the 17 Wards.

*Which actions do you want to promote against illegal buildings? DoA said that it is very difficult to cope with privately owned illegal buildings. Or, even clearer, nothing can be done with them. Do you agree with DoA? If not, what should be done?*

Action against illegal buildings is related to the gravity of the illegality and to the area where the building is placed. There will be policemen to check the illegality and people will be fined according to the seriousness of the crime, and penalties could be as severe as jail.

He means to have the illegal parts of the buildings demolished: these parts are mostly storeys exceeding the limits of 35 feet, envisaged by the Rules. In the Core Area he means to be very strict: he has the power to do this, and means to use it. His action will involve not only height, but also the shape and the rhythm of the openings: these too will be checked.

*The incentives providing money for traditional building materials, are just for the reconstruction and not for the restoration. Why?*

Incentives are granted to buy wood, and they are higher than the 25% of the value of the new building. I am not aware of incentives granted to restoration works: I do not know about the possibility of restoring rather than demolishing and rebuilding. I'll take this into account as soon as possible, and I shall possibly try to put it into action.

*There is a list of illegal buildings in the Municipality: can we see it and work on it?*

As for illegal operations, the major responsible are the big hotels. Most of the illegal works concern openings, distances between buildings and heights. When the Municipality finds out the crime, the owner is called to the Town Hall to find an agreement about what to do to make amend (this meaning to mitigate the illegality, not to cancel it). As for the list, it shall be given to you.

*Entrance fee: do you want to utilise this relevant income to improve a private conservation policy?*

It is impossible to finance all the works on historic buildings. The Municipality will help the owner if he carries out a conservative restoration. Some private owned buildings are very important and decayed: they have been offered a financial grant from the Municipality for the restoration. I will work on this particular aspect.

*Are you going to utilise the Bhaktapur Municipality - UNESCO Research Project 1999? And even as a new Master plan? Can we have Volume #1 as file?*

I am not aware of this particular project.

*What about Building bylaws in Bhaktapur? Are you working on that, at the present moment? Could you tell us something about that?*

We are working on a plan limiting the distance among buildings and plots boundaries. This is originated in the necessity to meet today needs while respecting the Heritage. It will be necessary to widen the streets to help the cars circulation that is constantly growing.

**B.5 Former Mayor of Bhaktapur Mr Prem Suwal (=P.S.) and the Chairman of Nepal Workers and Peasants' Party, Mr Narayan Man Bijukchhe "Rohit" (=RO), who wrote a booklet on Bhaktapur urban conservation - Bhaktapur (09/11/2003).**

[Former Mayor Mr Prem Suwal, as all the other mayors in Nepal, was removed from his position by the Government in the summer 2002]

*Are you satisfied with the conservation policy you promoted and managed?*

PS: Not completely, but the work we have started is well oriented, liked by people. The Municipality staff - 450 people - was recruited before my election as mayor. Before democracy, I was a member of Ward; we started working on conservation in that period about 1975.

*Which are the problems you met in managing the conservation policy?*

First of all I would like to remember the slogan of our party (NWPP): "art and cultural heritage belongs to the people". With this slogan as part of our political program we can win. It is the symbol of mankind for us and for the next generations.

The problems of conservation were only economic; there was the wish to preserve, but the money available for that goal was very little. The Municipality helped the people and provided traditional building materials.

There are also legal problems, because the rules and regulations are not local, but emanate from the DoA. We are asking our Government to receive full power. We have a local office of DoA, but they do little work. They should be with the Municipality, in order to avoid the overlapping of rules and regulations.

*What will happen if all the power will be entrusted to the Municipality?*

(P.S.): They will work much more efficiently. The staff is doing very little because the direction is in Kathmandu, and there is little control. There were two offices of DoA here, Monuments Preservation and Palace Care. This was until 8 years ago; then they became just one. And this is not enough

*How do you consider the awareness level of the population in the conservation of Bhaktapur?*

(P.S.): Before we had Ward members in Municipality; therefore we discussed together the conservation policy. Immediately after they went to the respective Wards to explain and discuss the importance of conservation with the people: I also went to the Wards to discuss, and we organised many public meetings in schools.

*Can you figure out the percentage of convinced and unconvinced people on the conservation policy in Bhaktapur?*

(P.S.): 70% of the population are literate and 30% illiterate. We promoted a campaign against illiteracy, to obtain at least a bachelor-title in every family; this went on for 15 years.

The literate are pro conservation and the illiterate are not convinced, and with the support of the opposition, that is contrary only for political reasons.

*How did you fight against illegal buildings?*

(P.S.): The report 1999 showed all the illegal alterations in Bhaktapur, which will be corrected by the Municipality, not directly by the people, with the financial help of SEARC donors etc.

[At this point Chairman N. M. Bijukchhe "Rohit" arrived and the interview, for time reasons, followed a different path]

*You wrote a booklet on your concept of preserving Bhaktapur, and this became part of your Party program. Was it your own idea?*

(RO): In 1959-60 I visited China for the first time, and I visited many temples and monuments. Prime Minister was Chu En Lai, and he promoted a campaign of preservation of China heritage. After that I visited China other times, 4 in total; once I was in Hanzou and I saw in many monuments Nepali Newari carved lettering. And there were no cars in the historic city.

Once back, I proposed this preservation policy in Nepal, but it was very hard and slow to start. I utilised local translations of international support organisations to promote our campaign for preservation, and meetings and meetings, always meetings

*Talking about international organisations in support of preservation, what about UNESCO?*

(RO): UNESCO take care just of its own projects of conservation, and doesn't develop a strong policy and pressure on Nepali Government, which is the most important action to be promoted, and not just at local level, but central.

*Will you be able to promote conservation in the present political situation?*

(RO): I sent some of our Party people to the Minister to request continuity in the preservation policy of Bhaktapur, warning him that if he will not respect continuity, we will struggle against him.

*What do you think? Will the Ministry promote continuity?*

(RO): I don't trust them. Just an example: The Municipality submitted the restoration project of the 55 Windows Palace to DoA for the approval 4 years ago, and the permission was not granted. Right now, with the new mayor Shrestha, not only the permission was granted but the works have started. This demonstrates that DoA (read the Government) supports the project in order to support the new mayor.

The illegality in buildings nowadays is carried out from Government supported people, who take advantage of the present situation. Two buildings in concrete were recently built in Durbar Square by members of National Democratic Party, with the approval (so they say) of DoA.

And there are new types of illegal buildings in the core area, as the mobile telephone towers, built 3 months ago, and disturbing the cityscape.

*How will you react if this trend goes on?*



(RO): We have to convince the people, through individual and groups meetings. Acting step by step, the people understand and support preservation. Also the Newari are for preservation and against Government policy in conservation. UNESCO should talk to Government to support and help preservation.

*The Land Pooling policy was created to reduce the development pressure outside the core area: did it help conservation?*

(RO): In 5 years time it will be all right. The principle is simple: who doesn't want to live in the difficulties of a historic city and heritage buildings, can go in that new area, located at East, outside the town limits, and build his new house. Curiously enough, people are bored with the modernist style, and now want traditional style buildings.

*The incentives were for the reconstruction, or to promote conservation?*

(RO): The incentives are both for restoration and for new buildings, to help people to buy traditional materials. 5% of the owners having the right to get support reject the help for political reasons, explaining that, because they did not vote my Party, they cannot get *our* money!

*May I ask you if it is clear the difference between reconstruction and restoration?*

(RO): Yes, I know the difference between two interventions. The Government doesn't provide any money for preservation, while it does it for reconstruction. On the other hand, restoration is very costly and people don't understand the importance of it: if restoring their house is more expensive, why not demolish the old building and build a new one?

Khopa University in Bhaktapur could train students to conserve historic buildings, along with group of workers, for the Municipality. We could create Emergency Restoration Units, to promote conservation and maintenance after every monsoon season

*Why the Bhaktapur Municipality - UNESCO Research Project 1999 is not in action as an important planning instrument, especially regarding the proposed demolition policy?*

(P.S.): Demolition of illegal alterations and buildings was too expensive. As Comrade Rohit said, we can afford to demolish just 10 per year, to go back to the original shape of the building.

The Research Project 1999 foresaw that the general managing of preservation in Patan and Bhaktapur would be carried out by a Conservation Authority, composed by DoA and Municipality, and later by Guthies and Sansthan. The new Authority, composed by all the actors involved in preservation, from the State to the privates, will avoid overlapping and retards. But the proposal was rejected by both the sides involved, Government and Municipality. The first, because the Conservation Authority will be another body, in addition to other already in existence; the second, because of the presence of DoA, with its autonomy and central power.

#### **B.6 Mr Ganesh Lal Phoju, Sociologist, Municipality of Bhaktapur (10/11/2003)**

When people go to the Municipality for water, sewage and gas connections, then an inspection starts to survey the possible presence of illegality. If the building permit is lacking, or if there is a discrepancy between permit and effective building, then the connections to the various facilities are refused.

What happens is that the people committing illegalities, in order to get a provisional connection promise in a written form to eliminate the illegality by a given time (3, 6 or 12 months). If this promise is kept, the connection becomes permanent, otherwise it is cut.

If the infraction is not too serious, the responsible is fined for a modest amount.

The following, ordered by importance, are the most common infractions: excess of height, flat roof, plastered façades, cantilevers at the first floor, odd number of windows and metal shutters. Each of these features has to be erased by a certain time; after that, as said before, the facilities will be cut. Three years ago the Municipality started demolishing an illegal building but, because of the violent reaction of the people, they stop. The only demolition of illegal building is the one related to occupancy of public space.

The two reports listing illegal works on buildings [they will be described at the end of this interview] were prepared for DoA.

There is no manpower available to go and inspect the building sites, and order to stop illegal actions. In the few cases in which this happened, and the stop order was given by the Municipality officer, the workmen simply did not care and did not carry out the order!

In some cases the inspector calls the owner of illegal construction to the Town Hall, and in a few cases the person signs a commitment to respect the law and the approved design.

In 2002 the Municipality charged 1100 people for illegal works in Bhaktapur, for a total charge of 700.000 N.R.; moreover was imposed the obligation to regulate the infraction: nobody complied!

If we want to stop illegal works, we have to start demolishing them, and we should not provide them with facilities.

Why, I ask, people do not respect the law?

The law is bad, as there is one and the same for Monument Zones and for Bhaktapur city. There should be two laws, for the two parts, and quite different. Density is high, and the built area is small and the height not enough: therefore people, needing more space, want to occupy more area. In addition, in the old houses light and ventilation are not enough, as well as the height of floors.

The density is as follows: the area of the entire Bhaktapur is 6.80 square km, with a population of 73,000, distributed in 13,000 households, while the core area, of 3.00 square km. is inhabited by the 80% (58,400) of the total population.

Those last figures are the reason for illegal actions in the core area.

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### B.7 Bhaktapur Municipality – List of illegal buildings

#### Abbreviate description of abuses:

H= excessive height	PF= plaster façade
FR= flat roof	EF= extra floor
DIM= excessive dimensions	CB= concrete building
IC= illegal cantilever	IE= illegal enclosure
IU= illegal use	IEPA= Illegal enclosure on public area
IM= illegal materials	NS= not started
IO= illegal openings	NE= not expressed abuse

#### Booklet A (till Feb. 2001)

1	H+	11	H+I	21	H	31	IC+
	FR		M				IC
2	H+	12	IC+	22	H+I	32	CB
	FR		H+IM		O		+FR
3	NS	13	H+I	23	H	33	IM
			M				
4	DI	14	H+I	24	NE	34	IEP
	M		M				A
5	IC	15	IO	25	H+D	35	NE
					IM		
6	IE	16	DI	26	NE	36	NE
			M+IO				
7	H	17	IU	27	NE	37	H+I
							E+IC
8	H	18	H+I	28	IM+	38	NE
			O+FR		FR+IC		
9	NS	19	H	29	IM	39	NE
10	IU	20	H	30	IM+	40	NE
					FR		

#### Booklet B (till Feb. 2001)

### Demographic aspects

In Bhaktapur MZ there are today about 7000 inhabitants. The survey has counted 920 families, plus 280 that the surveyors have not been able to contact, for a total of 1.200 resident families.

It is interesting to underline that the buildings with only one resident family cover a very high percentage in the MZ (65.76%). The buildings with two families cover the 21.02% and the 13.22% have three or more families.

The density of inhabitants doesn't seem to be a problem, but if we pay attention to the distribution we can realise that some areas have higher density. These are the peasants' area, in the north of ward 10, and the craftsmen's area in ward 13. In these two sectors, where the residential use is higher than in the rest of the MZ, we also find the higher number of buildings with three or more families<sup>10</sup>.

Checking the number of kitchen in comparison with the number of families, in the assumption that more than one kitchen for a family could mean a future subdivision<sup>11</sup>, we found that this is not a serious risk: basically, there is a coincidence between the number of kitchens and the number of families.

### Type of occupancy<sup>12</sup>

This part of the survey shows that the main type of occupancy is that of resident-owner. Houses inhabited only by the owners' families (normally one family for each building), are the 71.84% of the total, those inhabited by the owner and tenants<sup>13</sup> cover another 13.79%.

So the number of families renting is very low; only a small number of them are of immigrants or of recent immigration. Irrelevant is also the number of buildings completely let (2.61%), while religious and institutional ownership cover the 11.32%.

In most cases, the families owning the buildings are native of Bhaktapur (97%) and have owned the building for more than 20 years (90.90%), which means a persistence of the occupancy since the Nomination.

The owners resident in the centre are mainly occupied in a tourist-commercial activity (30.90%), in agriculture (24.26%) and in the services sector (clerks are 17.09%). Artisans are the 9.70%.

In almost all cases, owners work inside the boundaries of Bhaktapur municipality, in the town itself or in the neighbouring fields: only the 13.59% work in other places of the Valley.

It is very interesting to analyse the ownership according to caste membership, that can be considered as an indication of social status<sup>14</sup>.

If we try to group in comprehensive categories the various castes where the owners have been inserted, according to their family names<sup>15</sup>, we find that the high castes own about the 36.45%, while the second group, that of the peasants, own the 29.85%.

The other categories of owners seem to be more spread: the largest percentage is the one including the owners whom we could not ascribe to any particular caste (including proprietaries of

<sup>10</sup> See the map "Number of families".

<sup>11</sup> Families have basically a patriarchal structure and tend to gravitate towards a single kitchen, where all the member of the family gather daily.

<sup>12</sup> Here too we must remember that the information gathered refer to the 77% of the surveyed buildings.

<sup>13</sup> In most of these cases, tenants run a commercial activity in a space rented from the same owner.

<sup>14</sup> See the map "Ownership by castes".

<sup>15</sup> See the map "Synthesis of ownership by castes".

religious bodies, public institutions and others: all together, this category owns the (8.68%) and to the lower castes (15.02%).

If we look at how the ownership is placed, we find that the ownership of peasants is mostly concentrated in the north-west (ward 10) and southwest (ward 13) sectors. In ward 13 there is also a significant amount of owners not ascribable to any particular caste, as the many artisans of the area.

The ownership of the higher castes, on the other hand, concentrates in ward 11, in the core area of the monumental area, between the two squares and along the Main Street.

A last important information is the one about the future projects of works on the part of the owners on their buildings, obtained through interviews to the resident-owners, carried out during the survey: 495 owners have answered<sup>16</sup>. 66.87% of the interviewed owners said they are willing to preserve the building, while 18.59% said they mean to demolish it to rebuild according to the contemporary way of living. The 2.2% declared their intention to change or to sell the owned building.

### Pashupatinath

The residential area of Pashupatinath MZ is heavily conditioned by the nearness of the great religious compound that it serves as area of reception and for integrative cult activities. Therefore, the presence of religious ownership is significant, and so is the function of reception of pilgrims.

The map of the built areas where demolitions decided by the PADT have been carried out, is of special interest: more than 100 buildings have been demolished, amongst them 32 (at least) were traditional; all of them inside the core area, where now there are large open spaces, strongly in contrast with the original morphology of the place<sup>17</sup>.

### Land Use

In the core area, the residential function has almost completely disappeared and it serves only for the reception of pilgrims; in areas 2 and 3, on the contrary, the residential use is still dominant.

Residential uses are 49.17% at the ground floors, and 46.28% those connected with tourist-commercial activities. The upper storeys are almost entirely given to residences, with a percentage of the 95.80% of the surveyed buildings. Hotels and restaurants are almost inexistent. Let's remember, once more that residential uses are coupled with temporary residences for pilgrims and other religious activities.

As for localisation, residential functions are found mostly in areas 2 and 3 that they occupy almost completely at the upper floors, while at the ground floors some tourist-commercial activities are placed on the crossing streets and are more numerous next to the core area<sup>18</sup>.

As for the earlier and actual use of the buildings, in Pashupatinath, in areas 2 and 3, the main changes have happened at the ground floors, transforming spaces that were originally part of the dwelling into commercial spaces. Nor these transformations are too many, because this area is mostly dedicated to service the religious activities of the nearby religious compound: this service includes also some commercial activities and peddlers. It has to be underlined that the strong and significant religious function of the area, one of the most important centre of Hindu cult in the

<sup>16</sup> See the map "Owners' intentions".

<sup>17</sup> See annexed illustrations.

<sup>18</sup> See the maps of the land use at the different floors.

## B.8 Religious properties in Bhaktapur: case-studies on Guthi<sup>24</sup> (M.F.S.)

The cases of Guthi properties, Dyochhens and Aganchhens are a real testimony of the state of conservation of traditional buildings today. These examples of small religious architecture help us to understand more their real condition and situation.

Actually, their condition varies from case to case, as we shall see particularly, but it has to be noted that the majority of these buildings form part of the classification of monuments done by Bhaktapur Municipality and UNESCO<sup>25</sup>.

In this joint project, the monuments within the monument zone of Bhaktapur are classified according to their importance to prioritise the ones for conservation.

According to the importance of the buildings, they are classified as international, national and local importance. There is a regulation criterion for nominating such buildings in the corresponding category.

Between the cases study chosen, there are buildings classified as international, national and local importance, and this fact let us understand the significance that these constructions might represent.

### Guthi Houses, Dyochhens and Aganchhens

#### • Case I: Bolachhen Swata Bairab Dyochhen (Private Guthi Property).

There is a Bajan Group staying in it. According to Laxmi Bhata Iwali, some people are in rent currently, and the rent money is used to run religious works of Swata Bairab and to renovate the Dyochhen. There is a priest in charge of the house, Bishnu Bhakba Acchaya and he does the daily pray for God.

The North part of the Dyochhen is in very bad condition and it needs restoration works.

The property is under the name of the Guthiyars, they are 8 members; and there are some conflicts with the restoration works offered by Municipality. The owner says that is not ready to accept the assistance of Municipality, because they ask in change some "ownership in the name of the society". This means that some ownership is passed to the local community, representing the loss of part of the property by the Guthi owner.

The house is very rich in details and it has a Pith outside and a God image inside, but the state of conservation is not good. It also has a patti in the street level. As the patti is public property, there is also some conflict with Municipality. They want to do the restoration works of this patti, but the general state of the building is in danger of collapsing if restoration works goes on. Unfortunately, this is the situation of this building and for the moment things seems to continue in this way, without any solution.

At regards the legal aspect, this building presents an iron roof, instead of the traditional tiled roof proposed by the current Bye Laws<sup>26</sup>.

#### • Case 2: Ikha Lachi Math. (Guthi Sansthan Property)

<sup>24</sup> Research by Maria Florencia Sbarra.

<sup>25</sup> "Report on documentation and enhanced management of Bhaktapur protected monument zone". Joint Project of Bhaktapur Municipality and UNESCO WHC. July 1999. Volume I. Bhaktapur Municipality.

<sup>26</sup> Bye Laws for Preserved Monument Zone published by Department of Archaeology. 1997.

This building is under the name of Guthi Sansthan Association and it is known as Ikha Lachi Guthi. It is a very conflictive property from the point of view of the ownership, there is a big controversy.

There is a project between Municipality and the "Università degli Studi di Firenze" that will give the economic help after the completion of the work. The project consists on a Museum, the "Herakat Museum" and the estimated cost is of 35.55708.10 rupees. As said before, the ownership of this property is of the Guthi Association and a Mahanta Group, but after the reconstruction, the Municipality will ask some ownership under its name.

As explained by the secretary of the Ward Office Number 12, this project is in the process, but has many aspects without resolving.

Within the total plot of this property, there are three houses in private ownership. Municipality doesn't know how it can be possible. In another part, there are some people living illegally and Municipality will have to remove them in the future in order to go on with the project. And, also the rear part of the property has a cottage industry, a mill of beaten rice. As the ward members said, this part of the plot is given by Guthi Sansthan to the mill without asking a rent, they don't pay anything for being there, and Guthi doesn't mind of these properties.

As we can see from the photo, the condition of the property is chaotic, the buildings are on a demolition state, and however, some works are being undertaken.

On the other hand, and to complete the controversy, Valerio Sestini<sup>27</sup> affirms that this project has a long story without any solution. He also says that the guidelines of the project and the restoration works have not had the required process. The Italian architect comments that they haven't received any information of the on going of the work from Bhaktapur Municipality, and also recognises some difficulty regarding the finance resources from Italian and European institutions. Now, Nepalese are proceeding on a unilateral manner on the conservation operations.

At this point, this controversial property is under a difficult situation and the future destination of its use of is still uncertain.<sup>28</sup>

According to the current Bye Laws, this property presents some illegal aspects; there is a building with illegal cantilever, the permitted one must have the projection roof of traditional tiles. The height of this building is also illegal, the allowed height is of 35 feet (10.70 metres). Moreover, the construction presents some added volumes, when the permitted storeys are 4.

### • Case 3: Bati Aganchhen (Private Guthi Property)

The house belongs to a Guthi group of 50 members, Bati caste. The people in charge of the building are Ganesh Lal Bati, Hari Bar Bati, Gyankaji Bati and Krishna Ram Bati. The house is only five months old; the previous one was demolished and reconstructed by Guthi.

At the present, there is a family living on rent and the sum received from the rent is used for religious purposes. Each member has to look after the chhen (house), and worship in relay process, one member each year gets this duty. They have to do the puja<sup>29</sup> (worship) daily. For the main festival Dasal<sup>30</sup>, 45/50 persons come to sleep here in this house, as pilgrim accommodation.

The main person of this Guthi, Ganesh Lal Bati explains: "*When we reconstructed the chhen we didn't use dachi-appa bricks, we don't need to do so. We didn't use the help of municipality (subsidy), we didn't want*".

The maintenance and conservation of this building is done by the Guthi itself.<sup>31</sup> The illegal aspects present on this building are the iron roof, instead of the traditional tiles, and the finishes, which are also an alteration of the traditional façade. The doors are out of the bye laws and the brick balcony is an illegal element too.

<sup>27</sup> Italian architect responsible of the joint project between Bhaktapur Municipality and the University of Firenze.

<sup>28</sup> Information given by Valerio Sestini, as responsible of this project.

<sup>29</sup> See Glossary.

<sup>30</sup> See Glossary.

<sup>31</sup> Information given by 13th Ward Office members and interview to the Guthi main person (Ganesh Lal Bati).

- **Case 4: Karmacharya Dyochhen (Private Guthi Property)**

As we can see from the photo, this property is on a total demolished condition. Bhaktapur Municipality has offered the assistance for this property, the economic support or subsidy, but the Guthi didn't agree. For this action, the Municipality had asked some property, or the possibility to use part of the reconstructed building as Ward Office, but the parts couldn't arrive to an accord.

The present situation of the property is very bad, it is abandoned, and for the moment, it doesn't seem to have any solution.

- **Case 5: Hada Bijachhe Aganchhen (Private Guthi Property)**

The Guthi itself has renovated this house. This private Guthi has been divided in two parts; they didn't use the help of municipality. With the reconstruction work, the building has been added a modern façade. This front part of the building has adopted a commercial use. The rear part is under the original form, it is inside of a courtyard, and the state of conservation is medium. After the repair work, the building has lost its unity and there is also some conflict between these two Guthi owners. This private Guthi didn't accept the subsidy of Municipality for reconstructing, and Ward Office members said there have been some problems with the approval of the drawing plans, they were rejected by Municipality. Guthi members do the conservation and maintenance of this Aganchhen.

As we see, it is another controversial property as the majority of the Guthi cases we are studying.

This building presents an iron roof as an illegal element according to the current bye laws. The original roof must have been of traditional tiles, and after a reparation work it might have been replaced with this material. The rear volume, as we can see from the photo, has a terrace, which is another element regulated by the bye laws. The terrace is allowed only when it doesn't occupy more than 1/3 of the total roof area.

- **Case 6: Dapha Chhen (Ghataka Dapha Bajan Mandal) and Nashada Dyochhen (Guthi Property. Public Guthi Property)**

The property is a Bajan Mandal<sup>32</sup> house and it is being run by the member of the Guthi. Most of the Guthi members are of Twaina and Suwal caste. The Guthi has renovated the building with the funds from the members. In order to maintain and conserve the building they give lessons of music and the amount of these fees is used also for religious purposes. They also participate on musical competitions and religious programs from where they can get some money too. The building is in medium condition.

- **Case 7: Kolachhen House and Patti. (Private Guthi Property)**

The house is under a Private Guthi property. The main person of the Guthi is Ganesh Guthi. At the present, two families are in tenant. The tenants are poor people, who work for the Guthi and they probably don't pay the rent amount. The house is in a medium state of conservation and it has a patti that has been restored by Bhaktapur Municipality, as the patti represents a public property.

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<sup>32</sup> Music played as an act of worship to a deity. Performing of religious music and instruments.



This Guthi house belongs to a Sana Guthi<sup>33</sup>, and the required processes when people die take place in this building. When these activities occur, people in rent must liberate a room for the performing of such activities.

The conservation and maintenance of this building is undertaken by the Guthi. The patti has been restored by Municipality.

▪ Case 8: Daiba Nayak Ganesh's Dyochhen. (Private Guthi Property)

This building used to be a sattal<sup>34</sup> of two floors, but after the earthquake of 1934 AD was rebuilt in this way. The property belongs to Daiba Nayak Ganesh Guthi. It is a Guthi group of 12/13 members. Anyone can enter in this Guthi but should be able to perform a required religious process of Ganesh during the Bairhab<sup>35</sup> festival. On this occasion the Ganesh icon is brought out of the building and a fire ceremony takes place, it is a religious exigency for becoming a member of the Guthi.

The building has some shops on the ground floor, a restaurant and commerce, and the amount of the rent of these ones, is used to conserve and maintain the Dyochhen and the Bajan Mandal. This Bajan Mandal, that is the performing of the religious music, takes place on the first floor. Four years ago, approximately, the second floor was added, as we can see from the photo, with a different material than the rest of the building. The total cost of this reparation was of 2 lacks rupees and the total amount was expensed by Guthi. The building is not used as a residence, nobody lives there but the Guthi members shall use it every time they need.

As we have said, the illegal aspect of this building is the presence of a different material on the added floor. This changing on the traditional façade made the building become *Hibrid*, the original style was Rana, while the added part is in traditional bricks, representing a Newari style. Moreover, the roof is an iron roof instead of a pitched tiled roof.

▪ Case 9: Karmacharya Aganchhen (Bidya Pith Chowk) (Private Guthi Property)

A private group of Karmacharya caste owns this Aganchhen. The building was built about 200-300 years ago. The Guthi group is composed by 34 members or guthiyars, they look after the chhen in relay of 1 month, they change turn every month. To become a member of this Guthi, Dekha has to be taken; it is one of the religious processes. The group has to pay a contribution each month in order to run the religious processes and to maintain the building, but also other expenses have to be supported by the member in turn.

The building has never been used as a residence, it is only used for special occasions, but every time the Guthi needs a place to meet, they can use it. The Guthi association takes care of the conservation and maintenance of the chhen, but they don't want to be known as Guthi owners. They hide their identity.

The condition of the building is very poor and it has a bad state of conservation, it seems to be an abandoned property. It is a shame because it's a very rich construction, with important details and inside a courtyard, which contains other interesting religious icons and smaller temples. Some elements of its façade are missing, as they had been robbed.

The building presents iron projection roofs as illegal materials, which are surely replacing the original ones in tiles. Also, the finishes are totally in plaster, while according to the current Bye Laws they should be in traditional (dachi-appa) bricks. This alteration is not an illegality.

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<sup>33</sup> Sana Guthi, coming from the Sanskrit word *sanathya*, is an association for performing activities when people die, as cremating the dead. It has a crucial role to play at the most important transitional moment in a man's life.

<sup>34</sup> See Glossary.

<sup>35</sup> The following nine-day period is Biskā, the Solar New Year. The main deities are Bhairava, Bhadrakali and Ganesh. This is a focal sequence concerned with the division and integration of the city's spatially based units.

- **Case 10: Bradakali Aganchhen (Public Guthi Property)**

The chhen is of public property, but it belonged to Bardakali Nau Bajaa Guthi. This building is situated inside of a courtyard, and the Bhaktapur Municipality doesn't have the intention of restoring it at the moment. The Aganchhen is in relatively good condition and it is not used as a residence, only for religious purposes and worships. The only illegal aspect of this building could be the iron roof as a non-permitted material.

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## **8. MAPS**

### **a. Maps of Bhaktapur**

**b. Maps of Pashupatinath**

## **9. PHOTOGRAPHIC DOCUMENTATION**

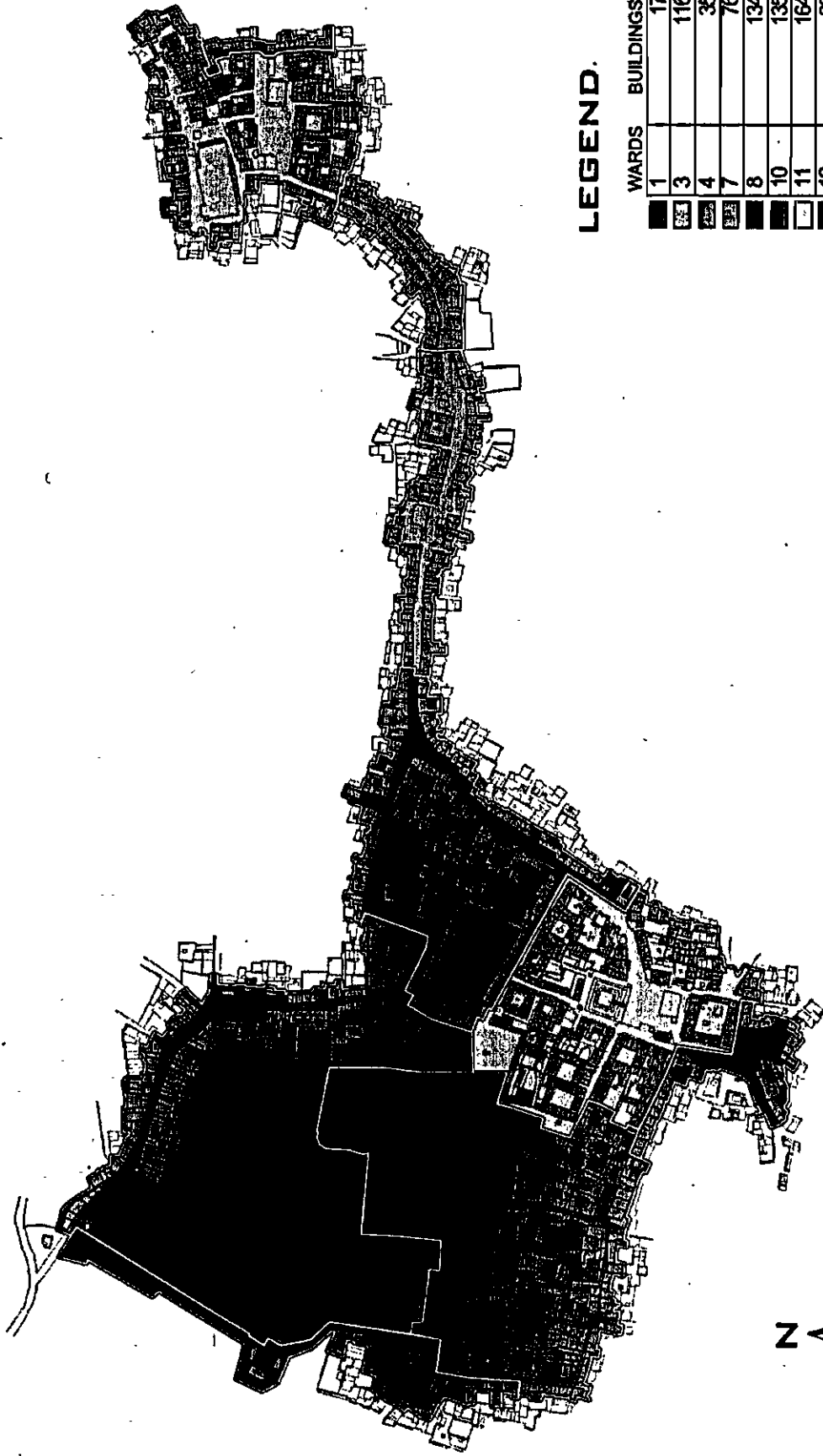
# **BHAKTAPUR**

## **LIST OF MAPS**

- |   |  |
|---|--|
| <b>01 SURVEY AREA</b>   | <b>12 UTILITIES</b>                          |
| <b>02 BUILDINGS BY TYPE</b>   | <b>13 TYPE OF OCCUPANCY</b>                  |
| <b>03 HYBRIDIZAZION HISTORICAL BUILDINGS</b>  | <b>14 OWNERSHIP BY CASTES</b>                |
| <b>04 CLASSIFICATION OF BUILDINGS</b><br>historical, post-earthquake, light hybrid                        | <b>15 SYNTHESIS OWNERSHIP BY CASTES</b>      |
| <b>05 CLASSIFICATION OF BUILDINGS</b><br>reinforced concrete frame buildings, neovernacular, heavy hybrid | <b>16 OWNERS' INTENTIONS</b>                 |
| <b>06 STATE OF CONSERVATION</b>   | <b>17 PRESENT LAND USE GROUND FLOOR</b>      |
| <b>07 STATE OF CONSERVATION</b><br>historical, post-earthquake, light hybrid                              | <b>18 PRESENT LAND USE UPPER FLOOR</b>       |
| <b>08 STATE OF CONSERVATION</b><br>reinforced concrete frame buildings, neovernacular, heavy hybrid       | <b>19 NUMBER OF FAMILIES IN EACH BUIDING</b> |
| <b>09 ILLEGALITY</b>  |  |
| <b>10 ILLEGALITY BY FAÇADE</b>  |  |
| <b>11 ILLEGALITY BY HEIGHT</b>  |  |

# BHAKTAPUR

## SURVEY AREA



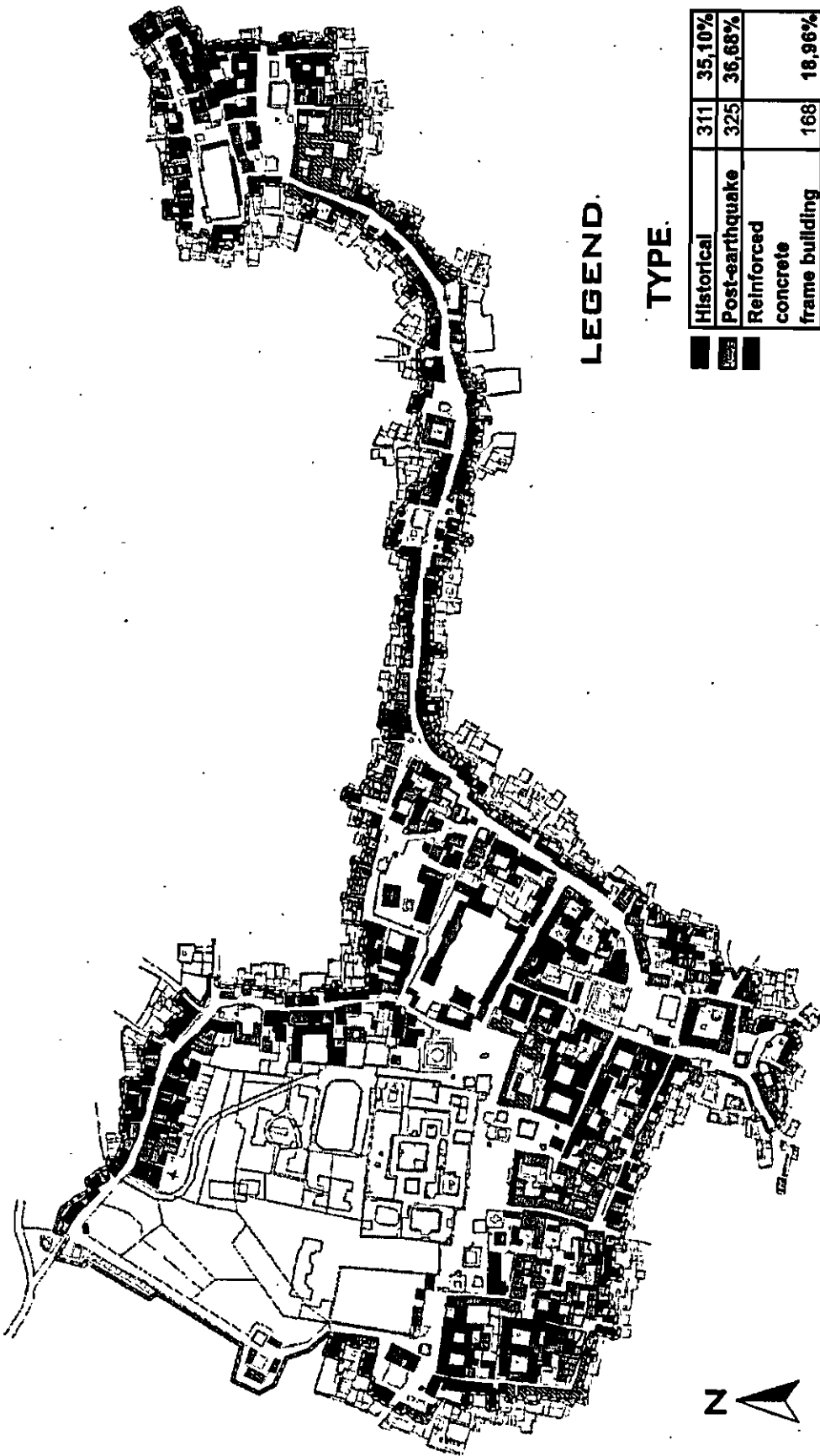
### LEGEND.

WARDS	BUILDINGS
1	17
3	116
4	35
7	76
8	134
10	135
11	164
12	30
13	156
15	23
Total	886

100 0 100 Meters

# BHAKTAPUR

## BUILDINGS BY TYPE



### LEGEND

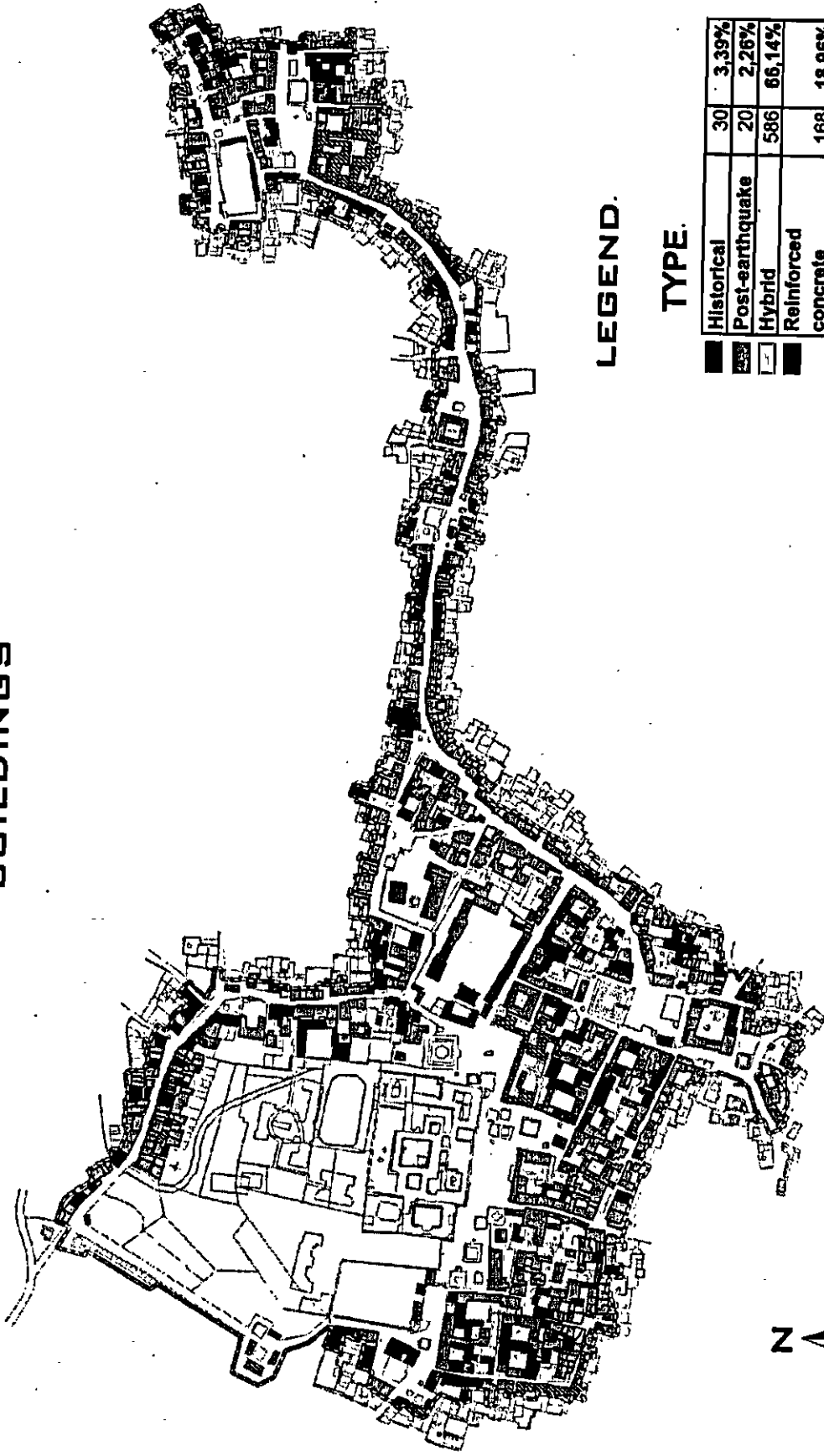
#### TYPE

	Historical	311	35,10%
	Post-earthquake	325	36,68%
	Reinforced concrete		
	frame building	168	18,96%
	Neovermacular	35	4,06%
	NO INFO	47	5,19%
	<b>TOTAL</b>	<b>886</b>	<b>100,00%</b>



# BHAKTAPUR

## HYBRIDIZATION OF HISTORICAL BUILDINGS



### LEGEND.

#### TYPE.

Historical	30	3,39%
Post-earthquake	20	2,26%
Hybrid	586	66,14%
Reinforced concrete	168	18,96%
Neovermacular	35	3,95%
not classified	47	5,30%
<b>TOTAL</b>	<b>886</b>	<b>100,00%</b>

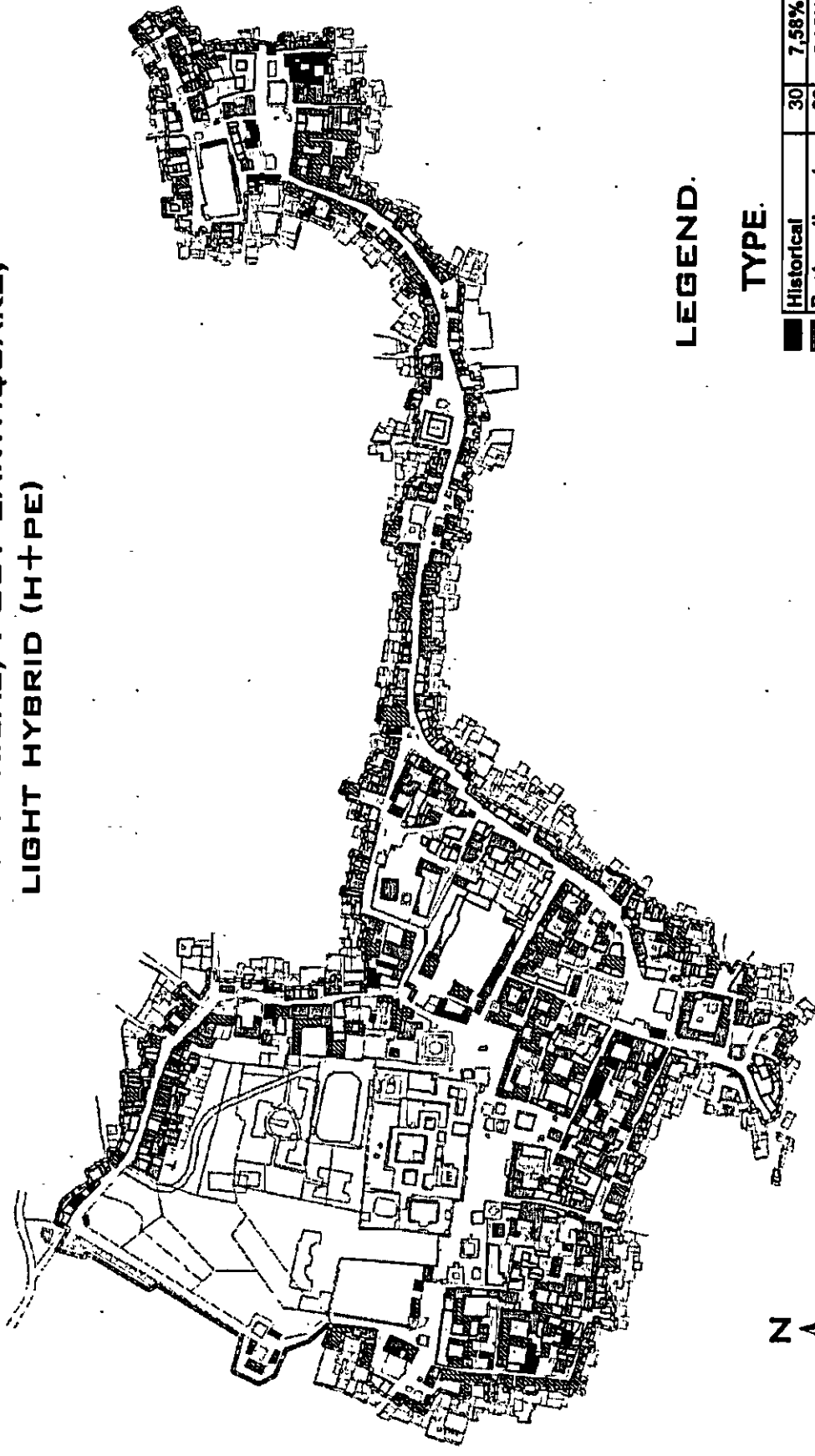


100 Meters

0




# BHAKTAPUR

## CLASSIFICATION OF BUILDINGS HISTORICAL, POST-EARTHQUAKE, LIGHT HYBRID (H+PE)



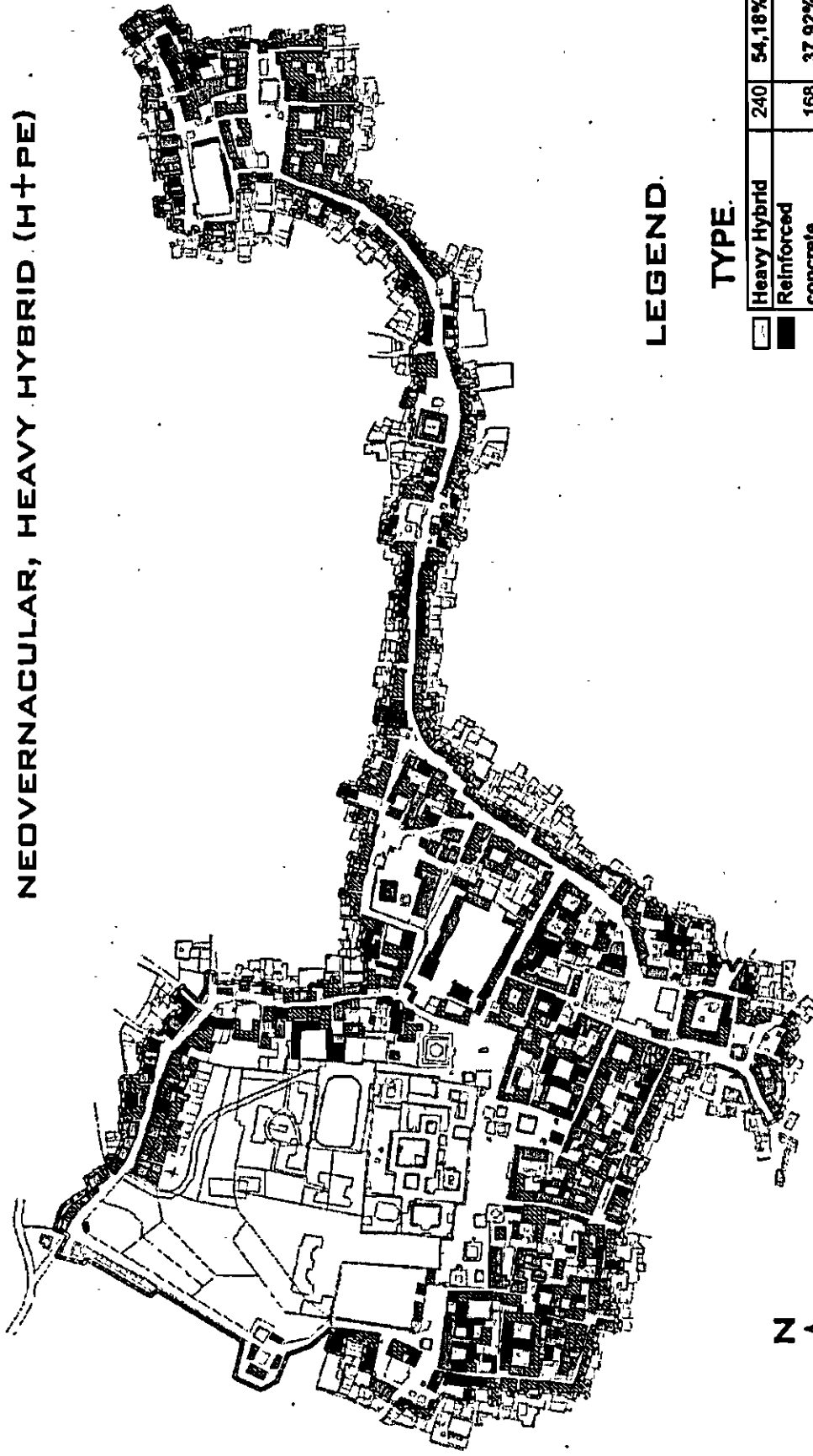
### LEGEND.

#### TYPE.

	Historical	30	7,58%
	Post-earthquake	20	5,05%
	Hybrid light	346	87,37%
<b>TOTAL</b>		<b>396</b>	<b>100,00%</b>




# BHAKTAPUR

CLASSIFICATION OF BUILDINGS  
REINFORCED CONCRETE FRAME BUILDINGS,  
NEOVERNACULAR, HEAVY HYBRID (H+PE)



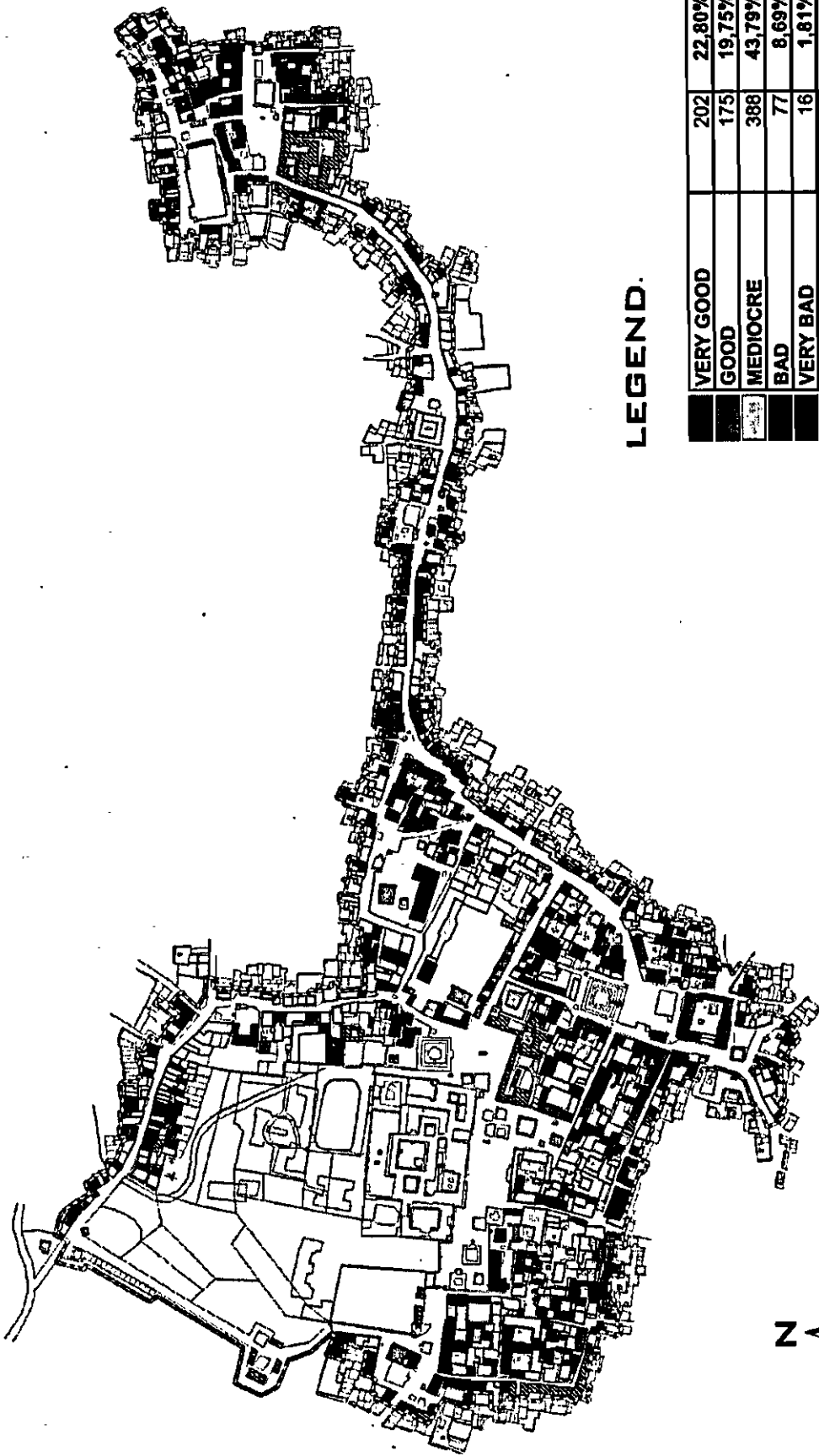
## LEGEND.

### TYPE.

	Heavy Hybrid	240	54,18%
	Reinforced concrete	168	37,92%
	Neovernacular	35	7,98%
	<b>TOTAL</b>	<b>443</b>	<b>100,00%</b>

# BHAKTAPUR

## STATE OF CONSERVATION

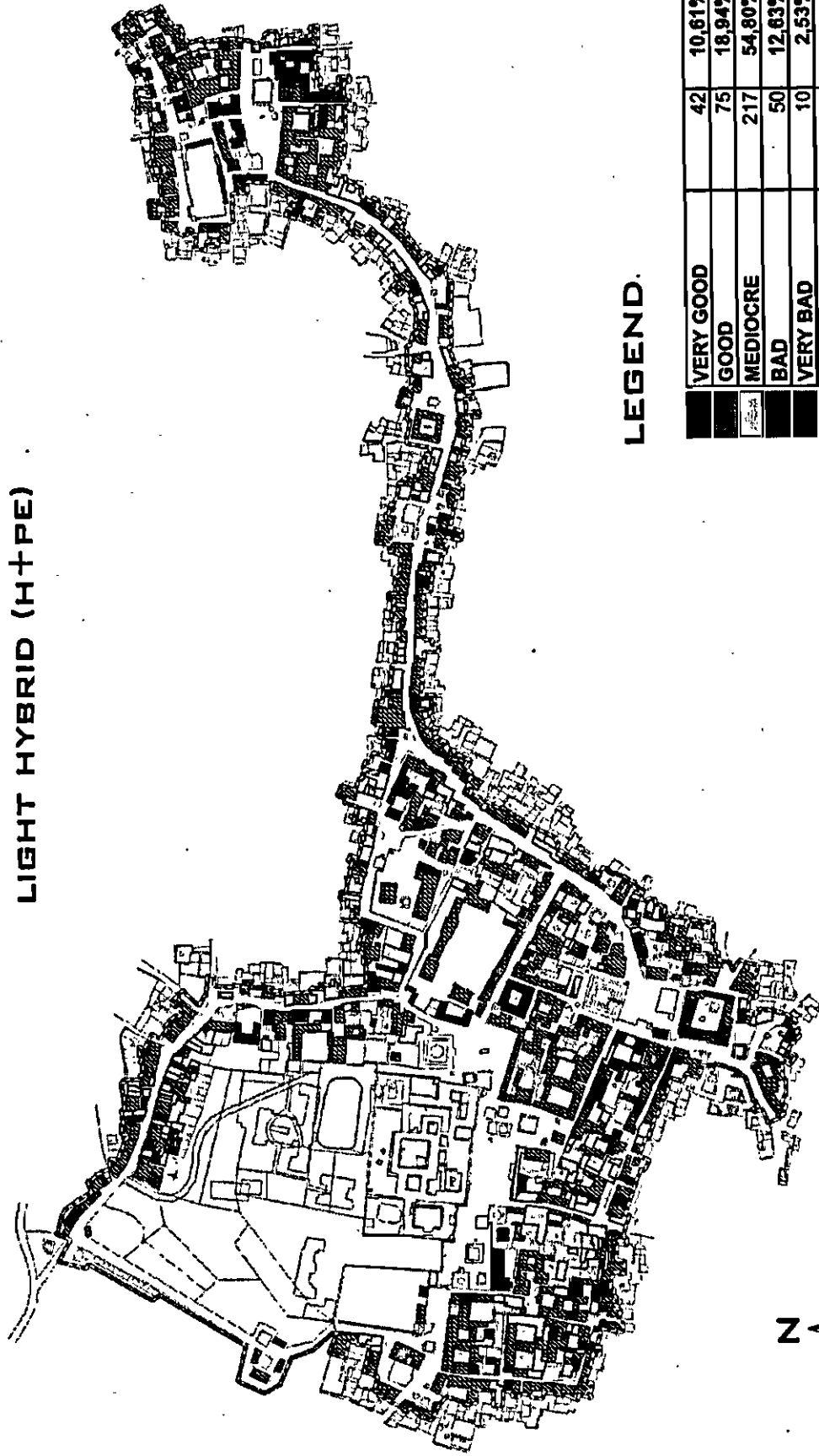


### LEGEND.

VERY GOOD	202	22,80%
GOOD	175	19,75%
MEDIOCRE	388	43,79%
BAD	77	8,69%
VERY BAD	16	1,81%
IN CONSTRUCTION	5	0,56%
no info	23	2,60%
TOTAL	886	100,00%

# BHAKTAPUR

STATE OF CONSERVATION  
 HISTORICAL, POST-EARTHQUAKE,  
 LIGHT HYBRID (H+PE)

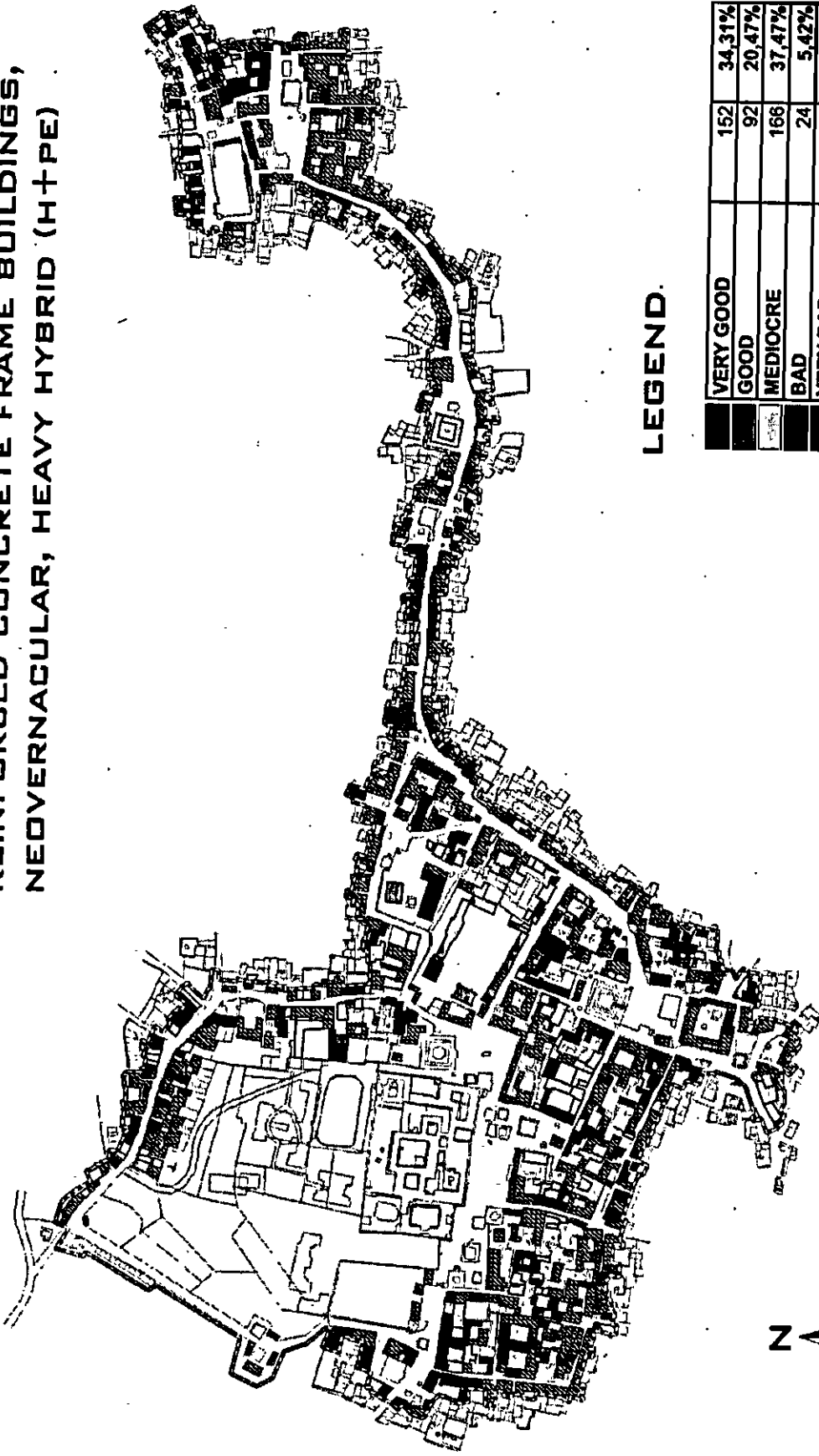


## LEGEND.

	VERY GOOD	42	10,61%
	GOOD	75	18,94%
	MEDIOCRE	217	54,80%
	BAD	50	12,63%
	VERY BAD	10	2,53%
	no Info	2	0,51%
	<b>TOTAL</b>	<b>396</b>	<b>100,00%</b>

# BHAKTAPUR

STATE OF CONSERVATION  
 REINFORCED CONCRETE FRAME BUILDINGS,  
 NEOVERNACULAR, HEAVY HYBRID (H+PE)

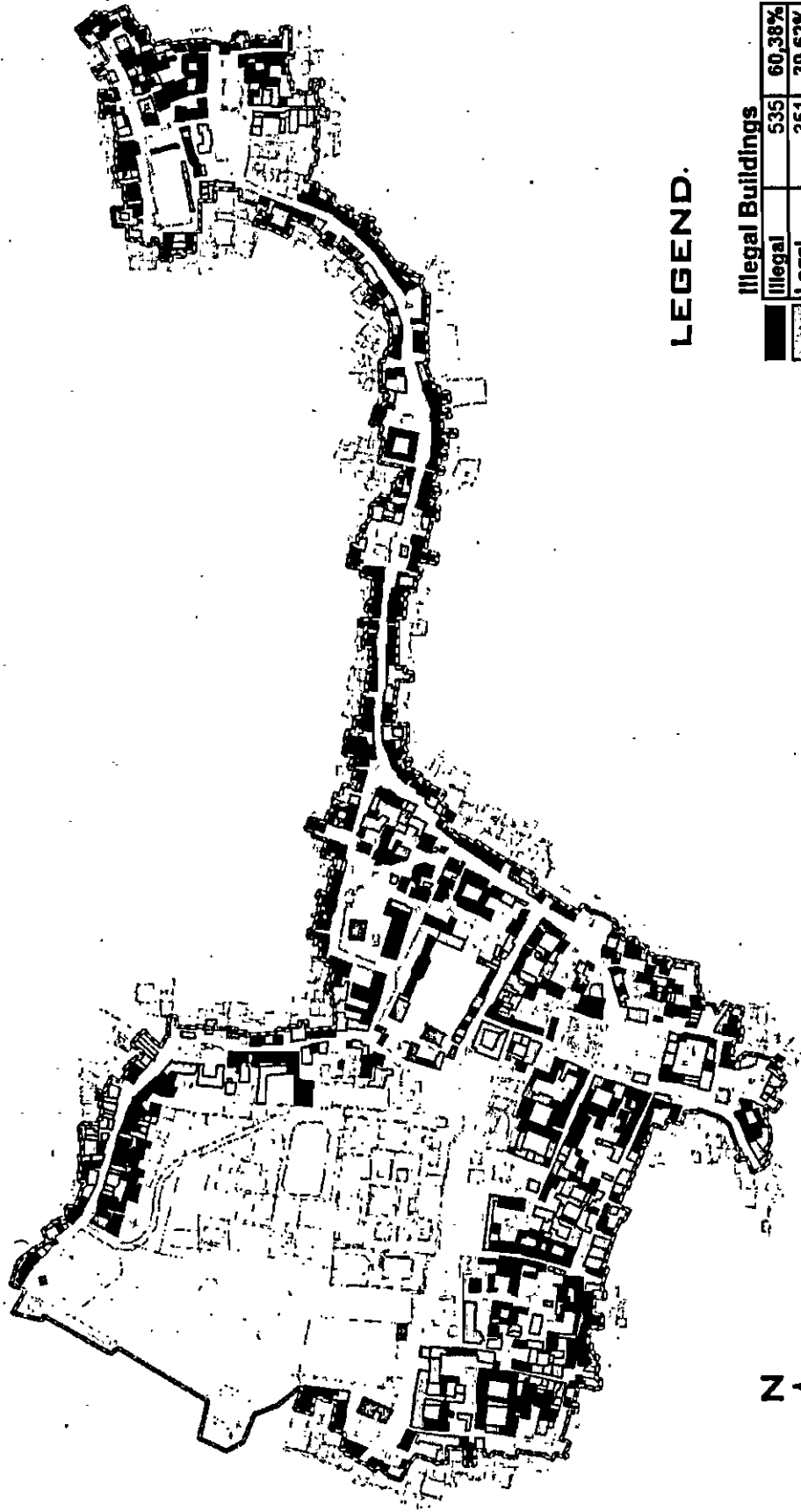


## LEGEND

VERY GOOD	152	34,31%
GOOD	92	20,47%
MEDIOCRE	166	37,47%
BAD	24	5,42%
VERY BAD	6	1,35%
IN CONSTRUCTION	2	0,45%
no info	1	0,23%
<b>TOTAL</b>	<b>443</b>	<b>100,00%</b>

# BHAKTAPUR

ILLEGALITY.



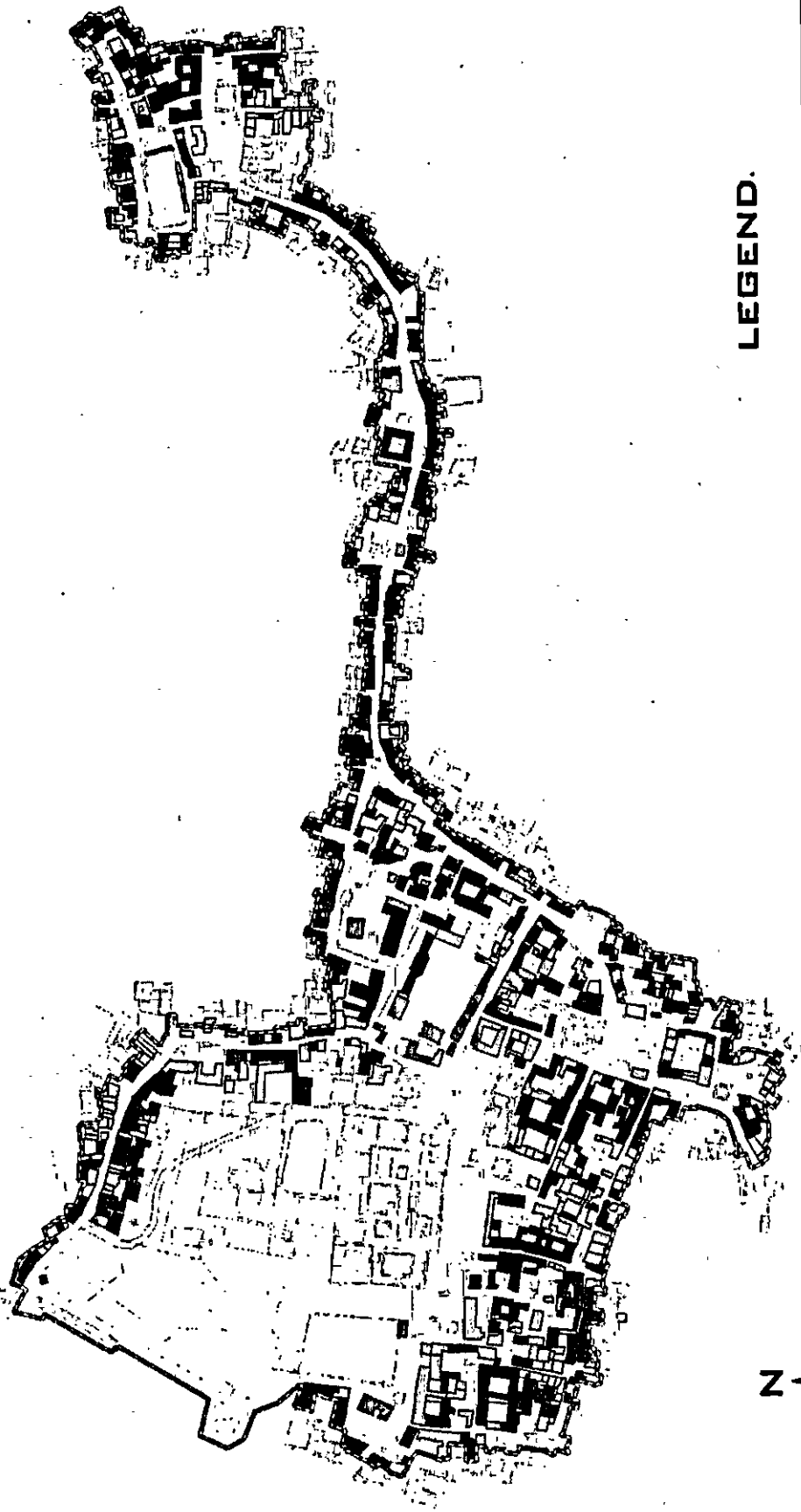
100 0 100 Meters

## LEGEND.

Illegal Buildings		
	Illegal	535 60,38%
	Legal	351 39,62%
	total	886 100,00%

# BHAKTAPUR

## ILLEGALITY BY FAÇADE



### LEGEND.

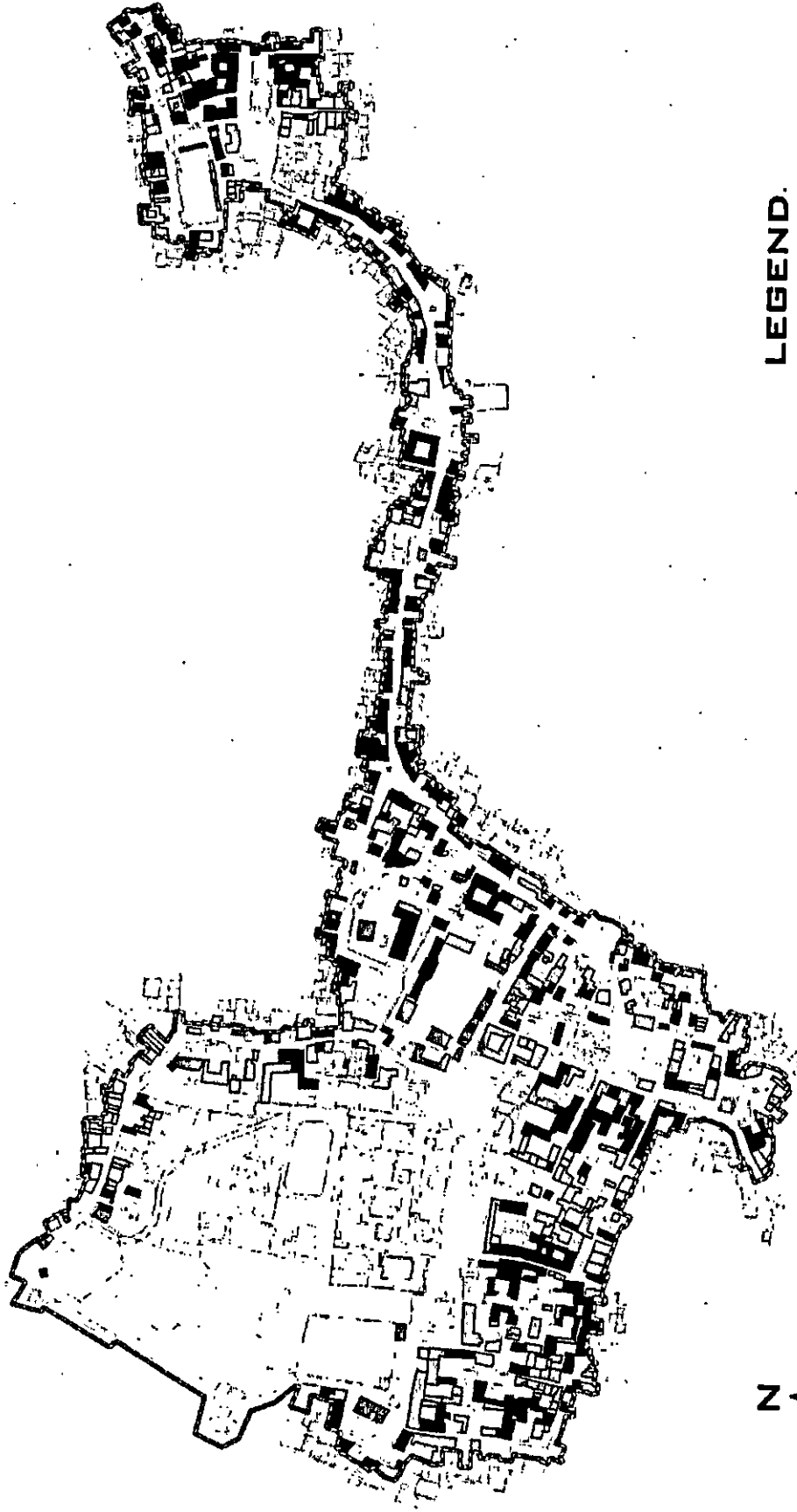
Illegal by façade	353	65,98%
total illegal	535	100,00%

100 0 100 Meters



# BHAKTAPUR

## ILLEGALITY BY HEIGHT.

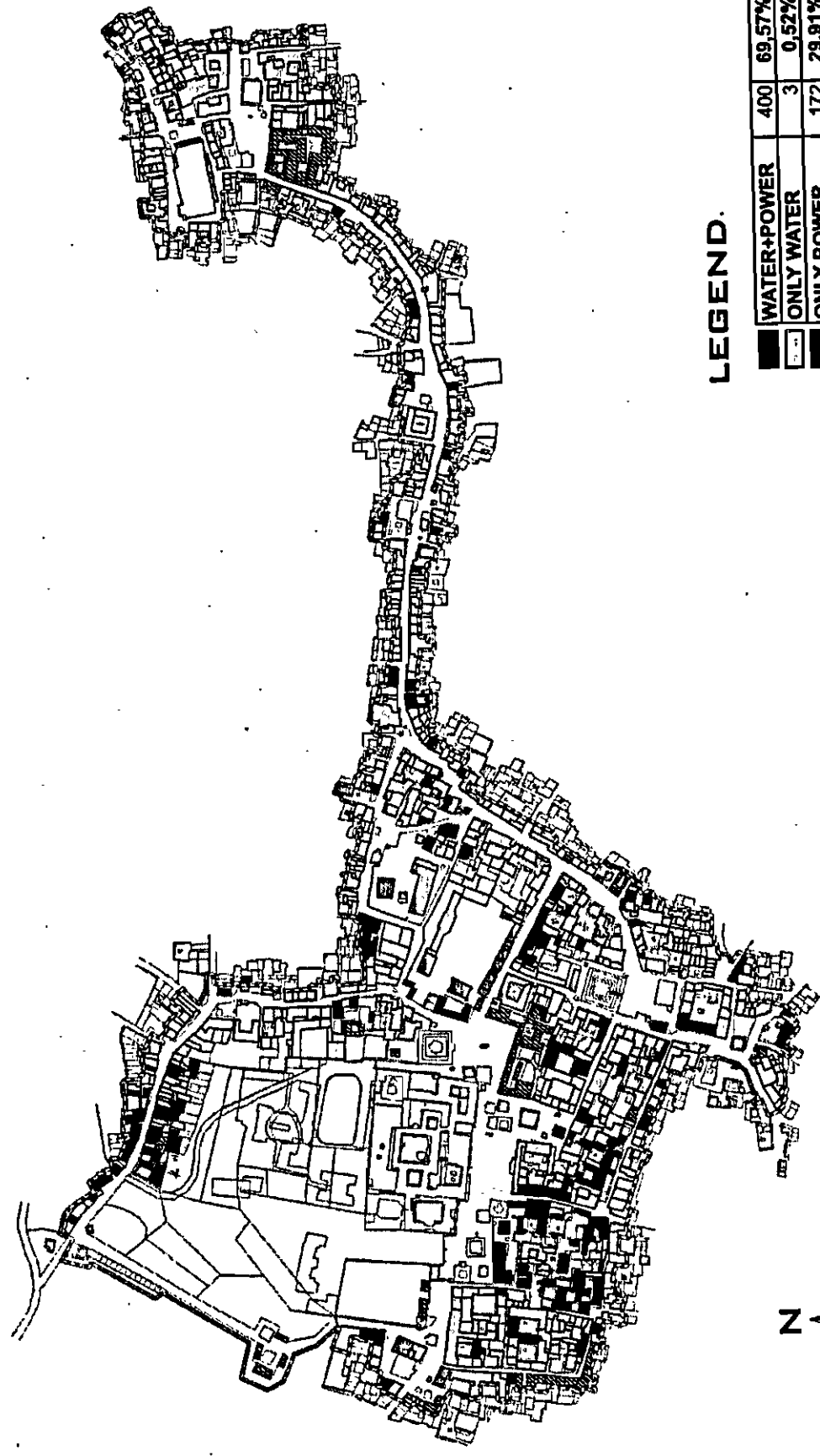


### LEGEND.

Illegal by height	274	51,21%
total illegal	535	100,00%

100 0 100 Meters

# BHAKTAPUR UTILITIES



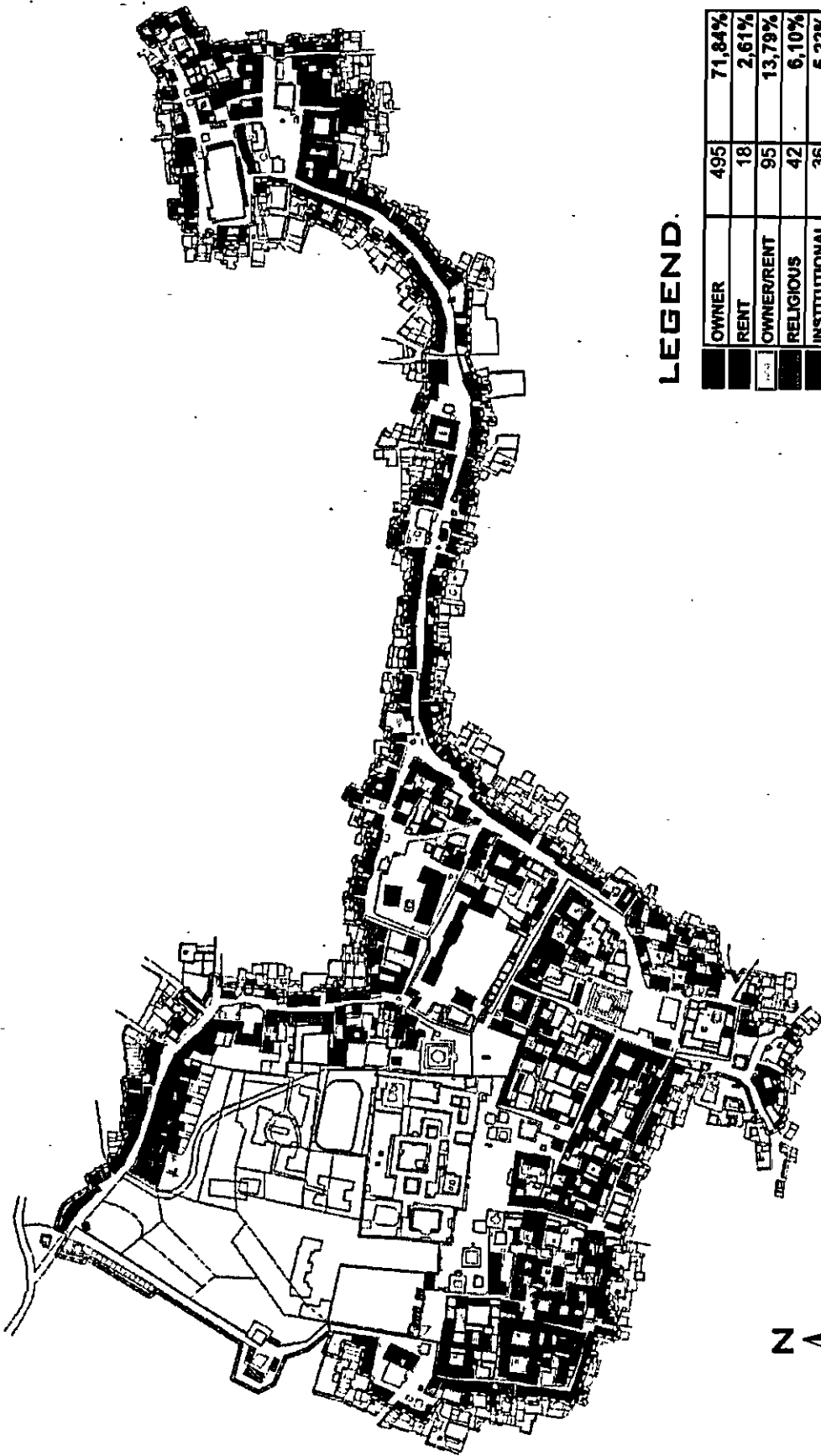
## LEGEND.

	WATER+POWER	400	69.57%
	ONLY WATER	3	0.52%
	ONLY POWER	172	29.91%
	TOTAL	575	100.00%
	NO INFO	311	

100 0 100 Meters

# BHAKTAPUR

TYPE OF OCCUPANCY

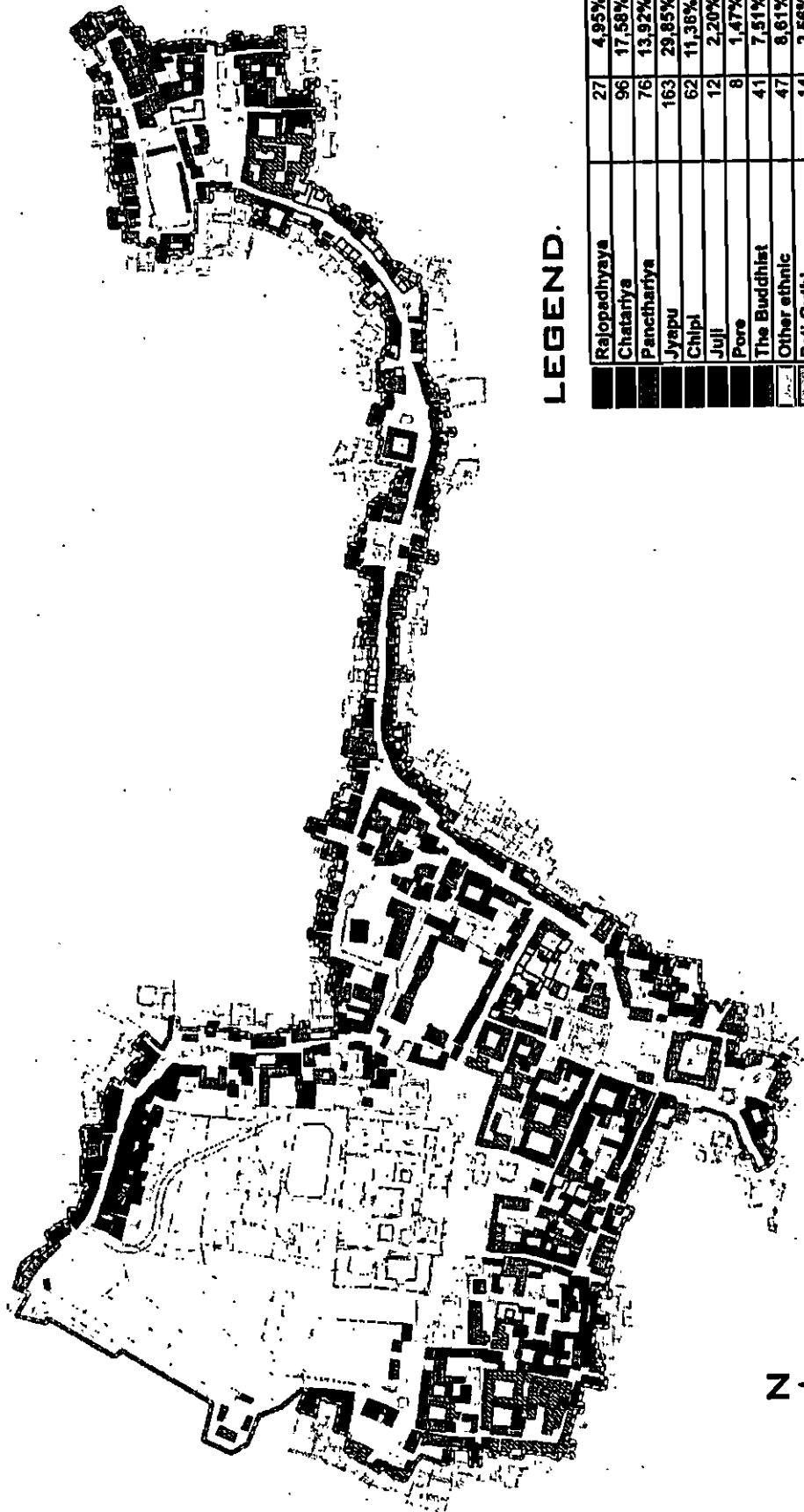


## LEGEND.

OWNER	495	71,84%
RENT	18	2,61%
OWNER/RENT	95	13,79%
RELIGIOUS	42	6,10%
INSTITUTIONAL	36	5,22%
OTHER	3	0,44%
TOTAL	689	100,00%
no info	197	

# BHAKTAPUR

## OWNERSHIP BY CASTES



### LEGEND

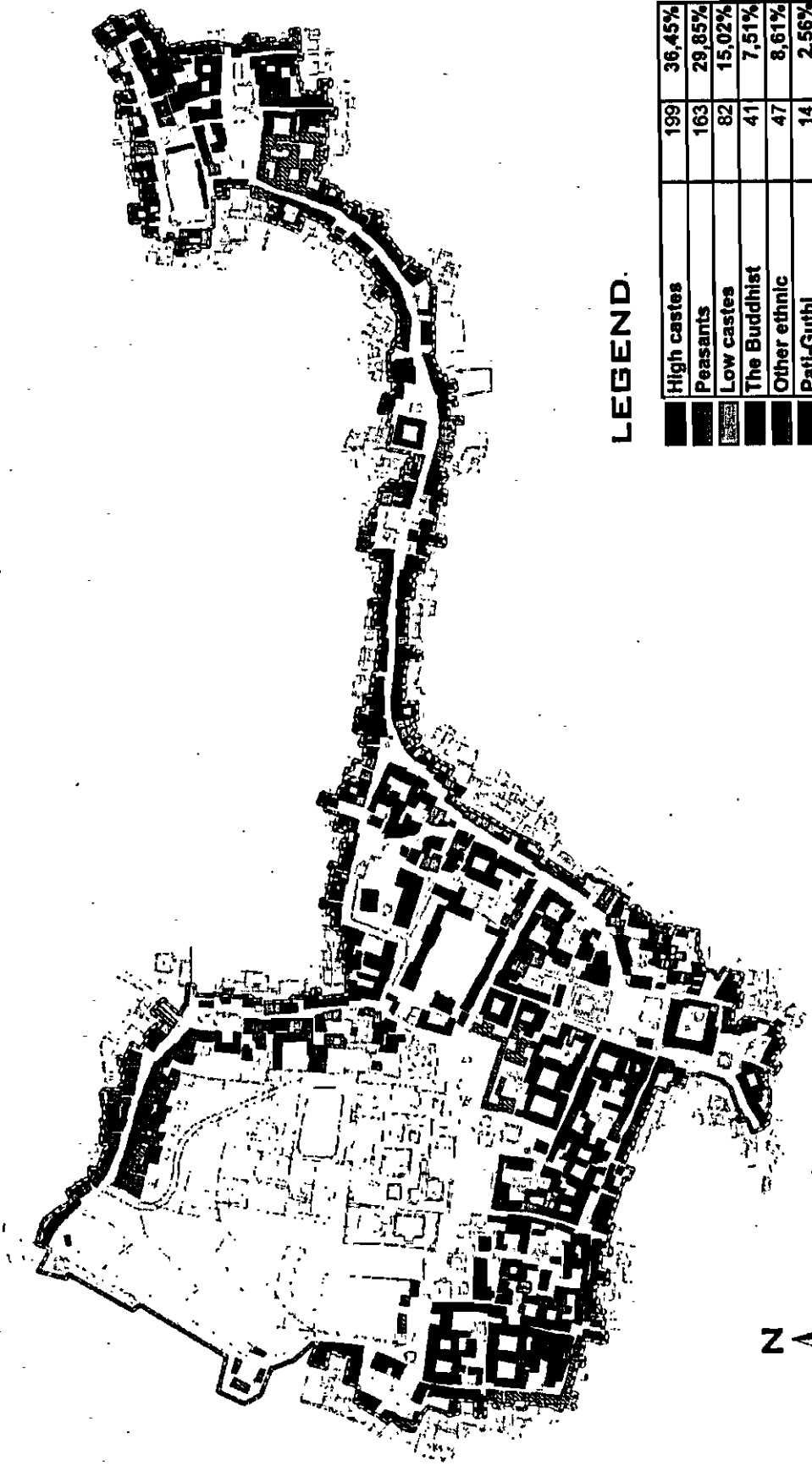
Rajopadhyaya	27	4.95%
Chatriya	96	17.58%
Panchariya	76	13.92%
Jyapu	163	29.85%
Chipli	62	11.36%
Juji	12	2.20%
Pore	8	1.47%
The Buddhist	41	7.51%
Other ethnic	47	8.61%
Pati-Gurthi	14	2.56%
TOTAL	546	100.00%
no info	340	



100 0 100 Meters

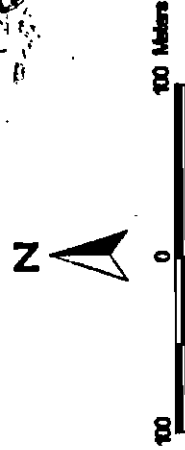
# BHAKTAPUR

## SYNTHESIS OF THE OWNERSHIP BY CASTES



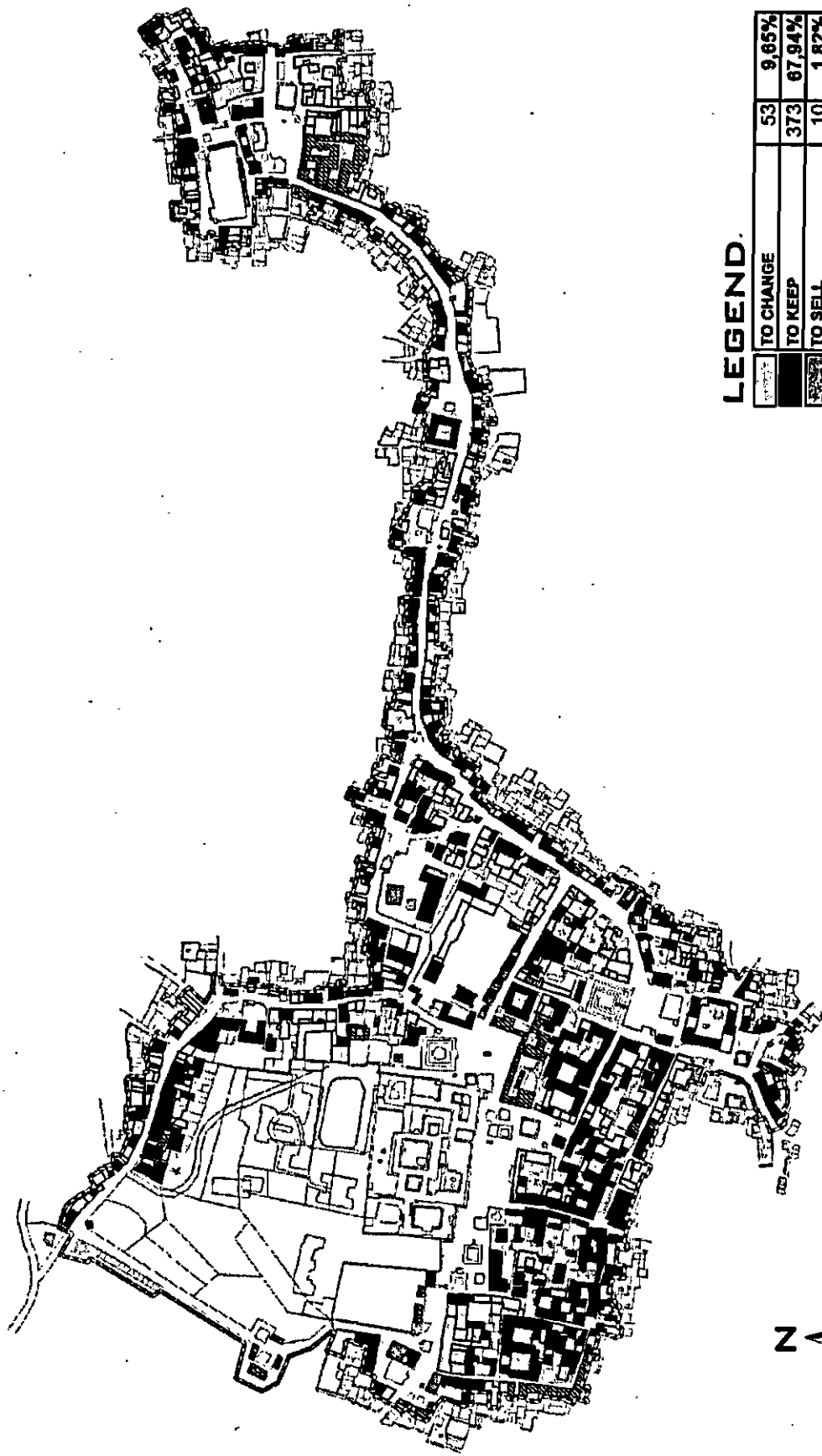
### LEGEND.

High castes	199	36.45%
Peasants	163	29.85%
Low castes	82	15.02%
The Buddhist	41	7.51%
Other ethnic	47	8.61%
Pati-Guthi	14	2.56%
<b>TOTAL</b>	<b>546</b>	<b>100.00%</b>
not classified	340	



# BHAKTAPUR

## OWNERS' INTENTIONS



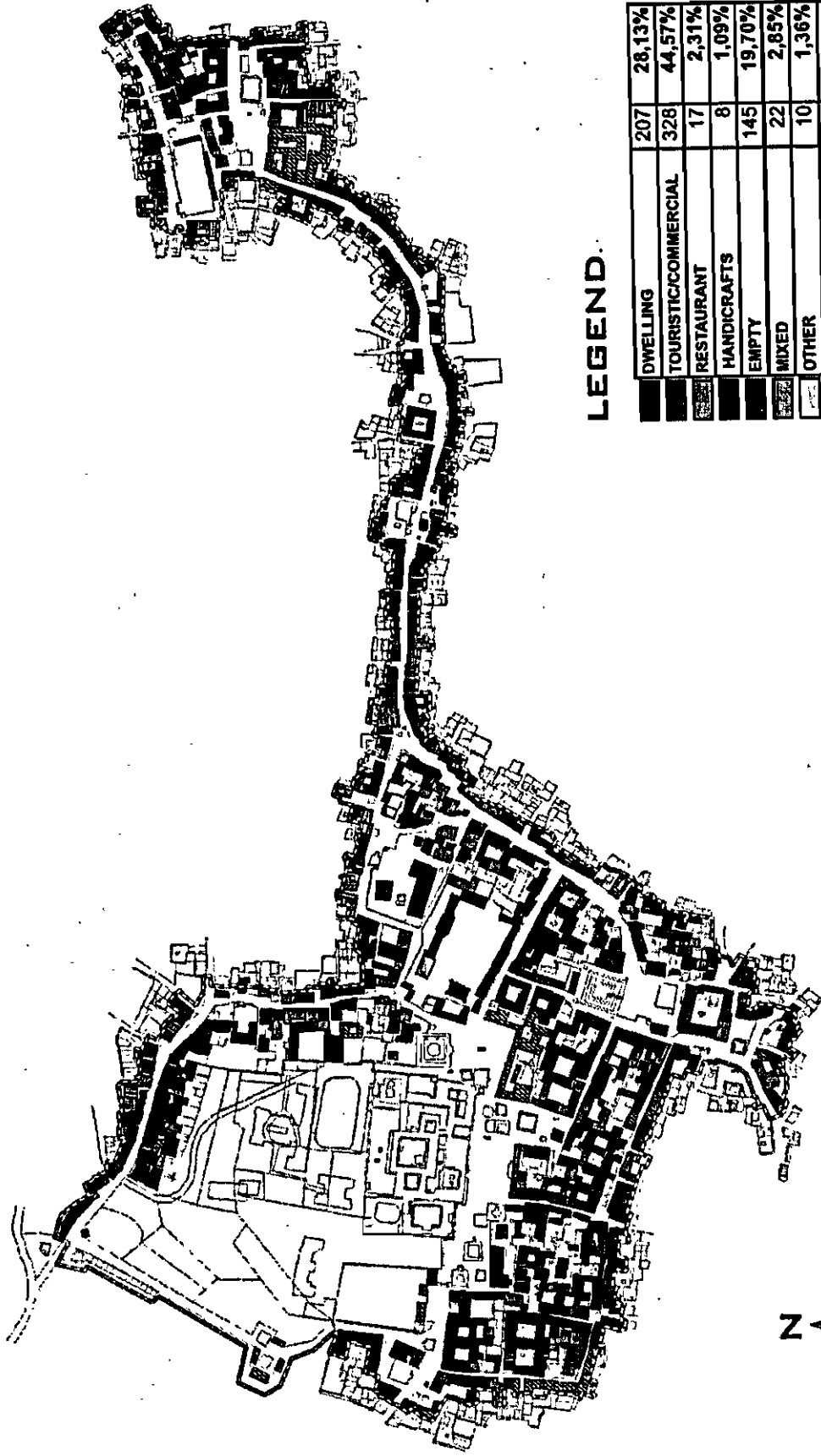
### LEGEND.

	TO CHANGE	53	9.65%
	TO KEEP	373	67.94%
	TO SELL	10	1.82%
	TO RECONSTRUCT	113	20.58%
	<b>TOTAL</b>	<b>549</b>	<b>100.00%</b>
	no info	337	

100 0 100 Meters

# BHAKTAPUR

## PRESENT LAND USE GROUND FLOOR



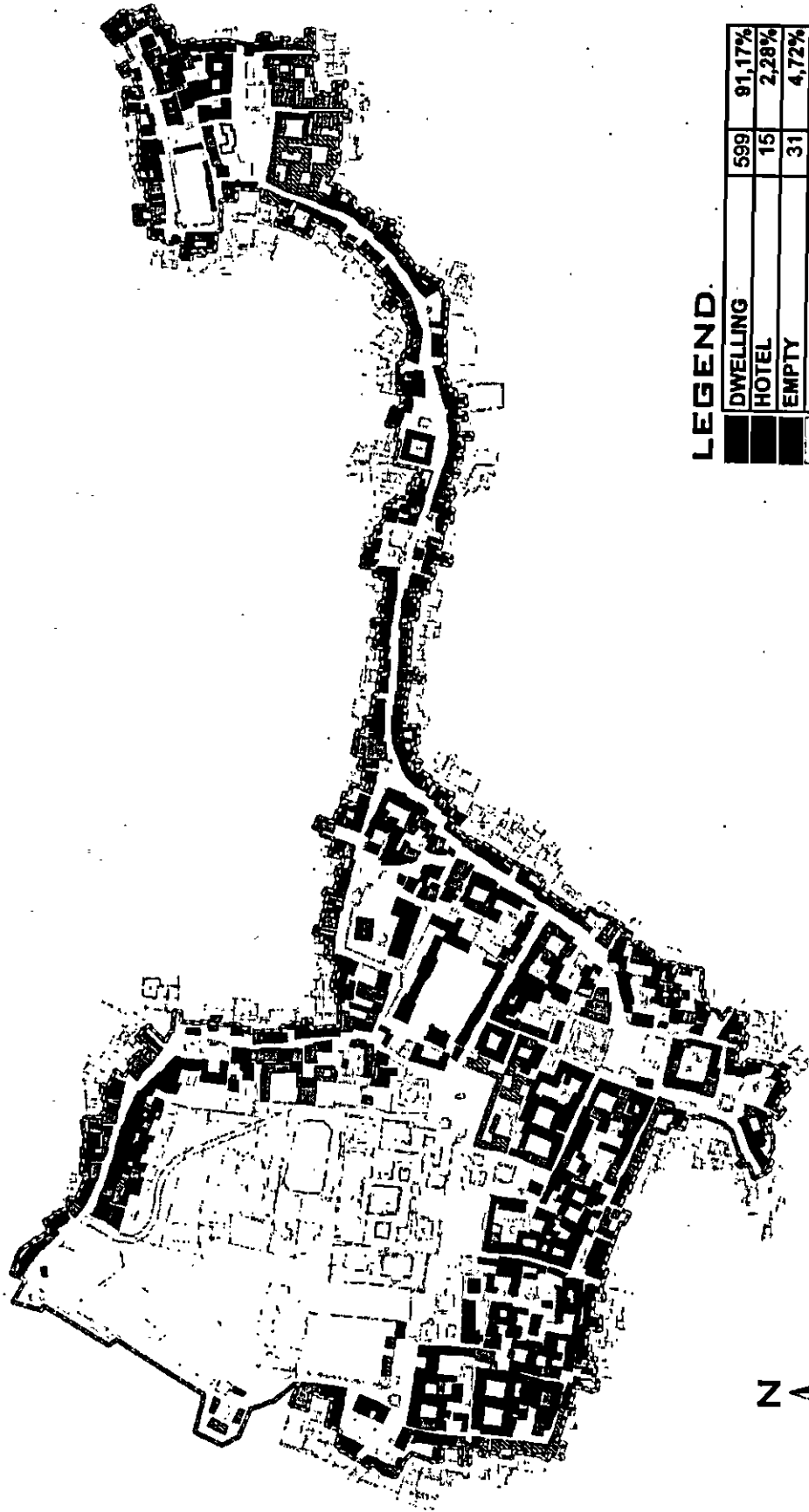
### LEGEND

DWELLING	207	28,13%
TOURISTIC/COMMERCIAL	328	44,57%
RESTAURANT	17	2,31%
HANDICRAFTS	8	1,09%
EMPTY	145	19,70%
MIXED	22	2,85%
OTHER	10	1,36%
TOTAL	736	100,00%
no info	150	16,82%







100 0 100 Meters

# BHAKTAPUR

## PRESENT LAND USE UPPER FLOORS



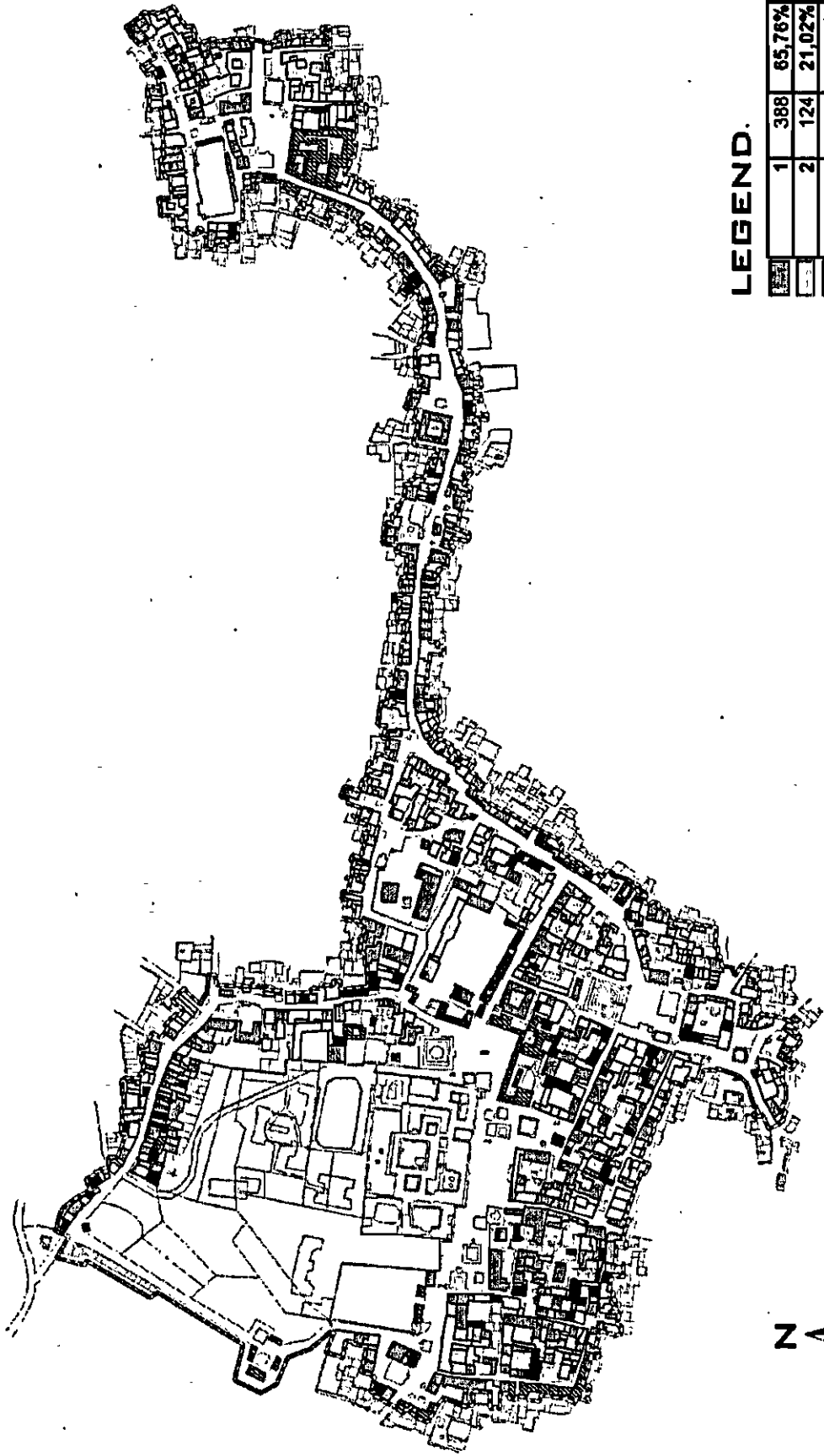
### LEGEND.

	DWELLING	599	91,17%
	HOTEL	15	2,28%
	EMPTY	31	4,72%
	OTHER	12	1,83%
	TOTAL	657	100,00%
	no info	229	



# BHAKTAPUR

NUMBER OF FAMILIES IN EACH BUILDING



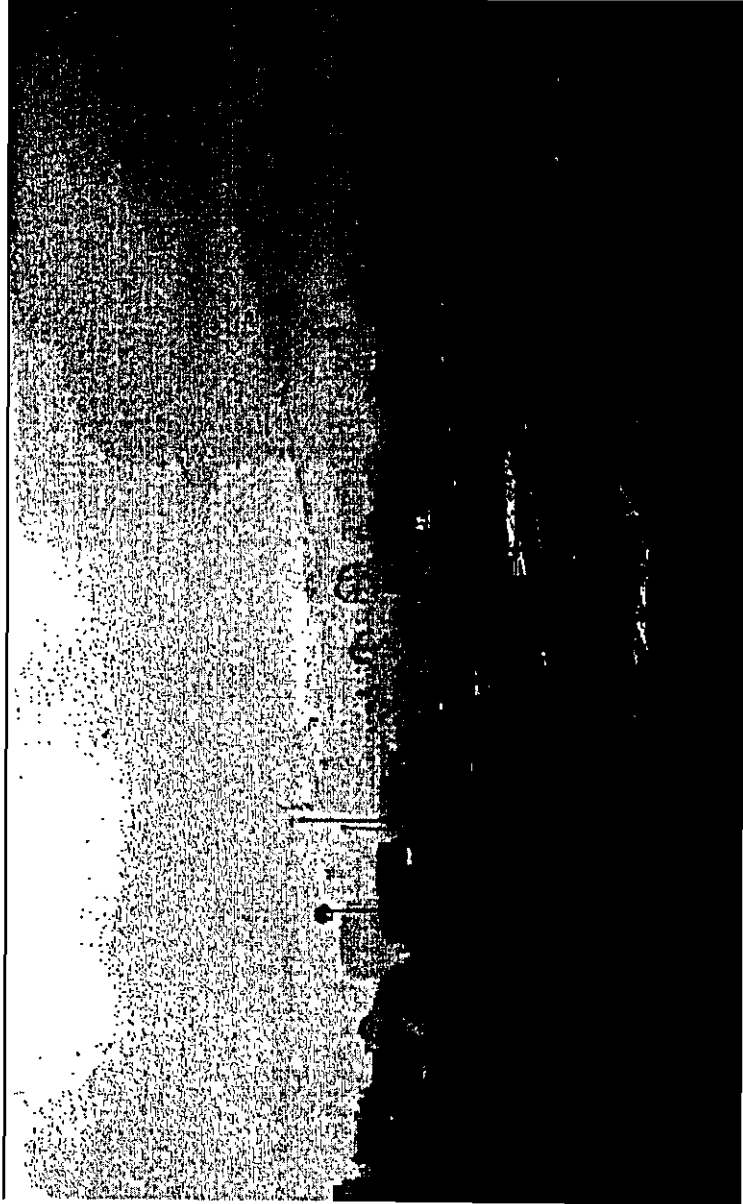
## LEGEND.

	1	388	65,76%
	2	124	21,02%
	> 2	78	13,22%
	TOTAL	590	100,00%
	no info	296	

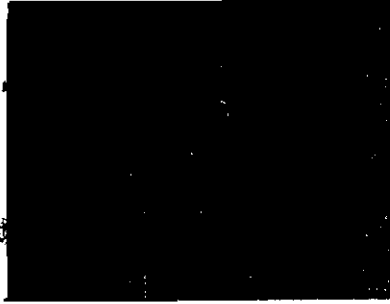
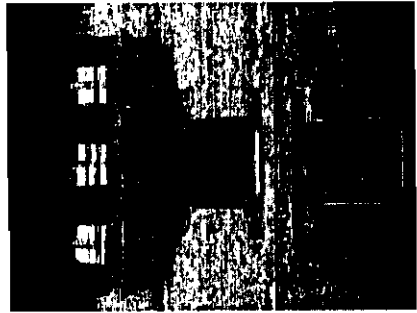
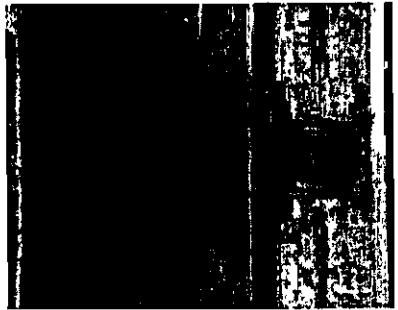
# Bhaktapur: photos

photos Michele Miegge

ass. Cesar A. Varela



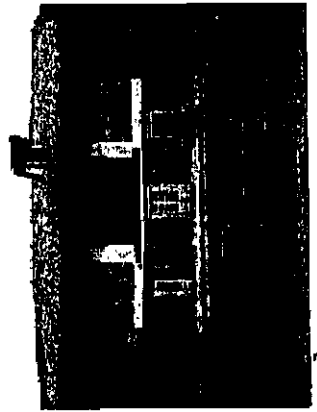
historical buildings  
photos Michele Megge



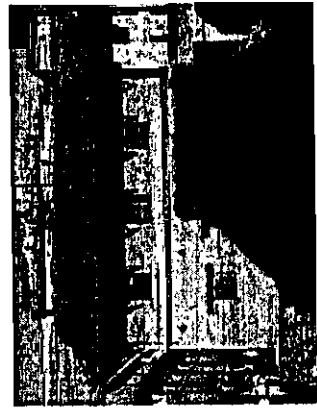
historical buildings  
photos Michele Miegge



310



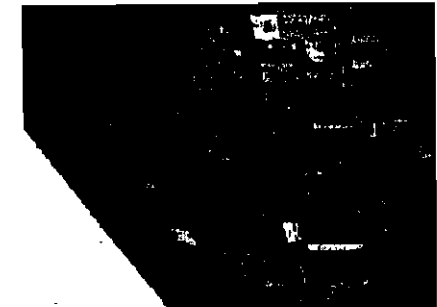
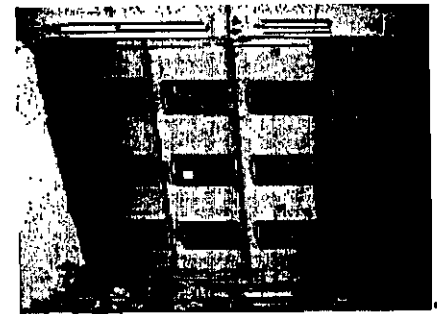
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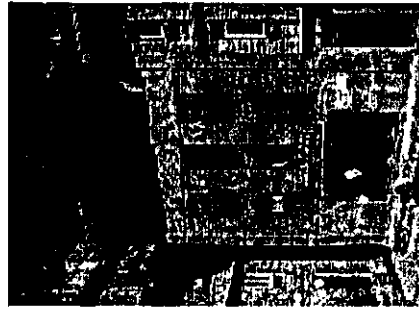
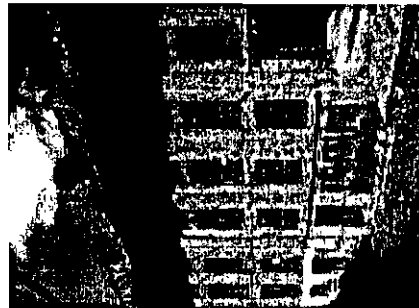
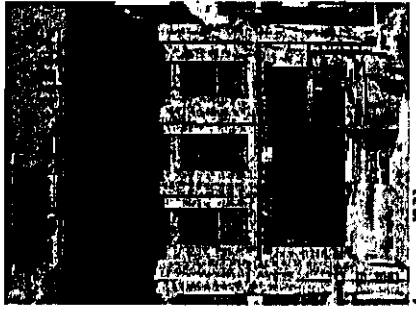
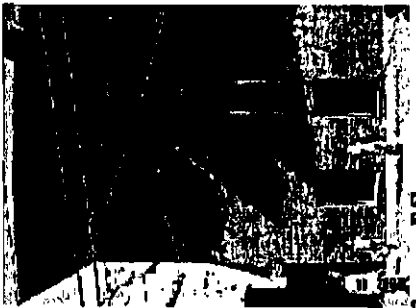
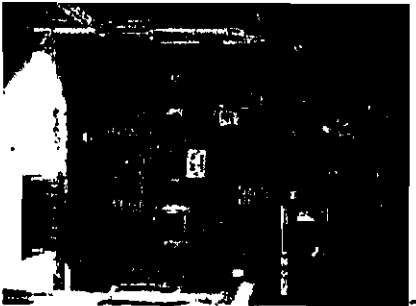
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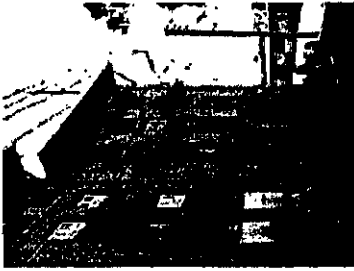
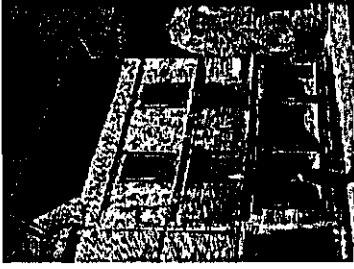
32



post earthquake buildings  
photos Michele Mlegge

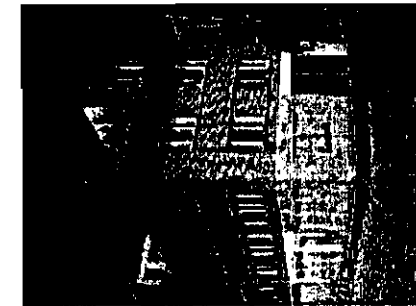
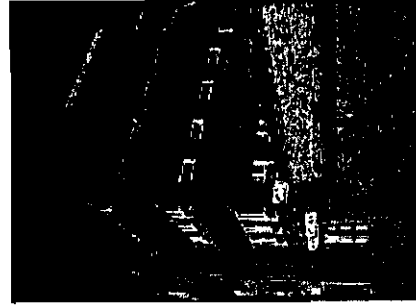
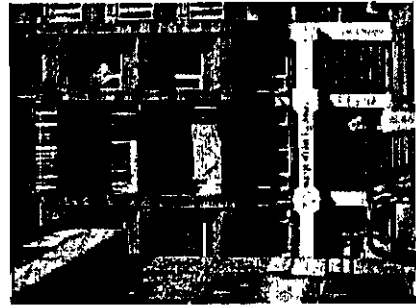
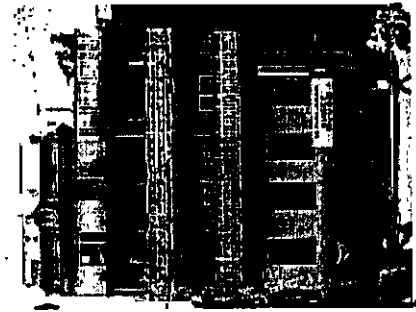


post earthquake buildings  
photos Michele Miegge



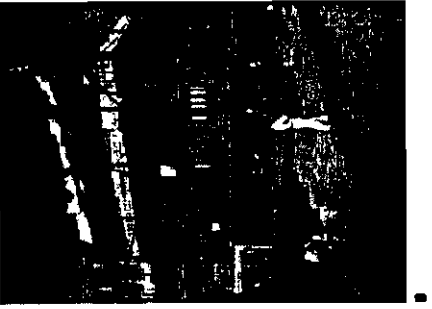
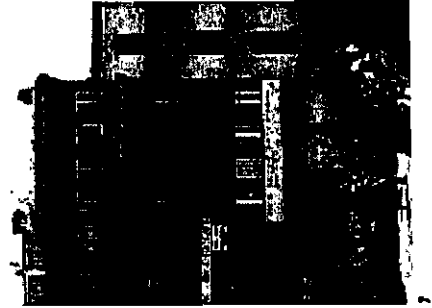
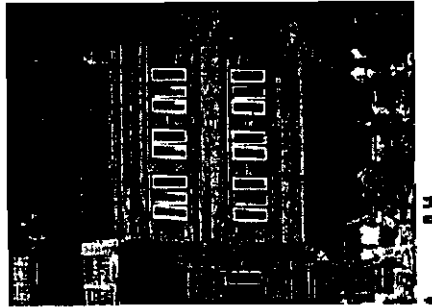
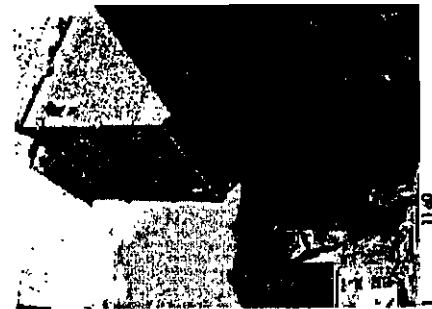
reinforced concrete frame buildings

photos Michele La Tegge



reinforced concrete frame buildings

photos Michele Miegge

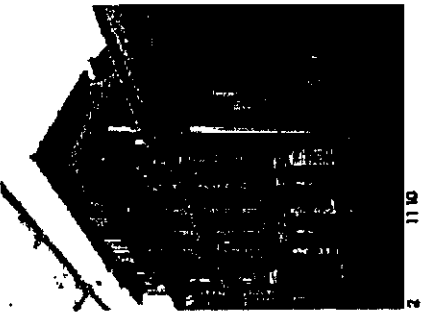




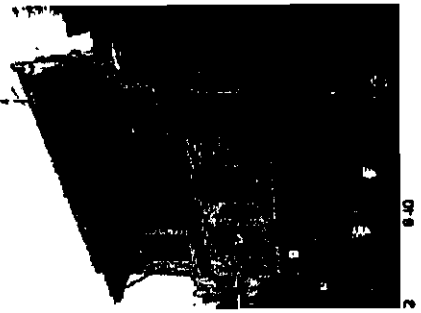
neovernacular buildings  
photos Michèle Miegoue



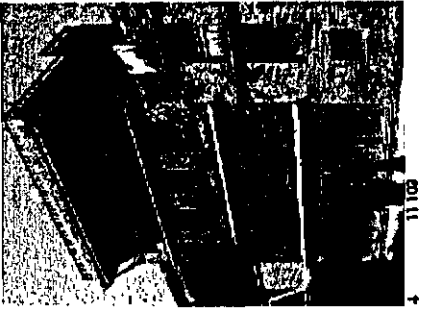
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11 10



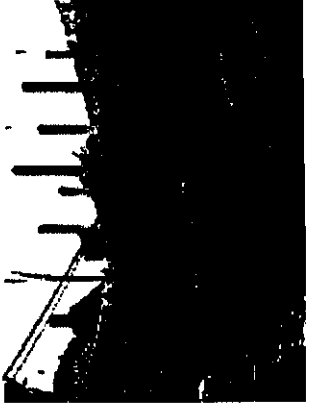
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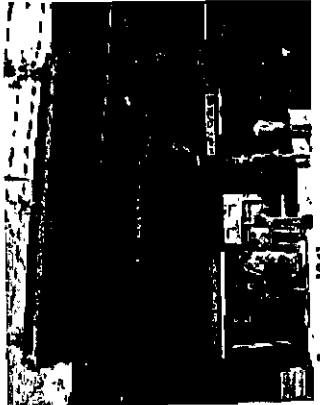
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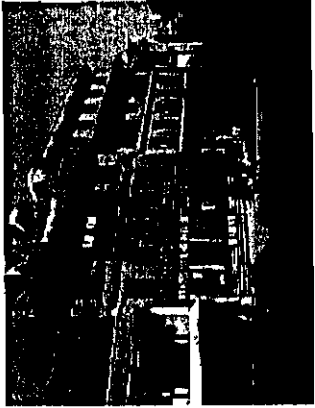
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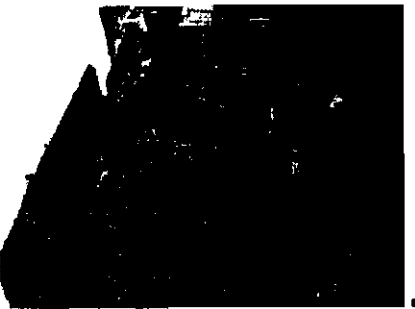
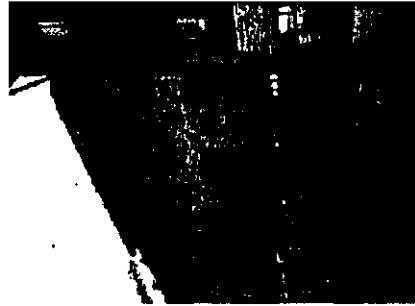
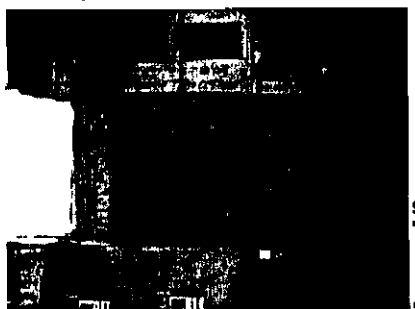
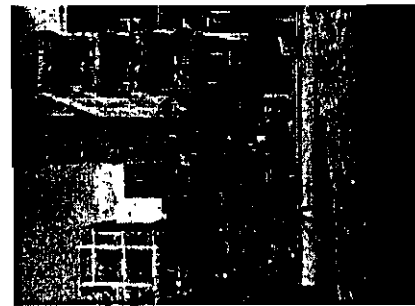


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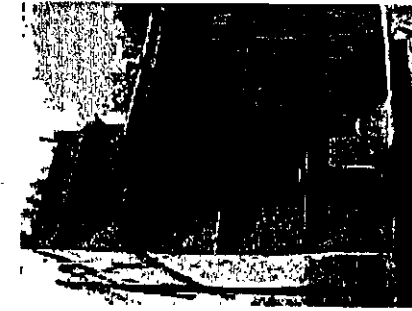
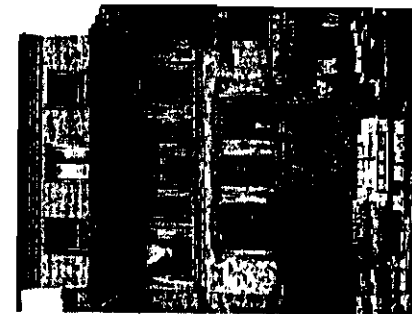
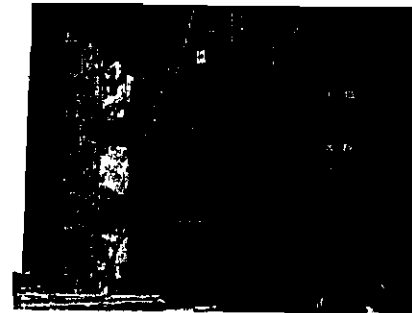
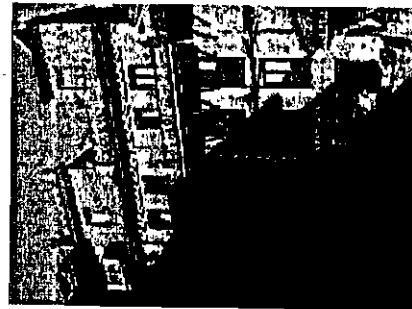
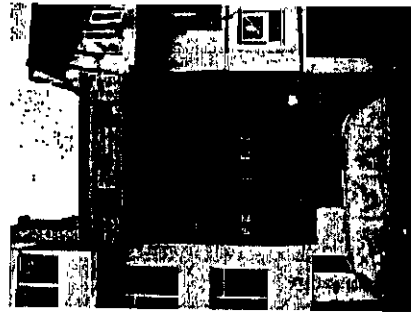
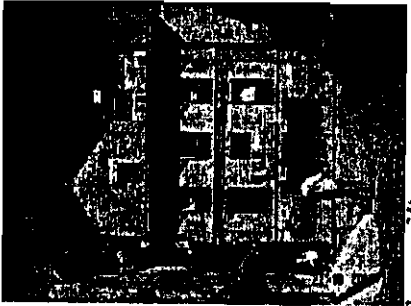
hybrids, heavy hybridisation: property split up

photos Michele Miegge



hybrids, heavy hibridisation: added floors

photos Michele Miegge



hibrids, heavy hibridation: others

phd ca Michele Miegge



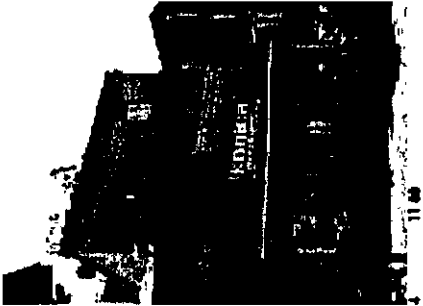
Added balcony



Added balcony



Added terrace on patio



added porch



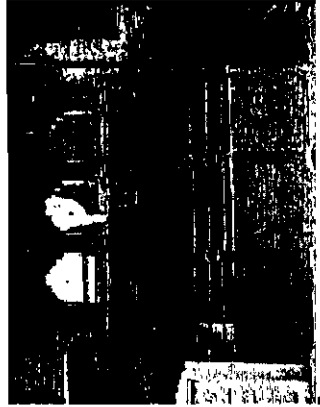
Ramp facade on earlier building



Ramp facade on earlier building



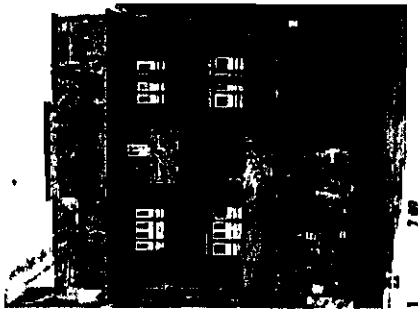
private space enclosure



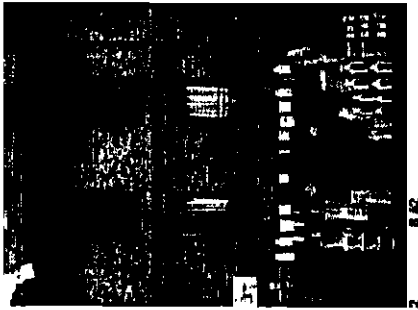
private space enclosure

# hibrids: light ibridation

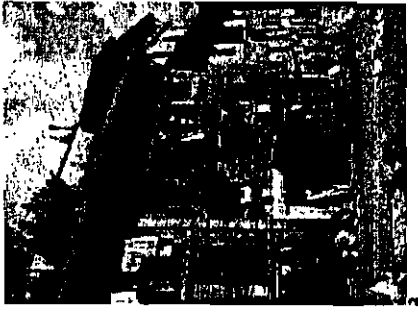
photos Michele Miegge



polished facade



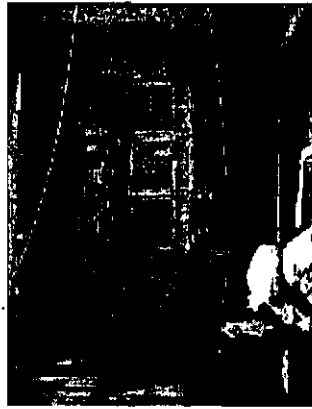
iron head roofing



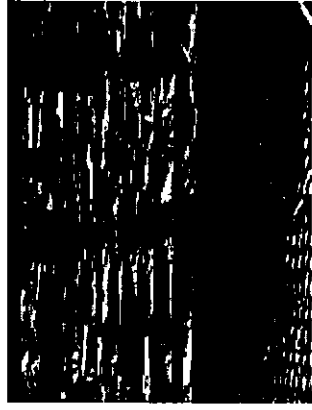
added volume in occupied iron



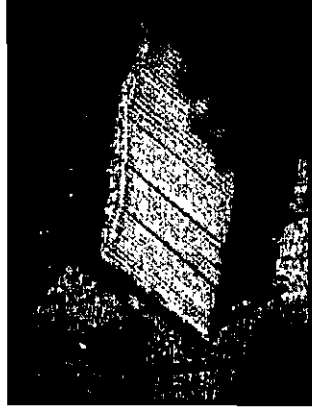
coupled iron head on a traditional roof



windows attention



iron head on a traditional roof



coupled iron head on a traditional roof



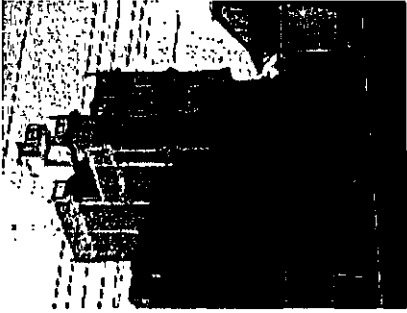
coupled iron head on a traditional roof

neovernacular buildings

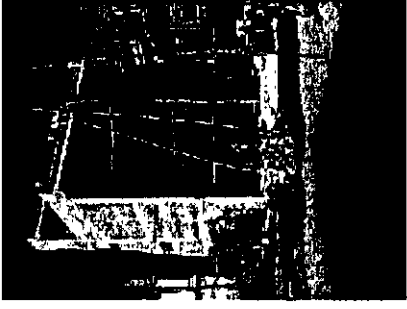
photos Michele Miegge



side facade, Tum all square



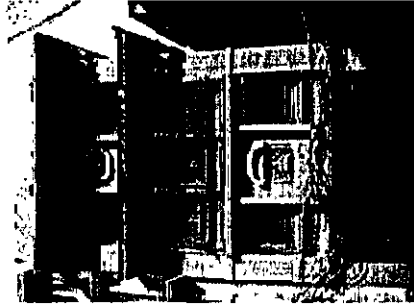
'pistm odem' building in Kofim and the same concept applied to the neovernacular



neovernacular



reinforced concrete frame faced with adobe bricks



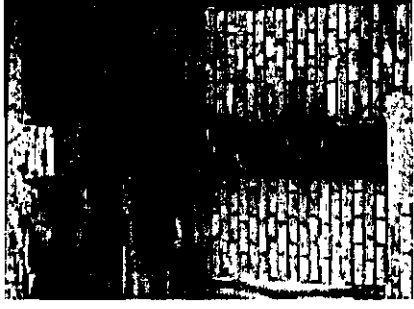
windows of different styles on the same facade



Bhaktapur university



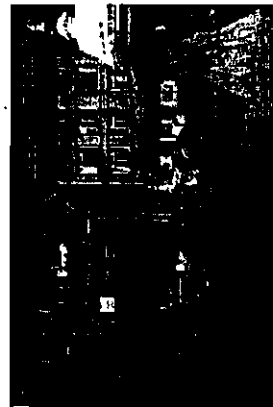
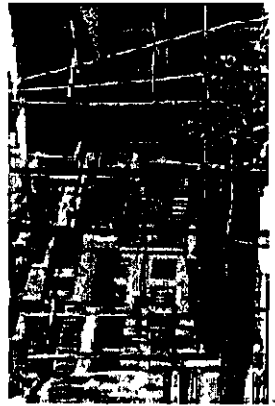
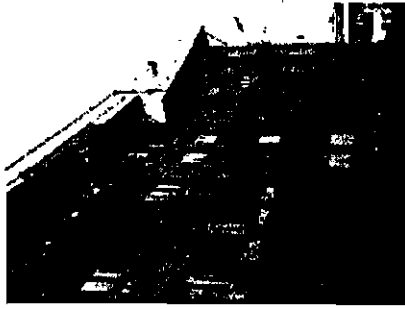
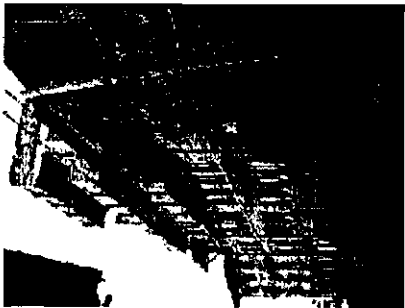
Bhaktapur municipality offices, fiberglass statue



traditional facade from a dem old building

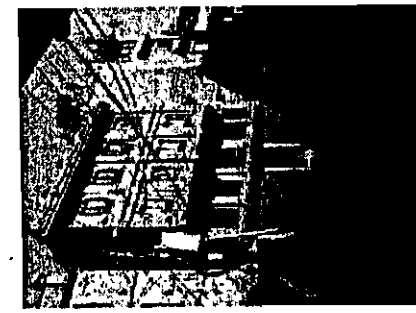
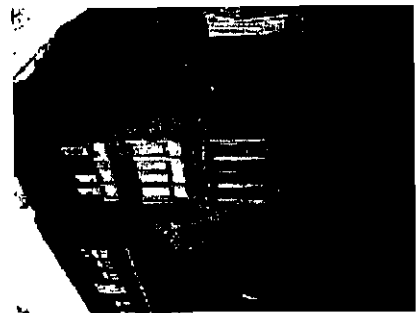
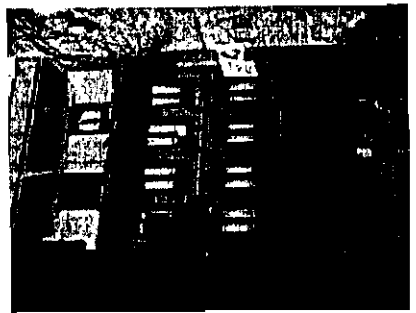
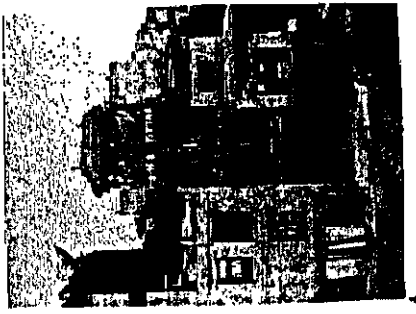
fragmentation of streetscape and urban landscape

photos: Ulrike Miesge

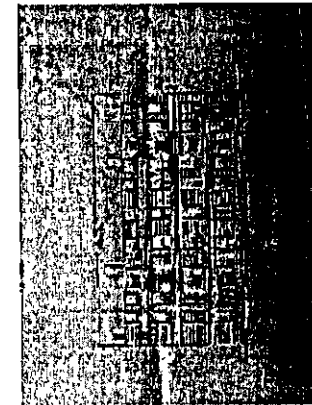
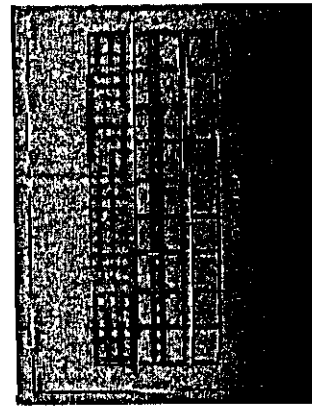
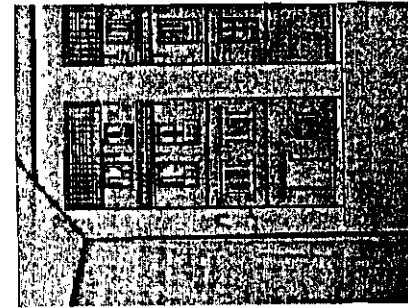
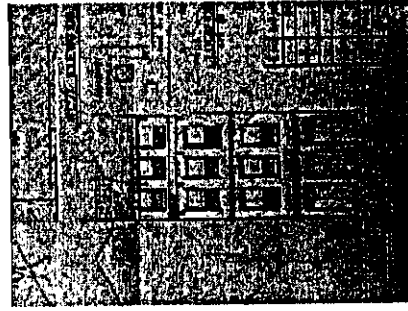


Bhaktapur municipality: incentives and building permits

photos Michele Miegge



Neovermaular buildings that received incentives for bricks and tiles

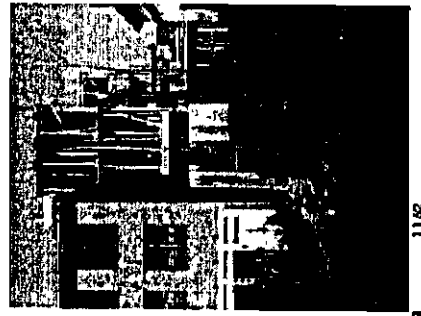
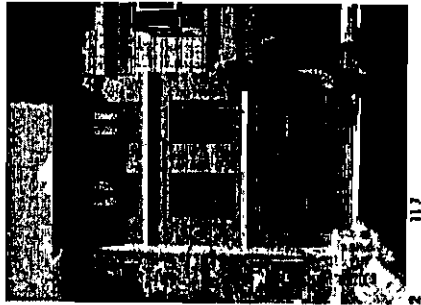
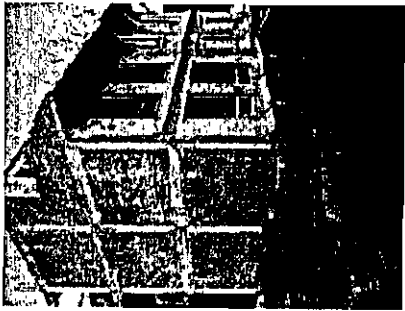


Neovermaular buildings approved by building permits



# Recently built neovernacular houses, approved by the municipality

photos Michele Miegge

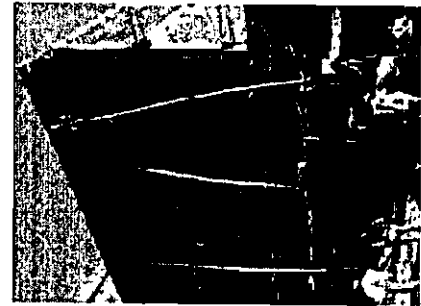
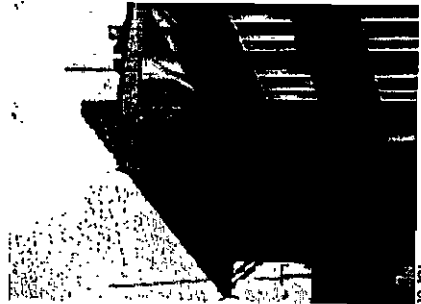


117

118

Durban square

a historical building was demolished on the plot facing the main road



Main road

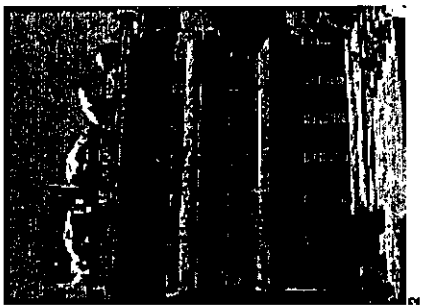
this building will be demolished and rebuilt

recent illegal buildings

photos Michele Mlegge



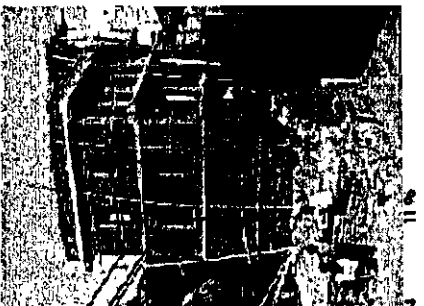
Shiva guest house, Dubai square



Braj poison guesthouse Tounadi square



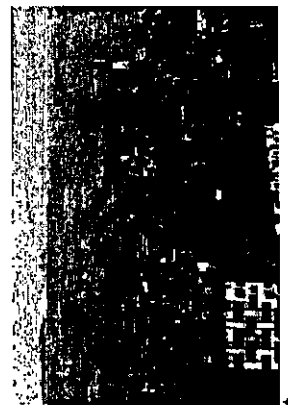
chinese restaurant, Main road



Tounadi square, the building differs from the granted building permit



telephone tower

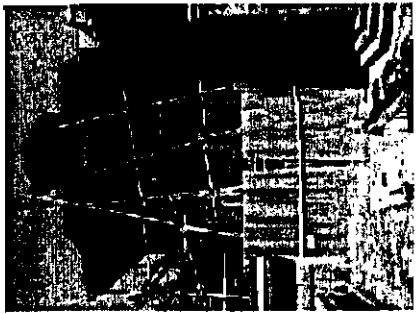
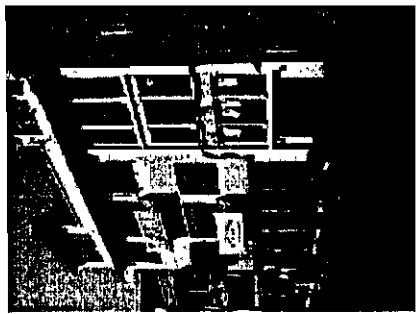
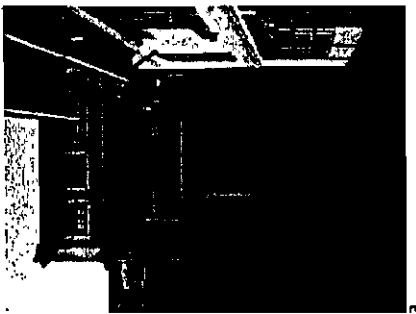


Legal administrative building in PHZ. Building permit not available



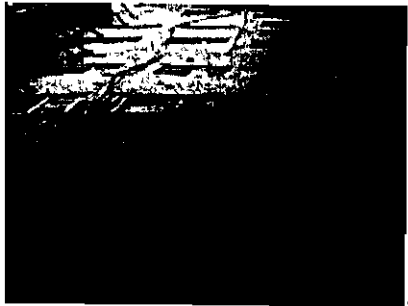
some houses competing for the "Lalitpur Heritage Award"

photos Michèle Miégo



recent restorations

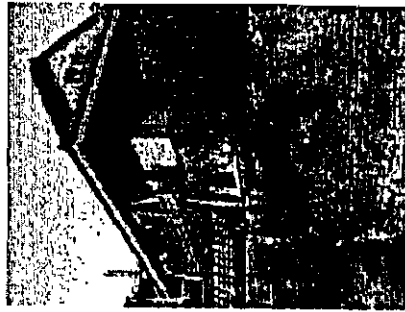
photos Michele Megge



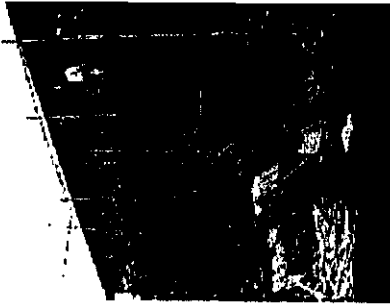
Bhatnagar municipality acquired this house that should be restored



Robindra Puri's house in Bhatnagar



Robindra Puri's house in Bhatnagar



Robindra Puri's house in Patanji



math restoration in Bhatnagar. Pottery square, Bhatnagar municipality with Pat. Sestri



An alya house in Patan



Rajbendray House in Patan



Shwettha house in Patan

# hybrids: interesting interventions

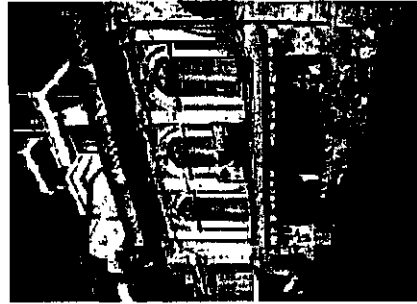
photos Michele Miegge



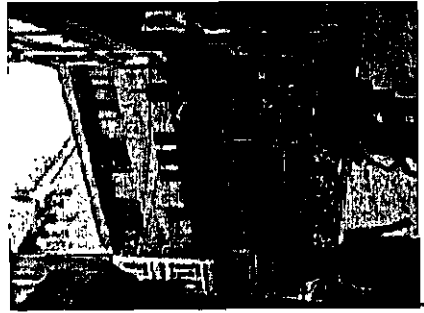
added floor realized under Bhaktapur  
Developing Project



added floor realized under Bhaktapur  
Developing Project



4: Part of the expected addition of a floor on the  
building will happen under the control and with the  
contribution of the municipality



5: It is interesting to note that this self-made addition  
respects the earlier facade partition



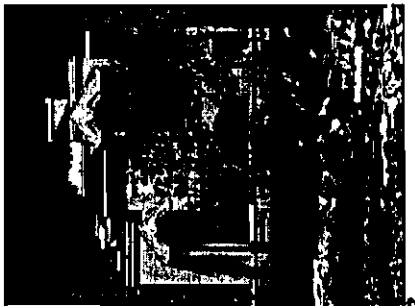
6: Bhaktapur cars cannot materials give to these  
added floors an acceptable aspect

# Architectural models

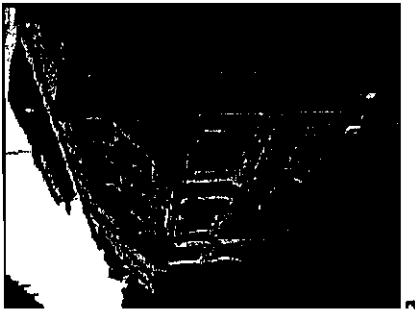
photos Michele Miegge



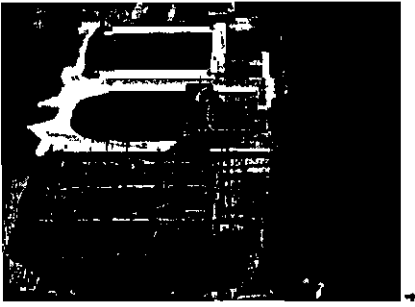
school Bhaitapur, GTZ



Added floor Bhaitapur, GTZ



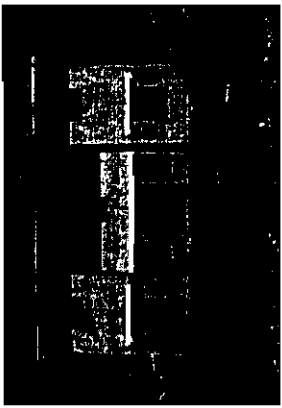
model house in Bhaitapur, GTZ



model house in Dhulal, DED

"post modern" impacted models

"traditional style" : iframed

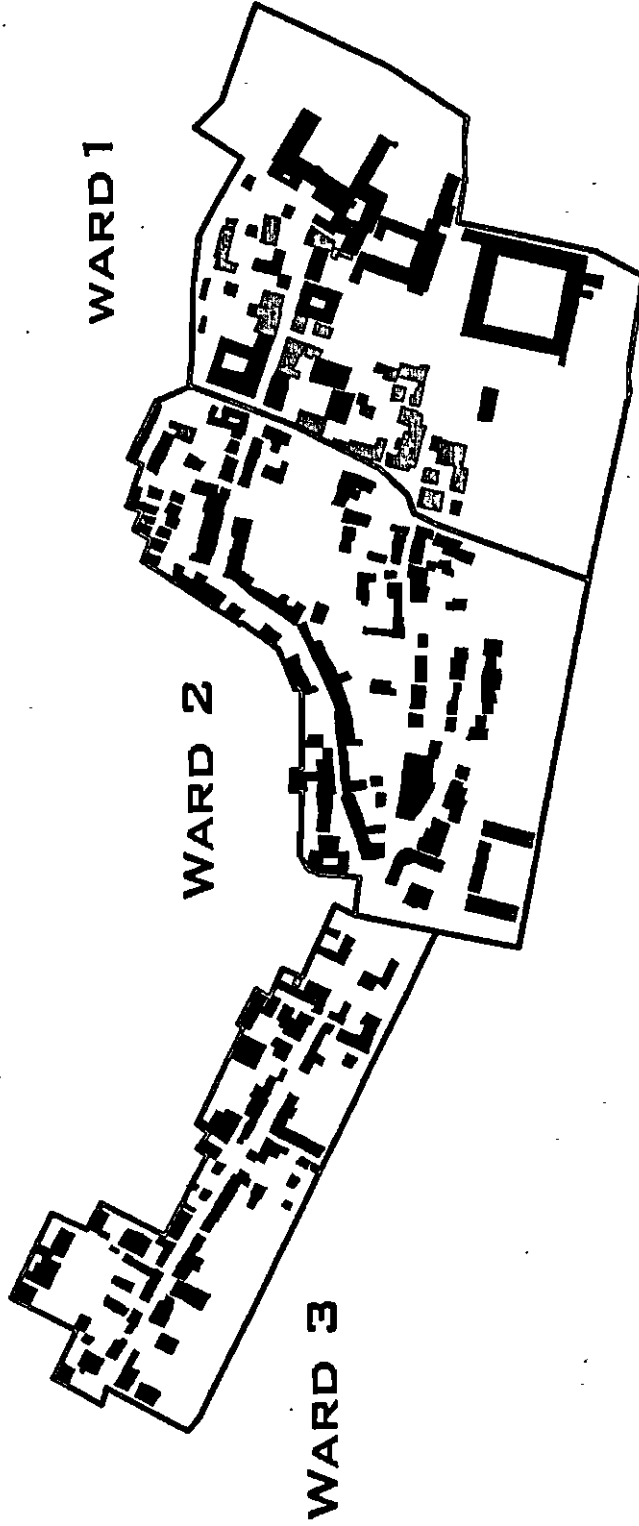


# PASHUPATINATH

## LIST OF MAPS

- |  |  |
|--|--|
| 01 SURVEY AREA   | 11 ILLEGALITY BY HEIGHT                |
| 02 BUILDINGS BY TYPE   | 12 UTILITIES                           |
| 03 HYBRIDIZATION HISTORICAL BUILDINGS  | 13 TYPE OF OCCUPANCY                   |
| 04 CLASSIFICATION OF BUILDINGS<br>historical, post-earthquake, light hybrid                        | 14 OWNERS' INTENTIONS                  |
| 05 CLASSIFICATION OF BUILDINGS<br>reinforced concrete frame buildings, neovernacular, heavy hybrid | 15 PRESENT LAND USE GROUND FLOOR       |
| 06 STATE OF CONSERVATION   | 16 PRESENT LAND USE UPPER FLOOR        |
| 07 STATE OF CONSERVATION<br>historical, post-earthquake, light hybrid                              | 17 NUMBER OF FAMILIES IN EACH BUILDING |
| 08 STATE OF CONSERVATION<br>reinforced concrete frame buildings, neovernacular, heavy hybrid       |  |
| 09 ILLEGALITY  |  |
| 10 ILLEGALITY BY FAÇADE  |  |

# PASHUPATINATH SURVEY AREA



## LEGEND.

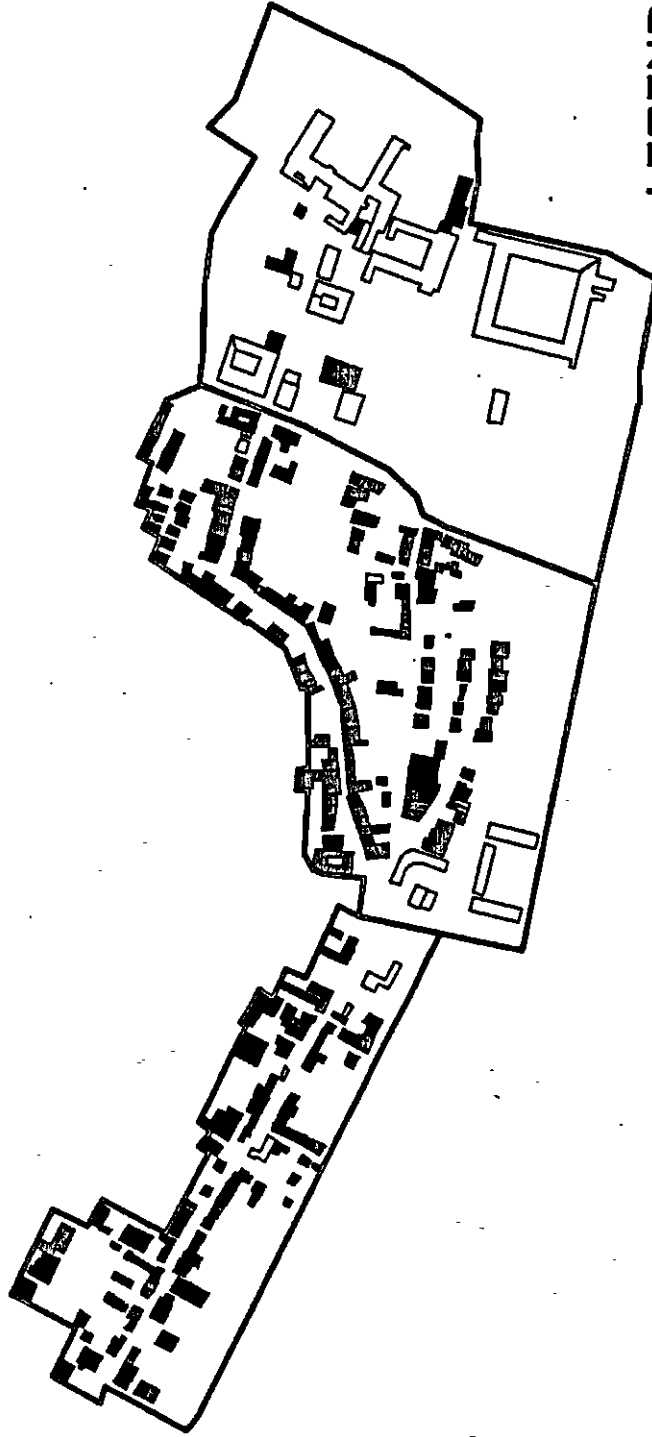
WARDS	BUILDINGS
1	6
2	177
3	116
Total	299

- INSTITUTIONAL BUILDINGS 17
- RELIGIOUS BUILDINGS 8
- TRADITIONAL BUILDINGS 274
- DEMOLISHED BUILDINGS 32





# PASHUPATINATH BUILDINGS BY TYPE



LEGEND.

TYPE.

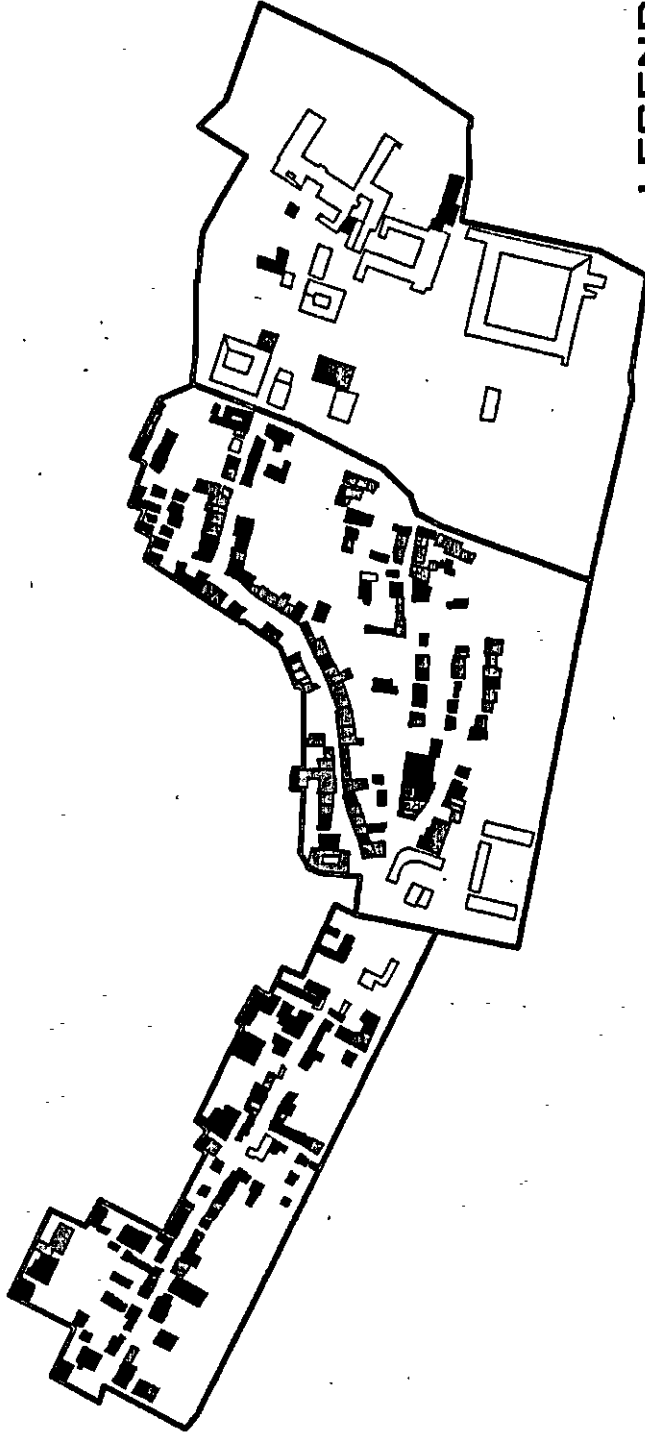
Historical	32	10,70%
Post-earthquake	105	35,12%
Reinforced concrete frame building	151	50,50%
Neovernacular	11	3,68%
<b>TOTAL</b>	<b>299</b>	<b>100,00%</b>



100 Meters



# PASHUPATINATH HYBRIDIZATION OF HISTORICAL BUILDINGS



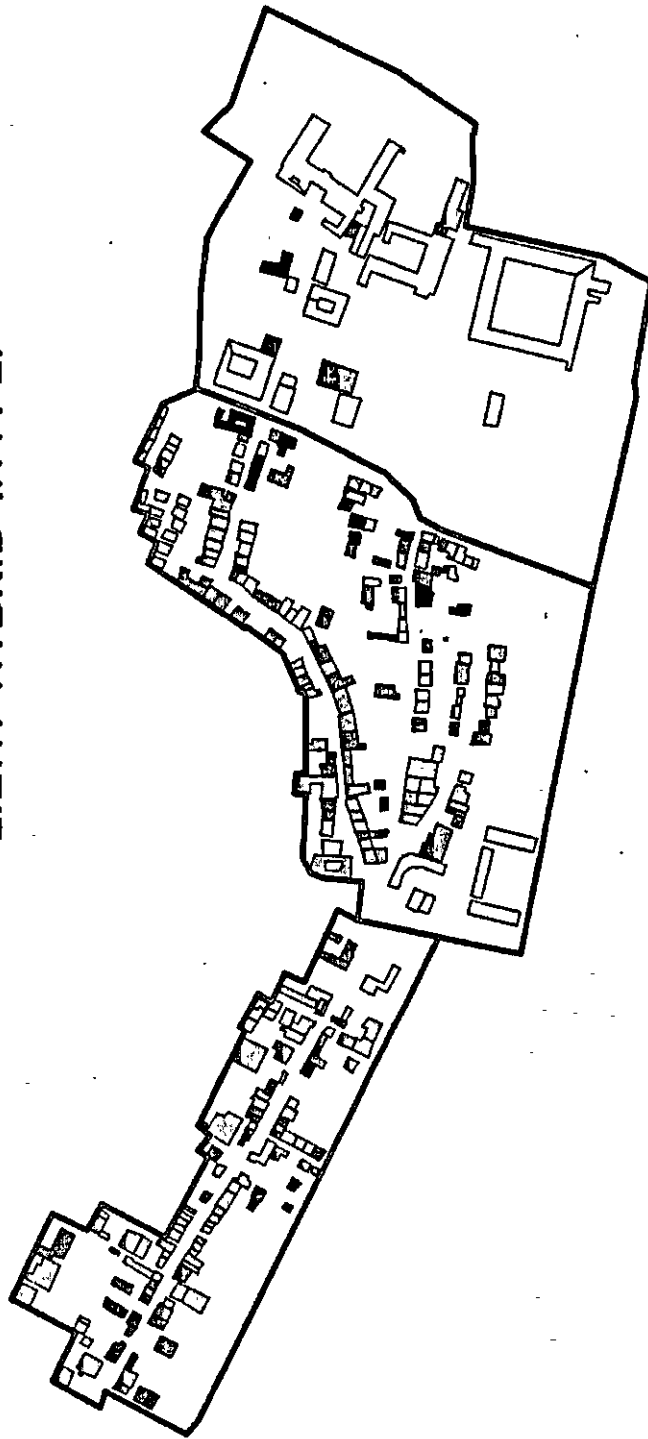
LEGEND.

TYPE.

Historical	13	4,35%
Post-earthquake	54	18,06%
Hybrid	70	23,41%
Reinforced concrete	151	50,50%
Neovermacular	11	3,68%
<b>TOTAL</b>	<b>299</b>	<b>100,00%</b>



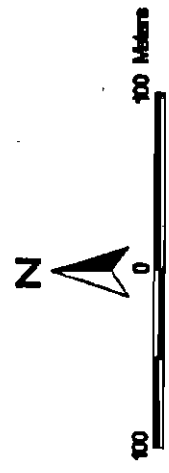
**PASHUPATINATH CLASSIFICATION OF BUILDINGS  
 HISTORICAL, POST-EARTHQUAKE,  
 LIGHT HYBRID (H+PE)**



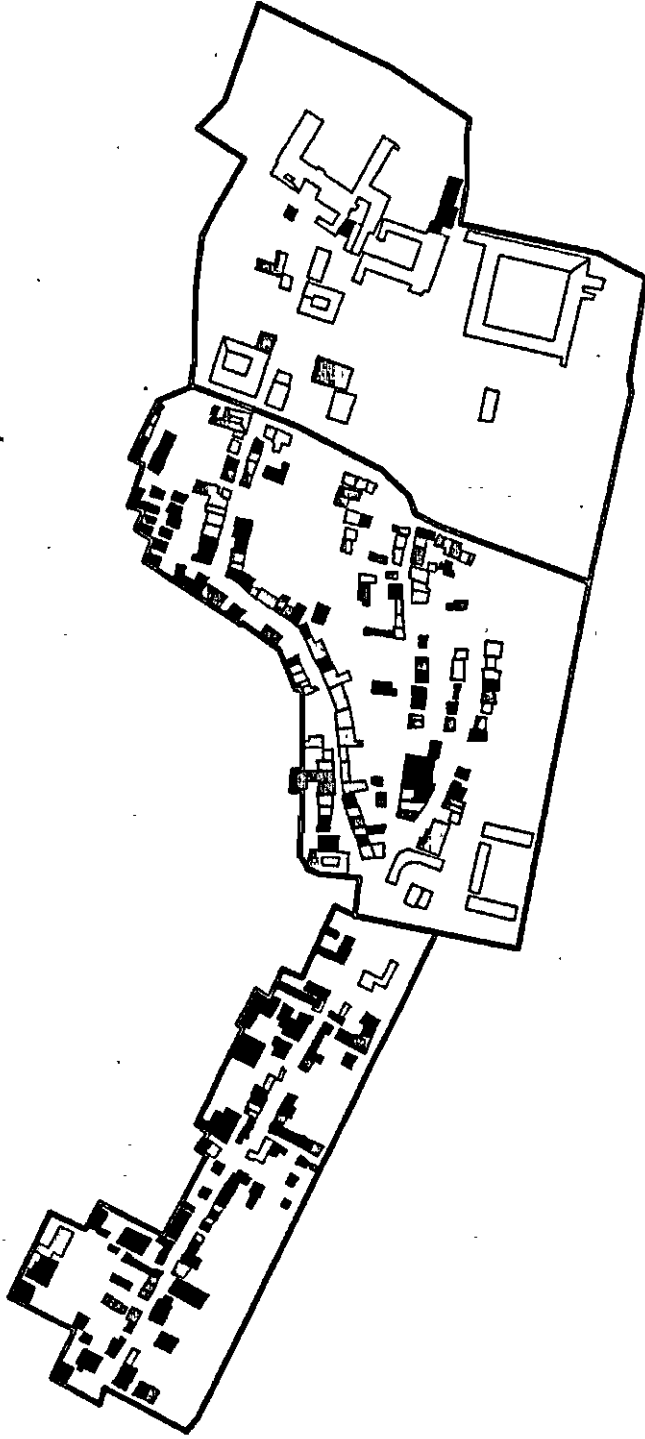
**LEGEND.**

**TYPE.**

■	Historical	13	11,11%
▨	Post-earthquake	54	46,15%
▩	Hybrid light	50	42,74%
<b>TOTAL</b>		<b>117</b>	<b>100,00%</b>






**PASHUPATINATH CLASSIFICATION OF BUILDINGS  
 REINFORCED CONCRETE FRAME BUILDINGS,  
 NEOVERNACULAR, HEAVY HYBRID (H+PE)**

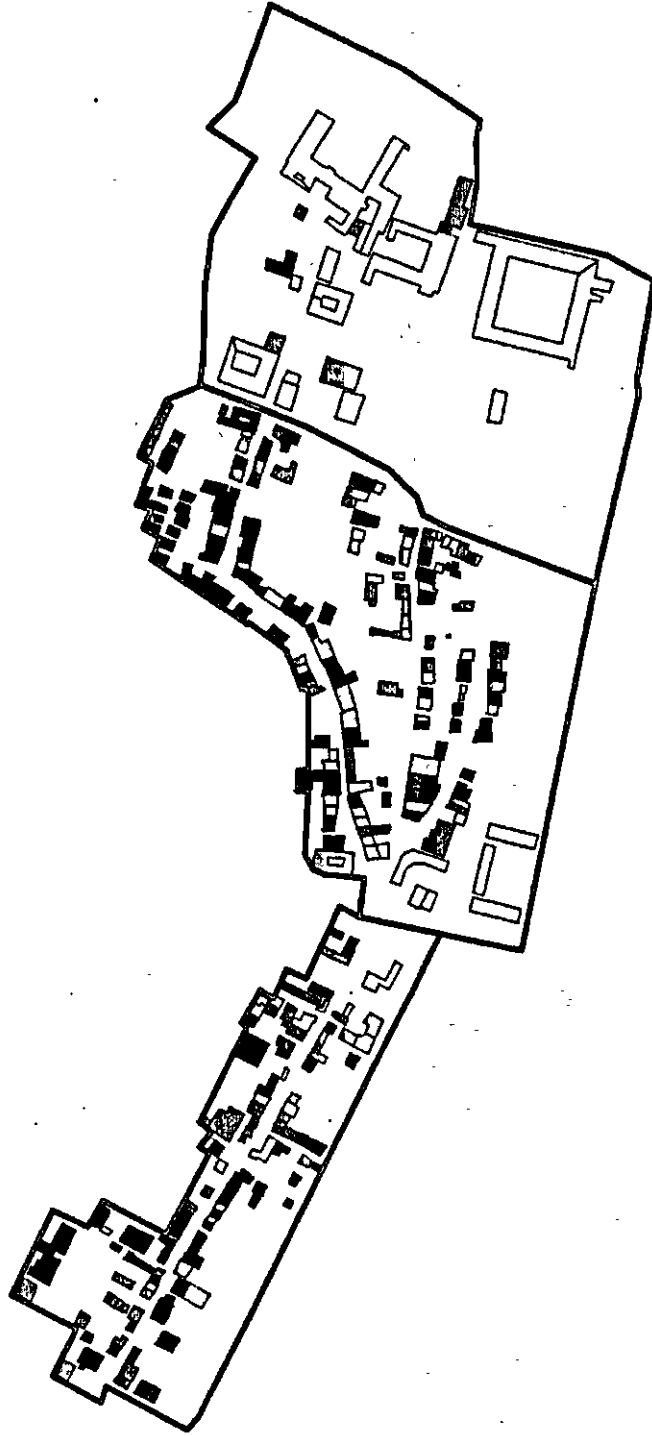


**LEGEND.**

**TYPE.**

	Heavy Hybrid	20	10,99%
	Reinforced concrete	151	82,97%
	Neovernacular	11	6,04%
	<b>TOTAL</b>	<b>182</b>	<b>100,00%</b>

# PASHUPATINATH STATE OF CONSERVATION

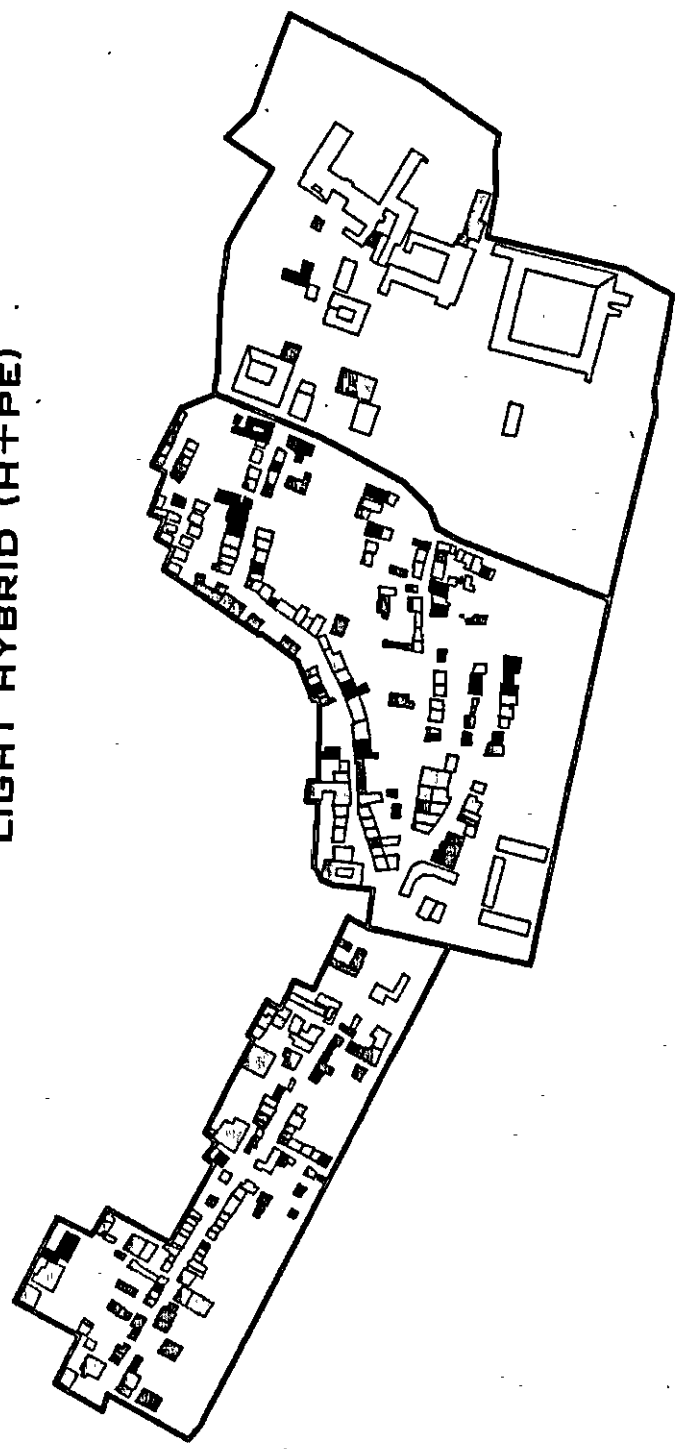


## LEGEND.

VERY GOOD	103	34,45%
GOOD	50	16,72%
MEDIOCRE	103	34,45%
BAD	35	11,71%
VERY BAD	5	1,67%
IN CONSTRUCTION	3	1,00%
TOTAL	299	100,00%

# PASHUPATINATH

STATE OF CONSERVATION  
HISTORICAL, POST-EARTHQUAKE,  
LIGHT HYBRID (H+PE)

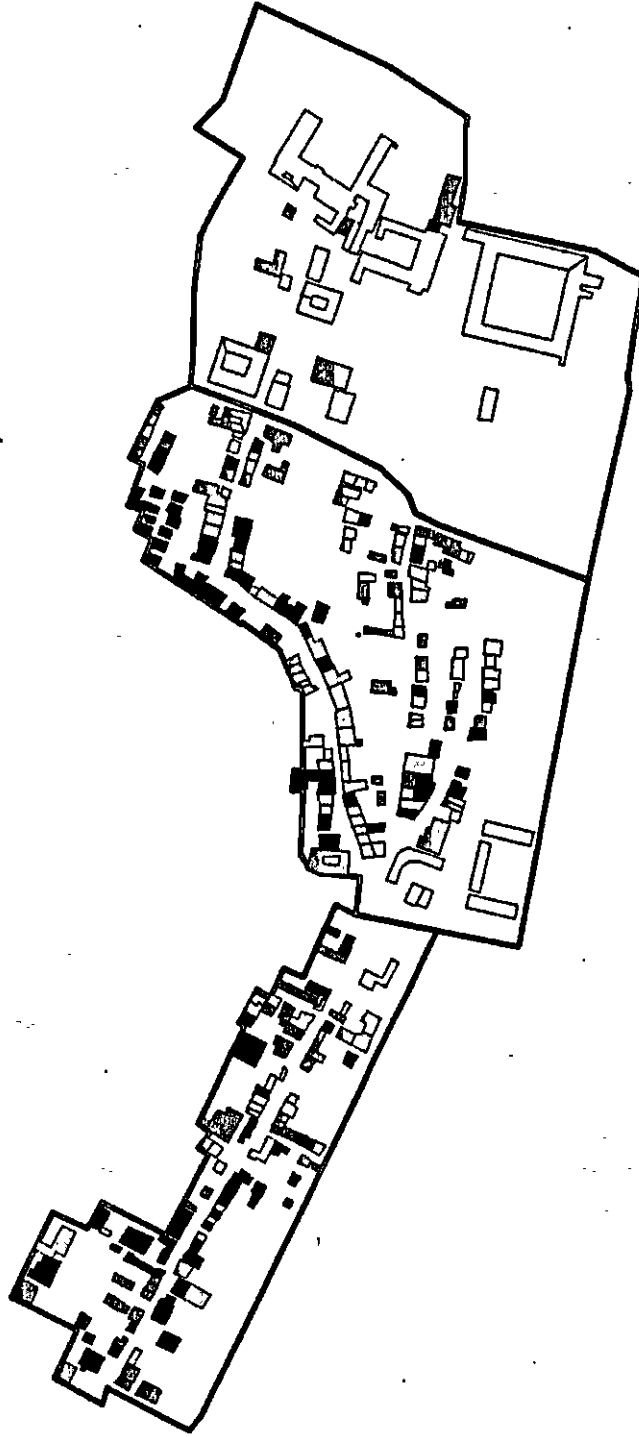


## LEGEND.

VERY GOOD	15	12,82%
GOOD	19	16,24%
MEDIOCRE	57	48,72%
BAD	22	18,80%
VERY BAD	4	3,42%
TOTAL	117	100,00%

# PASHUPATINATH

STATE OF CONSERVATION  
REINFORCED CONCRETE FRAME BUILDINGS,  
NEOVERNACULAR, HEAVY HYBRID (H+PE)



## LEGEND.

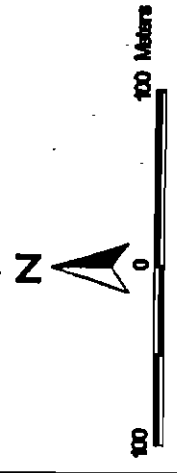
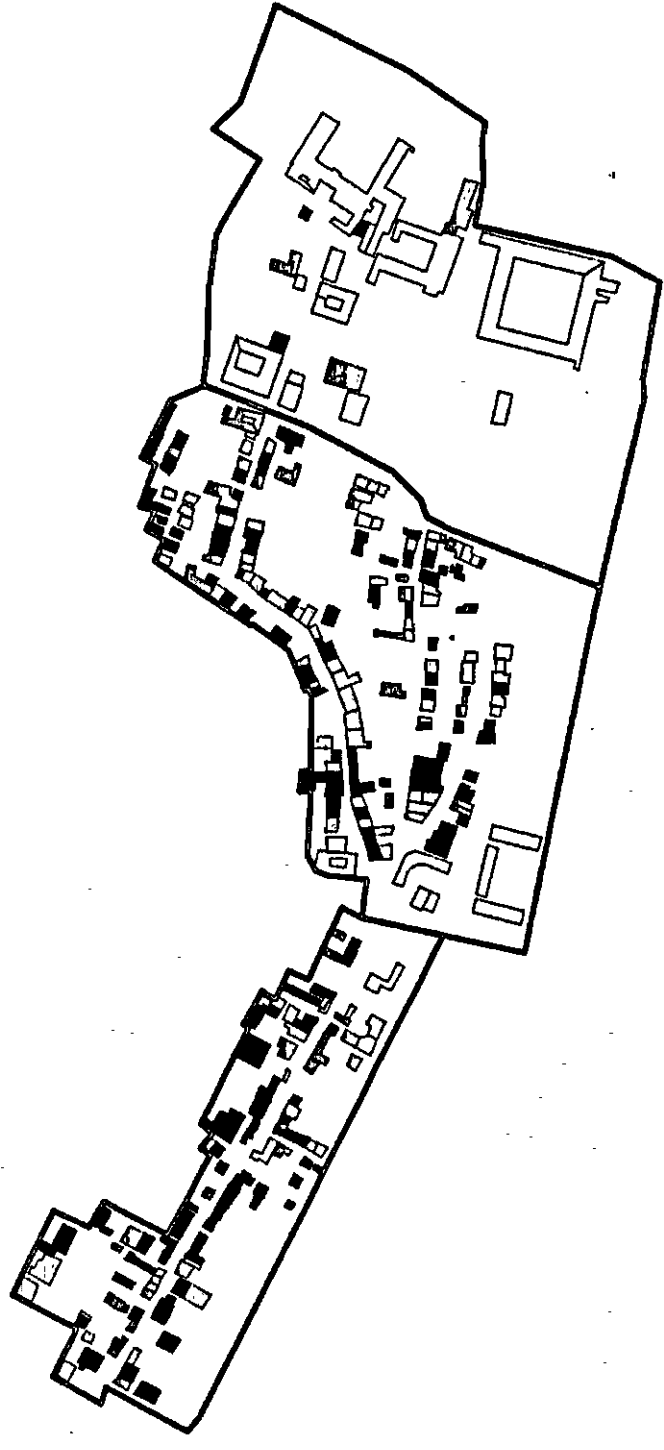
VERY GOOD	88	48,35%
GOOD	31	17,03%
MEDIOCRE	46	25,27%
BAD	13	7,14%
VERY BAD	1	0,55%
IN CONSTRUCTION	3	1,65%
TOTAL	182	100,00%





100 Meters

100

# PASHUPATINATH ILLEGALITY

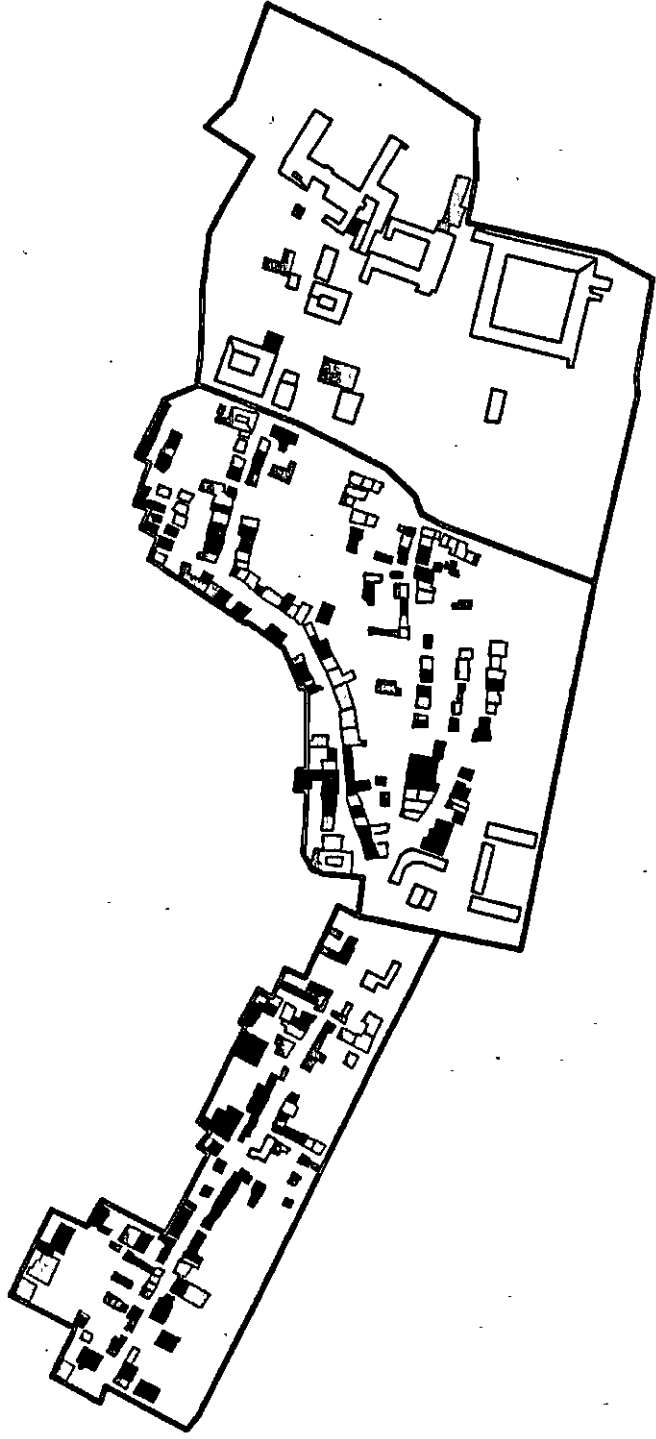


## LEGEND.

Illegal Buildings		
	Illegal	157 52.51%
	Legal	142 47.49%
	total	299 100.00%



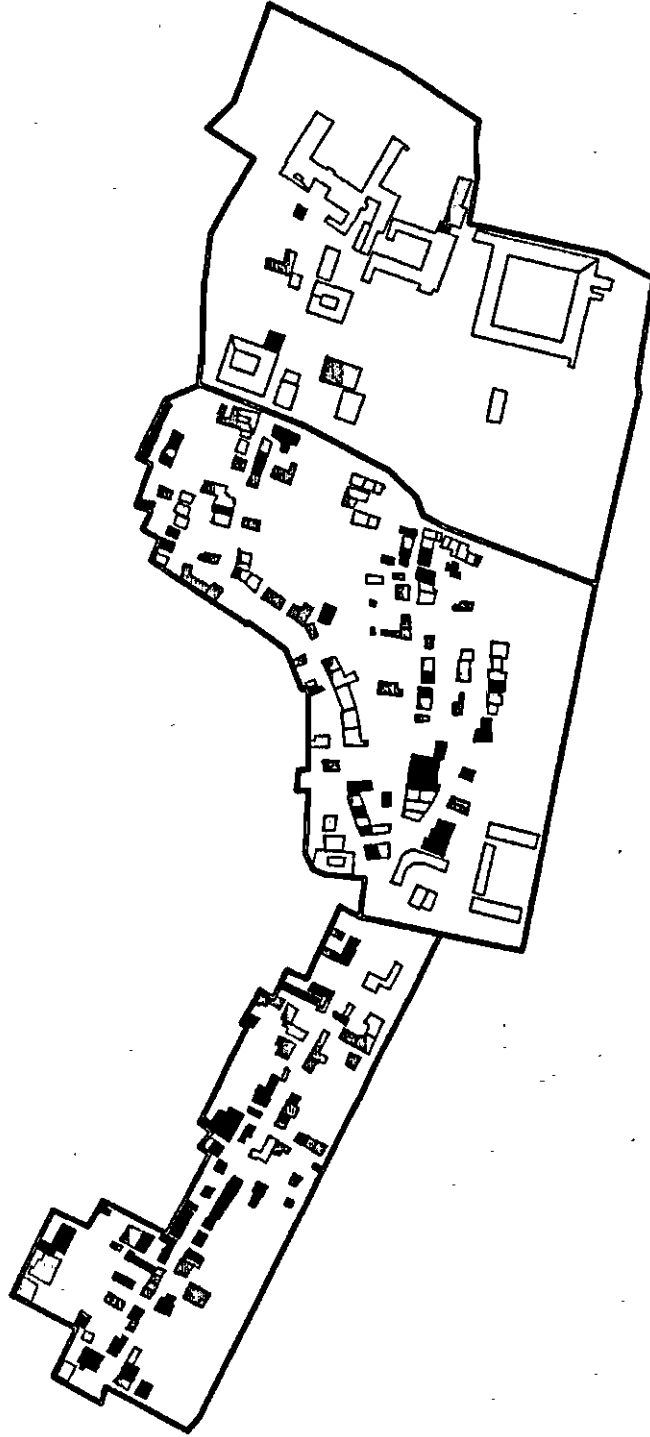
# PASHUPATINATH ILLEGALITY BY FAÇADE



## LEGEND.

	Illegal by façade	71	45,22%
	total illegal	157	100,00%

# PASHUPATINATH ILLEGALITY BY HEIGHT.



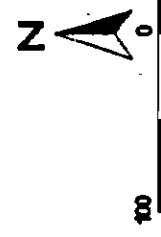
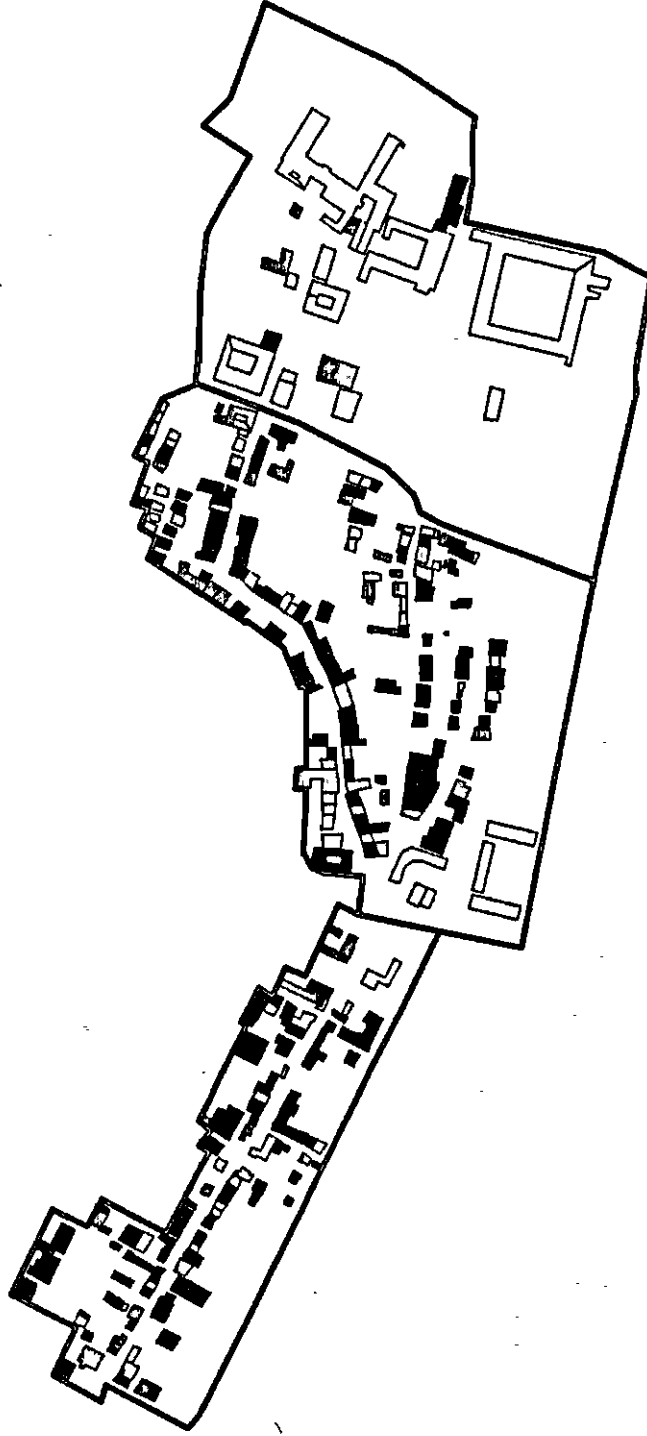
100 Meters

100

## LEGEND.

■	Illegal by height	36	22,93%
■	total illegal	157	100,00%

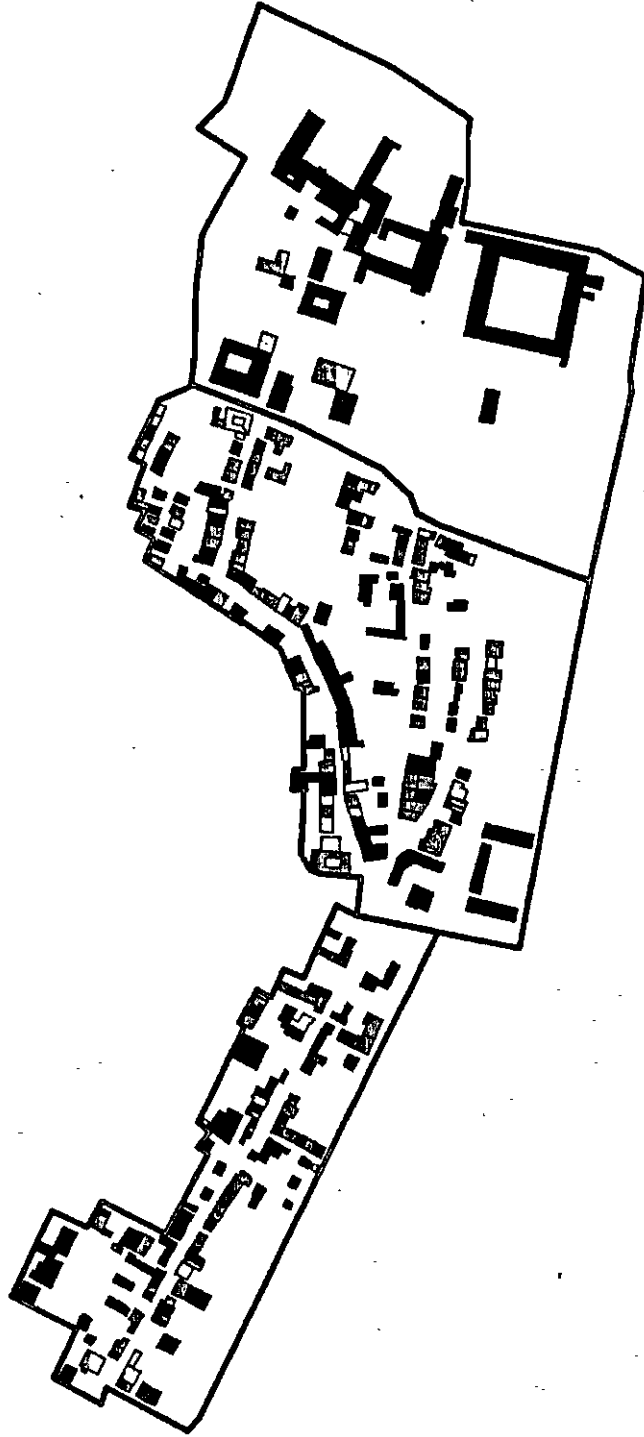
# PASHUPATINATH UTILITIES.



## LEGEND.

■	WATER+POWER	186	86.51%
■	ONLY WATER	2	0.93%
■	ONLY POWER	27	12.56%
■	TOTAL	215	100.00%
□	NO INFO	84	

# PASHUPATINATH TYPE OF OCCUPANCY



## LEGEND.

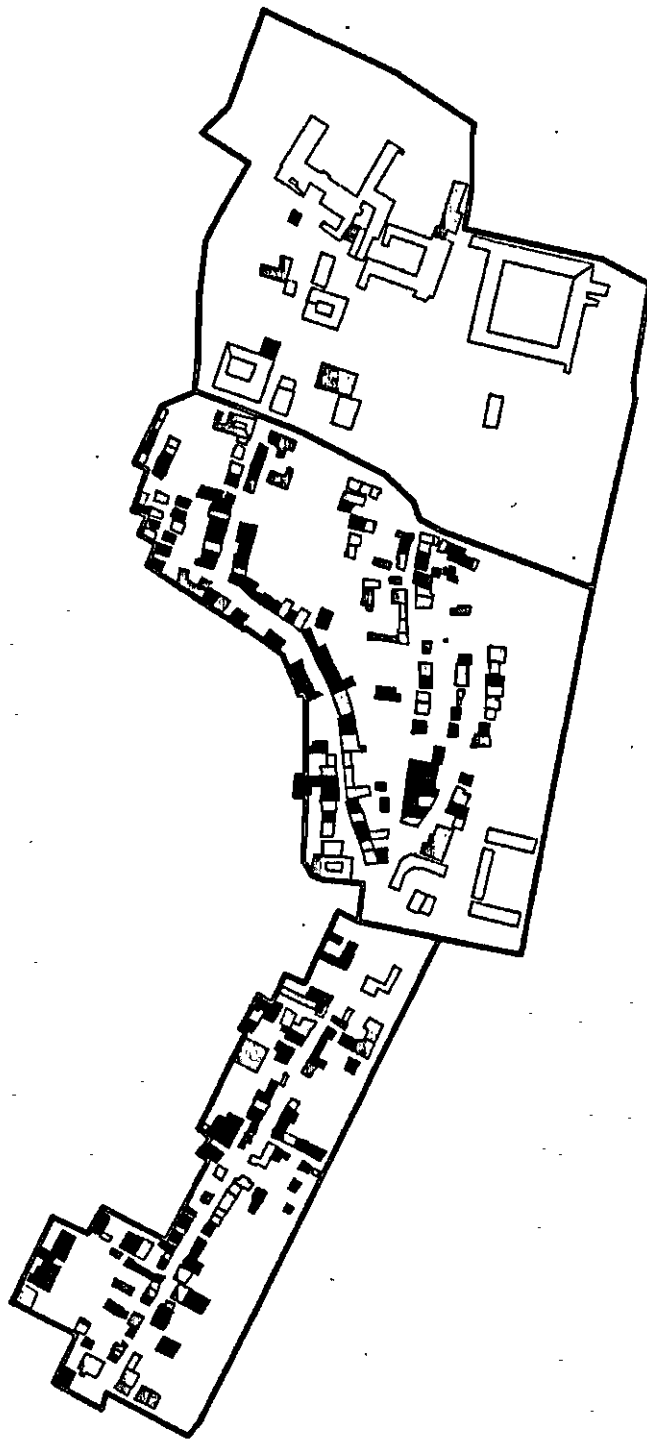
OWNER	116	42,18%
RENT	6	2,18%
OWNER/RENT	100	36,36%
RELIGIOUS	23	8,36%
INSTITUTIONAL	29	10,55%
FACTORY	1	0,36%
TOTAL	275	100,00%
no info	58	



100 Meters

100

# PASHUPATINATH OWNERS' INTENTIONS



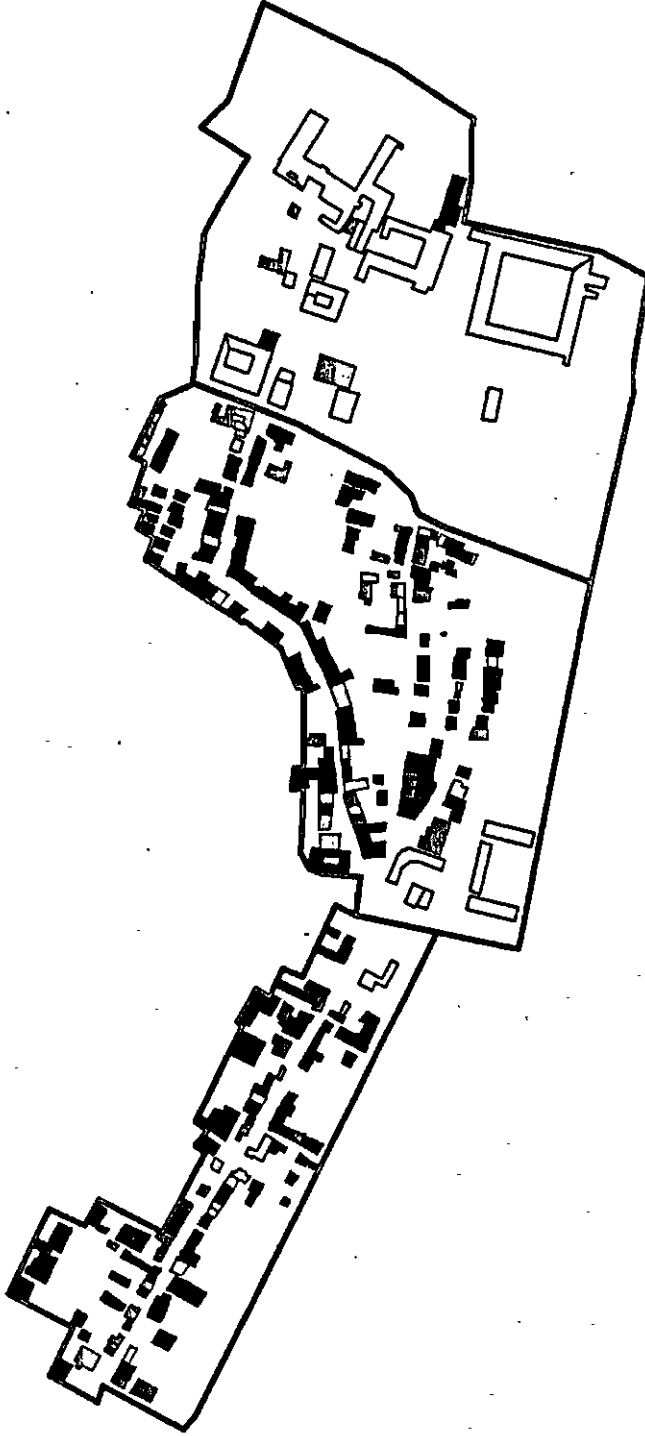
## LEGEND.

	TO CHANGE	26	14,05%
	TO KEEP	127	68,65%
	TO SELL	4	2,16%
	TO RECONSTRUCT	28	15,14%
	TOTAL	185	100,00%
	no info	114	



100 0 100 Metres

# PASHUPATINATH PRESENT LAND USE GROUND FLOOR

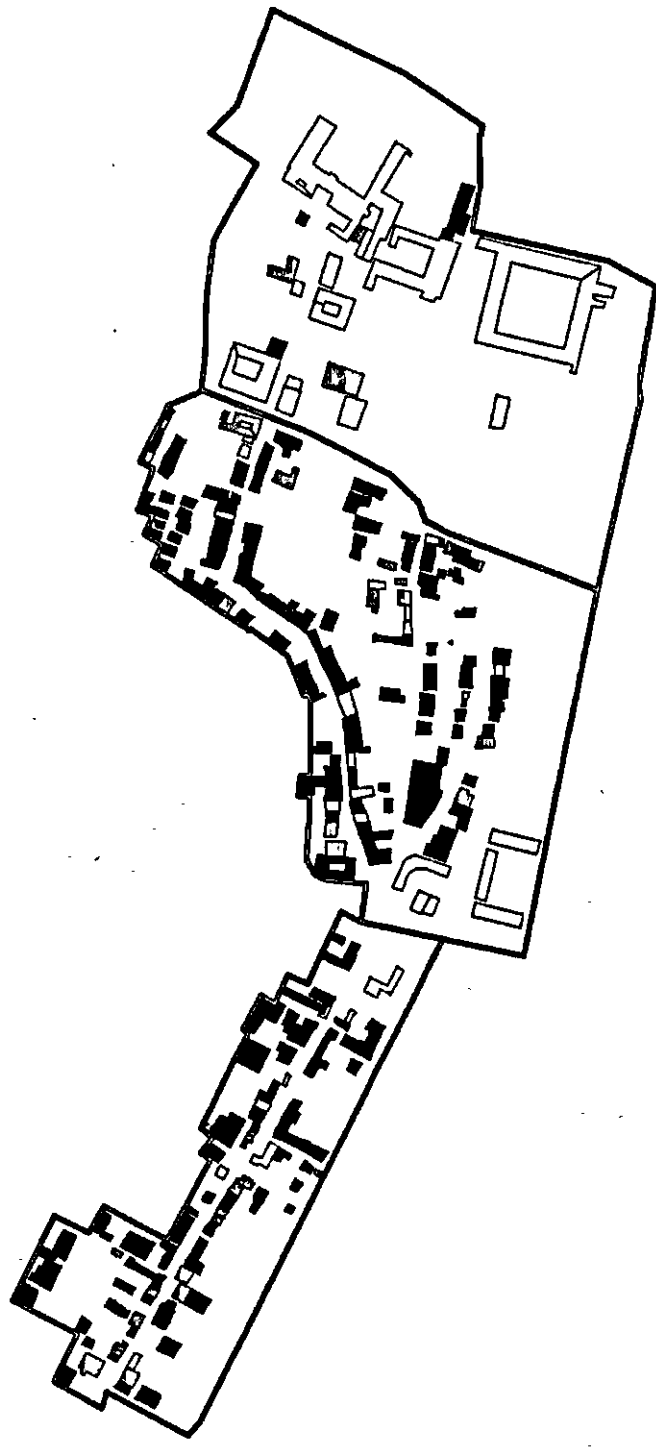


## LEGEND.

DWELLING	119	49.17%
DWELLING / COMMERCIAL	25	10.33%
COMMERCIAL / TURISTIC	80	33.06%
RESTAURANT	6	2.48%
HANDICRAFTS	1	0.41%
OTHER	5	2.07%
EMPTY	6	2.48%
TOTAL	242	100.00%
no info	57	



**PASHUPATINATH PRESENT LAND USE  
UPPER FLOORS**

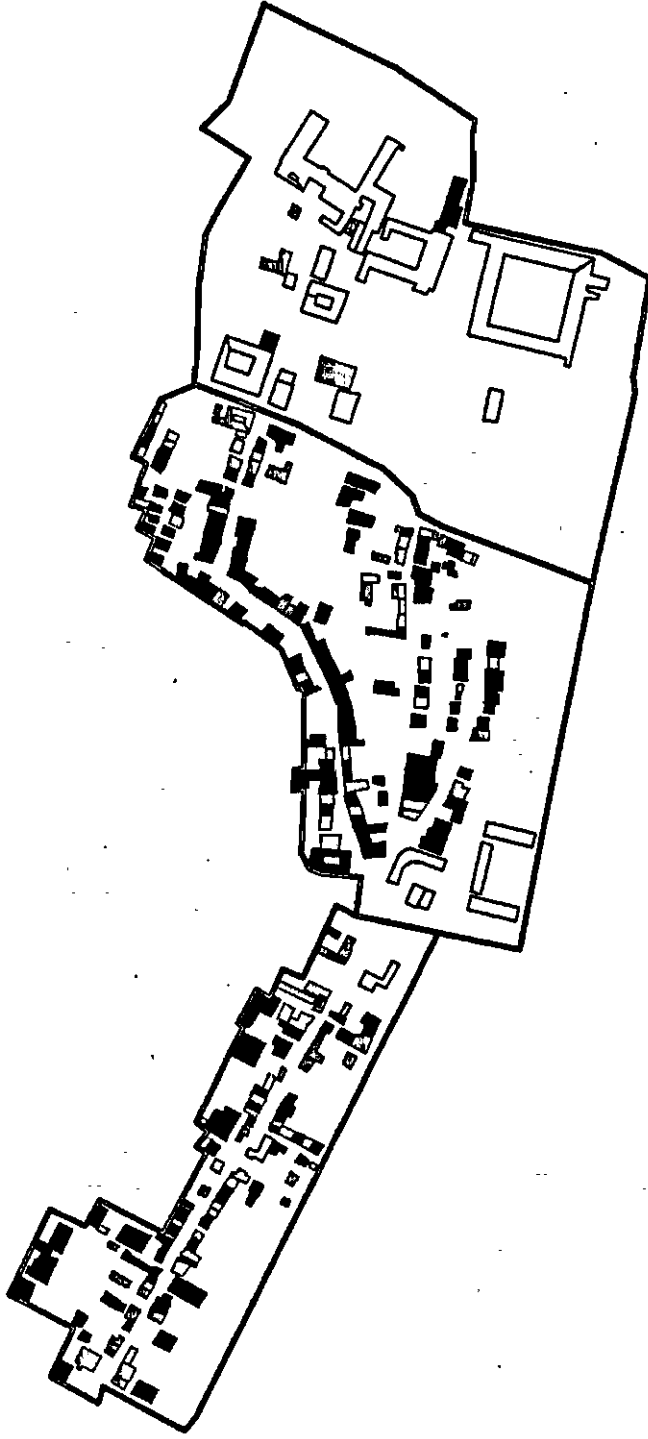


**LEGEND.**





	DWELLING	228	95,80%
	HOTEL	1	0,42%
	OTHER	8	3,36%
	EMPTY	1	0,42%
	TOTAL	238	100,00%
	no info	61	

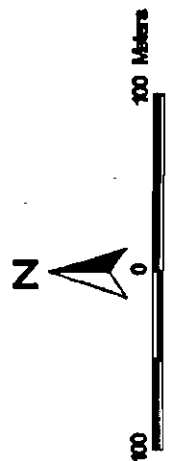


# PASHUPATINATH NUMBER OF FAMILIES IN EACH BUILDING



## LEGEND

	1	166	63,78%
	2	37	16,16%
	> 2	46	20,09%
<b>TOTAL</b>		<b>229</b>	<b>100,00%</b>
	no info	70	





Pashupatinat: photos

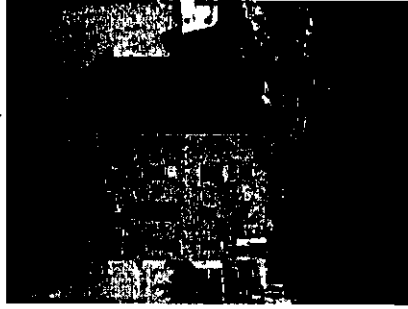
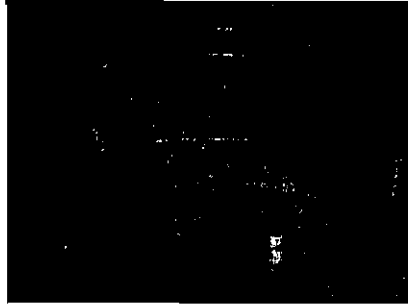
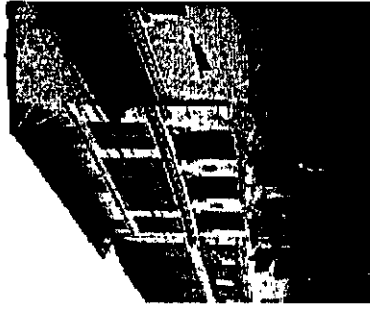
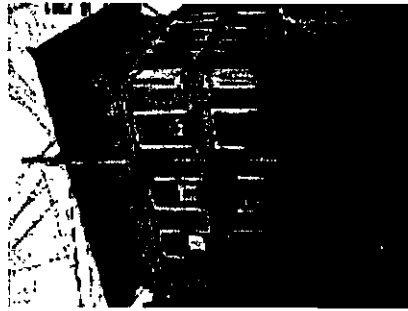
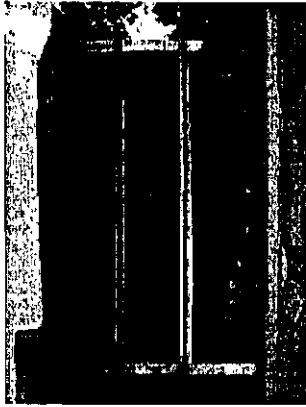
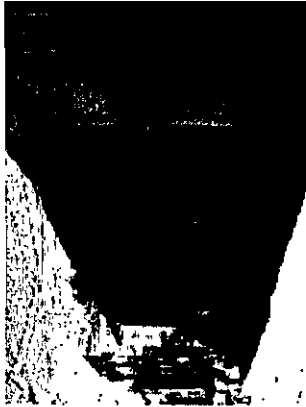
photos Michele Miegge  
art. Cesar A. Varela



Deopatan area

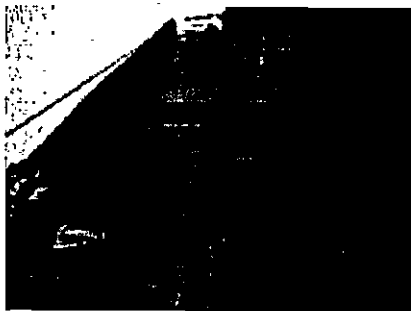
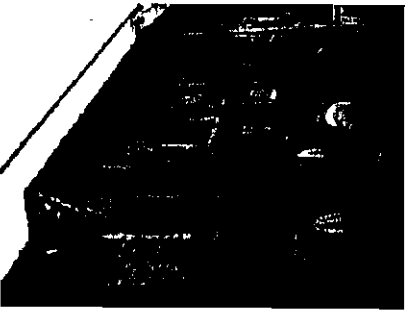
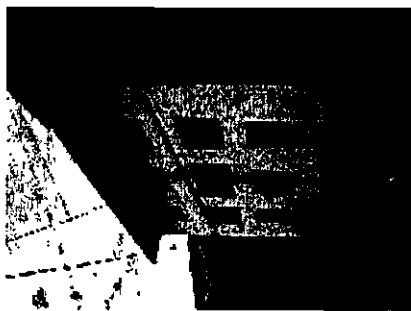
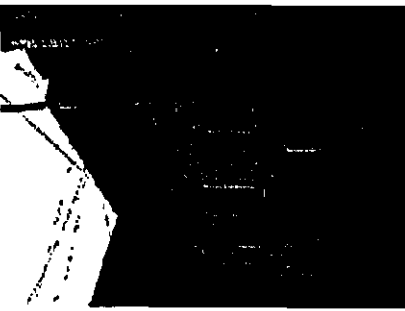
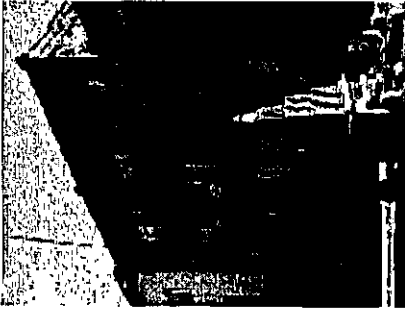
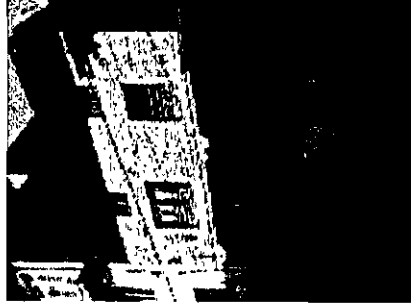
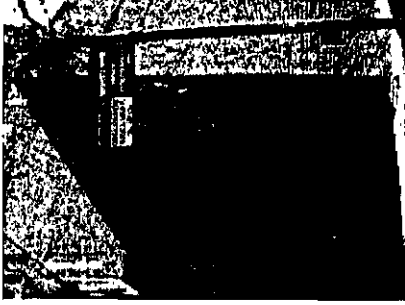
historical buildings

prova Michele Melegre

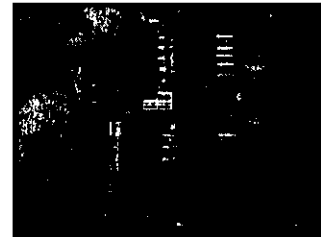
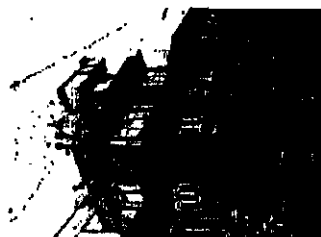
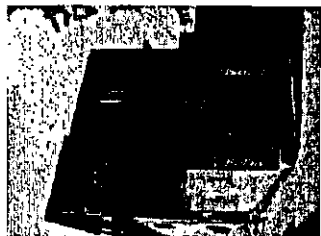


post earthquake buildings

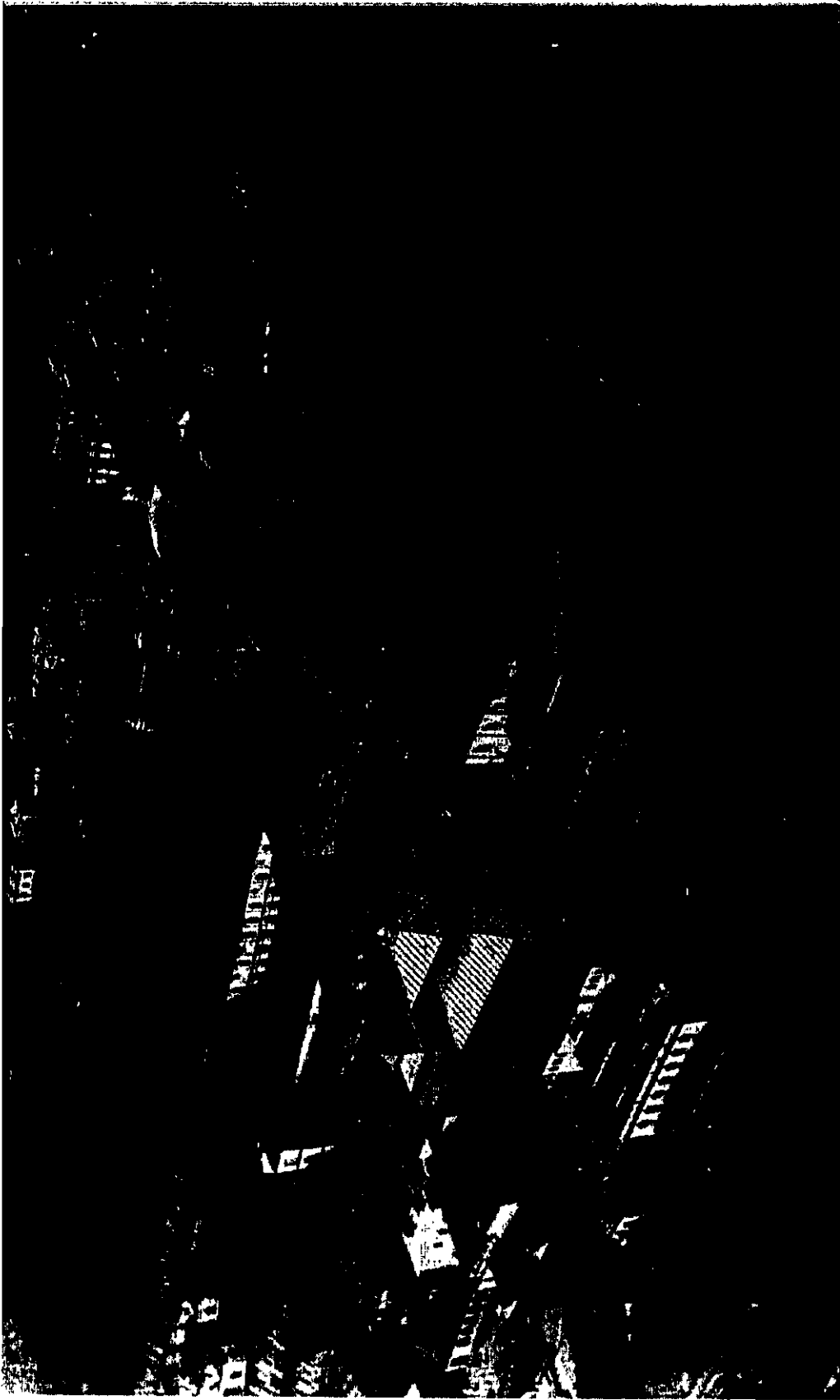
photo: Marco Maggi



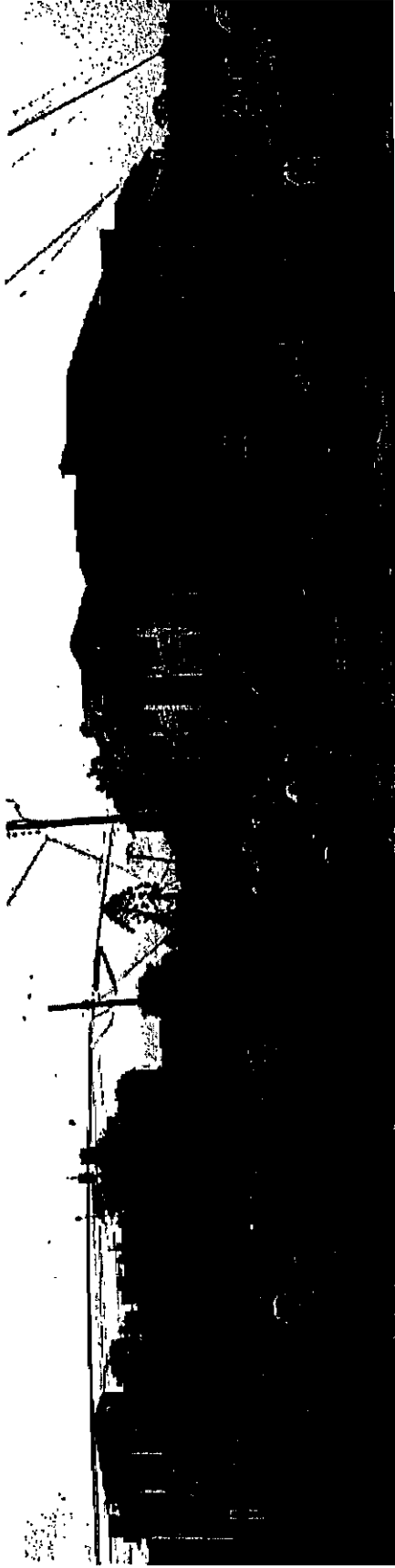
reinforced concrete frame buildings  
photo: M. M. M. M.



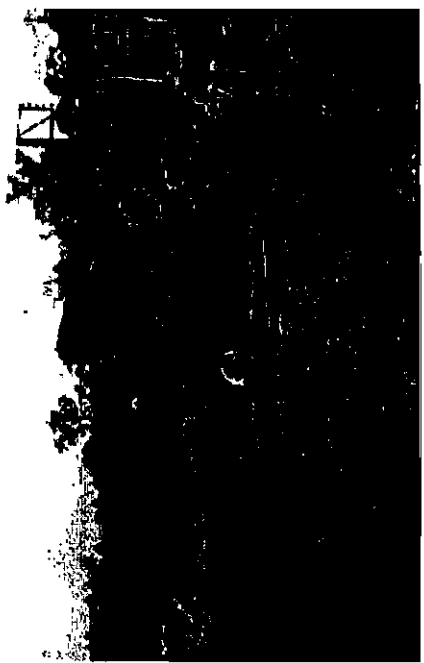
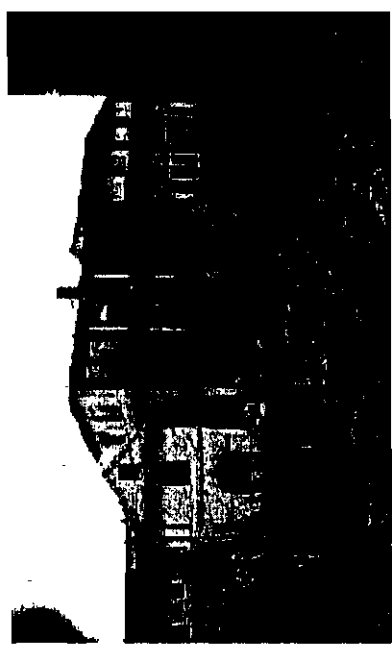
the area 60 years ago



demolition works. before and after

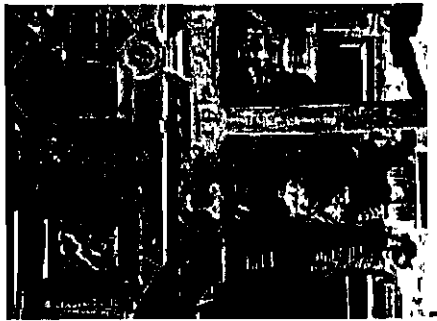


demolition works. before and after



# 2000 - 2003 some examples of evolution

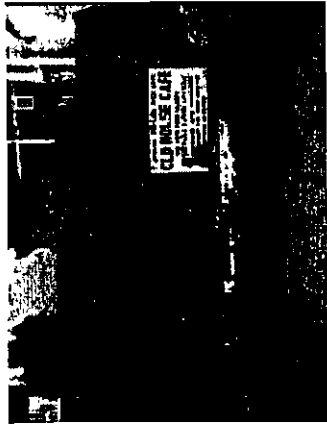
photos Michele Mlegge



2000



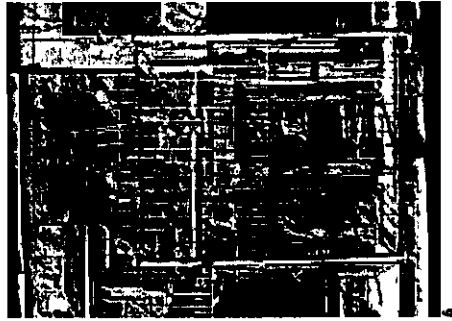
2000: small temple in Bhaktapur



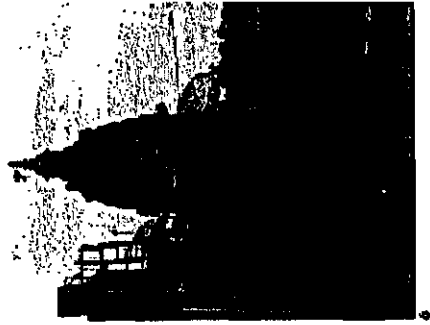
2000: Patan Durbar Square



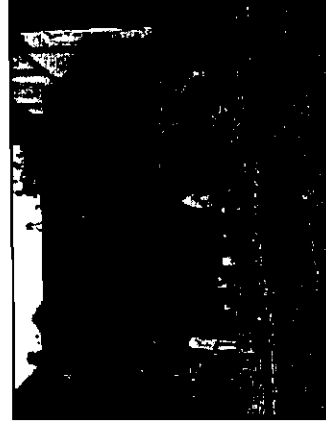
2000: Patan dhoka area



2003: protection against theft, robbery are still under control



2003: temple was restored but main worshipping practices disappeared



2003: restoration by Kathmandu Valley Preservation Trust



2003: pond restoration by local ngo