



Kungl. Konsthögskolan | Royal Institute of Art

Inclusive India – Re: Pune

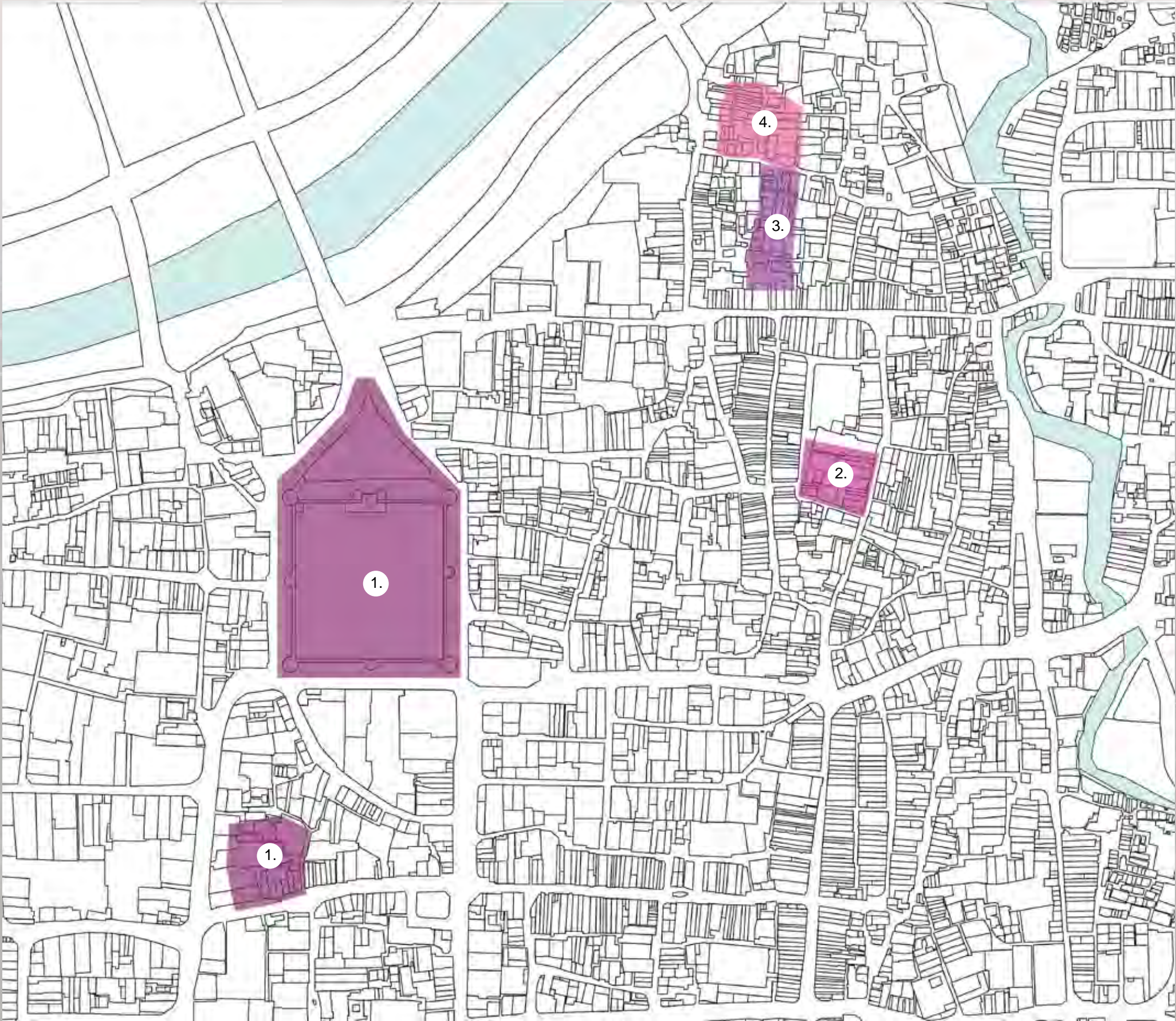
To conserve and to preserve the cultural heritage, its architecture and stories, when re-developing a historic city is a challenge with a multitude of possibilities and resources.

The ever-increasing pace of urbanization has been met by small scale strategies in the projects proposed by the students of Architectural Conservation, 2011/2012, Mejan Arc, Royal Institute of Art, Sweden

PUNE INDIA



Pune central city from Google Maps. Project area marked in pink.



Project area in Pune old city core. 1 - Karale Wada / Shaniwar Wada, 2 - Sinnarkar Wada Hotel, 3 - Fish Market Street, 4 - Kumbhar Wada.

LIST OF CONTENTS

Introduction	1
History of Pune	2
Present Situation	5
Listed Buildings	8
Morphology / Typology	10
The Colours of India	14
Sustainability	18
Cultural Heritage Values	22
Proposed Framework	25
Projects KKH	
Karale Wada / Shaniwar Wada	26
Sinnarkar Wada Hotel	42
Fish Market Street	56
Kumbhar Wada	64
The Ritual Landscape	74
Conclusions	80
Biography	81



INCLUSIVE INDIA - RE:PUNE

PRESERVATION AND DEVELOPMENT STRATEGY FOR PUNE HISTORIC CORE

Background and purpose

All Indian cities and towns are facing tremendous pressures in terms of population influx and economic growth which is leading to direct and indirect impacts on environmental resources, the health and wellbeing of people, the equitable distribution of resources and the overall social and built fabric. While these impacts have been identified to a certain extent, municipal bodies in India are ill-equipped and lack the capacity to conduct research on and devise strategies for alternatives for dealing with them. Conventional methods of planning are failing to keep up with the demands, needs and aspirations of the citizens. In addition, municipal bodies, while trying to catch up with the task of providing infrastructure to the cities, often end up with stop-gap planning measures and initiatives which contradict the principles of sustainable development, as well as the preservation regulations for their historic quarters. Broad areas of urban planning such as strategic long-term planning and holistic systematic approaches, as well as more specific ones such as heritage conservation or environmental restoration are seldom considered in the agendas of municipal authorities. Even where these aspects are considered, rarely do officials have the capacity to incorporate such approaches in their work. Property rights and land value issues overshadow building value and the will to form a proper development plan for the city – particularly for the historic city core – with building regulations, as well as solutions for traffic and public transport.

This has resulted in the neglect of commonplace but historic buildings that are as valuable to the urban landscape as the archaeological sites, the only category to receive any legal protection. Even INTACH, the Indian National Trust For Art and Cultural Heritage, is usually concerned with specific heritage zones, rather than the more ordinary ones affecting residents living in neglected historic city centres. This architecture is seldom a monument in itself, but it contributes to an important context for the identity and character of the place and its people and forms an integral part of the whole. For this reason even simple buildings should be safeguarded in historic areas. In the Pune city core area there is only one national monument – the fortress of Shaniwar Wada – which means that the only legally protected building in the area is Shaniwar Wada and the area around the monument. Shaniwar Wada is protected with a 100–300 meter buffer zone with higher protection closer to the monument. All other historic buildings are deteriorating as there are no protective programmes for these buildings, even if they form the majority of the historic city core representing its history, the life lived here for generations and is an integral part of the city itself. As INTACH states ‘for many communities and groups in the country, the intangible cultural heritage is the essential source of an identity, deeply rooted in the past’. Intangible values are of the greatest importance in the Indian context, values easily lost if not considered in urban planning.

Preservation Challenges

The historic core of Pune is seriously neglected, despite its rich cultural-historical values and evidence of the city’s past for future generations. These assets are not taken into consideration in development plans for the city. Besides the national monument of Shaniwar Wada, INTACH has identified around 200 more buildings on its heritage list. These vary from temples, to private residences and public buildings to bridges. Apart from this, INTACH also has identified heritage precincts – areas with a particular distinct character – either architectural or due to the nature of the activities which take place there. Of this list, more than a hundred buildings have found a place on the heritage list adopted by the Pune Municipal Corporation (PMC).

Pune Municipal Corporation is mandated by the State government to prepare a heritage list and work towards the protection of the listed structures. The Central government’s urban development department has published model building by-laws for Indian cities in which an entire chapter is dedicated to conserving buildings listed on the heritage lists. The situation on the ground, however, is that very few cities have a heritage list and fewer still have any legal protection granted through approved by-laws. Pune, too, has had a list for more than 10 years but the list has not been formally adopted. There are no heritage by-laws adopted to date in the development plan of the municipal corporation. The corporation has set up a heritage committee to look into matters concerning heritage buildings, but the committee only has recommendatory powers. The system is such that there have been cases where the committee has been completely bypassed. The heritage section of Pune Municipal Corporation has however undertaken conservation works of a few important sites, for instance, Vishrambaug wada, Nana wada, Kasba Ganapati temple, Trishund Ganapati temple and Nageshwar temple.

The kind of provisions in Pune’s development plan have also been problematic for creating a climate favouring conservation. The building by-laws and their successive modifications have consistently increased the allowable FSI (Floor space index or lately termed as FAR: Floor Area Ratio) in the core city. It has also gradually allowed more and more commercial land-use in this area. This results in increased land values and more pressure on property owners to redevelop their old buildings. This process happens invariably through agencies called Promoters and Developers. Their role is to acquire a property (or acquire its development rights), compensate the owners for the land costs, compensate the tenants for whatever they are entitled to and then sell the remaining redeveloped property on the open market. With the increase in the FSI, this portion of the remaining property goes on increasing, thus the probable profits from redevelopment, thus the pressure to demolish old buildings. Selling redeveloped property for commercial uses fetches more profits, hence the pressure is even greater.

The problems of the core city have increased with no compre-

hensive traffic policy and no provision of effective mass transport in the city. Road widening is the only tool employed to address traffic problems. This has taken a toll on old buildings abutting narrow roads. Infrastructure development has not kept pace with private redevelopment. So there is an overload on all kinds of infrastructure. Due to all this, life in the core is perceived as difficult and unattractive, compared to the perception of a better life in the suburbs. Despite a large section of population still finding merit in living in the core city, these pressing problems push them daily towards the decision of migrating outside the core city or at least, acquiring a brand new apartment in a redevelopment scheme.

To add to the woes of the residents is the Rent Control Act. This Act has more or less frozen rents in the core city where majority of the historic housing is rental. The frozen rents are unreasonably low – many times lower than the cost of a single meal. It is impossible for owners of old buildings to maintain their property through these rents, let alone receive any meaningful income. The buildings therefore become liabilities to the owners and they are frequently more than happy to sell them off to a developer. The tenants on their part suffer a dilapidated building due to no repairs or maintenance being carried out by the owners. Property owners rarely allow tenants to invest their own money in repairing buildings for fear of any legal claims arising from the process. The tenants also then look forward to a new apartment on an ownership basis in the redeveloped building.

Thus the challenges for preservation of the core city are manifold. INTACH has been involved in the city for more than 20 years and has studied and documented it, participated in projects, initiated a few, worked with communities, worked with the municipal corporation and parallel to all this, formulated its own view on core city development. INTACH has come to a point where it wants the municipal corporation to declare the entire core city area a heritage zone, subject to special planning provisions. It is convinced that larger issues like FAR, land-use policy, traffic management, and rent control are the real tools through which preservation of the core can be guaranteed. No matter how much awareness it generates among the masses, no matter how vigilance it keeps through the citizens, the pressure of real estate values and collapsing infrastructure is going to prove greater.

The Project’s Objectives

The main objective of the project, which has been financed by SIDA (Swedish International Development Cooperation Agency), Royal Institute of Art and BNCA (Dr Bhanuben Nanavati College of Architecture for Women), was to develop and put into practice an academic applied research program model, engaging professionals in India and Sweden. The model, a scenario workshop being part of it, aims towards engaging professionals from all segments of society implementing the latest research outcomes in their daily practice, through a critical and design based year-long study of all aspects of the sustainable development and conservation of Pune historic core, including issues of equity and environmental diversity within the Indian urban context. The project aims at supplementing the efforts

of local governments by empowering the role of academics – thereby linking urban environmental research to practice.

The project is a collaborative studio undertaking between the Architectural Conservation department at the Royal Institute of Art in Stockholm and BNCA in Pune, with participation of INTACH (Indian National Trust for Art and Cultural Heritage) Pune Regional Chapter, directed at safeguarding the tangible and intangible heritage of Pune City Core. The project aims at setting a framework for preservation issues relevant for Indian city cores in general and Pune city core in particular. A few concept proposals for conservation, renewal and development are presented of areas of special interest from different aspects, unique or simple, but still important to the urban context as a whole, but easily neglected due to the simplicity of the building stock. The proposals are designed to bring about the changes through inclusive and participatory planning, this being an important element of a sustainable planning process, even if it has not been possible to carry out that part of the aim in this study.

The proposals are based on international charters like The Valletta Principles for the Safeguarding and Management of Historic Cities, Towns and Urban Area, ICOMOS 2011 and the guidelines of INTACH, as for example that on environment which states: *‘In a world of increasingly ubiquitous new buildings, where a redeveloped town centre looks very much like another, historic buildings by their layout, form and materials can often give an important sense of place and identity that would otherwise be lacking.’*, describing the sense of place, or *‘Historic areas, built with local materials display mature townscape qualities that have evolved over a long period and which are not always easy to achieve in the comprehensive redevelopment of today.’*, describing the value of the townscape.

The study area has been part of the heritage area of Pune city core. This core is not just a building stock, but a tangle of socio-cultural institutions, communities, livelihoods, associations, collective knowledge, history, places and territories. All these are the city’s heritage and its peoples’ habitat. The objectives of the project has been to arrive at ideas, recommendations and frameworks for innovative planning models for Pune city core, to enable the care, repair and conservation of its built fabric, as well as a sensitive development and deployment of existing historic values as a recourse and potential for local inclusiveness by offering a few proposals which illustrate this. Issues of identity, liveability, equity, environmental sustainability and justice have been the primary focus for the project, coming from an inclusive approach based on continuity, identity and small scale solutions. The Pune City Core project has studied the role of tangible and intangible heritage as an integrated part of sustainable development.

The focus of the study has been:

- Identify the remaining built heritage in the study area
- Identify the threats and risks that affect their values
- Find small scale inclusive solutions for preservation and development

To carry out the study the following steps have been done

- Collecting all existing historical and later maps of the area
- Create a base map in GIS, a simpler version in this phase
- Formulate a framework for the preservation work

Methodology

The suggested applied research program will address inclusive urban development through researching a specific urban historic context of India, considering different local potentials. The program is practiced as a collaborative one-year course, including seminars and workshops. These activities will involve exchanges of participants from the two academic institutions and closely-related NGOs and municipalities, as well as international experts. The research objective of this collaborative exchange is to bring into focus concerns so far unrecognised in the development agenda and suggest ways to include these in the planning process.

The scenario methodology has been applied as one of the methods to investigate different probable outcomes of the city’s development policy and mechanisms and thereby arrive at preservation approaches for Pune Historic City Core.

Proposals are developed within the general framework of international charters, especially the Valletta Principles for safeguarding historic cities, as well as the guidelines and definitions of INTACH through a design-based research methodology.

The definitions of values for the historic urban landscape are based on the Valetta Principles as well as:

- describing the historic city core as a unique urban fabric depicting the history and the identity of the place and its inhabitants,
- perceiving the urban fabric as a monument where all elements are interrelated and create a whole, even if individual elements are simple buildings
- demonstrating how the testimony of historic layers created by additions and changes from different periods illustrates the development of the area
- identifying focal points as important ‘nodes’ in the urban landscape for the intangible values of the local neighbourhood
- deriving the concept of authenticity from the notion that authenticity of intangible values offers an important understanding of the urban space

The work has been conducted according to the principles of the Venice Charter with the preparation of inventories and documentation prior to analysis and project proposals.

Collaborating partners

MEJAN ARC – ARCHITECTURAL CONSERVATION is a post-graduate course at the Royal Institute of Art/ Stockholm. The one year course has an interdisciplinary approach with participants from diverse fields and includes an extensive lecture series addressing the chosen theme and specific context in a comprehensive manner besides the basic architectural conservation subjects. The education contains, besides lectures, seminars and workshops with international experts. Part of them are arranged as open seminars for a wider range of conservation professionals. The objective of Mejan Arc is to engage society through the generation of relevant and concrete projects, as well as the creation of working networks that continue outside the academic realm. www.kkh.se/mejanarc/restaureringskonst

BNCA, Dr Bhanuben Nanavati College of Architecture for Women, is a registered institution under the Maharshi Karve Stree Shikshan Samtha, a 117-year old institution working for women’s education and emancipation. BNCA offers numerous undergraduate and post-graduate courses, all affiliated to the University of Pune. BNCA believes in an academic program based on student and faculty exchanges, workshops, seminars and interactive methodologies of teaching and learning, thereby training students to actively participate in a culture of research and excellence in the field of architecture and planning. The post-graduate (M.Arch) course started at BNCA in 2006 has since seen women architects specialize in the fields of Environmental Architecture and Landscape Architecture. www.bnca.ac.in

INTACH (The Indian National Trust for Art and Cultural Heritage) is India’s largest non-profit membership organization dedicated to conservation and preservation of India’s natural, cultural, living, tangible and intangible heritage. INTACH’s mission is to use its platform for public awareness about the pluralistic cultural legacy of India, instilling a sense of social responsibility towards preserving its common heritage. INTACH encourages and promotes activities that help protect and conserve India’s living, built, and natural heritage by undertaking necessary actions and measures. At an operational level, INTACH helps to document unprotected buildings of archaeological, architectural, historical and aesthetic significance, as the first step towards formulating conservation plans. It helps governing bodies to develop heritage policy and regulations, and make legal interventions to protect heritage. INTACH has been on the forefront of providing expertise in the field of conservation, restoration and preservation of specific works of art, generating sponsorship for conservation and encouraging capacity building by developing skills through training programs. www.intach.org

*Tina Wik, Professor in Architectural Conservation
Mejan Arc, Royal Institute of Art, Stockholm, Sweden*

*Sharvey Dhongde, Architect
BNCA and INTACH, Pune, India*



THE HISTORY OF PUNE: FROM RULERS OF INDIA TO BUSY INDUSTRIAL CITY

No reliable sources reveal how Pune was founded at the banks of the Mutha and Mula rivers. All that is known, is that a small settlement has existed here since at least the sixth century. Over time it grew to significance - perhaps because it was close to old trade routes and a former pilgrimage centre. Like many Indian cities, Pune's expansion was unplanned and developed organically, evolving from its oldest quarter - Kasba Peth.

Shivaji Bhonsle is one of the most notable personalities linked with the history of Pune. He was king of Pune and parts of the Deccan and many legends have been woven around him. He came to live in Pune around 1636 when, as a twelve year old, he was sent there with his mother, Queen Jijabai. By then the neighbourhoods known today as Raviwar Peth, Shaniwar Peth and Somwar Peth had been added to Pune. After years of warfare in the region Shivaji and Jijabai restored peace and the city started to prosper. Although Shivaji did not remain long in Pune, it was still an important city: traders settled there as well as Brahmins. The latter were important in giving the city a reputation for education and piety.

The Peshwai made Pune important

Pune's heyday was the 18th century. This was the time of the Peshwai, the chief ministers of the Maratha empire who controlled large parts of India. It was the second Peshwa, the legendary Baji Rao I, who decided to move his capital to Pune, thus making it the political and administrative centre of the confederate empire, giving rise to a larger, denser city. The great fortress of Shaniwarwada, built by Baji Rao 1730-32 and the city core's only iconic monumental structure, now became the centre of Pune. During the middle of the century Pune was embellished with numerous temples, ghats and wadas (residential buildings).

When Baji Rao I made Pune his capital it was an already an established town with six peths, or quarters. The making of a peth was a mix of governmental initiative and private enterprise: the ruler issued a koul (a permission or an order) to some trusted person, which gave the rights and duties concerned with founding a peth. Thus the peths were created through a combination of official planning and ad hoc decisions.

During the Peshwai period, the system grew more sophisticated. The assignment to develop a peth was given to a Shete or Shete-Mahajan. His job was to build roads, divide plots, invite settlers and provide amenities. An important part was to ensure the prosperity of the peth by establishing shops and bazaars for local crafts and imported goods. The rights of the Shete - carefully regulated from the Peshwa - included various contributions from the area's craftsmen and traders in goods or cash. The citizens of the peths also paid taxes to the government, collected by the kamavisdar, who also was in charge of security.

Handicraft at a frontdoor: A lot of details bear witness of Pune's cultural history.

In a newly founded peth there was probably not much more than a stone-paved main road, a couple of residences for the Shete and other wealthy families and a few huts. As traders, shopkeepers and others settled in the district, the Shete allotted spaces for shops, workshops and residential houses. Over time temples, orchards, a bazaar, and other structures appeared. Water was provided by connection to Pune's aqueduct system and by digging wells and tanks. Lanes were created from leftover spaces between the houses.

The peths developed different characters: Kasba and Somwar were residential, Visapur was home to many military institutions, while Malkapur had a bazaar. In Murtazarad well-to-do families built their wadas close to the Peshwa, Sadashiv became a center for Brahmin orthodoxy, while Budhwar was primarily a business district. Although the peths were caste-based localities they were not totally segregated. In the end of the 18th century seven of the old peths were renamed after the days of the week by the powerful minister Nana Phadnis, who also had a peth named after himself.

The British treaty of 1818 changes the way of life

The defeat of Maratha forces by the British in 1818 and their subsequent control over large tracts of the Maratha Empire was an important point in the British colonization of India. It also marked a start of British administrative control of Pune from the Bombay Presidency and the sharp division of the city into an Indian and a British part, thus beginning the decline of Pune's historical city core, a decline that continues today.

The British left the peths to themselves and built their own residential areas, Cantonments, planned communities on a grid pattern. The mild, cool climate of the area was considered so pleasant that Europeans from Bombay began to erect bungalows in Pune.

Because of the growth of this prosperous new European area of the city, many traders moved to Sadar Bazaar which became an interface between the old/Indian city core and the new/British settlement. In the end of the 19th century racial segregation of the European cantonment was lifted; several well-to-do Indians started to build similar (but slightly more elaborate) type of bungalows in the same kind of areas as the British. After Independence the retirement of many Indians from the professional classes to these neighbourhoods gave rise to one of the city's nicknames, "Pensioners' Paradise".

The decay of the city core starts

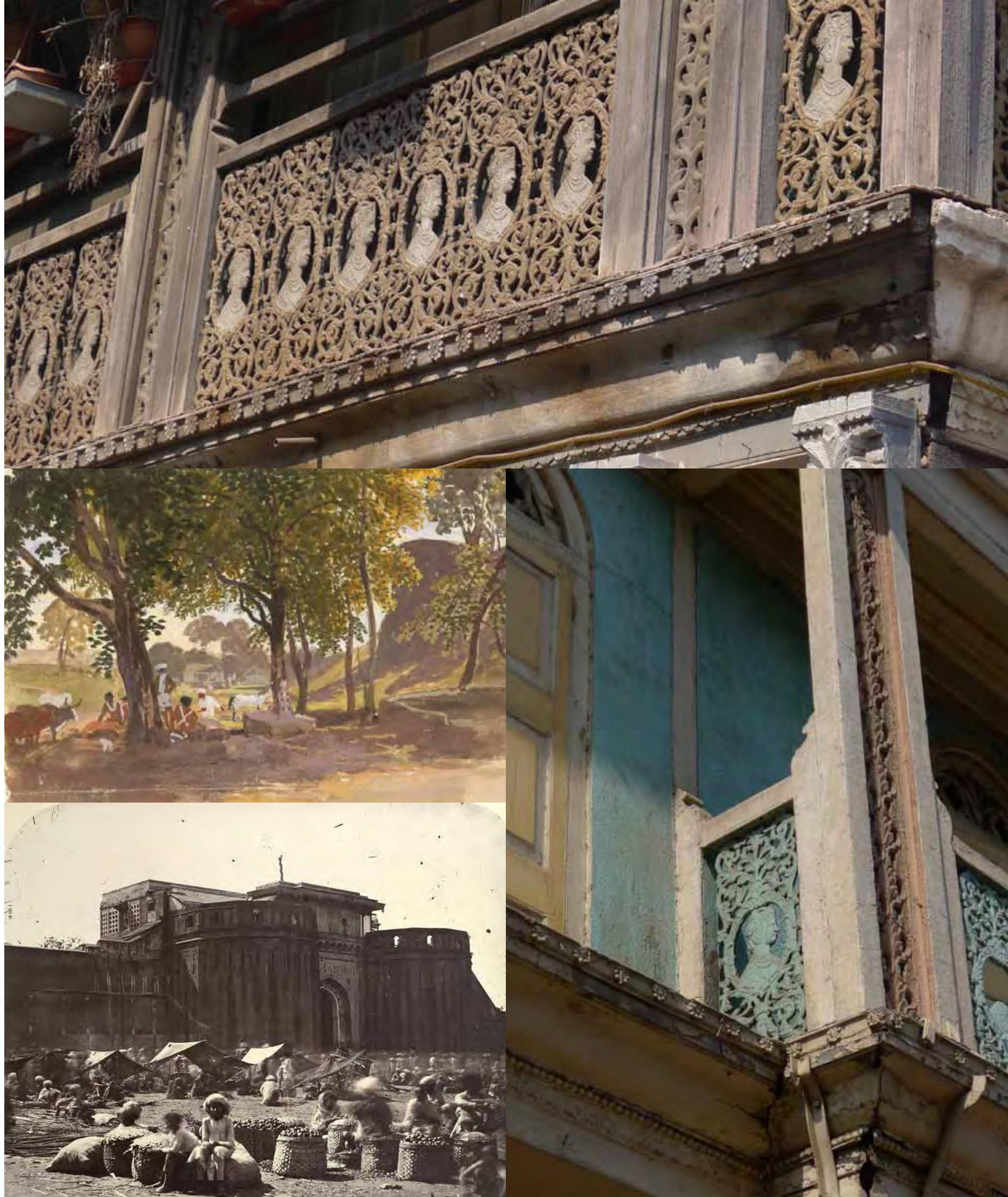
Those left living in the peths after the development of the cantonments were mostly from lower income groups. While the rest of Pune flourished over the course of the nineteenth century, the old city core gained little benefit from the econom-

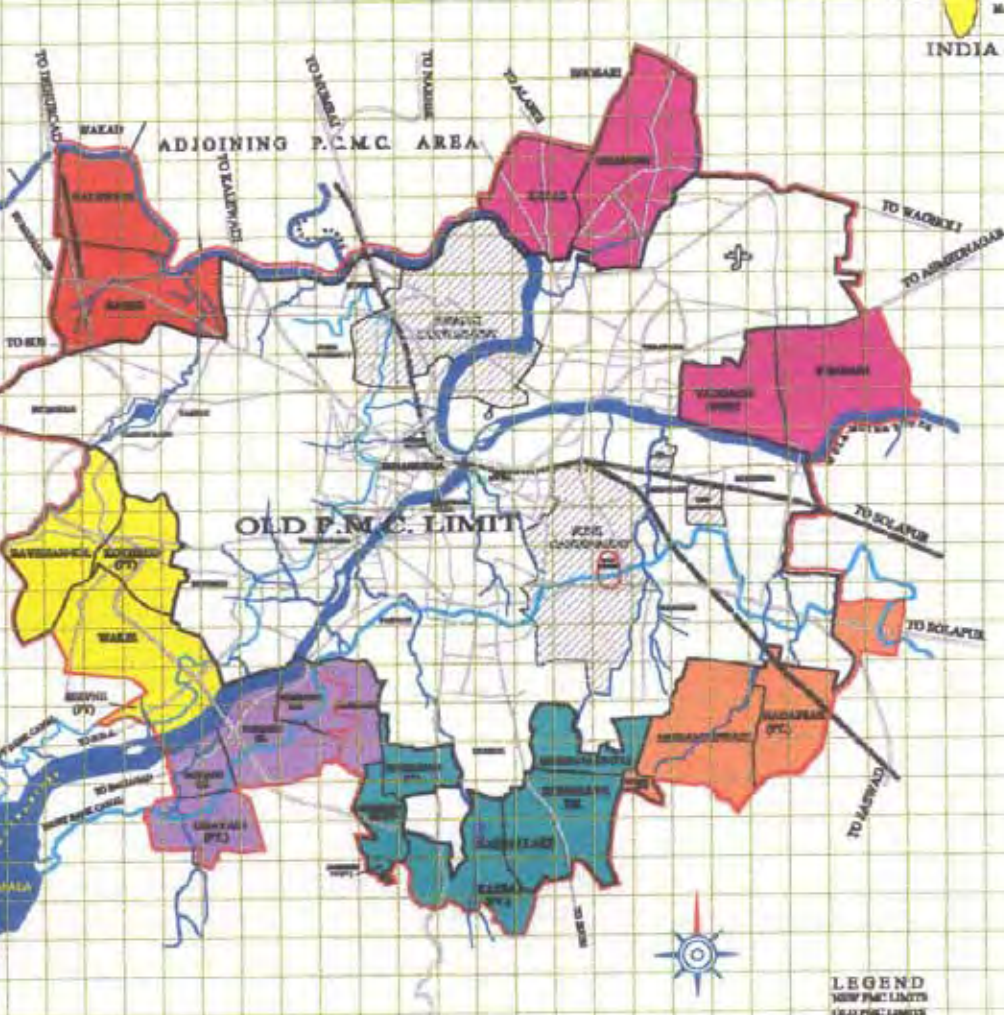
Clockwise from above: The legendary king Shivaji is a popular motif, like this 19th century railing.

The citizens of Pune have not been as kind to the images of Queen Victoria as the ones of Shivaji as you can see of this beheaded portrait to the right.

Outside Shaniwarwada there used to be a weekly market.

British soldiers and Indians enjoying some peace just outside Pune.





Illustrating the growth: Fringe villages within Pune Municipal Corporation limit from 1950.

Shaniwarwada: The beloved “green living room” of the residents of the old city core.



ic boom of the 1860s. Even though the bazaars bustled with economic activity, the lanes were in poor condition and many wadas and other houses were in ruins. When the reform movement which preceded the Independence took off, some wadas acquired new uses, serving as venues for political and social reform meetings, as well as schools and cultural events.

Nor were the old city’s sanitation and drinking water systems sufficient. In 1863 a survey that revealed the poor condition of Pune’s sanitary infrastructure was presented to the Bombay Presidency. The report’s authors, A H Leith and T Martin, suggested among other things, that two roads be built that cut through the old city and more public toilets built. Several suggestions were implemented, though not the most radical: to demolish the walls of Shaniwar Wada and turn the monument into a garden to improve the ventilation of the congested city centre.

After Independence in 1947, one third of Pune’s population lived in the dense peths. The riots that broke out after Mahatma Gandhi’s death in 1948 affected city development and the homogeneous culture of Pune by bringing non-Marathi refugees to the city. They settled either in the city – near the railway station, in the outskirts of the eastern peths of Bhavani and Nana and close to the Sadar Bazaar – or in refugee camps at the then quiet village Pimpri on the Pavna river.

The refugee camps evolved into low standard permanent settlements and are one reason why 40% of Pune’s population today lives in informally constructed dwellings. Another is the rapid and extensive industrialization Pune has experienced since the Sixties. The city has gone from being a “Pensioners Paradise” to the “Detroit of India”, with many Indian and international car production plants and other industrial companies, such as the Swedish firm Alfa-Laval. Today numerous multi-national information technology companies choose Pune to base their enterprises. While on the one hand this is a success story, it has had its disadvantages. The many new industries needed workers and thousands of migrants from impoverished rural areas moved to Pune. However the only living accommodation they could find were slums. Today industrial investors also act as developers as they build areas of high-rise residential buildings of low architectural quality to house their workers.

Another crucial impact on Pune’s development came from the catastrophic flood of 12th July 1961, when a dam upstream on the Mutha River collapsed and the city’s river burst its banks. As much as 75 percent of the buildings, bridges and green areas close to the river were destroyed, and sewage and electricity infrastructure were disrupted. The fact that the authorities were totally unprepared made the damage even greater than it should have been. One outcome was that many young people affected by the flooding fled the city core and moved to nearby Kothrud, leaving the older generations behind. In this process the city government missed both the opportunity to redevelop the historic city centre and to plan the fast growing Kothrud into an attractive suburb.

A sprawling city

Pune’s apparently uncontrolled growth has created a sprawling city with many new suburbs. Pune became a Municipal Corporation in 1950, when the city and the Suburban Municipalities amalgamated – the two Cantonments are still currently separate entities. With this amalgamation, the area within the municipal limits increased from 44 to 139 square kilometres. From that time the city area has further increased and today the Pune Municipal Corporation spreads 30 kilometres from one side to the other. During the Fifties and Sixties, transport infrastructure was improved with new road construction and widening projects. Since then, however, Pune has outgrown several ring roads.

Several master plans for Pune and the region have not been able to solve the many problems that now are acute: slums, traffic, a vanishing cultural heritage, urban sprawl. How much will the brand new city development plan, completed in 2012, make a difference?

Shaniwarwada – a history of Pune’s greatest monument

The fortification is closely connected with the Peshwai – in the 18th century the rulers of Pune and of the Maratha empire that stretched over the greater part of India. Shaniwarwada was built by the second Peshwa, Bajirao I, in 1730–32 under the supervision of the architect Khasgiwale. Many surrounding buildings were torn down to make a place for the new royal residence. Since Shaniwar means Saturday in Marathi, both the laying of the structure’s foundation stone and the celebrations marking its completion are considered to have occurred on a Saturday and is the most likely reason for the structure’s name.

Bajirao I first built a rather small hall, but in 1736 it was extended to a big wada built at the centre of the site. Over the century, building after building, function after function, was added to the fortress up until 1761. Then war broke out and expansion came to a stop. In the 1770s the Peshwas again started to erect buildings until Shaniwarwada consisted of a total of 51 structures. In its heyday 15–25 close family members lived in the Peshwas ruler’s household. Add to that figure other relations, guests and servants and the number of people who occupied the fortress added up to a thousand each day.

The walls of Shaniwarwada were constructed in the 1750s. It has four bastions and nine gates, the most important being the Delhi Darwaja, today its main entrance. Above Delhi Darwaja is the Nagarkhana, the elegant drum house in stone and wood – the only building to survive the fires that were to devastate Shaniwarwada.

When the power of the Peshwai diminished, as much by the Anglo-Maratha wars as by family feuds, the glory of Shaniwarwada faded. The last Peshwa, Bajirao II was forced to flee from Pune in 1802 and when he returned, he did not live in the fortress. Between 1791 and 1828 five fires broke out in Shaniwarwada. After the last all that was left were ruins, except the perimeter walls and the Nagarkhana. It seems that there were no attempts to combat the fires – and one can’t help wondering

why. Were Pune's citizens so disillusioned with the Peshwai? Or could they not risk raising the anger of the Peswais' enemies?

The British used what was left of the fortification for different purposes, as hospitals and administration. At the beginning of the 20th century they began to take an interest of its historical and cultural values and the government declared it a protected site in 1919. When the Prince of Wales visited Pune in 1921 Shaniwarwada was given a facelift with trees planted and lawns relaid. Excavations and repairs have been carried out over the century. Today Shaniwarwada is owned by the Archaeological Survey of India and is legally protected as an Ancient Monument.

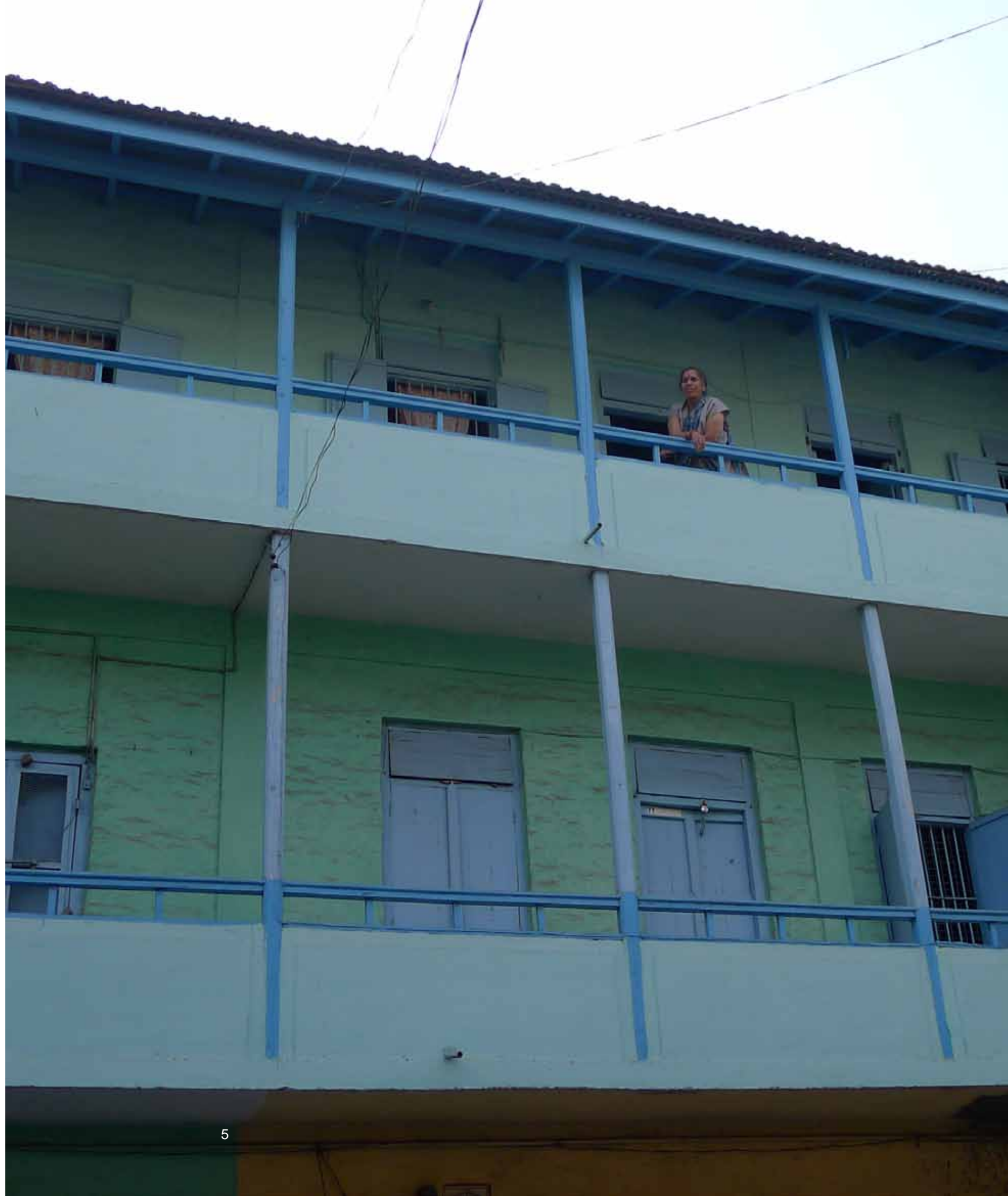
Shaniwarwada is also the city's treasure box in a figurative sense: impossible to get into if you don't have the key. Gaining an insight into the life royal household of the Peshwas is indeed like being given a precious jewel. But today the monument's intangible values – history, architecture, arts, legends – is withheld from the general visitor as there is hardly any information about these values in the fortress. It is not clear why this is so. Shaniwarwada's gardens are well-used by the citizens of Pune as their city park; they meet friends and relatives here, attend concerts, have picnics. Is it not perhaps more important that these domestic visitors are made more conscious of their most important landmark, as well as visiting tourists?

PUNE'S PRESENT SITUATION: HERITAGE AT RISK

Pune is the historic former capital of the Maharashtra state in north-western India, with fully five to six million citizens.

Known as "Pensioners Paradise" where seniors enjoyed the relaxed pace and the cool climate of the hills, Pune is also called "Oxford of the East" because of the University of Pune, one of India's highest rated universities, as well as many other higher education institutions. Nowadays the city is also known as the "Detroit of India" because of its many car plants. Pune has become an important industrial city and besides its large car factories it has become home to numerous software companies.

Yet, for all Pune's dynamism, wealth and enterprise, the built heritage of this ancient city is critically threatened. Within ten years approximately 50% of houses in the historic city core will have vanished. Many are in poor condition, with low maintenance and living standards. Public spaces are neglected and traffic is a daily inferno in Pune's traditional peths. Modern houses in concrete, already aging badly, rise above the old brick or half-timbered wadas of the peths. Residents who can't



Colours of the sea: A well kept wada in Shaniwar Peth.



afford, or want, to live in the city core any more end up in the suburbs which, at least superficially, have run-of-the mill plans and poor architectural quality.

The traditional values of Pune's peths are all too visibly disappearing: the residential typology of the wadas, unique for Maharashtra and Pune; the character of the oldest parts of the city in Kasba Peth, dating mostly from the 17th century or later, with its small plots, winding streets and narrow alleys; the small open spaces, or chowks, with a significant tree and a temple; a way of living that goes on outside, whether residents are washing the dishes or laundry, carrying out a trade or craft, or simply relaxing underneath a tree.

Lack of governance

There are a number of reasons for this detrimental trend. One is a lack of governance. Many critical citizens point out that the government of Pune doesn't do enough to meet people's demands with regard to the city's development – or does the wrong things.

“The government should take care of the pollution and renovate the houses”, says civil engineer Archana Tanwade. She lives with her family in a modern flat in Kasba Peth and, except for the pollution and the noise, likes the way of life in the historic city core very much. Another citizen of Kasba Peth, retired civil servant D L Deshpande, also pronounces on the strain on the area's infrastructure such as traffic and water supplies.

“I have water myself but a lot of others in Kasba Peth don't. If the area continues to grow, the government must build better facilities. Personally, I'm emotionally attached to this area and don't want it to change. But I understand and don't oppose to that it probably has to – but in that case the facilities must follow the growth” says D L Deshpande who has a sign that says “Loss of heritage is loss of culture” in his newly renovated wada.

Mr Deshpande has considered having tenants in his wada, but thinks it isn't worthwhile because of the rent regulations. This is another factor in the decline of the city core: a 50-year old rent act brought in for the benefit of tenants has set rents at a purely nominal value. Even if today the rent act has loosened, renting doesn't bring property owners enough income to renovate or even maintain their houses. And since they seldom allow tenants to carry out improvements themselves, the houses are falling apart.

Troubled property owners are easy targets for the developers who have led the degradation of Pune's historic urban core since the 1970s. They buy a building, tear it down, then build a new, larger one which contains more apartments. The property owner receives a brand new apartment in the house, as do the tenants. The developer makes a profit from the additional

Clockwise from above: The public spaces, chowks, are important as a lot of daily life goes on outside. Maybe this will never become a house. In the meantime, it serves as a garden. Concrete is the dominating material used for new constructions...
...but traditionally wood and bricks have been used.

flats built. The only ones who are not happy are the people who care about the cultural heritage...

Rajiv Raje, professor, architect and member of the Board of the City Development Plan, claims that the government plays a passive part in this: it supports the development of high rise structures replacing the old low rise buildings because it is easier to build technical infrastructure when the city core becomes denser.

The Urban Heritage Committee of Pune Municipal Corporation has the mandate to protect and conserve the 250 structures in Pune on the Heritage List.

“But it’s impossible” says Rajiv Raje. Pune’s cultural heritage is far too big to cope with quickly enough. In the meantime, the buildings are demolished or fall apart.

What will be left of the city’s cultural heritage in ten years are the most valuable buildings and urban ensembles identified as Heritage Structures, prophesies Raje. But areas that are ‘just’ old and/or significant for the historical city core will have disappeared.

High property prices

In many European cities, the process of gentrification brings first the creative industries and then the trend-setting middle-classes to transform a declined city centre into a bright and busy area. Pune has already leaped over that stage: the property prices in the historic core are too high for striving artists because of the lack of land.

In 2012 a new city development plan is being introduced in Pune. This plan will be in addition to the Maharashtra Region and Town Planning Act of 1966 that was created to direct the so far-unrestricted growth in the Mumbai-Pune region due to industrialization. According to Professor Raje, it didn’t help much. He describes the city development as being drawn in different directions depending on the industries establishing themselves in different areas outside Pune and building plants and living quarters for their workers. After the buildings comes the infrastructure – a backwards way of constructing a sustainable city.

Even though Rajiv Raje is a member of the Board, he doesn’t think the City Development Plan handles development well enough. There is no solution for the chaotic traffic situation for example. He also points a finger at gated communities. In the new plan developers are allowed to build such segregated areas and also stipulate their own regulations in them:

“Gated communities – it’s like France before the 1789 Revolution!”

According to the city’s politicians in 2012, slums (or informal settlements as they are now usually called) in Pune will be extinct. This is good news – if anyone believed it would be so. In 1961 15% of Pune’s citizens lived in slums; by 2009 the number had risen to at least 40%. “Slums are slums only for want of legalities and inferior infrastructure provisions”, states Ahmedabad architect and activist Yatin Pandya. The density is six times higher in informal settlements compared to the rest of Pune. More than 58% of informal dwellings have a water

supply and more than 93% electricity. There were 564 informal settlements in Pune, with about 200,000 residences in 2009. Only 14 of these areas have been rehabilitated over the last 14 years, though Maharashtra State and Pune Municipal Corporation have two programmes to transform informal settlements to formal parts of the city.

Exploiting the hills outside Pune

Outside town the surrounding hills are being rapidly built on, either with formal settlements, with high-rise modernist residential buildings, or informal ones. The pressure on the land use is very high in rapidly expanding Pune. But the hills function as the city’s green lungs – how will the people of Pune breathe if they are exploited?

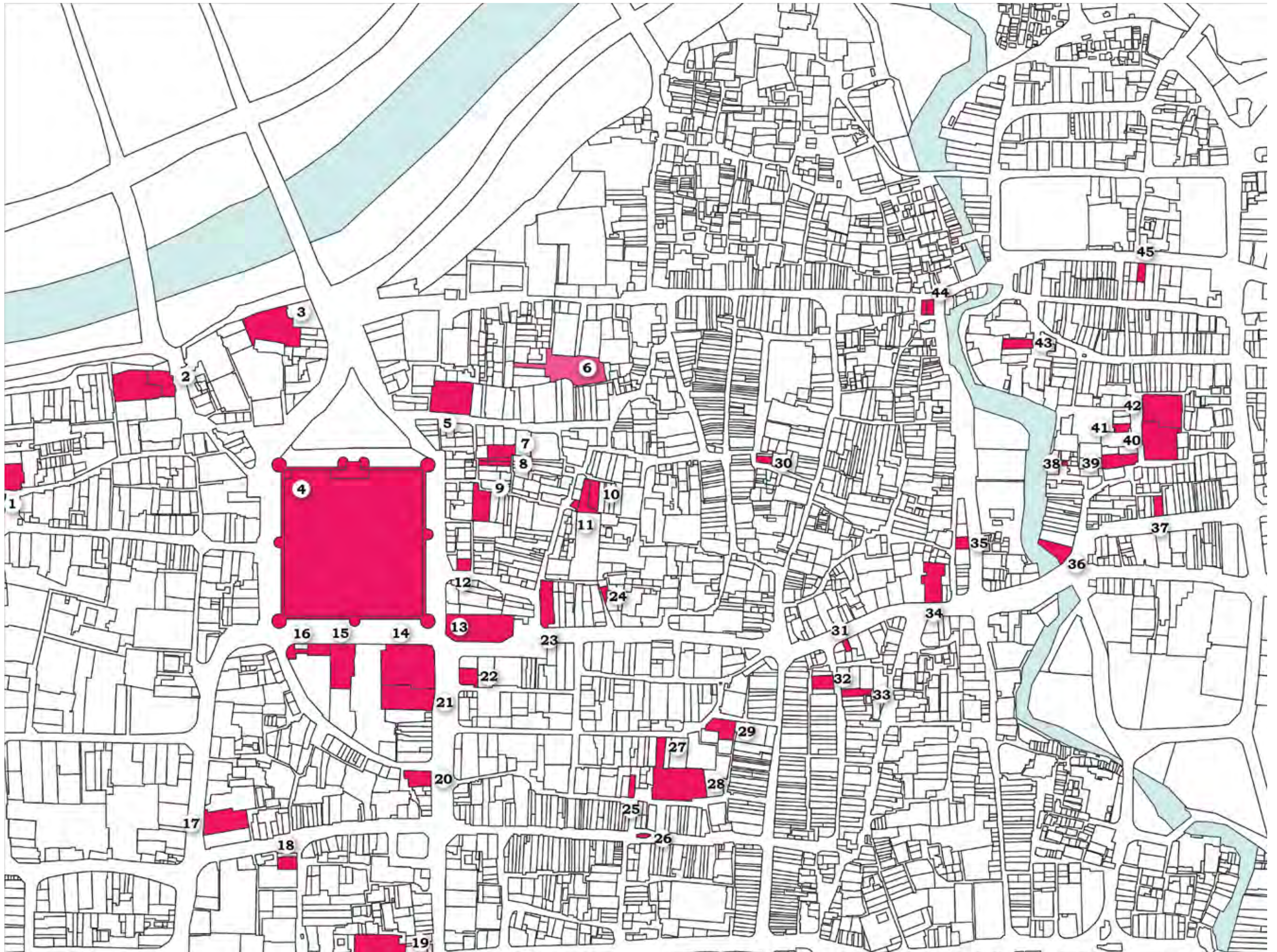
Professor and architect Anagha Parajape-Purohit points at several issues that have to be solved in the city’s rapid development starting with the type of growth – compact or sprawling – alongside such questions as traffic management, pressures on water supply, sewage, waste management and, land use, not to mention changes in Indian lifestyle. She is extremely critical of local politicians and the lack of urban governance.

“I want an urban policy which focuses on the citizen, I want transparency and predictability, project management and uniformity. Today there’s too much populism” says Professor Parajape-Purohit, who has started a political career herself.

“Be the change you want to see in the world” – Parajape-Purohit lives the words of Mahatma Gandhi. In the meantime, another unique wada in one of Pune’s distinctive peths is being torn down. Keeping the cultural heritage in Pune is a race against time.



Clockwise from above left: Far right, a torn down wada where the owner waits for a governmental decision.
Mr. Deshpande (centre) and his family.
A sign in Mr. Deshpande’s wada.
Mrs. Tanwade and her family.





Dagdi Wada (27.)

LISTED BUILDINGS IN STUDY AREA

As in most cities dating back many centuries, there are considerable numbers of historically important buildings in Pune. The map on the left hand side points out some of them, listed by The Indian National Trust For Art and Cultural Heritage (INTACH).

1. Gupchup Ganpati Temple
2. Amruteshwar Temple
3. Dhakta Sheik Salla
4. Shaniwar Wada
5. Mote Mangal Karyalaya
6. Tambat Courtyard
7. Kanya Shala
8. Pawar Wada
9. Mujumdar Wada
10. Tambat Ali
11. Narsinha Bhavan & Temple
12. Yelekar Wada
13. Lal Mahal
14. Nana Wada
15. Biniwale Wada
16. Patwardhar Wada
17. Prabhat Talkies
18. Jogeshwari Temple
19. Belbag Temple
20. Deo Wada
21. Vasant Talkies
22. Nana Houd
23. Kasba Ganpati Temple
24. Kedareshwar Temple
25. Hari Mandir
26. Pasodya Vithoba Temple
27. Dagdi Wada
28. Prarthana Samaj
29. Phadke Wada
30. Gurdacha Ganpati Temple
31. Parekh Traders
32. Purshottam Niwas
33. Damodar Bhagwandas
34. Hariramji Maharj Haveli
35. Radha Krishna Temple
36. Kala Ram Temple Complex
37. Dutta Temple, Parab Niwas
38. Laxminarayan Temple
39. Dutta Temple
40. Kala Ram Temple Complex
41. Belbaug (old)
42. Nageshwar Temple
43. Trishund Ganpati Temple
44. Dharmashala/Talim
45. Ramgir Gosavi Temple



Amruteshwar Temple (2.)



Narsinha Bhavan Temple (11.)



Kedareshwar Temple (24.)

URBAN MORPHOLOGY AND BUILDING TYPOLOGY WITHIN THE CITY CORE

Typology of the historic city

At first glance, the character of Pune's historic city appears fairly chaotic. Looking just a little bit closer, however, one discovers several quite particular patterns can be found.

While the streets appear to be universally winding and narrow, looking at a map one quickly realizes that they all do not follow the same scheme. In Kasba Peth there are two distinctly different patterns: some streets follow a medieval winding pattern, while in others (laid out during the seventeenth century) the blocks are slightly smaller and the streets straighter. Domestic houses were usually built of timber, stone and brick. The most common construction technique was a timber frame structure, using a post and lintel system with load bearing brick infill. (*Aspects of conservation in urban India, Pune Cantonment; Foy Nissen*) The pattern this creates in the facade is very much a part of the city's typology and is the structural reason behind the sectional appearance of the houses.

Most traditional houses are deep, with narrow facades facing the street. Normally a house occupied the full width of the plot, giving a continuous facade towards the streets. Plots could consist of one, three, five or more sections. The number of sections a house consisted of was not crucial to the height of the building. Structures could be a mix of a ground floor

plus one, two or three stories, giving a slightly irregular skyline. The whole ensemble, however, still presented a low and dense context, kept within a human scale.

The grandest secular building type of the historic city of Pune is the Wada with its traditional courtyard plan. But smaller service establishments and shop-cum residences also follow a similar layout. Typically, most houses had a business or craft premises on the ground floor facing the main street. Inside, these houses consisted of indoor and outdoor areas, functioning together as living accommodation. This pattern of building and courtyard is the most important feature of the building typology of Pune's historic city – the central key to how life has been lived within the city.

The streetscape rarely opens up in parks or squares. The shared life of the city is instead focused on the spaces just in front of the houses, on porches (known as *osris*), or platforms called *kattas*. (*Our built heritage; Intach Phune Chapter*) It takes place round monuments such as temple areas, in chowks

and holy places squeezed into the cityscape. Typical meeting points are the *Paars*, platforms built around a venerable tree with a small shrine beneath it. These features form an important part of the cityscape. (*Glimpses of Pune's Heritage- A Mosaik; Samita Gupta*)

The walkable scale of the neighbourhood incorporates all the important basic needs and spiritual functions into everyday life. The *Paars* are visited in early mornings to offer a gift to the deity. In the evening the locals take the opportunity to sit down here for a "chit chat" and, when going to the market, it is possible to "pop in" to the temple close by. These intangible values of how life is lived within the city and orientated around these holy places are irreplaceable.



A short stretch of Gate Road. In the corner there is a tree and a small shrine, most likely to be missed by an uninformed observer.



Typology of secular buildings

“Traditionally, home is the concept which constitutes the family, in the way that each home was a family; there could be no family without home.”

The typology of the old Wada is a perfect example of this concept and explains well what a large joint family and its living accommodation meant in old Pune. A wadi was originally a piece of land. But in later developments the suffix wadis was assigned to an area with a group of buildings occupied by several households and with a single owner, who collected rents. Now a Wada is defined as a courtyard house. *(Rupa Rajae Gupta, professor of Architecture in Delhi and specialist in wadas of Maharashtra)*Traditionally it offered living quarters and often business premises for a whole extended family.

The building occupies the entire plot of land available in its very dense environment. Historically the Wada enclosure also included a garden, a few of which still exist. The courtyard is the most important part of the house. It is this open interior space that organizes and connects the indoor spaces within the Wada. Most everyday tasks were carried out outdoors in the courtyards. Domestic animals were kept here and many courtyards had a well connected to the old water system. The galleries surrounding the courtyard and facing the streets were also an important element, responding to climatic conditions. If the Wada has a series of courtyards, the first, accessible from the street, is a semi-public space. The second courtyard is more private – it is here one often finds the Tulsi Vrindavan, an altar with a holy plant, Tulsi or Holy Basil, for daily worship. It is one of the many features found in everyday environments that connect people to their spiritual life and needs.

Variations of the traditional house structure are also to be found. Some houses face the street with a high wall; here a doorway in the wall enters directly in to the courtyard. Others, like the houses along Shimpi Street, have no courtyards at all. Instead they offer their residents outdoor premises in form of a platform, elevated from the street on high stone plinths. Old maps show that they at one time had gardens at the back of the plots, now lost due to the densification of the city.



Typology at risk- current situation

Today Pune's historic city core is suffering badly as a result of rent controls. The small income landlords receive does not cover the property's maintenance costs and results in the rapid dilapidation and decay of the houses.

This has created opportunities for developers to intervene and erase the old structure of the district. Many of these contemporary developments are in a scale and typology foreign to this area, threatening the historic city and its social life. However, there are some contemporary buildings in the old city that take great consideration of the environment and of the traditional way of life.

The most important example is the houses rebuilt after the floods of 1961, organized and financed by Pune Municipal Corporation. The huge extent of the disaster meant that a massive rebuilding programme took place during the 1960s. Yet, the traditional way of life has continued seemingly unaltered in these new structures. The indoor spaces have a close relationship to the outdoor spaces, the scale of the streetscape is well kept; the traditional height of the city, however, has been raised by one floor.

The city is also heavily burdened by overpopulation, resulting in a constant need for more space which has set its mark on the city. There is an 'add on' approach to creating increased space, both in cityscape and in single structures, like the wadas. But the city is forgiving to such small additions. They cram unfilled gaps or rest on rooftops almost unnoticed and they fill up dilapidated courtyards.



Examples of contemporary buildings in Pune historic city

House built in 1937. This property faces one of the larger streets of the area. It connects to the traditional buildings of the city, but is still is a typical design of its own time.



House built in 1964 with the help of Pune Municipal Corporation. The original structure was ruined by the flood of 1961. This property faces the busy street of Ramganesh Gadkari Path and connects to the copper-smith's community in the back, to which the owners and the residents all belong.



House built in 1990s. The building stands within a plot consisting of several old buildings facing an open courtyard within the property. The owners live here with their extended family. They also have tenants in some of the older buildings; however, these are not connected to the family's courtyard.



House built in 2008 replacing an old house in very poor condition. It faces the courtyard of Kedareshwar Mandir. The owner lives here with her extended family. When she replaced the old structure she herself made the plans for the new Wada in which she wanted her sons to have a floor each for their families.

Contemporary housing projects governed by profit-driven developers. These types of developments are erected in big blocks covering several old plots. Often these developments make room for car parks under the building in the street level. The residents' needs for outdoor spaces however are not attended to. Neither the traditional life of the residents, nor the scale of the city is taken into account.





THE COLOURS OF INDIA

India is famed as the country of colours – a brilliant kaleidoscope that light up and decorate every aspect of its material culture: buildings both inside and out, the brilliant hues of women’s saris and embroideries, brightly-painted furniture, the deep yellow garlands of marigolds used in many Hindu rituals and the vivid geometric designs of rangoli, the decorations created on floors and courtyards to mark Hindu festivals and other auspicious events. One of the country’s most famous festivals is Holi, a festival of colour which marks the beginning of spring and the hope for good harvests to come, as well as the triumph of good over evil. Its central ritual is throwing a mesmerizing array of coloured powders over family and friends. While the visitor is enthralled by these vivid colours, for the Indian observer they hold deep meaning and convey their symbolic messages very directly.

Many colours relate to the chakras. Chakra is a concept within Hinduism and other Asian cultures and religions relating to energy points within the body. Chakra means wheel or rotation in Sanskrit and it is sometimes called the wheel of life. The seven chakra colours of violet, indigo, blue, green, yellow, and orange each relate to a particular chakra and their spiritual meaning. These colours in super-saturated hues are used widely throughout India.

Among India’s cities, two are celebrated for their distinctive use of colour. Jodhpur is called the Blue City, famed for its houses painted a striking indigo blue. Here, the scintillating blue of the buildings contrasts with brown of the desert that surrounds them. The blue colour of Jodhpur’s houses also reflects India’s caste system, as the colour was used only on those of the Brahmins who regarded themselves as the purest of castes.

The architecturally magnificent city of Jaipur is known as the Pink City from the dominant colour of the city’s buildings – a colour which has many stories and theories behind its origins. One claims that the city’s buildings were first painted the colour when Jaipur was preparing for a visit by the Prince of Wales in 1876.

In Pune, the painted house facades and door, window frames and shutters, balcony rails and decorative details are variations on a theme, using saturated pastel colours – mainly on wood, but also on plastered walls, as well on corrugated steel and other building materials. This use of paint is characteristic not only of Pune and its historic core, but of India as a whole – practice that derives more from tradition than maintenance. The general impression of house exteriors in Pune is that the cool saturating monsoon rains discolour facades to a greyish-black – a permanent appearance until they are repainted, usually on a yearly basis. Indians customarily repaint doors and window frames in connection with religious festivals or special occasions.

Red is one of India’s most widely used colours. Above all, it is linked with marriage and the commitment of a woman to her new role in life. Wedding saris are widely coloured red, as is the bindi, the tiny red dot of pigment a married woman traditionally placed on her forehead. Red also has a protective function – shown in the red pigment thrown at deities in temples and the red thread tied round the wrist of loved ones during prayer.

Both yellow and orange, too, have important meanings in Hinduism. Yellow is associated with the god Vishnu, who usually wears yellow clothing. Bright yellow turmeric is widely used in Hindu and Buddhist ceremonies and is linked with prosperity and fertility; brides are frequently smeared with turmeric as a ritual of purification. The use of the colour orange has its roots in solar symbolism. Blue is traditionally associated with Lord Krishna, who is usually depicted as having a blue skin. White is the symbol of purity and was traditionally the colour of clothing worn by the Brahmins, highest of India’s castes.



Blue colours



Blue is generally seen as the most popular colour in India. Blue symbolises trust, reliance and commitment. The colour of the sea and the ocean is seen as constant in our lives. And therefore carries these values in the Indian tradition.



Cream colours



Cream has the same relation to yellow as pink does to red. It is a light colour and can be used with touches of complementary colours like red, green or blue. Since it always is a light colour, cream does not absorb heat from the sun as much as other colours and therefore is mainly used on modern buildings.



Red colours



Red is a warm stimulating colour and has more personal associations than any other colour. The red pigment is made from heating yellow mineral pigments. Thus, the deepness of red correlates to the amount of heat used producing it. So when looking at a particular shade of red, the colour preserves the level of energy and the amount of heat used to produce it. Red colours can also be created from materials other than minerals.



Pink colours

Pink symbolises youthfulness, fun and excitement, while a more red-dish pink symbolises passion with less aggression than red. Toning down high-energy reds with the purity of white results in a softer pink that is associated with the innocent playfulness of the youth.

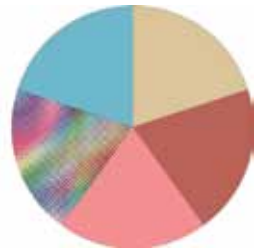


Other colours



Other colours are used and tend to be very saturated. Green, violet and orange is common.

Colours in the city





SUSTAINABILITY

India has had a major population growth and an unprecedented rapid industrial and economic growth over recent years. While existing alongside illiteracy and deprivation, its strong educational tradition has lifted millions out of poverty and created a new resourceful middle class. Still, India ranks 134th (of 180 UN countries) on the Human Development Index List 2011, and 125th (of 132 countries) on the 2012 Environmental Performance Index, including health, governance, technology, and international cooperation.

India has an imbalance between its natural resources and population. 18% of the world's population share 2.4% of the planet's landmass, 4% of the fresh water resources and 1% of the world's forest

Urbanisation has been comparatively slow in India, with around one third of its population living in urban areas. Population stabilization has been most successful in the south. The majority of the population remains employed as small farmers, but there is a rapid development of agriculture into monocultures and cash crops, along with increased use of fossil fertilizers combined with groundwater depletion.

Food production slowed again in the 1990s. Seeds, plants and knowledge of biodiversity are becoming privatized and patented, thus out of reach for local communities.

Affordable housing also needs to increase ten times. The slum dwellers who now comprise 24% of India's urban population will need to be addressed with formal affordable housing programs and housing structures.

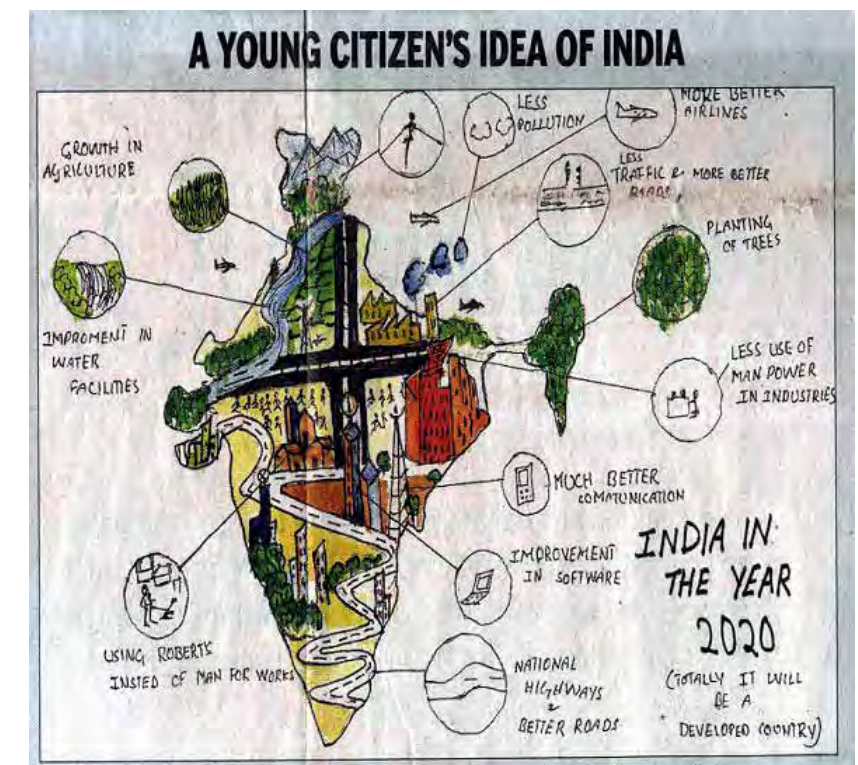
India faces the accelerated depletion of its natural resources and deterioration of environmental quality. Most Indian rivers have water quality unfit for direct human use. Air quality in cities is degrading, despite improvements in reducing emissions from vehicles and industries. The energy infrastructure is based largely on coal, wood and agricultural waste, also comprising a health problem. Added to this is an increase in traffic powered by fossil fuels. India is the sixth largest producer of greenhouse gases.

An overshadowing problem is future unpredictability of global energy supplies and pricing. A recent report from UNDP shows that energy projects in developing regions often lack the support to make them successful in the long run. The conclusion is that energy must be seen as a means, not a goal.

Social expectations of raised standards of living are high. Local resistance to alternative sustainable technological solutions is not uncommon. The biggest threats to sustainability might be the rapidly changing culture and values of the majority.

In India, as well as globally, monetization quantifies every unit of human activity. The application and logics driving organizations and industrialization processes have led to serious problems of sustainability. However the country still remains balancing on the threshold of an ecological crisis. Local solutions, national policies and global technology are all needed.

Analysts stress a number of conditions for sustainable development:



Times of India, Pune, January 25th 2012

1. Shape: Where people live. Lack of planning of the growth of cities, or placement of new cities, results in unplanned urban sprawl.
2. Governance: How cities are governed at city level. Current governance is at state level, often at a considerable distance. Kolkata's mayor-commission model might be a forerunner.
3. Sectoral Policies: Include economic development, sustainability management, and housing management. India would need to increase affordable housing from 200,000 to 2 million units a year. In 2008 people living in slums were numbered around 82 million; this may possibly double by 2030. There is a need to establish funding, external expert advice and dedicated managers.
4. Urban Planning: Change from ad hoc and sporadic planning.

Develop longer-term plans (40-50 year) with nested 20-year master plans designating land uses, transportation services, infrastructure and building typologies that are actionable with transparent public processes. India's current urban processes are still not executed in reality.

Implementation of technology and know-how is difficult without policies. India has the legislative framework and well-established institutions. What it lacks are mechanisms for public participation outside democratic elections. Poverty and lack of education are two important factors working against participation, as well as distances and languages.

Renewable energy - Wind

Development of nuclear power in India is ongoing on a national level, but is non-renewable source of energy as are fossil fuels. Analysts predict a massive growth in electricity use particularly for buildings alongside issues of steady electricity supply and power loss. Around 40% of India is not connected to the power grid.

To meet the challenge of declining fossil fuels, one future is considered to be in large-scale wind energy and solar plants, which relies on a developed power grid. Maharashtra has good conditions for both wind and solar energy solutions.

Local small-scale alternatives are considered more efficient in the short term, though not sufficient. Small scale turbines (around 2kW) are a developing area in rural India, due to the lack of power grids and an overall low usage. The urban setting is however less suitable for small-scale wind turbines.

Maharashtra has the second largest capacity of state-run wind turbines (around 2310 MW per year). In the case of Maharashtra and Pune, large-scale wind parks connected to the power grid are considered the most realistic option.



Indian wind farm

Renewable energy - Solar Power

India's theoretical solar power reception, only counting land installations, is about 5 Petawatt-hours per year (5000 trillion kWh/year).

Solar cells, that produce electricity, have an efficiency of about 15% maximum. Future thin film techniques can also enhance the use and versatility of solar cell panels.

According to the latest research, small-scale solar power is a more viable option than small-scale wind power. It can be easily set up for local use, with or without a connection to the power grid.

Large-scale solar power is feasible in different forms. A solar cell plant has been set up in Mulshi outside Pune (3 MW over 12 acres).

Future solutions being tested are thermal solar towers and chimneys (pyramids), where a large number of reflectors concentrate the solar energy to receivers that can drive a turbine or generator via steam, liquid or hot air, or release steam into a district heating system. A plant of 140 MW is planned in Rajasthan.

Heating and cooling

Solar power in the form of solar panels for heating tap water is one of the most resource saving options available and can be implemented both on large and small scales. With heat exchangers the energy can also be used for cooling systems in urban areas.



Solar plant in Mulshi outside Pune

Renewable energy - Biofuels

Biofuel includes derivatives from biomass conversion, solid biomass, liquid fuels and various biogases. Emission is 40-100g CO₂/kWh (coal is 800-1300).

India is developing different types of liquid biofuels, for vehicles, heating and household needs. There are some interesting alternatives, such as *Jatropha Curcus* and *Millettia Pinnata*, which use less agro-area than biofuel crops like corn, sugar cane or palm oil.



Jatropha Curcus Rajasthan

Waste management

Solid waste

India's rate for collection of solid waste lies at around 72%, including waste disposal, collection, treatment, sorting and recycling.

Treatment levels need to increase six times today's levels because of the consumption expectations of an emerging middle class. The national projection for waste production is 377 million tons per year, inclusive of construction debris.

Sewage

Today India treats only 30% of sewage. Sewer and septic tank coverage is only 63%. To handle sewage conventionally, treatment capacity needs to increase 11 times and sewer piping by 2.4 times by 2030.

Local initiatives are limiting use of detergents and changing to less harmful products. Pune provides five sewage treatment plants managing 68% of its sewage.

Organic solid waste and sewage can also be seen as a resource for biogas or biofuel production, both on large-scale and small-scale levels. On a small scale household biogas plants are highly realistic, doubling as an organic waste management system.

Transportation

Transportation is estimated to quadruple nationally by 2030. There has been a huge increase in individual vehicle ownership in urban areas. Transportation density is already compromising productivity.

To solve the density problem urban areas need intercity mass transit like rail-based or bus rapid transit systems, as well as a 50% increase in urban road networks. Twenty times the capacity of metros and subways will need to be added compared to the past ten years.

To manage fuel needs, pollution and CO2 emissions, individual transportation needs to be both limited and upgraded. Moving away from fossil fuels is vital. Indian companies are experimenting with solar powered vehicles, two-wheelers and rickshaws.



Solar powered vehicles – present and future

Water management

Important water supplies from the Himalayas are diminishing due to overuse and climate change. Rivers are increasingly polluted from urban and industrial waste (around 75%).

Privatization of water sources and droughts also limit the supply. Some local initiatives such as rainwater harvesting are being taken. The national goal is to provide 150 litres per capita per day with full coverage. Nationally the water supply will need to increase 3.5 times, from 56,000 to 189,000 litres per day.

In Pune residential piped water is limited in coverage mainly due to topography, insufficient distribution systems and leakage. Drinking water is tested and treated and is of good quality.

Pune's storage capacity of drinking water is low, about 22%. Supply is therefore limited to certain times of the day, not primarily due to a gross supply problem. This requires some local storage initiatives.

Surface and storm water

The national goal is to provide storm-water drains with 100% coverage of urban roads in 2030, something considered a necessity in urban areas, not at least for safety and health reasons. In Pune the sewer system covers most of the city and is also the runoff system for monsoon floods.

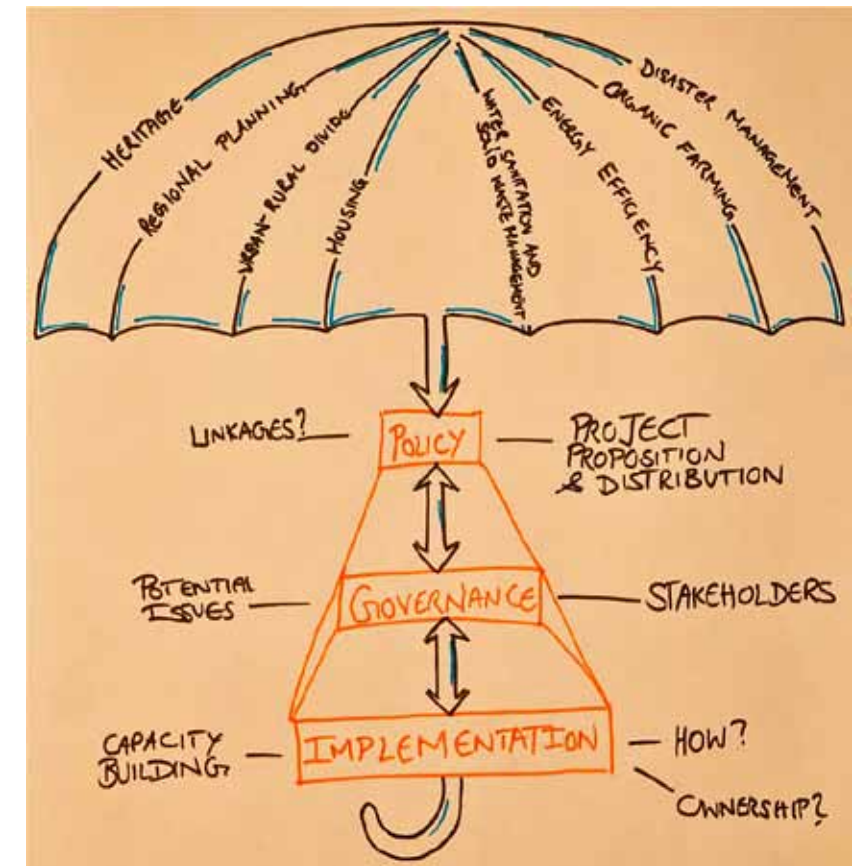
Eco City and Eco Housing project

In 2004 the PMC launched a project addressing sustainability issues, the Eco City. The concept has been partly implemented at Agra (Taj Eco City) and at Kottayam in Kerala. In Pune it includes the IIEC and TERI (The Energy and Resource Institute) which has launched a framework for mainstreaming eco-housing in the city.

Eco City is defined as “an urban centre that is moving towards controlled and sustainable patterns of consumption and growth”, “reducing the ecological footprint while simultaneously improving the quality of life for our and future generations within the capacity limits of the City”.

The eco-housing partnership aims to build houses that can save money by conserving electricity, water, maintenance-time and improve health by reducing chemicals. Buildings and architecture are here the core issue which uses 85% of energy.

Pune is still not officially part of the Eco City program and efforts have so far been made in isolation. There is a need for participatory arrangement with all institutions, NGO's and builders, as well as for an environmentally oriented planning approach.



Urban structure. GIZ-DAAD Summer School Pune 2011

Development Plan Coalition

The Pune Municipal Corporation (PMC) is currently preparing the Development Plan for the core area of Pune city.

The DP Coalition, a network of organizations and individuals, seeks to enrich the planning process by bringing in external expertise and inputs from stakeholder consultations. It also aims to undertake outreach efforts to publicize options and tradeoffs.

The underlying aim of this initiative is to use the opportunity of the DP process to enhance social, environmental and economic sustainability in the Pune urban area including: affordable housing informal-sector economy and occupations, land policy enabling town planning schemes, infrastructure planning and management, biodiversity and open areas, and planning the physical structure of the city.

Sustainable architecture

Traditional knowledge used in vernacular architecture can contribute to sustainability, reducing use of resources. Roof ventilation, surface insulation and diffused illumination are

more energy efficient than air conditioning. After years of denigrating vernacular architecture, some experts are starting to argue that “the knowledge of yesterday can make a better tomorrow”.

The use of local materials is wise creating sustainable architecture. They economize the energy of transport and are naturally adapted to the local climate. In the Maharashtra region, there are considerable resources of quality hardwoods like ain and palmyra, or flexible and resilient bamboo. There is also a variety of building stone such as the well-known blue and black basalt. Clay is regularly used as infill in wooden wall structures, as bricks or as wattle and daub.

In addition to this wide range of traditional materials, some architects and research centres in Gujarat have demonstrated how solid waste can be reused in a modern way in construction. The material comes from local waste and helps to reduce pollution while providing economic activity.



Wall of wood crates

Attitudes and awareness

“India is full of people with skills, knowledge and resourcefulness who are not recognized as engineers, architects or water experts but who can bring more to communities than governments or big businesses.” Dixit Barefoot College, India.

To orient skills and knowledge in a sustainable way is easier when it makes people self-sufficient and ameliorates their quality of life. A few interesting small-scale sustainable experiences have been launched with success in India. They are easily replicable and deserve more publicity.

One is the project of the “Barefoot College” which trains women selected in the poorest members of rural communities to be solar engineers. They receive a six month’s training before returning home to create a Rural Electronic Workshop (REW). The REW acts as a mini-power plant that produces 320W per hour and provides lighting for the houses of the community. The women receive an income and the community gains in self-sufficiency.

Hivre Bazaar in the Maharashtra, is a successful example of the rebirth of a village deserted by its people who migrated to



Solar engineer woman by Coste

Pune and Mumbai. Led by its new mayor, the villagers jointly decided to introduce the concept of Shramdan (voluntary labor) to improve the village’s conditions. With the help of the State government, they implemented a reforestation programme adapted to the local climate, dug trenches to create water catchment areas, and cleaned public spaces.

Villagers can ask for micro-loans for seeds, cattle or agricultural tools. The income per inhabitant has shot up and is today Rs 30,000, three times the national average. More than one hundred residents have returned to the village in the last ten years.

Perhaps the most important part of the transformation to a sustainable urban environment concerns awareness and attitude. To encourage sustainable low-tech solutions in local communities, investment in education and participative structures is essential.



Barefoot College solar power engineers





CULTURAL HERITAGE VALUES – PUNE OLD CITY CORE

Cultural heritage - tangible and intangible – belongs to all human kind. It is an important part of understanding our identity. Historic buildings and places teach us about our common past and our place in the present. So it is with the old city core of Pune whose tangible and intangible values are worth documenting and conserving to pass on to succeeding generations. These values are part of the foundation of humanity, expressed in stone, wood, bricks and colour.

“Historic towns and urban areas are made up of tangible and intangible elements. The tangible elements include, in addition to the urban structure, architectural elements, the landscapes within and round the town, archaeological remains, panoramas, skylines, view lines and landmark sites. Intangible elements include activities and historic functions, cultural practices, traditions, memories, and cultural references that constitute the substance of their historic value.”

Valetta Principles for the Safeguarding and Management of Historic Cities, Towns and Urban Areas – adopted by the 17th ICOMOS General Assembly on 28 November 2011.

Material values – Tangible values

Because one of the oldest urban morphologies in India can be found in the old city of Pune, this district represents a valuable asset, not only as a document, but also as a link to the past for its inhabitants. This is crucial for the understanding of such values as historical information and continuity. In a traditional townscape, building units are linked together whereas the majority of new developments are free from historic tradition and usually fall into the category of urban sprawl. Thus the distinctive urban environment of the old city of Pune could work as a model not only for how cities in India can be preserved, but how they could be built in the future.

The fort of Shaniwar Wada is an important landmark in the historic city core of Pune and the only listed monument in the survey area. The monument is known for its remarkable architecture, but besides its architectural values, the fort also has great archeological and historical values.

The preserved street network around Shaniwar Wada is a textbook example of how the city was built and grew. It can easily be seen how the sizes of the plots has preserved the sizes and volumes of the houses.

The low skyline of the old city is still clearly subordinated to the central building of Shaniwar Wada. Today, however, the modern city is creeping higher and closer to Shaniwar Wada and the old city, despite the 300 meter buffer zone around the fortress, increasing the value of the old city skyline as historical narrative and marker of value. The importance of preserving this feature can not be underestimated since a skyline is considered as unique as a fingerprint.

The built environment in the old city displays a large area of 18th and 19th century design, engineering and construction techniques, materials and built forms. Among the buildings are a number of more exclusive wadas with obvious form and design qualities such as architectural elegance and ornamentation. The many temples in the old city show different kinds of architectural and aesthetic values and are well maintained since they still play an important role in everyday life.

However, the most common architecture in the old city is largely quite simple and poorly maintained, but yet exhibits architectural and constructional qualities showing the historic building tradition and represents the history of old Pune in material form. These preserved remains of the older buildings are becoming more and more unique.

Religious meaning is not only perceived in temples, but also in urban places given a spiritual significance by worshipping an old tree or part of a tree. Sometime shrines are added at the site.

The houses of the craftsmen with their characteristic plans for workshops, rooms for living, and smaller courtyards have a long continuity and are an exemplary model of a system with traditions reaching back hundreds of years. These typical structures form an important part of the unique character of the old city. They are often simpler buildings, called chawls, on deep plots with narrow facades towards the street. Decorated wooden parts of these buildings and other embellishments have their own aesthetic and artistic values and also show the older craft traditions. There are many aesthetic values, too, in the bright colour scheme of the buildings.

Authentic historic building materials such as wood, bricks, fired as well as adobe, and ceramic decorations are perceived as having great value in themselves. Materials were locally sourced and are adjusted to the demands of the climate – good examples for future buildings seeking sustainable solutions. The traditional building techniques, as well, represent cultural-historical values.



The coppersmiths have been working at the same streets for many hundreds of years.

Immaterial values - Intangible values

Traditions: Cultural expression that connect people such as annual festivals, religious rituals or everyday life patterns are often incorporated in places and form a large part of its identity and attraction. For example, the layout of parts of Pune's historic core, are designed after the location of temples and the rituals associated with them. It is therefore important to recognize this urban context as a value with equal importance to other values.

More recently it has become a widely accepted view in international conservation to consider immaterial values equally valuable to material values. The term intangible is used to express the immaterial, something with a cultural value that is not touchable, but profoundly present and inseparable from the material. The concept of the intangible imbues a sense of meaning and identity to places and buildings.



A Ganesh deity. **The spiritual life** is integrated in the daily life.

This view raises a number of questions to be debated. In India, culture still is closer to spirituality and religion compared to the more secularized West – often described as a more materialistic culture. Can a building be seen as an object for 'reincarnation'? Meaning that the material object is simply a host for the immaterial. And what is loss of cultural-historical value from a Western perspective? Will aspects of authenticity and patina forever be lost through such a position? Will India risk losing craft skills and building techniques valuable in

the future? Can a pastiche have a value that goes beyond the Western way of evaluation? Are there human and cultural aspects that have been lost in a Western modern urban setting? What can West and East mutually learn from each other?

The speed of the contemporary development of urban areas, however, demands a wider perspective for conservation. In a world of rapid changes the sense of recognition and cultural identity, of continuity with the past, is perhaps of even greater importance than before. Defining intangible values is a challenge, perhaps as a result of our own loss of spirituality. Still, the feeling of meaning and identity is very obvious to a visitor gazing at the environment of Pune old city for the first time, though harder to put into words.

Most of the people living in the survey area were born and grew up here which contributes to sense of community and the social values that the area possesses, as well as to its unique character. Modern life has partly changed traditional lifestyles, but to a large extent people live and work as they have been doing for generations.

The central position in the city, the strong bonds between people and the area gives the inhabitants of Pune's ancient core an identity and a history of strong continuity.

The small-scale of society has a positive quality for people living here. One benefit is the security it offers children. Semi-private and public spaces are used as a natural part of daily life. Many social qualities and values are linked to Indian culture, such as living in extended families. Another social value is the interaction which comes through shared wash basins, bathrooms and shared semi-public spaces – though in many cases, of course, these values are also associated with problems such as overcrowding and inadequate facilities.

The old city core preserves a whole range of traditional crafts, actively produced in the same streets for hundreds of years. This is a great socio-historical value and reveals the traditions of the different parts of the area by preserving craft practices, while maintaining an economic system, a basic requirement for a city. The live/work premises used by small-scale businesses in the area is a feature which makes it easier to combine work with the care of children and the elderly. Of course this can also create problems by making it more difficult for women to work outside the home.

Shaniwar Wada represents both tangible and intangible values because with its massive stone structure it is a link to Pune's history and a cultural reference of the Peshwas who lived there.

Festivals, religious rituals and everyday life patterns are intertwined in the old city and form a large part of its identity and attraction. In the Indian context traditions are living expressions of culture and an integral part of the spirit. These are intangible values equally important to material-based values.





Condition of the buildings in Pune old city core

In Pune it is largely monuments and buildings listed by INTACH which are maintained, restored and highlighted as valuable. As the most historic part of Pune the old city core needs an ambitious conservation programme. The survey area in the historic town has enormous cultural heritage values and great potential. It is important to preserve the street life and maintain the surviving buildings and the urban environment of the area for future generations.

While the negative impact on maintenance of structures arising from low controlled rents is clear, nevertheless, single-family ownership of the buildings has ensured that the various plots, the very foundations of the city and its streets, have been preserved. The buildings and urban plan of the historic core have managed to survive thanks to this ownership model. Single-family ownership is thus a value in itself that contributes to the persistence of the historic city and the units that form it.



Materials in the interiors are often modern.

A majority of the buildings in the area are in poor condition mainly due to many years of poor or non-existent maintenance. The decline of the buildings is sometimes very far advanced with escalating decay and some severe damage. Many buildings have inadequate roofing resulting in significant damage from the autumn monsoon rains. Traditionally, many houses had roofing of mud bricks. Today, the most common roof covering is corrugated iron. Because this material is both cheap and easy to install, it has certainly saved many houses from deterioration. The interiors, as opposed to the exteriors, are mostly in good condition being renovated. The interiors are usually simple, with painted walls and tiled floors.

Three levels of proposed restoration

In all restoration philosophy it is important to approach the conservation project with great respect for the object, the surrounding buildings and the wider environment. This is certainly true in such a complex place as a city. There must be clearly outlined plans for the project. Decisions made should

be guided by the project's chosen conservation approach. The variation of maintenance to structures can range from minor improvements to complete reconstructions if that is found to be the most suitable approach depending of the state of the existing object.

No. 1

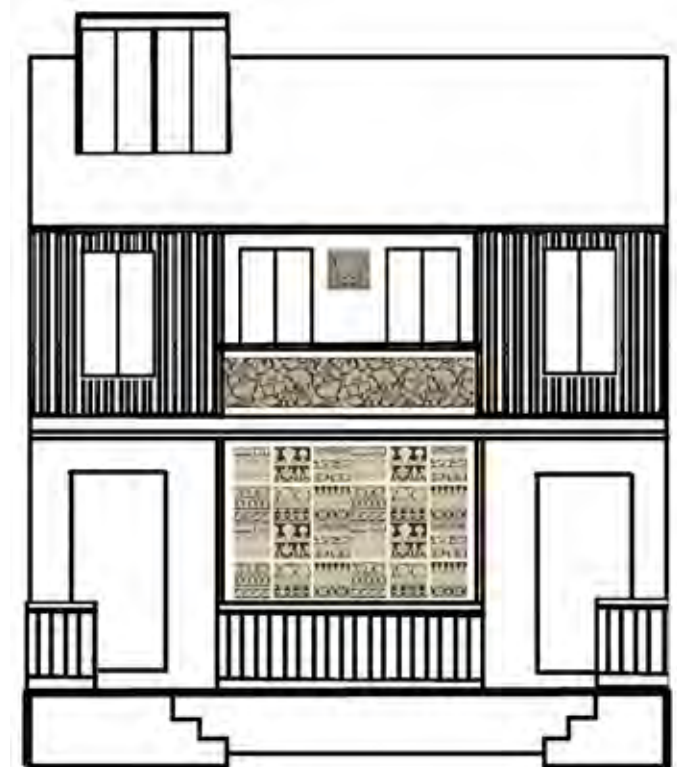
Reconstruct the building's missing parts with all existing information. If necessary, search for information in the area's building types from the same period – so called analogical examples. Leave the building unaltered as much as possible. Take into account the history of the building, such as additions, deformations and respect the traditional building materials. Traditional materials should be used in the repairs as well as in the additions.

No. 2

Rebuild the parts of the building that are too difficult to rescue with materials that are sustainable and traditional to the area. Respect the traditional scale of the place. Create new additions without disturbing the harmony of existing structures. Old and the new parts should create a new entity where new and old materials as well as new architectural expressions should harmonize.

No. 3

It is almost always possible to repair a building, even if the building has substantially deteriorated. This could be done by the residents themselves with the materials from the site or nearby areas. This is a most effective way for a sustainable rehabilitation for this small scale historic environment. An inclusive approach will guarantee that local needs are fulfilled. This is also would guarantee that the scale of the urban landscape continues to exist.



Idea sketch of new building.

PROPOSED FRAMEWORK

Objectives

Taking its position from definitions in policy documents such as ICOMOS' Valletta Principles as well as INTACH's guidelines, the framework has two core objectives: one is to suggest principles for the development and conservation of the historic environment in Pune city core, the other to provide building-owners with suggestions for maintenance work on their property. In the long-term, the target is that Pune continues to live on as one of India most important historical cities, developed with a balance between ancient and modern. More specifically this means preservation of the townscape and original historic settings, retaining the maximum amount of the authentic historic building materials and of the current mixture of subsidised housing, private single-family house ownership, commercial buildings and services.

The framework addresses government, residents, local experts, architects, and other stakeholders.

Background

Sustainability issues: Well-maintained and cherished buildings enhance the quality of life. Historic buildings provide the possibility of appreciating the artistry and craftsmanship of handmade building materials, a sense of the historic use of space, and of continuity with the past which such buildings carry. Keeping and repairing existing buildings reduces the generation of building waste, and conserves the energy embodied in their construction, and so is in the wider interests of sustainability.

Rehabilitation and re-development of these historic urban districts is crucial for saving Pune historic city core. "All interventions in historic towns and urban areas must respect and refer to their tangible and intangible cultural values", Valetta Principles for the Safeguarding and Management of Historic Cities, Towns and Urban Areas - adopted by the 17th ICOMOS Assembly on 28 November 2011.

Pune's historic buildings: Building methods have evolved over centuries, using the materials available and craft skills to deal with local weather conditions in the best possible way. Traditionally-built Indian buildings are constructed in materials such as timber frames for buildings with brick fillings and lime-based plasters and mortar. These materials are hydroscopic, unlike modern materials.

Common structural problems

The most common building problems that were found during our work in Pune were leaking roofs and damage in timber structures caused by insects or humidity. Foundations suffer from capillarity problems and humidity is creeping up walls, nourishing vegetation. Iron works often lack protective coating and are rusty. Plasterwork is not maintained and is deteriorating in most buildings. All these problems are mainly caused by lack of maintenance. Poorly-lit rooms with poor ventilation increase the problems caused by humidity, and rehabilitation

must include mechanisms to correct these faults. Several of the buildings require extensive repairs of the roofs.

Problems are often caused from the mix of traditional with modern materials, such as cement, concrete or steel. Cement rendering applied to an old lime-plaster is likely to fall off. Cracking of plaster is particularly problematic as water that enters cannot escape easily and might cause serious damage which is visible on many buildings in Pune.

Roofing: The repair of all parts of the roof will be critical to the well-being of the entire building.

Some of the remaining old buildings in Pune city core have, or once had, clay-tile roofs supported by a timber roof structure. These roofs have often been changed to corrugated metal sheets. However, some clay-tile roofs still exist.

External walls: External walls should be monitored and repaired when necessary before too great a damage occurs. This could be done by the inhabitants themselves, supported by a maintenance program from INTACH defining which type of plaster should be used.

Mortar filling is often the only intervention required if done in time.

The regularly removal of plants and shrubs will prevent damage from occurring.

Painting: the wrong type of paint is being used over decayed brickwork may cause damage in the future. Paint types should be carefully selected.



Proposed monitoring by the inhabitants

Check external render for cracks. Loose areas of render can be located by tapping; a hollow sound will indicate where the coating has become detached from the wall behind. The detached area can be cut out and new render patched in. Use traditional materials since the use of modern and harder materials such as cement will cause damage to the plaster as well as the brickwork.



Details: Ironworks and Woodworks


The majority of Pune's historic doors are made of wood with beautiful carvings. Some houses have wooden window-shutters. Rotten or damaged parts do not necessarily need to be seen as a reason to replace original doors. A skillful carpenter will be able to cut out the damaged parts and replace them with new ones.



Pune has many elaborate cast iron balustrades on balconies and galleries. Ironwork must be protected from rust with a protective coating.

Maintenance

Pune's strong sun and heavy rains cause damage to the historic buildings. Costs will be less with regular maintenance which also avoids larger interventions.



REVIVAL OF KARALE WADA AND SHANIWARWADA

Hillevi Gebring
Anniina Meriläinen
Elisabet Näslund
Thomas Petéus
Anna Reuter Metelius
Rebecka Tarschys

MICRO AND MACRO FUTURE POSSIBILITIES

Our projects deal with the conflict between modernization and conservation of Pune's cultural heritage. The clash between urban growth and social values threaten the traditional structure of the historic city core and its future dynamism.

Karale Wada's two houses are vibrant with life, but poorly maintained and on the verge of being swept away. The same has already happened to other houses belonging to the wada, now a new apartment building forms the anonymous east wall of the earlier wada. To compare with if the built in social life could carry on in the repaired rest of Karale Wada with the yard as an oasis instead of a second apartment building.

The gardens of the well-visited and much-loved monument Shaniwarwada are badly maintained, and lacking information about its cultural-historical importance. In a city expanding at high speed, where sidewalks yield to increasing traffic and narrow high-rise buildings are replacing an historic/human city plan, the importance of open areas can only increase. These common city 'rooms' will become important places for recreation and socializing in an, otherwise isolated and private environment.

Since the current list of legally-protected heritage does not recognise vernacular architecture as a category of heritage worthy of being conserved, Karale Wada has no legal protection concerning its preservation. These challenges to the wada's and Shaniwarwada's future needs to be converted into actions involving the local community.

Hidden Karale Wada

The first encounter with the hidden wada and its two remaining houses with their balconies facing towards a cluttered yard is unforgettable. A suddenly visible island of welcoming everyday life at the bottom of anonymous high-rise apartment buildings. That the wada and its vital way of life is soon to be destroyed, was dismaying to learn. A telltale sign was the ruins of a third row house which disappeared six years ago. However, even if the developer who has bought the old houses plans to build a new structure on their ground and yard, the wada's residents have clear ideas and priority list of how to upgrade the wada to improve its living standards. Poor maintenance of these aging houses is an outcome of the

very low rents long-term tenants pay, so both tradition and law share the responsibility with the owners. The destruction of the area's older properties is taking place at an alarming tempo.

Like many Indians, the Karale Wada families are typically upbeat in the presentation of their future in the planned new apartment building as positive: bigger apartment, home ownership, the developer finding them somewhere to live during the construction period. But some negative perspectives come between the optimistic presentation: how will they manage the costs, losing the togetherness of old life, and most often repeated – the coming isolation 'behind closed doors'. Besides saving the traditional wada community by repairing the old houses and developing the courtyard, the balconies could help address this issue of isolation by opening up the new building's silent modern facade. It could be stressed that the cleaned and replanted courtyard is a social space for all the neighbours, helping to regain the lost old social contact and restoring the lively sense of community.

What becomes noticeable is that in a trend where densely packed high-rise buildings are becoming more and more usual, something is lost but something could also be gained. The importance of the wada structure with its common yard and the cultural identity that goes with it is something not only to save and protect, but also to develop.

Recreation in Shaniwarwada

With its immense historical importance and its function as the only green lung inside the city core, the fortification of Shaniwarwada is by far the greatest cultural landmark in Pune. Shaniwarwada is quite literally the city's treasure box. With its strong walls and the forbidding gate, embellished with nails to prevent elephants forcing it, the monument is hard to gain access to. The heavy traffic on the roads that surround its walls on three sides is another barrier that keeps people from discovering what is inside. Once you are there, a recreational area and garden dotted with gems such as fountains, beautiful ruins and tall sheltering trees opens before your eyes.

Sadly, this treasure is not as glorious as it should be. The park is poorly maintained and entrance is not free of charge. In its current state, the importance of the historical monument is not conveyed to the visitor. The revival of Shaniwarwada garden aims at turning it into a beautiful, pleasant and inviting recreational green space and making people aware of its history, which will also serve to enhance local cultural identity.



The location of Shaniwarwada and Karale wada in Pune.



During the monsoon season Shaniwarwada park is lush and green.

LOOKING AT BUILDINGS

The architectural styles in the area diverse – buildings from different eras and of various typologies make the environment interesting and unique. Functions of the buildings range from residential to industrial, from health care to religious sanctuaries.

The threatened wadas

The ages of the buildings in Shaniwar Peth and Budwar Peth vary, although most of them were built after the 19th century. However, some of Pune's very first residential buildings still exist here. The oldest are relatively small wadas built before the 18th century. They are situated in the north-eastern corner of Shaniwar Peth, a couple of blocks to the west of Shaniwarwada, and along Budwar Chowk Road in Budwar Peth. Built in 1730, the fortress of Shaniwarwada is not only one of the historically most important but also one of the oldest structures in the area.

Many of the 19th century wadas are in poor condition due to lack of maintenance. Buildings from this era can be found in all parts of the area. Most are residential and have been rented by the same families for several generations. One of the larger public buildings, the Nana Wada School, just south of Shaniwarwada, was also built in the 1800s and was originally a residential wada.

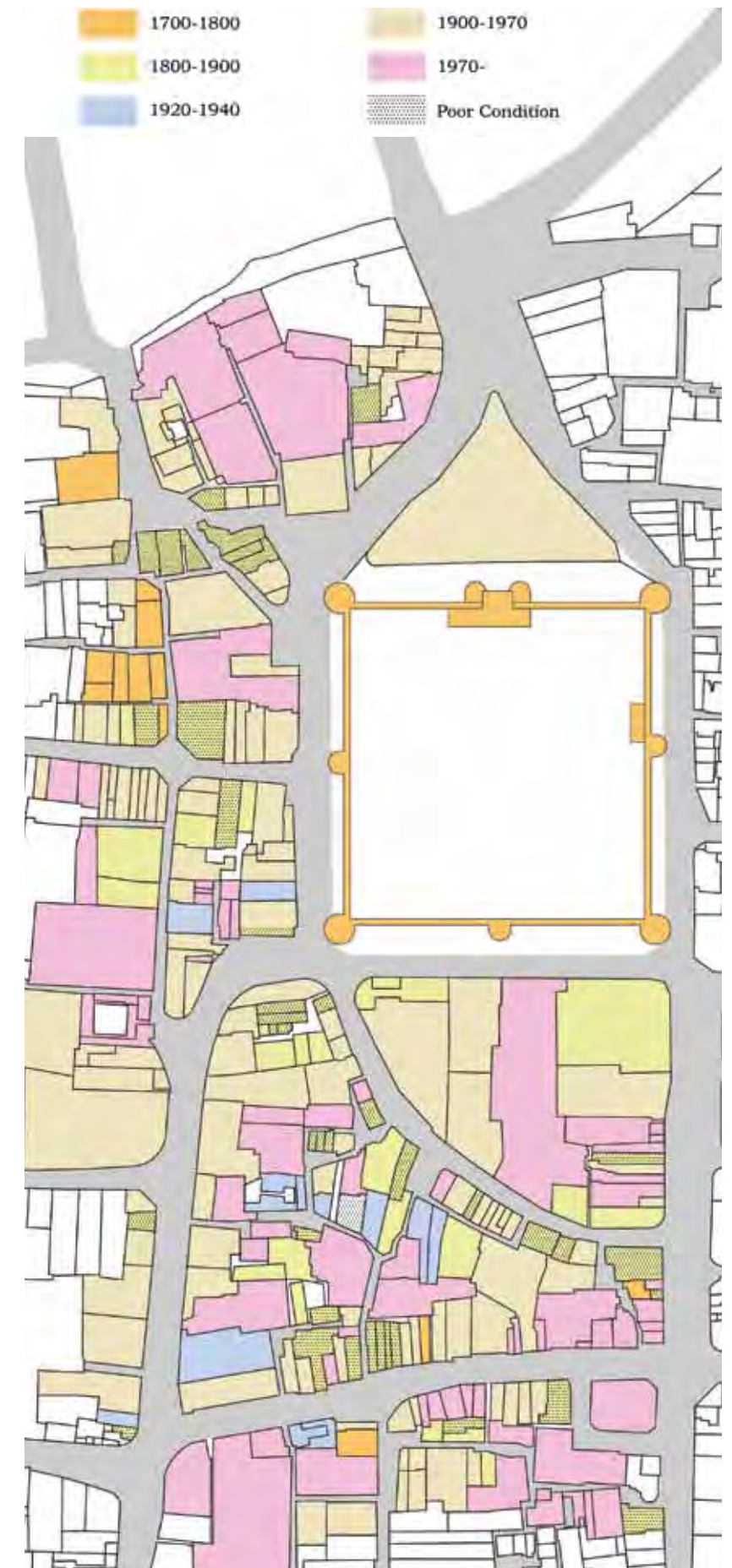
Buildings from the earlier half of the 20th century were usu-

ally built on the ruins of old, collapsed wadas. If both owners and tenants agreed, old buildings could sometimes be torn down to make room for new apartment buildings. High-rises are not allowed, however, since it's prohibited to build taller than the existing city structure within 500 metres from the walls of Shaniwarwada.

From big to small

Much like the ages of the buildings in the area, their typology is also mixed. The oldest are usually the smallest (excluding Shaniwarwada) and the most recent the largest. Structures range from the tiniest shrine to a 2,5 hectare fortress. The wada is the most common vernacular building type in old Pune and has been traditional there for hundreds of years. Today the wadas are an important part of the city's unique character. In Shaniwar Peth and Budwar Peth the old wadas are spread in the built environment as rare and decayed, unfairly treated vestiges of the past. At the same time they are the present as the most lively nodes of city life.

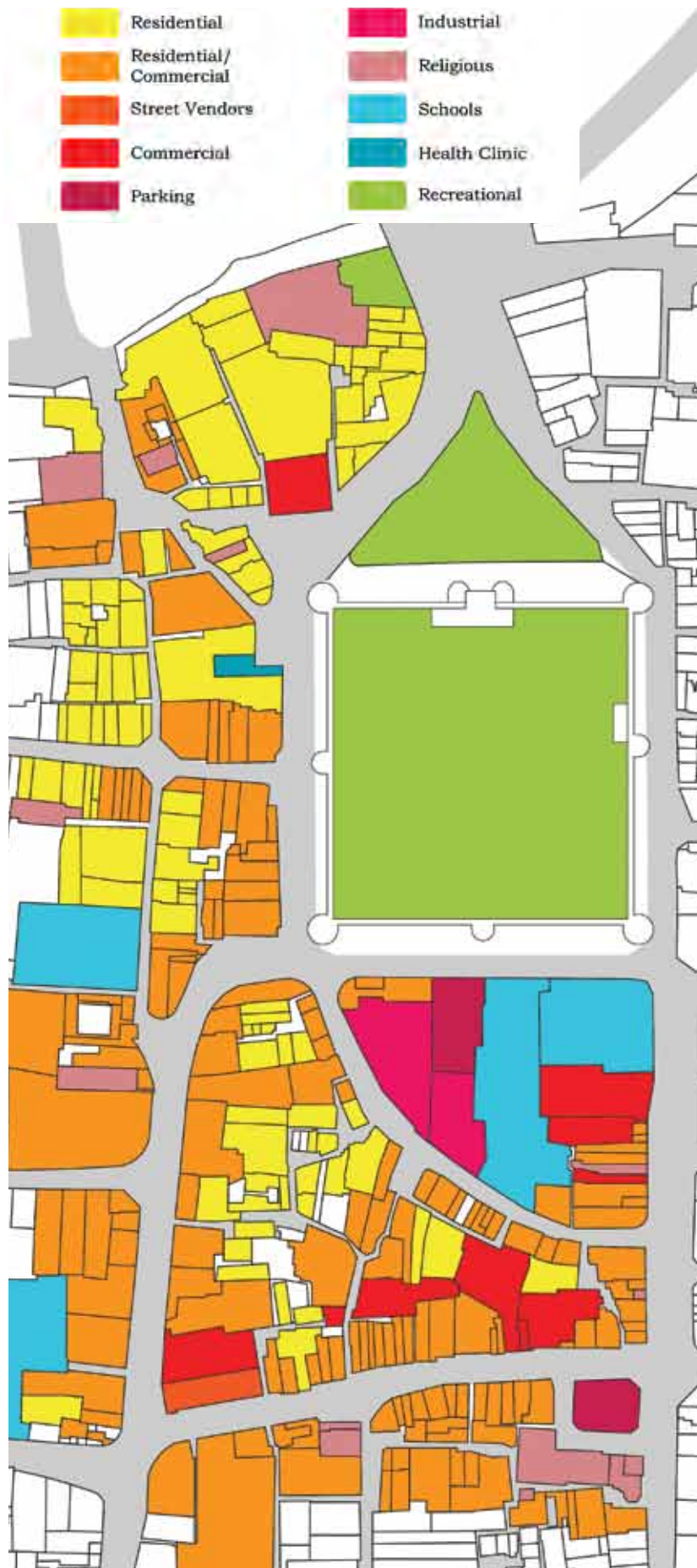
Compared to other parts of the city core, there are considerable numbers of wadas built before the 20th century. The oldest ones from the 18th century are usually two stories high (sometimes with an attic) and relatively small and narrow. They are built with a thick timber frame and either masonry or mud for walls. Windows are glassless and tall, protected with shutters. The use of cast iron and glass distinguishes the more recent 19th century wadas from their earlier counterparts. Another



19th century wada surrounded by 20th century buildings.



The courtyard facades are often very colourful.



typical feature of the wadas of the 1800s is the use of long balconies or galleries, both on the courtyard facades and on the facades facing the street.

Apartment blocks and commercial buildings from the 20th century were most commonly built using concrete and steel. Compared to the historic wadas, they look streamlined and modern, with few or no decorative elements. Although not extremely tall, their footprint is large, covering substantial parts of their blocks.

Shaniwarwada fort is 150 metres wide and measures 168 metres in the north-south direction. It is surrounded by stone walls three metres wide and ten metres high. Inside the walls were both residential and administrative buildings which now lie in ruins.

Living above a shop

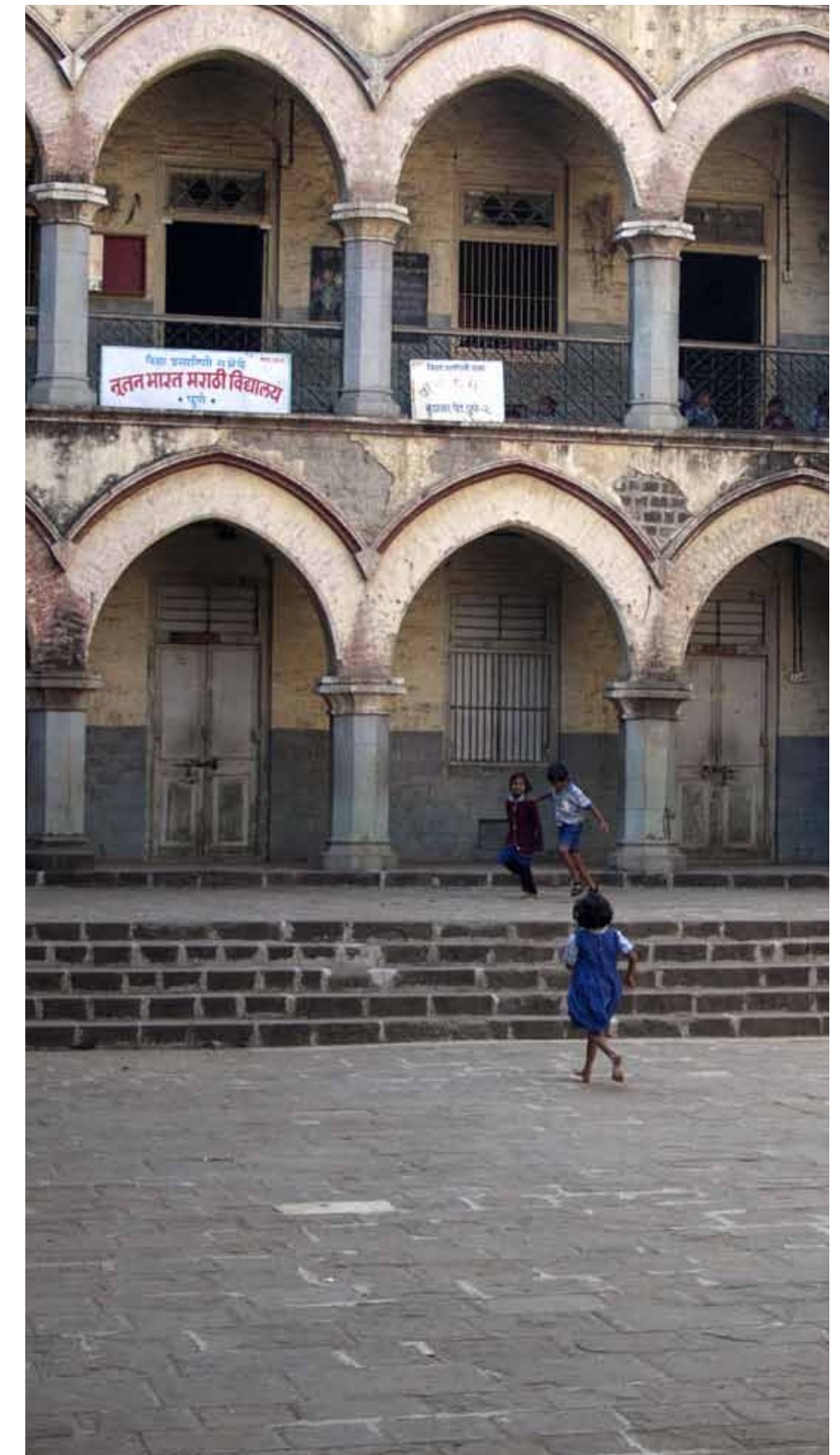
Even though both Shaniwar Peth and Budwar Peth are areas of mixed functions, most of the buildings are at least partly residential. Buildings that have both residential and commercial functions usually have shops or independent enterprises on the ground floor facing the street, with apartments upstairs. Some of the shops can also be situated in the courtyards of the otherwise residential buildings. Only a few of the buildings are completely in commercial use. Besides shops, commercial functions include restaurants, cinemas and shopping malls. Along the streets there are also numbers of small workshops, offices and shops in little stalls and booths by the



S. R. Electricals.

streets. Although the district is mainly residential in use, it is the mix of housing and commercial activities that makes the atmosphere so lively and unique.

There is also a variety of religious buildings including three big temples, smaller shrines and a mosque in the northern part of Shaniwar Peth. Other public buildings are four large schools and a small health clinic situated to the west of Shaniwarwada.



Schoolchildren in the courtyard of the Nana Wada School.

SEEN FROM THE SKY - MORPHOLOGY

Densely constructed blocks of buildings, narrow streets and lanes, a lot of vehicles. Even though first impressions on the city be somewhat claustrophobic, there are also places of peace and quiet.

Dense and tight

Because of Pune's constantly growing population, the blocks in Shaniwar Peth and Budwar Peth are dense and built very tightly. Thus, the inner courtyards are usually also quite small. The plots have traditionally been long and narrow, but the size of the building footprint has since increased drastically. Most of the public buildings and new apartment blocks take up the same amount of space as multiple old wadas.

Although the main roads are wide, most of the secondary lanes and alleys are very narrow. There are no driveways leading inside the courtyards, the access is either directly from the street or through a building. The courtyards are tightly surrounded by apartments and outbuildings.

Open spaces in the city structure are small, with the exception of the river Mutha and the large open area inside Shaniwarwada fort.

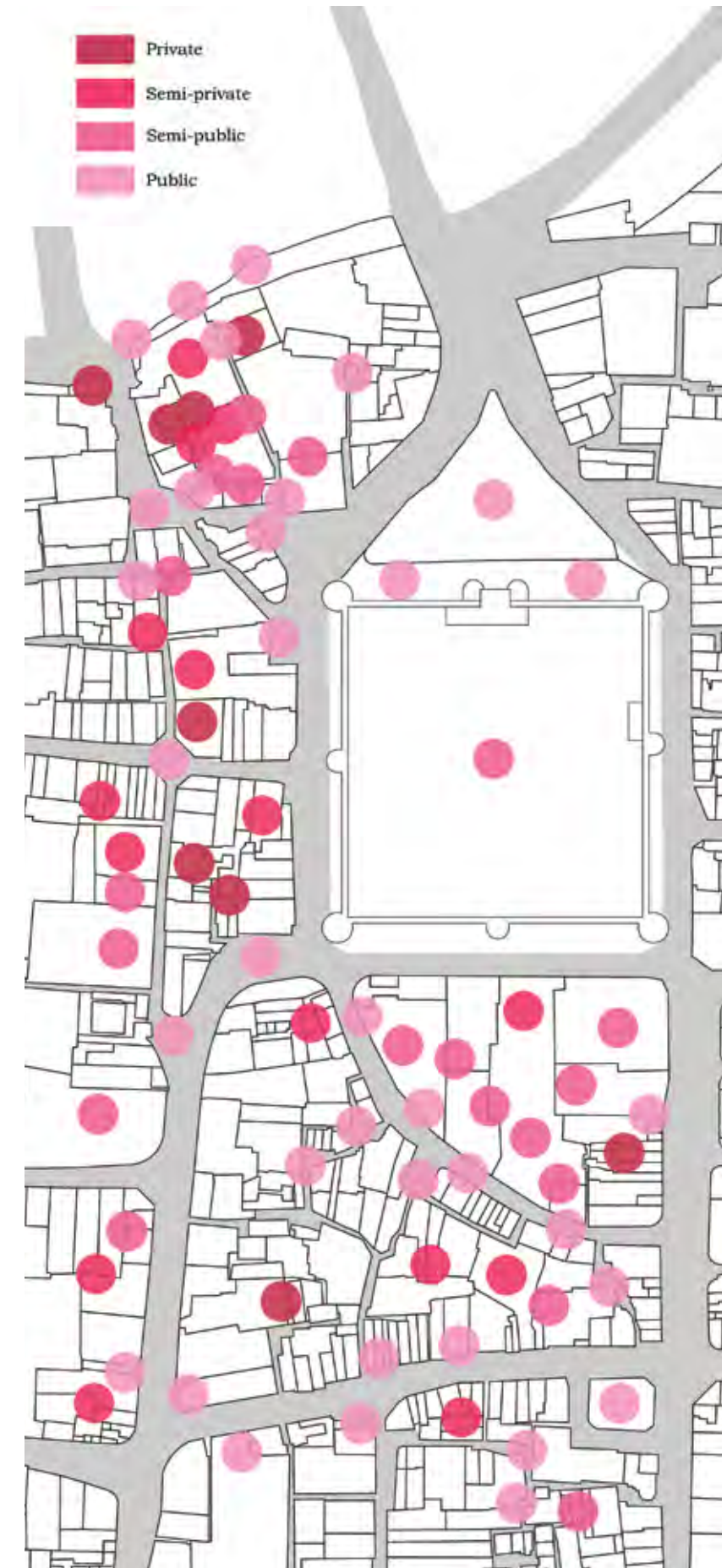
Taking space

The organic structure of the city core hosts various types of open spaces ranging from tiny private courtyards to a large public park. In general, the most private open spaces are courtyards found inside the larger wadas or apartment blocks. Corridors and front yards with fences are considered semi-private. Classified as semi-public are public squares and similar spaces which can not be entered directly from the streets, but are, for example, behind a building. Completely public spaces are easily accessible from the street, such as open-air market-places, squares and small openings in front of different shops or houses.

Since Indian culture is extremely social, every bit of open space is always in good use. Whether it is washing dishes, doing business, practising your religion or just plain gossiping, it is not easy to find an empty corner in the city.

Green spots

The most prominent green areas in the city core are the un-built open space by the river Mutha and the park inside Shaniwarwada fort. There are also prominent rows of trees right outside the walls surrounding the fortress, on each side. In addition, there are several smaller green patches in the inner courtyards of individual wadas. Although often made up of a solitary tree, they are important oases in the midst of the hectic city.



Narrow lanes are a prominent feature inside the tightly constructed city.



Courtyards provide shelter from the heat and the noise.



Inside the walls of Shaniwarwada are the remains of a large and impressive garden being used as a public city park. The situation at the river front is not as pleasant. The open lawns on both sides of the river are taken over by mounds of garbage due to the lack of waste management of any kind.

Traffic warning

There appears to be no regularity in the way the streets in Shaniwar Peth and Budwar Peth are formed. They are at their widest around Shaniwarwada, with the main arteries stretching from the river Mutha southwards. From Shaniwarwada, smaller secondary streets extend radially in all directions. These in turn are connected with extremely narrow alleys and lanes winding between the buildings.

Even though the overall shape of the street network is organic, some of the main streets are occasionally very linear, particularly the road going from north to south on the eastern side of Shaniwarwada, and the one on the southern side of the fort. Most of the smaller streets and lanes meander inside the very dense blocks of buildings in a seemingly random pattern. In the midst of the busy main roads, the blocks come across as if they are islands in a stormy sea.

Traffic in the city core is extremely heavy, consisting mainly of motorcycles, scooters and rickshaws but also of four-wheeled vehicles. Extreme pollution and noise is a daily burden not only for residents but also for the built environment. It is also a considerable danger to pedestrians. The main cross-roads are noticeable nodes in traffic.



The riverfront is one of the few green areas in the centre of Pune.



Motorbikes are a popular mode of transportation.

STREETLIFE TAKING SHAPE

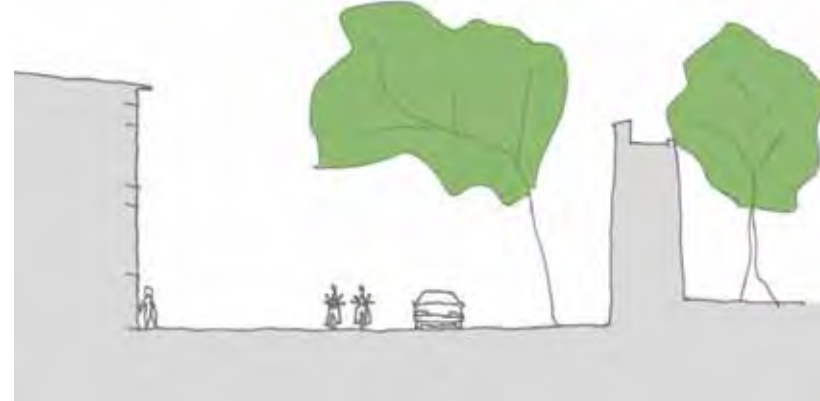
The streetscape in Shaniwar Peth and Budwar Peth is very defined by the densely-built blocks of buildings. Organically developed, both the streets and the buildings were usually constructed simultaneously and there are practically no unbuilt pieces of land in the area. As the buildings are relatively low in height, the streets have a human scale. Even the widest of the streets, Bajirao Road next to Shaniwarwada, seems to be slightly narrowed, thanks to the trees planted on the side.

Life inside the buildings is linked with life on the streets through windows, balconies and through the entire ground level, which is often very open towards the street. Together with the patchwork-like houses in different colours, the narrow and winding streets are a constant source of changing visual experiences for the people wandering in the area. The streetscape is always of interest.

One of the most prominent features of the district is its very busy street life. Businesses large and small are spread over the whole area, and are found not only in semi-residential buildings and offices, but in sheds, booths and carts. Vegetables and fruits or plastic kitchen equipment on rolling stands and barrows are found everywhere on a walk along the street. And so is the garbage. Despite its unpleasantness, trash has become a defining feature in cities all over India. Managing waste is a big

Among the different types of enterprises, sometimes set up even in the tiniest holes in the walls, there are many printing workshops. Budwar Shawk Road – the book store street – is the centre of all kinds of paper shops. A married couple described the successful growth of their wrapping paper business by explaining how they were able to move out from his parents' wada in the same peth into a modern apartment in a new house opposite their shop. They even have extra space now for storage. They also talk positively about the collaboration with the other shopkeepers.

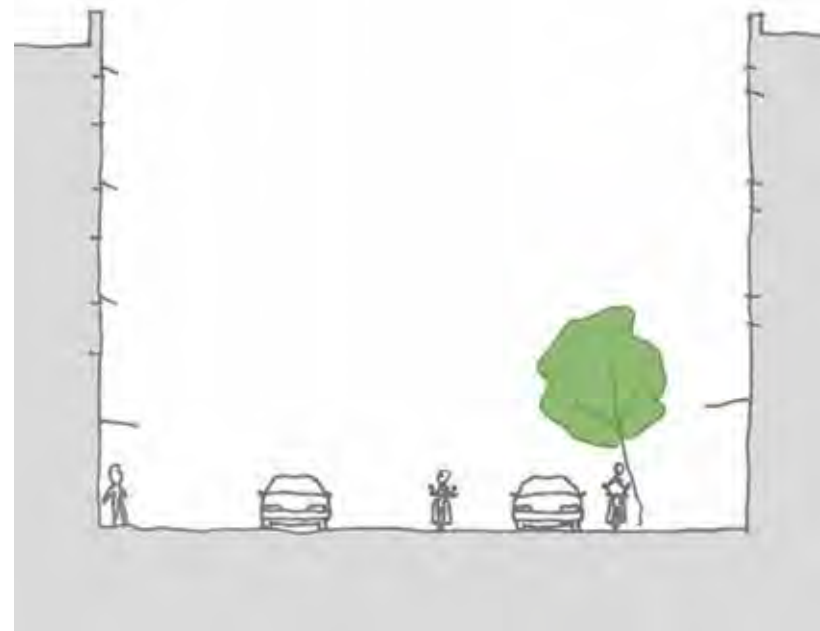
In the new house next to Karale wada the shop in the entrance is an open wholesale shop for office supplies. The fresh smells that come from the vegetable and fruit stalls, the fluttering textiles on washing lines, the colours on walls of the houses and handpainted signs add to the charm of the every day life of the peth.



Section 1.



Section 2.



Section 3.





View 1. Mixed use and building typology with apartment blocks, shops and religious structures.



View 2. Lively traffic. Two-wheeled vehicles are the easiest way to travel inside the city core.



View 3. The secondary streets are more serene than the main roads.



Vaibhavi and her grandmother.

SOCIAL S.O.S. – VALUES IN A WADA

We discovered the well-hidden Karale Wada by chance. Here we meet Vaibhavi, the three-month old symbol of the future of the socially well-functioning wada life, surrounded by her mother, grandmother, and aunts, having her diapers changed while life now and in the future is discussed in their small minimally-furnished home – the night mattresses rolled away for the day.

Very idyllic at first glance: Male neighbours sit talking on the staircases, women are washing at the communal tap, where the cleaning of animal cages is also going on. Children play hide and seek. There is constant coming and going, people walking down or up the staircases. The doors to almost all the tiny homes are open – “Welcome to visit!” – as well as those to a small sewing workroom and a matrimonial agency behind the sewing ladies.

Daily meetings in the yards with its miniature temple are part of the wada good life. Celebrating festivals together also is – though it was so much better before when the space was double the size. Other positive qualities of such peaceful living in the city core are being so close to vegetable market and everything else that is needed. Karale Wada has no connection with the main streets but is reached by narrow lanes and through the new high-rise apartment building, with a walkway down to wada life.

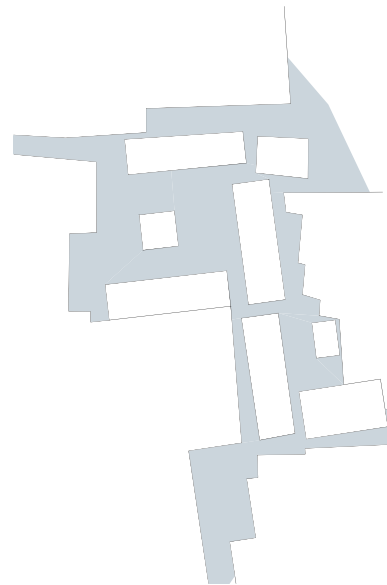
Two wada houses, two and three stories with balconies in a L-shape, fill the south-west corner of the yard. Staircases connect the balconies on the second floors. 130 – 150 tenants liv-

ing in 29 apartments – each have 10 square metres per family, including a kitchen. Railings of cast iron date from the 19th century. Sandstone tiles on balconies and landings. Varied colours on the walls define each apartment.

The architecture is reminiscent of the chawls, the housing built for urban workers, with one small all-purpose room, that functions both as living and sleeping space apartments and have shared toilets. Sometimes there are workrooms both on the ground and middle floors. A description from the 2010 Pune Charette writes of this type of housing: “trivial news and gossip travels quickly” and “this intimate living situation also leads to a friendly atmosphere, with support networks akin to familial relationships”.

The position of the Karale Wada homes at the base of larger buildings shows the result of the decades of urban development in the modern style – the most recent from 2011 still lacks a plaster finish, turning a grave facade towards the wada community below it. Yes, the newly-established neighbours did live here before – but at a lower level.

This seemingly idyllic life is at the same time problematic, with the long-term decay of the wada. As tenants who have lived for four generations in the 90–100-year old wada, many pay very low rents – almost nothing, or 20–70 rupees a month. The sum is the same the family paid when they first moved in 30 or 50 or 70 years ago. This economic order is something on which tradition and the law agree, but it gives a low profit to the owners of buildings. The response is little or no maintenance of the old buildings. Leaking roofs and pipes and three (not long ago six) shared toilets are examples of present Karale Wada living standards.



The previous structure.



Karale Wada hidden in the middle of Budhvar Peth behind high modern apartment buildings and hard traffic.

The yard is clearly not everyone's living space anymore. It has been filled with the rubble of the ruin of a third wada and the new apartment building is out of reach since there is no access in that direction. On every empty centimetre bikes and motorbikes are parked, some used to dry clothes on, others covered by climbing children. There are signs that the future feels unsure, that the days of the wada are counted – something everybody knows is coming, but not when.

The builder who has bought Karale Wada offers the tenants the opportunity to buy new homes. In August 2011 their neighbours from the ruined wada are back as owners of 30-40 square metre big apartments with living room, bedroom, kitchen and shower. Both near and far from their old neighbours. Or, as Mrs Anarudha Tipnis, who has lived 32 years in the wada, says: "They are here, but stay behind their locked doors, we don't meet them like we always did before".

Mrs Tipnis took almost 15 minutes to reach her friend on the first floor of the new apartment building, trying to call Alka in a loud voice but without result. Finally the owner herself, Vijaya Khadke, a social worker, aged 42, showed up in the window. She and her daughter Gayatri, working for IBM on her computer from home, welcomed us one flight up through their hand-carved big wooden door. "A gift to my self", Vijaya nods, describing her worries before moving to a modern standard of living.

With three students sleeping in the bedroom and sharing the space with four family members – a son studying and Alka taking care of the household – they manage to pay the mortgage. Vijaya says that a problem with owning an apartment which has turned up is that no-one is responsible for maintenance of the building. Topping her list of problems is the damp from water under the house. The lack of space for the children is another serious issue. There is also nowhere to put the family's cars and motorbikes. During festival periods they celebrated inside in the stairwell. The lack of balconies, she has been told, is a decision of the building authorities. She is missing her contact with the yard, a balcony would help.

Neha Saggam, our interpreting BNCA MA student, decided that life in Kerale Wada has the right to go on. She, who earlier during our mapping had declared that if she owned land in the peth with an old house on it, she would build a new modern house, now has changed her attitude and delivers her recipe for how to save Karale Wada: new roofs, new staircases, repaired balconies and better sanitation. Just the same things the inhabitants of Karale Wada have listed as acute needs they were prepared to handle themselves if the owner had not stopped them.

"The system could be an elaborate house-to-house, social-physical-economic survey of the settlement – upgrading design based on merit of each house", wrote Yatin Pandya, architect and activist from Ahmedaba, in one of his DNA-columns about how to rebuild instead of sweeping away a functioning social system. He is also seriously alarmed by the new taxes on "balconies, verandas and other necessary health spaces" – a blow to social togetherness.



Women in Karale wada.



Welcome to visit the homes



Vaibhavi with her mother and aunt.



The balconies need to be repaired.



Balconies have an important function as semi-public space.

ASSESSMENT OF VALUES

The wada is the most common vernacular building type in old Pune with traditions reaching back hundreds of years. Today the surviving wadas are an important element in the unique character of the old city. In Shaniwar and Budwar peths the old wadas are spread throughout in the built environment like rare, decayed and unfairly treated vestiges of the past. At the same time they are present at the most lively nodes of city life.

Karale Wada is a typical example of these old vernacular buildings in Pune. Its material appearance and its use testify on the one hand to traditional architecture, materials, construction and a way of life, and on the other to an identity of strong continuity. From an aesthetic perspective Karale Wada, despite its apparent simplicity and poor condition, carries such tangible qualities as good craftsmanship, use of fine materials and historic patina in its building components and in the vivid colour scheme of its facades. The building's composition – low buildings with galleries grouped around a collective courtyard – is humane in the way it favors connection, security and togetherness among its residents. Today its partially cluttered courtyard, once a scene for religious celebrations, festivals and weddings, testifies to lost intangible values that not long ago were important for the entire area.

Physical manifestations of cultural-historical values:

Structure in half-timber frame and brick infill
Building composition: low buildings around a courtyard
Building details in fine materials such as cast iron rails, wooden staircases and galleries, doors and limestone flooring
Vivid colour scheme of the facades
Semi-public areas such as galleries and courtyards
Public functions such as temples and recreational facilities
Use of the building as residences with small business on the ground floor

Damage-related condition:

Leaking roof and poor water diversion
Rot damage in wooden framework and floor beams
Degradation of sandstone floors in the form of blistering and cracking
Dilapidated stairs

Degree of importance in the building fabric

High Importance:

As much as is possible of the building fabric should be conserved in order to maintain the significance of the building. However, if any elements are damaged or missing, new compatible materials should be used for repair or reproduction. Original framework in half-timber and brick, though the cost of timber may be an impediment here
Building configuration of low structures around a courtyard
Original manufactured details in fine materials such as cast iron handrails, wooden staircases and galleries, doors and limestone flooring

Timber frame constructions and brick walls. Later replacements with steel beams could carefully replace rotten wood. Wooden staircase with bridges, balconies and handrails in cast iron and wood. All replacements will be reproductions of the originals

Original wooden doors and other joinery details

Sandstone flooring on balcony and landing

Medium Importance:

This part of the building fabric should be conserved as much as possible in order to maintain the significance of the building. However, if any elements are damaged or missing, new compatible materials may be used for repair or reproduction. Plasterwork of facades

Low Importance:

These parts of the building fabric may be repaired using new compatible materials. New construction should be introduced: Plasterwork of façades
Colour wash on walls
Electrical wiring
Water and sewage pipes

No Importance:

These parts of the building fabric may be changed, or removed, if necessary:
New building components such as roofing, without changing the roof profile.
The ruin in the courtyard.

Suggestions for restoration and development

The historic two to three-floor residential construction of Pune's wadas is unique, and should therefore be preserved as much as possible. Traditional materials should be used so that new structures blend well with the historic buildings. Works required for rehabilitating Karale Wada should be focused on restoration and upgrading of the historic buildings, with re-design and development aimed at increasing living space for its tenants.

Proposals for action:

Install new roofs and guttering
Fix all rot in wooden parts
Mend staircases and landings, hand rails, and woodwork
Renew electrical wiring
Renew pipework
Paint facade in colours chosen by the inhabitants and use modern painting materials

Development

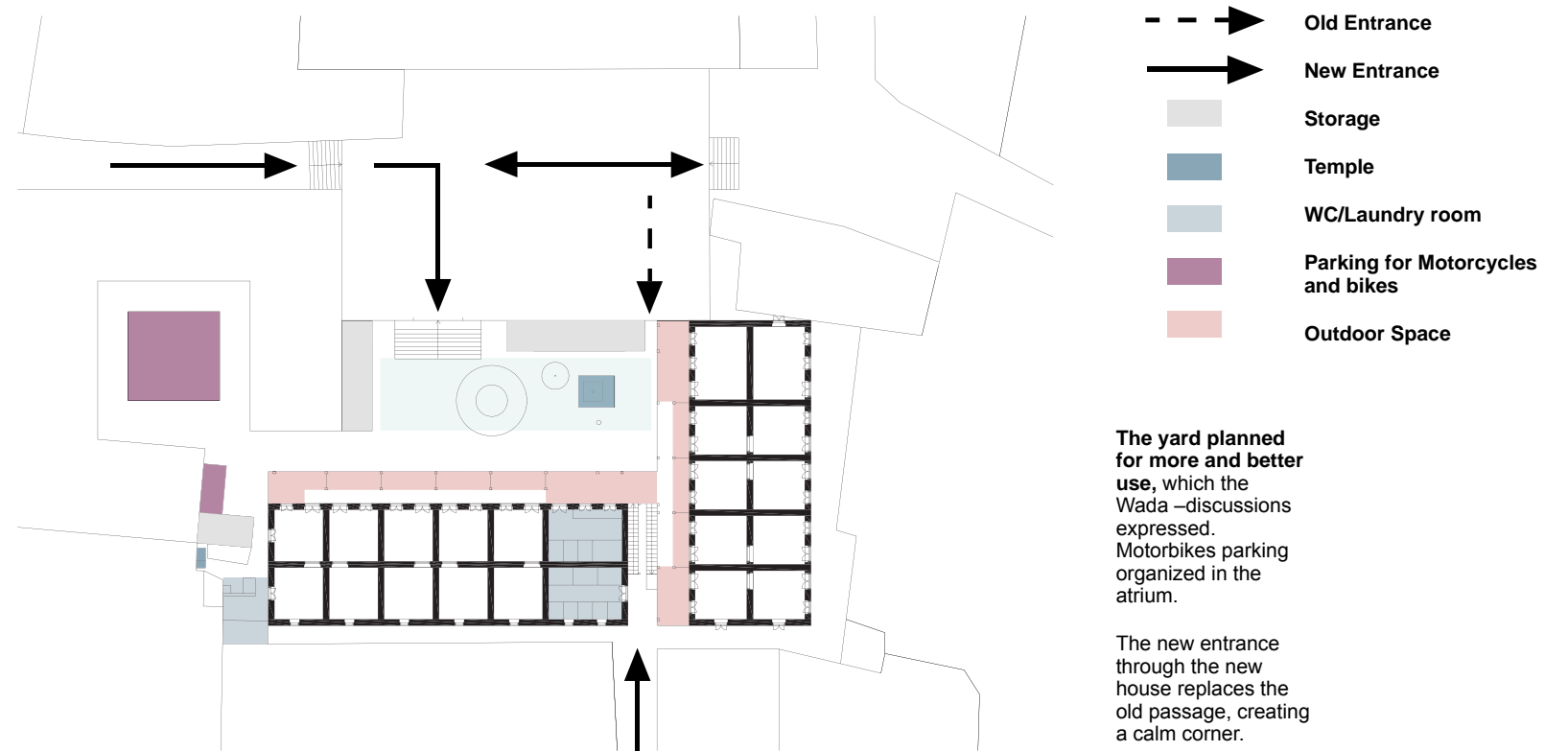
Functioning development:

Today Karale Wada's enclosed common yard looks like a building site. Rubble from the demolished smaller building, that previously was an important part of the structure, is now scattered about the yard, paralyzing any initiatives to improve the space. Instead this area's potential as a place for play and many other social interactions of everyday life has been compromised. By removing these building materials, and at the

same time cleaning up the yard – hopefully along the lines of the residents’ ideas and needs – living conditions would gain immeasurably.

Since the value of Karale Wada lies in its spatial arrangement as much as – or perhaps more – than in the architecture of its individual buildings, there is a clear possibility for some small scale development both in the buildings and in the courtyard. The space of the courtyard created by the surrounding buildings’ walls is an invitation which supports, strengthens, recreates and develops social qualities.

There are possibilities for a range of functions in the courtyard such as space for trees, a playground, composting and waste management areas, drying racks for washing, seating and storage. The yard would again be a better place for place for playing, socializing, celebrating, contemplating, cultivating, and just passing through. Trees that provide shade, the possibility to grow plants, benches for sitting, improved storage and better foundations for the constructions in the yard are all needed, as well as better rainwater management for the monsoon periods.



Space for the balconies getting double width. The old toilets in the corner behind stays, but each building has got new toilets and in a corner apartment, sharing common facilities as in chawls.



A part of the surrounding new structure...



...and the togetherness in the existing building.

Suggestions inspired by discussions with people in the yard are adding to the common and semi-common spaces by cleaning up the yard and moving the parking of motorbikes and bikes to the current location for toilets and storage. Toilets and showers – still shared and separate for men and women – and other washing facilities would be placed instead in common spaces within the buildings, one on the first floor, another on the second floor. This would be an improvement on those facilities, besides being more easily reached. It also would free the shower space in each apartment.

Other ideas for development are doubling the size of the balconies, giving each apartment an additional semi-public room

to furnish, cultivate, use as storage and to have a washstand. They would also function as buffer zone for heat regulation.

The new buildings surrounding Karale Wada have been placed with no respect for the former structure and the connection between them is slim. A possibility for creating contact with the courtyard could be by introducing new balconies on the new building. That would open up communication between Karale Wada and the new high-rise building, which today turns away from the social life in the yard. New entrances through the apartment building would help integrate these two building types and way of living with each other, reducing feelings of isolation.



The Indian way of living goes to great extension on in public space.



SHANIWARWADA GARDEN

It is readily apparent that Shaniwarwada has many cultural-historic values and that it should be maintained and developed in a way that better corresponds with its great importance.

Documentary values

Both building historical and technical values are apparent in the remaining parts of the fortification, most importantly the walls, the gate and the drum house (Nagarkhana) but also in the ruins, as the structures that were once there can still quite clearly be seen. Although Shaniwarwada has been repaired and also partly rebuilt, using perhaps more contemporary techniques and materials, most parts still showcase the building traditions of centuries past.

As a document of society and social history, Shaniwarwada reveals how the rulers' life was organised during an important period in the history of India and how the royal family themselves lived during the 18th century. The fort has been the centre of Pune during the Peshwa period, and could be seen as the place of origin for the whole city.

In Indian culture, patina is rarely seen as a value in itself, whereas in the Western conservation tradition, its preservation is considered crucially important. The value of patina is both documentary and based on individual experience. In Shaniwarwada, as a result of a historical process, the struc-

ture's patina shows the rise and fall of the Peshwai, including its tragic ending with the devastating fires of 1828 which destroyed much of its fabric.

Experience values

The construction, the walls and the ruins bear signs of the royal Marathi architecture of the 18th century. The monument is strategically placed close to the river and it lies at the centre of the old city core. The remaining construction shows the footprint of the once great Peshwai buildings. In Nagarkhana, especially in the Delhi Darwaja, there are traces of elaborate decorative paintings.

In addition to the buildings inside the walls, there used to be a magnificent garden with elements from a traditional Mughal garden. Evidence of the versatile use of different plants, lighting and water elements, all in a rectangular layout are still visible today. The most important feature in the garden is the lotus shaped fountain Hajari Karanje (meaning 'a thousand fountains'), with a perimeter of 24 metres. It has a great artistic value and could be the only fountain of this type in the world.

Shaniwarwada dominates its environment in the city core. The fort cannot be seen from a distance, since the walls are approximately only 10 meters high, but on a closer approach the fortification's heavy walls and the colossal Delhi Darwaja make a strong impression. There is a powerful contrast between the large footprint of the monumental structure and the

small scale buildings that surround it.

As one of the only historical monuments within the city core - and the only one reminiscent of the most powerful era of Pune - Shaniwarwada is highly significant for the identity of the Pune-kars. The fortress is the most important symbol of Marathi power in the city. During the time of India's independence movement Shaniwarwada also became important as a symbol for the power of Indian people and meetings and demonstrations were held outside the Delhi Darwaja. Even today, the fort is a traditional meeting place. Outside the walls there is an amphitheatre and two temples, while inside the fortification is a stage where people can enjoy different kinds of performances. With its spacious gardens, the monument could also be described as the green living-room of the city.

INSIDE AN INDIAN GARDEN

Even though the Shaniwarwada was built under Peshwa rule during the time of the Marathi Empire, the structure of the garden within its walls reflects the strong influence of the traditional Mughal garden. Mughal gardens were themselves based on a Persian "paradise garden", one of the world's quintessential garden prototypes.

The layout of a Mughal garden usually consisted of a rectangular water element at the crossroads of four walkways (rather than the four artificial streams of a Persian garden) portraying the four rivers in the Garden of Eden. All in all, water was an essential element and it appeared in various forms: as ponds,



The eastern part of the garden from the south. Chimanbag to the far left.



Nowadays, the north-western corner of the park is mostly empty of buildings.

canals and all kinds of fountains - large and small, wide and narrow. The slightly elevated walkways divided the layout into four smaller green areas, giving the entity its name: *charbagh*, or four gardens. It was common to have a small pavilion or even a tomb in the centre of the composition.

Vegetation in a Mughal garden followed the rectangular guidelines and trees were planted in impeccably straight lines. Many of the plants bore fruit and attracted various colourful birds. The smell of flowers and fruit and the sound of the birds were prominent and important attributes of these gardens. Typical trees included ashokas (cypress-like, tall and narrow), chinara trees, apple trees, pomegranate trees and aspen. Roses and daffodils were among the most common flowers.

The surrounding walls were usually of a rectangular shape as well, following the overall formal arrangement. Only the trees and flowers were left in their natural state providing a contrast for the man-made structure of the landscaping. The colours of the flora and fauna were accompanied with colourful fabrics, carpets and tents reminiscent of the Mughals' nomadic past.

Shaniwarwada Garden

The aim of the revival of Shaniwarwada Garden is to repair and conserve (perhaps even to rebuild a little if necessary) the public green area inside the fort so that visitors get a clear idea of how glorious it once was. The surrounding walls, the existing ruins and the Nagarghana - the main building - would be conserved carefully, utilising traditional knowledge of materials and methods. Inside the walls, the vegetation of the garden would be brought back to life with new trees and flowering plants. In addition to the existing water system (which would be restored), some new water elements would be created to further enhance the attractiveness of this beautiful green space.

The eastern half of the garden is more structured and organized, while the western part remains more informal. All the new additions would be strategically and carefully planned to bring into focus the past features of the garden. The Nagarghana would serve as a museum providing guided tours and information of the past, present and the future of Shaniwarwada. There would also be several easy-to-read and considerably placed guideposts inside the garden. In addition to the tours, the museum would organise a weekly club where children can learn about the heritage of their city while playing and exploring the park. It is proposed that the entrance to the park would be free of charge to all.

Shaniwarwada Garden could be the setting for a series of annual events, including different markets and fairs with an emphasis on local produce, traditions and crafts. There would also be an opportunity to rent certain parts of the premises for parties and events such as weddings. Different types of performances (theatre, circus or dance) could take place in the performance area at the southern end of the garden, which, along with its seating, would also be repaired and renewed. A small café next to the open lawns in the south-eastern corner of the garden would sell beverages and picnic baskets - although bringing refreshments of your own would also be allowed.



Map of the garden proposal. Features listed below, former functions in *italics*.

- | | |
|---|---|
| 1. The Nagarkhana | 18. Fountain and a chowk (<i>wada</i>) |
| 2. Cavalry's quarters | 19. Madhala Chowk (<i>wada</i>) |
| 3. Acacia trees | 20. Twin fountains/chowk |
| 4. Apple trees | 21. Verandas of the marksmen |
| 5. Three tents (<i>long building, mixed use</i>) | 22. Lawn (<i>Mastani's residence</i>) |
| 6. Chowk | 23. Dairy |
| 7. Stables | 24. The Chimanbag, flowering plants |
| 8. Harari Karanje | 25. Lawn (<i>hall of Bajirao I</i>) |
| 9. <i>Madhavrao's residence</i> | 26. <i>Bakali Chowk</i> , 5 pits of holy fire |
| 10. <i>Rahatacha Bangla</i> | 27. Tent, the dancing hall |
| 11. Fountains | 28. Tent |
| 12. Tent (<i>servants' residence</i>) | 29. Chowk, several water elements |
| 13. Water tank | 30. Water tank with niches |
| 14. New trees | 31. Water tank, flowering plants |
| 15. Water tank | 32. New trees |
| 16. Stage and seating (<i>Peshwa garden</i>) | 33. Lawn |
| 17. <i>Gauricha Mahal</i> (<i>for women & children</i>) | 34. Café |

FEATURES

The garden can be roughly divided into three parts: the elevated middle section with axial symmetry and several square fountains, the eastern third where the royal residences once were, and the less formally laid western part that used to be occupied mostly by servants' quarters and administrative buildings. The middle section and the western part are divided by north-to-south walkways. At the moment the majority of the fountains and water tanks are dry and there are not nearly as many trees or other plants as there were in the past, while most of the buildings lie in ruins.



Decorative apple trees and temporary tents in the north-western corner.

Water elements

The most important of all the fountains inside Shaniwarwada is the Hajari Karanje, or 'A Thousand Fountains', the lotus-shaped fountain just a fraction to the west from the elevated centre section. Consisting of 197 pipes, each with a cap of four output holes for water, it is aptly named. The elaborate structure of the fountain would be restored to its former glory and the fountain brought back to use. Tall ashoka trees would be planted in each of the four corners of the platform surrounding the fountain.

Almost next to the outside wall in the south-eastern part of the garden is a small water tank that has several niches carved inside its walls. They originally held lamps that lit the tank from the inside. These types of lighting solutions would be brought back with the help of electricity and the tank at least partly filled with water again. To the north of this tank is the area where a dancing hall once stood. Between these two elements was once a row of eight fountains that the dancers could admire; it is proposed to reconstruct these fountains.

In the south-western corner of the garden lies a larger tank-shaped construction that was once used partly as a water tank and partly as storage for grain. Above the storage was a two-storey residential building for the most important servants of the ruling Peshwa. This corner of the park is relatively quiet and serves well as a meditative retreat for those seeking solitude. The water tank would be refilled and lit from below much like the smaller tank mentioned above. A light tent-like



Water elements and shade-providing trees make the atmosphere serene.

structure would be erected above the ruins of the servants' apartment to both provide shelter and give an impression of how the former building was situated. A couple of steps to the east from the servants' residence is a smaller water tank that would also be filled and lit from the inside. Just north of this water tank used to be a well and several fountains in a building that was called Rahatacha Bangla, "the building of the water wheel". Along with the fountains near the dancing hall, these fountains would be reconstructed, too.

Next to the bastion in the middle of the eastern wall is a large square-shaped water feature called the Chimanbag. It has seating platforms on two sides and is surrounded with flowers planted in the form of a larger square. The Chimanbag is a miniature of a classic Mughal garden: there are four walkways leading away from the water feature, dividing the flower beds into four smaller sections.

A smaller version of the Chimanbag is situated near the lawn in the south-eastern corner of the garden. Here, there used to be a small fountain surrounded with flowers that in turn was circled by a two-storey structure. The fountain would be brought back to life and the flowers re-planted.

As mentioned above, the elevated middle section of the garden holds various types of fountains, all of which are rectangular in shape. Near the Nagarghana are two smaller fountains placed symmetrically on both sides of the north-to-south walkway in the middle of the garden. About twenty metres to the south, one finds the Madhala Chowk (the middle square) with

several fountains in the middle. Further to the south of that square is another fountain that was surrounded by a chowk. The whole of the middle section used to consist of residential and administrative buildings with these squares and fountains in the middle. It is suggested that all the fountains be restored, but the ruins of the buildings left untouched.

Vegetation

In addition to the existing individual trees and the small groups of trees beside the northern wall, there would be new trees planted, especially in the western and the middle parts of the garden. Next to the bastion in the middle of the western wall was formerly a long structure that comprised both storage space and servants' residences. This part of the garden would be kept quite informal except for a row of apple trees that would be replanted along the north-to-south walkway. New acacia trees would be planted behind the apple trees and in the north-western corner of the garden where there used to be several of them in the past.

The ashoka trees surrounding the Hajari Karanje fountain bloom with beautiful orange flowers. More flowering trees would be planted to the south of that fountain in the area of the Rahatacha Bangla, where they would provide shelter for the meditative south-western corner of the park.

The flower beds around the water elements would be conserved and partly reconstructed, as well as the lawn in the south-western corner beside the new café.

Light and fire

All of the water elements and the most significant of the individual trees would be provided with night time lighting. The water features would be mostly lit from below. Since the two squares in the middle section of the park are below the ground level, they would receive new lights installed on the walls surrounding them.

The most interesting of the light features is the Homshala or the "five pits of holy fire" between the dancing hall and the middle section of the park where the Peshwai used to perform religious rites. These pits would be reconstructed and lit with fire each night.

Tents and pavilions

Along with the tent structure in the south-western corner there would also be other light structures made of colourful, traditional fabrics embellished with sequins and embroidery. These shelters and tents mark the former existence of the dancing hall south of the Chimanbag and an long building opposite the apple trees north of Hajari Karanje fountain. The latter used to be alongside a public square housing several important halls and a temple. A non-permanent shelter could also be erected over the new seating area next to the performing stage by the southern wall of the garden.

SINNARKAR WADA HOTEL

Sarita Dale

Beatrice Coppeters 't Wallant

Gaga Bonnier



TRADITIONAL BUILDING TYPOLOGY

“Most traditional houses in The historic city are deep, with narrow facades facing the street. Normally a house occupied the full width of the plot, giving a continuous facade towards the streets. Plots could consist of one, three, five or more sections. The number of sections a house consisted of was not crucial to the height of the building. Structures could be a mix of a ground floor plus one, two or three stories, giving a slightly irregular skyline. The whole ensemble, however, still presented a low and dense context, kept within a human scale.”

“Inside, these houses consisted of indoor and outdoor areas, functioning together as living accommodation. This pattern of building and courtyard is the most important feature of the building typology of Pune’s historic city – the central key to how life has been lived within the city.”

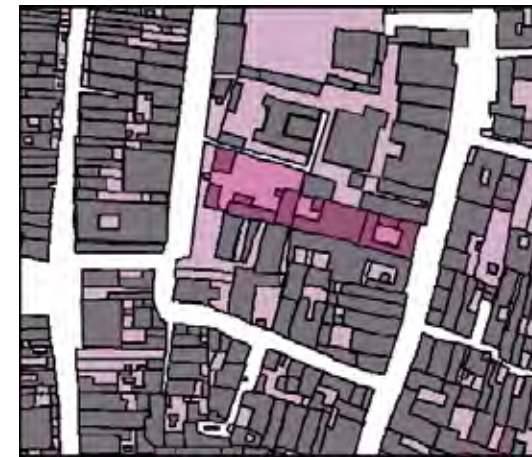
Kasba Peth, Pune.



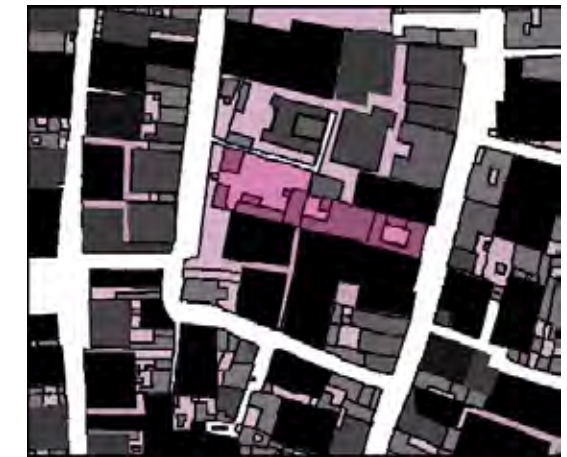
The block where Sinnarkar Wada is located, marked in pink.



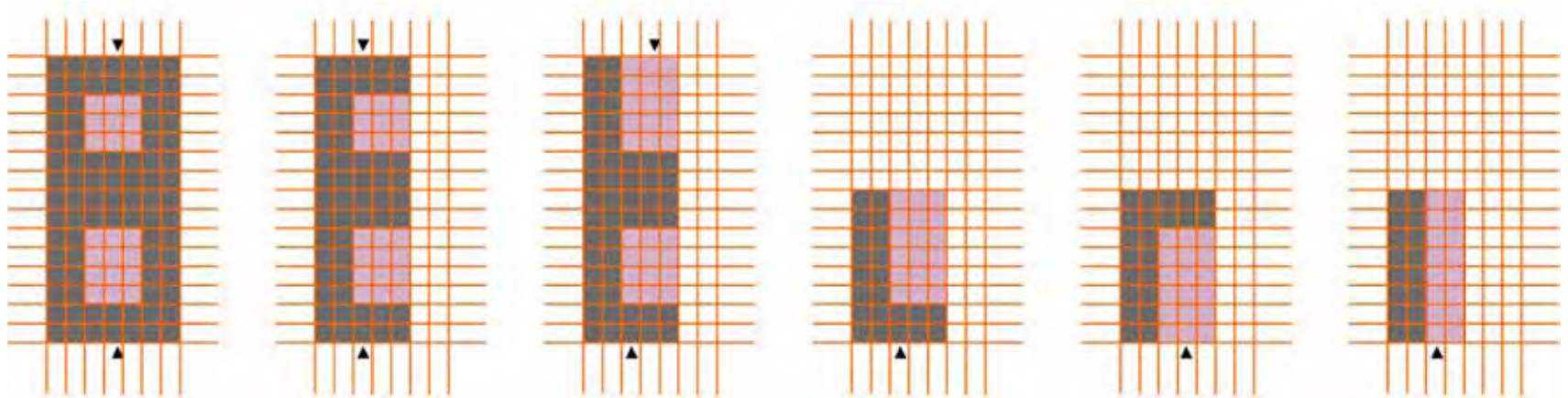
Based on a map from 1876.



Current situation.



Worst case scenario.



Analysis of building morphology based on the footprints.





Well: the well in the second courtyard would be used mostly by the women for washing clothes and is also a source for the units without water supplies (in the second building facing the garden).

Tethering rings: iron ring in the main facade for tethering horses and a similar one in the courtyard for cattle. Donkeys are, even today, often used for transportation and one can still occasionally find cattle in some wadas .



Stone stairs and stone basement: due to the intense rainfall during the monsoons, all the door sills, all the first steps of the stairs and all the bases of wooden pillars are of a local granite stone.

NOTABLE FEATURES OF SINNARKAR WADA

Sinnarkar Wada is a traditional Puneri courtyard house, or wada, built at the end of the 18th century. Today the wada provides housing for the Sinnarkar Family and two tenants. The rest of the rooms in the wada are unused and locked. However, the different functions of the various spaces are still easily recognisable and reveal how life was lived in a wada.



Carved wood: on the lintels of doors are found remarkably designed carvings in wood. That over the entrance door could be the name of the wada or the symbol of the family. There are typical floral motifs, and the lintel of the door in the second courtyard clearly shows a Ganesh figure. Stylistically these carvings are from the 18th century.



Wall niche in the main facade for an oil lamp: the lamp contains only one wick. There is usually a piece of metal that forms the back of the lamp, which has a picture of a Hindu



deity embossed on it. In many houses, the lamp burns all day, but in others it is only lit at sundown. The lamp in the home shrine is supposed to be lit before any other lights are turned on at night.



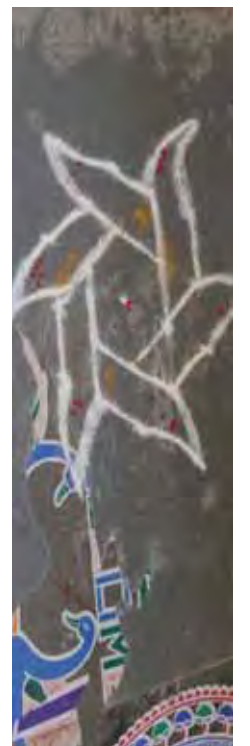
Tulsi vrindavan: in India the basil plant commonly known as Tulsi is considered sacred and is worshipped among Hindus. The presence of a Tulsi plant in a home signifies the presence of the Goddess Lakshmi, the goddess of prosperity herself. The plant is potted and placed on an altar called the Tulsi Vrindavan. Every morning the lady of the house waters it and offers her respects to the plant. In the evenings people light a lamp and place it by the plant or in the pot. This plant goddess is considered to be Lord Vishnu's wife.



Shiva lingam is a representation of the Hindu deity Shiva used for worship in temples. The Linga here is like an egg, and represents the Brahmanda or the cosmic egg. Linga

signifies that creation is effected by the union of 'Prakriti' and 'Purusha,' the male and the female powers of nature. Linga also signifies 'Satya,' 'Jnana' and 'Ananta' - Truth, Knowledge and Infinity.

Kolam or temporary chalk drawings on the ground: the presence of these colorful and beautiful pictures on the doorsteps shows the importance of religion in the everyday life of the Punars. It is a way to bless and welcome all guests and regular visitors to the house.





Entrance and work Main entrance and shop: there are four entrances to the house: three in the main facade and one at the back leading into the garden. These entrances were used for different purposes. There were separate entrances for domestic help, animals, customers or visitors and residents. Entrances were decorated

according to the status of the different doorways. The different entrances made it easy to direct visitors and residents into public, semi-public or private spaces.

Wadas facing a commercial street (as in this case) often had business premises at street level. In this facade it looks as if the commercial space has been placed to the right of the main entrance, where there is a closed veranda or osari.

LIVING FUNCTIONS IN SINNARKAR WADA



Social spaces

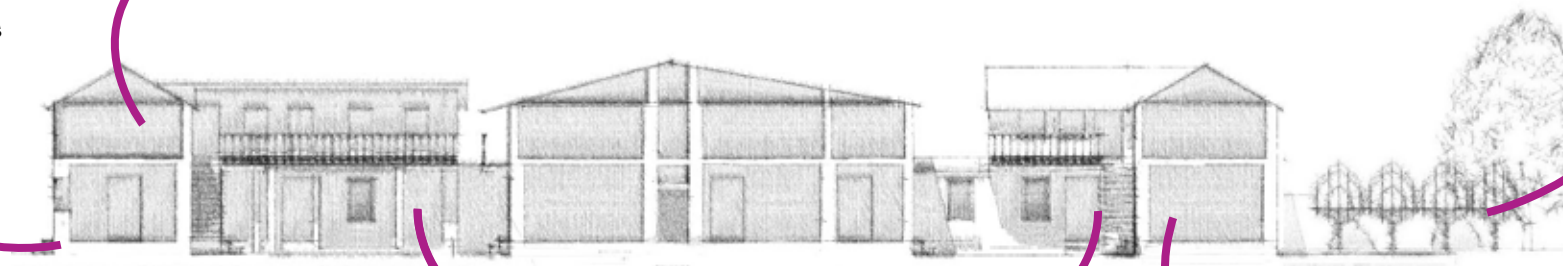
Divankhana: traditionally, this room on the first floor facing the street is a formal reception room. It is used for formal gatherings and reflects the wealth of the family.

Cultivating

Garden: the garden at the back of the wada is exceptional and very large for the center of the city. Remarkable large trees provide pleasant shade. The garden contains a well and the surrounding brick wall has arched niches. Perhaps cows grazed here in the past – as can be seen in the photograph taken 200 meters from the garden.



Storage room or granary: a small separate building in the first courtyard with a low ceiling, well-ventilated by trellis walls between the ground floor ceiling and the roof that must have been used for food storage.



Courtyards

The first courtyard is accessible from the street and is semi-public. The second is private. Most everyday tasks were carried out in these courtyards and the presence of a well shows that washing and ablutions took place there. The open gallery is used as a common external space and as extension of the rooms, as well as being the place to dry laundry. Above all it is a social place for discussions.



Sleeping and eating

Family household: each household in the wada has their own kitchen and a water supply. In the central building, the owner's family (which consists of three people) lives in three room on the groundfloor, the tenants (consisting of six people) live also in three room but on the first floor. The single female tenant lives in two room in the building in the courtyard.



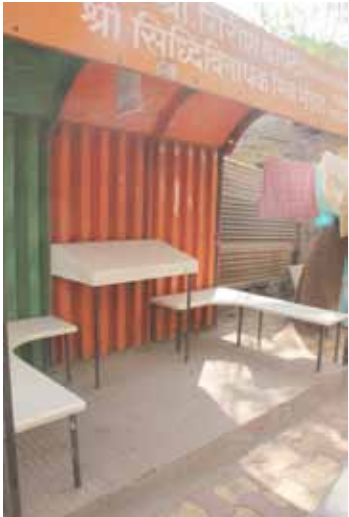
Praying

Private temple: many wadas belonging to Hindu owners have a private temple. Here the presence of a Shiva sign on the pavement in front of the door and a Ganesh design on the carved wood lintel is a clue to something sacred in the vicinity. The wada's temple is normally visited and maintained several times a day.





Holy tree, a praticel way of taking care of religion on your way to work



Newspaper reading station, today's newspaper is laid out for the elderly every morning



Osari, platforms in front of the houses used either for work or informal "chit chats"



Haud, a public water outlet that can be used for dishes, laundry or cleaning the scooter



Processions, take place in the streets whenever it is needed



Bench, public benches can be found everywhere in different colors and style



Temple, a meeting place for neighbors



Street shop, convinient food trade in the local environment

P
U
B
L
I
C

S
P
A
C
E
S

“YOU MUST BE THE CHANGE YOU WANT TO SEE IN THE WORLD”.

Mahatma Gandhi

Indian political and spiritual leader 1869-1948

Wada goes Pousada

The aim of this case study was to stop the deterioration and ensure the preservation of the old house known as Sinnarkar Wada in Pune's Kasba Peth. Its most important objective was to try to improve the economic basis of the property, providing enough income to stop its decay.

Thus a use for the building needed to be found that could give the owners of such buildings and their families an income and the possibility of remaining living in the wada. They would be able to maintain these interesting historic buildings and hopefully also provide employment to people in the neighborhood.

Portugal and Spain have a system of tourist accommodation housed in different types of historic buildings such as castles, palaces, monasteries and manor houses which ensures the preservation and continued use of these structures. The pousadas (known as paradores in Spain) were originally designed as rest houses for travellers in areas that did not offer other accommodation and were designed to be rustic and genuine and were referred to as “small hotels that does not look like hotels”.

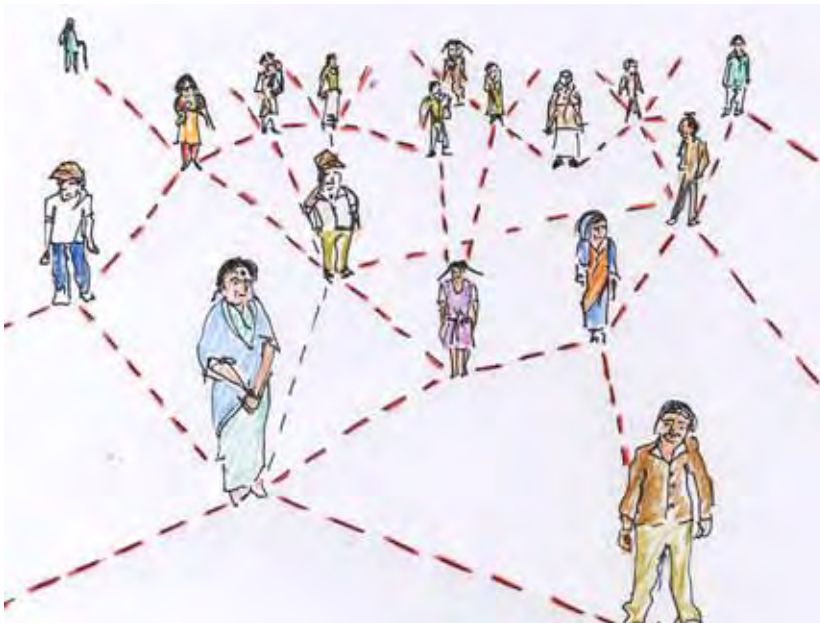
The pousada concept inspired the idea of turning Sinnarkar Wada into a small hotel. With its limited size the owner and his family could operate it themselves. This is a pilot project which hopes to begin a dynamic process in the area. Tourists staying at the hotel might also have an beneficial economic impact on the area.



STRATEGY- AN ECONOMIC INCENTIVE TO CONSERVE A HISTORIC CITY



Spreading a case study



Partnersnetwork, cooperative and collective agreement

The Wadas Network: diffusing a case study

Case studies are one possible tool to implement and direct the development of a city core within a conservation plan. In this case study a model has been developed that could be used by several threatened wadas.

A small hotel is created out of an old wada, preserving a historic structure, while providing job opportunities for local people and improved living conditions for the wada's present occupants, both property owners and current tenants.

An objective is to develop the possibility for more wada owners to connect to the project by offering a "wada living" type of bed and breakfast accommodation to the growing field of ecotourism. The Sinnarkar Wada hotel is meant to be a "Mother Wada", providing a booking service for these Wada Living Hostels.

Public/private partnership

For years INTACH, universities and local associations have raised the alarm to municipal and regional authorities about the rapid dilapidation of Pune's historic centre. They have stressed the urgency of taking serious measures to address the degradation of the city's heritage. A credible small scale project from private entrepreneurs could help convince the authorities to take part in the process of rehabilitation of the city core. To attract enterprises to the entire region it is important for Pune to keep a living and attractive historic centre.

Shramdan and the network of partners

To be partner in the Wadas Network implies that individuals or organizations accept taking an active role in the improvement of the public spaces of Kasbah Peth. The partners would agree to spend a set amount of time carrying out shramdan, or voluntary labour. For example, cleaning the streets, installing oil lamps on facades, or planting fruit trees in gardens and public space.



Inventory of constructions of age

Religious buildings
Wadas 1700-1800
Wadas 1800-1900
Buildings 1900-1970
Art Deco 1920-1940
Contemporary post 1970

Mother's Wada and satellites



Mother's Wada and satellites

Preservation of a wada

The preservation of a city core is a challenge and must be solved gradually, balancing the needs of conservation and development with the life of the city.

While it is desirable to preserve as many as possible of the old buildings and wadas, it is not possible to save everything. How additions to existing structures are designed is essential for preserving the old city core. Its values lie not only in the single monuments and old wadas. The totality of the urban fabric is just as important. Thus, the aim of development should be to preserve the old city structure and at the same time, build and modernize within it.

This project proposes to restore a wada very far gone in dilapidation in some parts. Both rebuilding and restoration will be necessary. The need for more space is a constant issue in the Pune's historic city, thus it becomes an important requirement to solve in this project.

Present conditions and required conservation measures

The whole wada will probably fall down in a few years without serious restoration work. However, all the buildings still form a coherent whole. The different periods of construction and additions carried out according to the local vernacular typology can be clearly seen.

The front facade is the most damaged part of the building. Plaster has fallen from surfaces, leaving the bricks beneath uncovered and without protection. Upstairs, the original wall has been replaced by corrugated iron sheets, though parts of the original wood construction are still visible on the outside of the iron sheets. Others facades have large areas of bricks without plaster and some bricks are missing.

The building's wooden frame, fillings of bricks and stone basement are threatened but could be restored. The original roof has disappeared and has been replaced by corrugated metal sheets. This effectively protects the building, but turns the attic into a hot oven. One outside staircase in the first courtyard was recently replaced with an incongruous stairway in steel. Traces of open galleries overlooking the courtyard are clearly visible, but only the support beams for certain parts remain. However, there are still many fine details remaining on the structure that show the great skills of the craftsmen of the region which can be seen in the stone carved sinks, all the carved woodwork, the stucco facade and niches, and so on.

Thus, urgent restoration is needed. The first step should be to protect and repair the wood and masonry structures. Open galleries and parts of the stairs should be reconstructed in wood and include carved motifs. Analysis of the original plaster to determine its precise mix should precede the application of new plaster. It was most probably a mix of lime, mud and even hay or cow dung that was laid on the bricks. Traditional colour schemes should be used on the carved wood.





Functions in the renovated wada-hotel

Respect for the traditional use of spaces such as the ‘divankhana’ and the ways of using common areas such as courtyards and gardens would be the most important link between the past and the future.

Some hotel rooms would be situated in the old wada and give onto the courtyard, others in new additions with a view of the garden. Rooms would be simple and characterful with a modern bathroom en suite or nearby. The hierarchies between the different buildings would be maintained but the central building, originally occupied by the trader landlord, would have two more luxurious floors with rooms connected to bathrooms. The landlord would still live with his family in the renovated apartment on the right side of the ground floor in the main building. The two apartments for the existing tenants will be kept. Their presence in the wada is important for establishing the welcoming atmosphere of the first courtyard of the old building, where the landlord will be able to offer hotel guests tea and coffee.

The building facing the main street will contain the reception area on the ground floor. It can be reached directly from the archway coming from the street. On the first floor of the building facing the street is the ‘divankhana’ which will be used as a tearoom for the guests of the hotel, as well as for non-residents. Downstairs on the ground floor, there will be a common bathroom, a shower room and double toilets.

Passing down the corridor through the central building, the second courtyard is reached. Here would be a building with simple rooms. In the hallway to the garden guests would pass by the wada temple. In the garden there would be bathrooms and toilets in the corner to the right. The bathrooms would be close to an old well, which remain in the garden.

The garden will lead to a restaurant, which forms a link to an adjoining street. There would be five simple rooms on the right hand side of the garden, each with an entrance directly from the garden.

Hotel guests would be offered daily yoga session in the garden and also offered the opportunity of experiencing the tradition of henna staining of their hands.

There would be a system for collecting rainwater during the monsoon period which can be used for watering surfaces in the garden and to reduce heat during the hot season. Green roofs will also be added to the buildings.

Outside the garden, at the back of the hotel, connects to a site typical for Kasba Peth. There is a water outlet where people in the neighborhood can wash their laundry and dishes. There is also a newspaper reading station, where elderly people come to read the daily newspaper each morning. But it is the old 16th century Parvati Nandan Ganapati Temple that dominates the site. The site should also receive new benches, new pavements and streetlamps, but the trees and the main structure should be conserved.



Bathroom, with the old traditional standard of the wada



Patio, with today's look in the old Wada, and as it might be enjoyed by future hotel guests



Bathroom, as it can be transformed in the new hotel



Bedroom, in design of one of the tenants of today

BEFORE AND AFTER

Passing through the old doors of this ancient mansion the modern world outside is quickly forgotten. Sinnarkar Wada is said to be at least two hundred years old – the seventh generation of owners' family now lives in the house. All the inhabitants in the house have always celebrated the festivals together and shared the daily life of the Wada, ready to support each other in times of crisis.

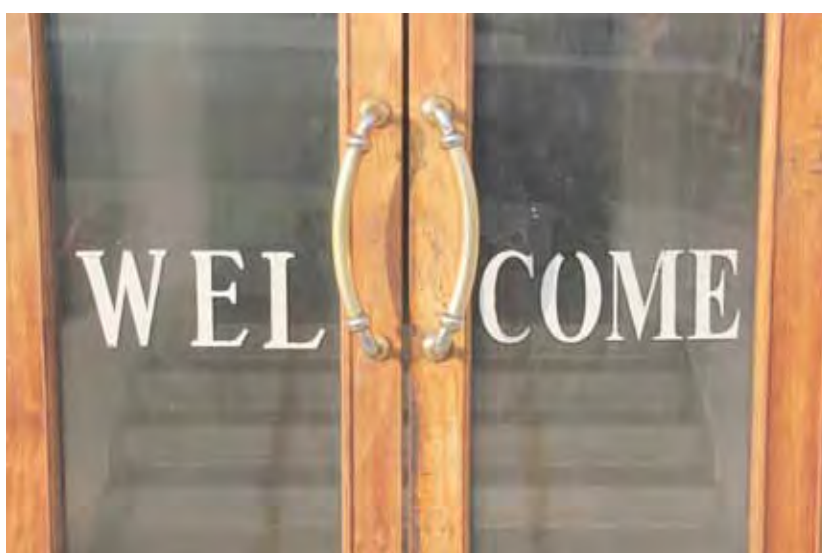
The project to transform Sinnarkar Wada into a hotel engages visitors in the tradition of a shared life. The atmosphere is decidedly respectful of tradition with interiors drawing on local styles, featuring white with strong colors, Indians silks, and genuine flair.



Bedroom, designed for the new wada hotel



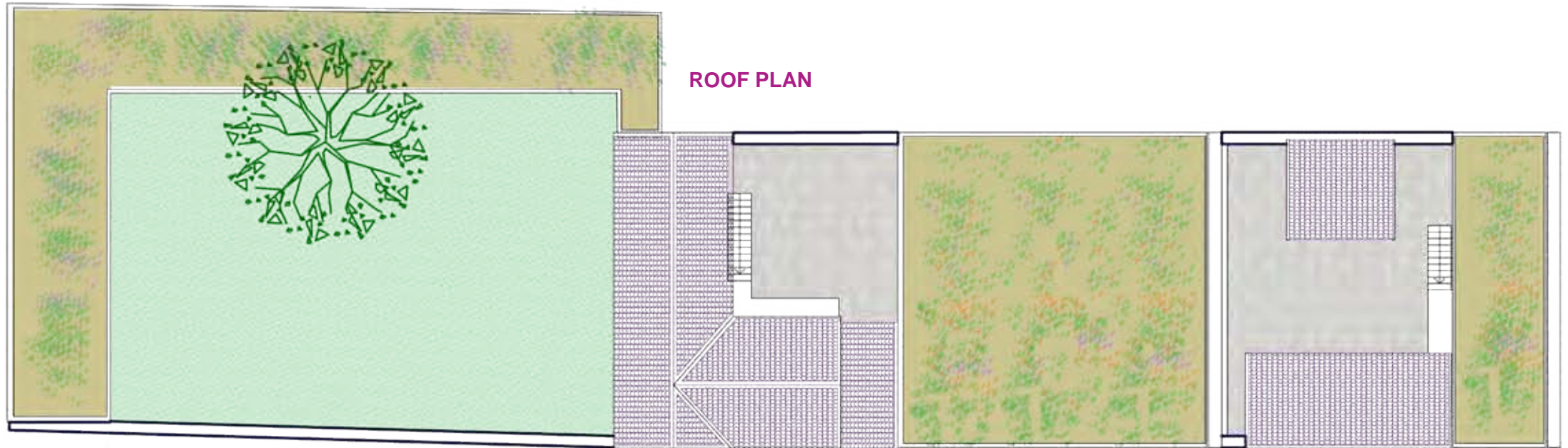
Garden of the old wada



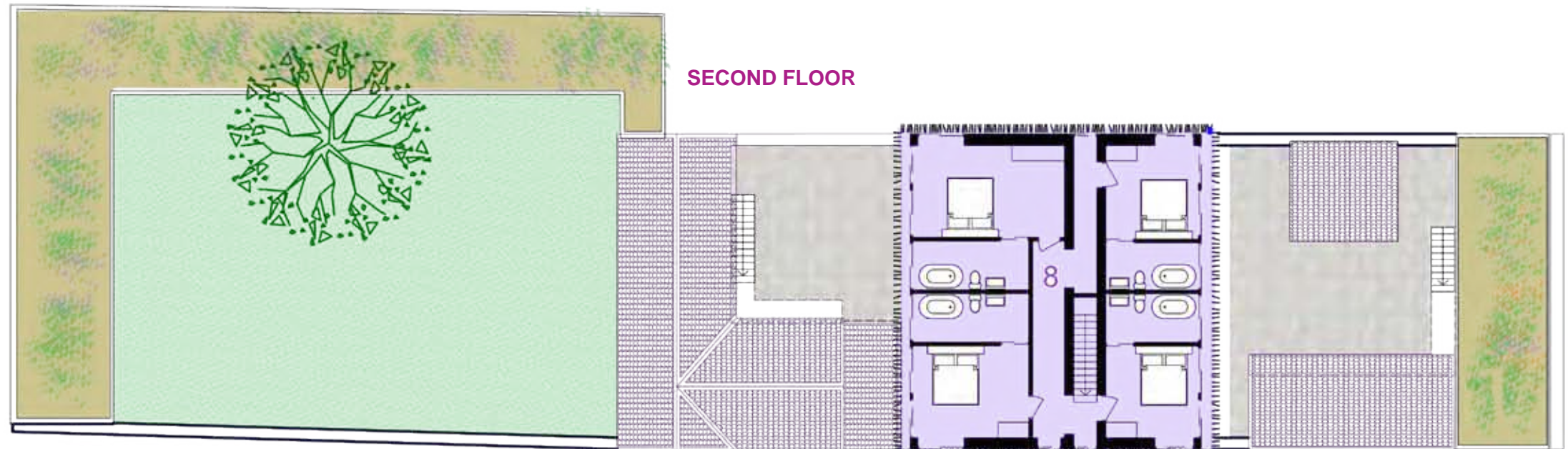
Garden of the restored Sinnarkar Wada Hotel



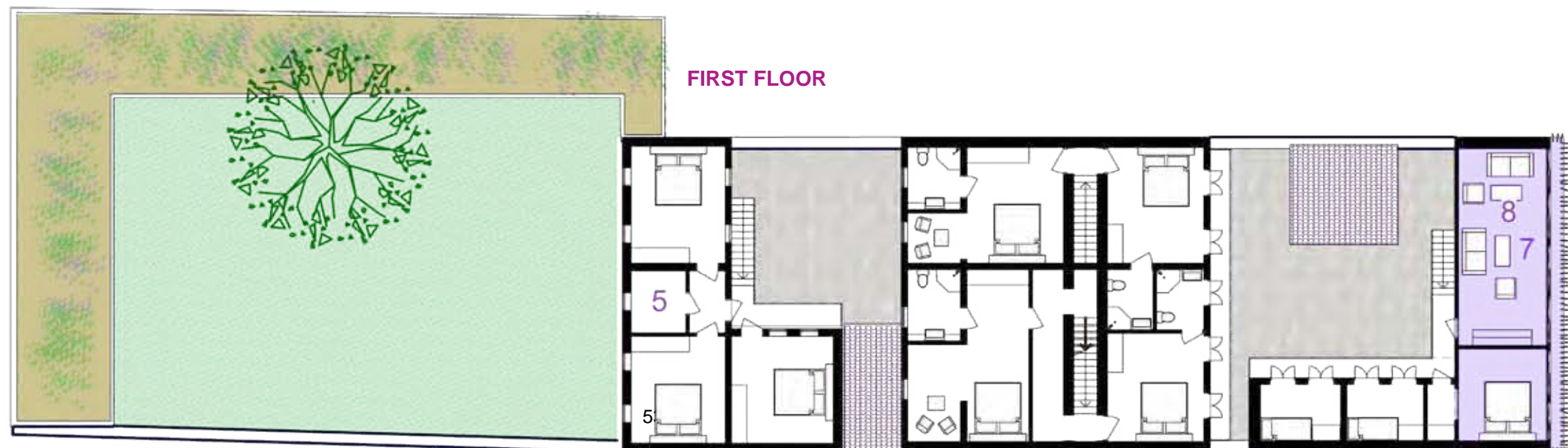
ROOF PLAN



SECOND FLOOR



FIRST FLOOR



NEW ADDITION

Additions to Sinnarkar Wada should respect the surrounding environment and enhance the historic district, but still express the values of its own time. The use of local and traditional materials would help the transition between the different styles. Modernization such as the introduction of new sustainable technology like solar panels should be made in the same spirit.

Whether to conserve, restore or renovate depends on the level of dilapidation, if the use is going to stay the same, or if there is a need for modernization. The difficult question is whether to reconstruct or to replace parts that cannot be saved or already have been lost.

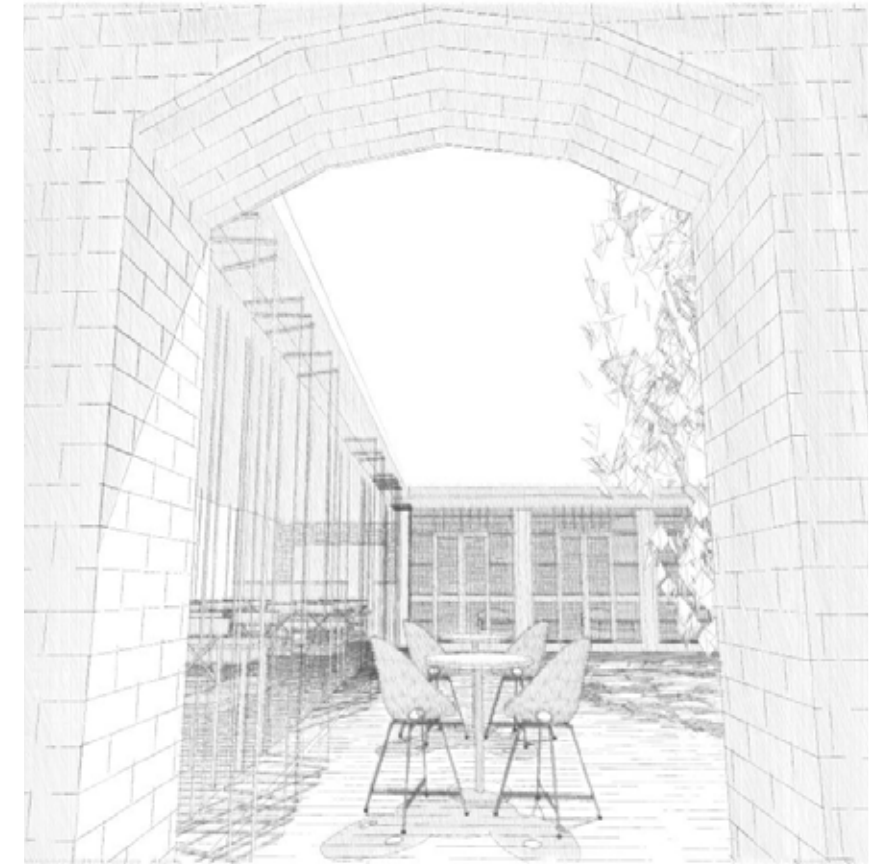
The part of Sinnarkar Wada that faces the main street is in poor condition. The facade on the ground floor facing the street and the facades towards the courtyard can be restored. But the first floor facing the street and parts of the gallery around the courtyard have already gone. The choice is to reconstruct the missing parts on the courtyard side, aiming to keep its traditional spirit, but to rebuild the missing wall on the front facade with a contemporary construction. Other additions would be made and the modern addition on the street facade will link to those.

The main body of the wada would acquire an additional floor. This would take care of some of the need for more space. The living standard of this part of the wada would also be improved. In a model workshop there was an opportunity to try several different heights and approaches to this issue. Discussions also took place on how to use old features such as the galleries, designed in a new way while still keeping the effect of the climate control benefits they gave, which resulted in a design for the new facades.

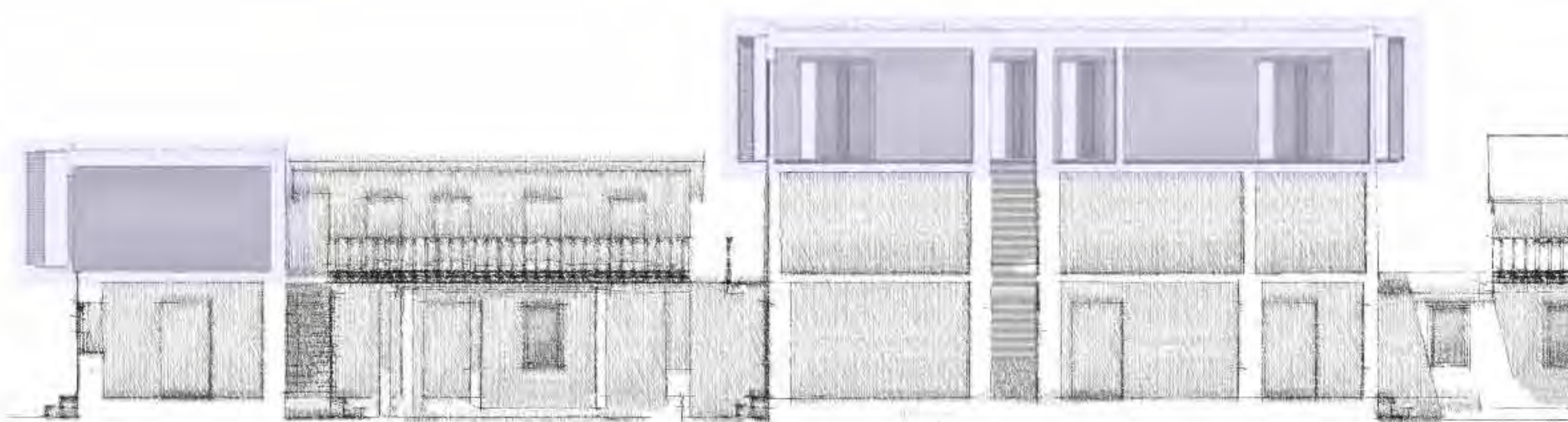
A new restaurant would be built facing the street on the other side of the garden. The restaurant building is meant to be a shield, acting as a filter, with the possibility of opening or closing to varying degrees depending on the current use, changing flexibly on a day-to-day basis. Additional rooms for the hotel would also be built with direct access to the garden.

To achieve the climate control effects of the galleries, a second skin of would be installed. The slender screens are rotatable and adjustable by hand, shading the facade and the rooms behind it, allowing light to come in or to keep it out.

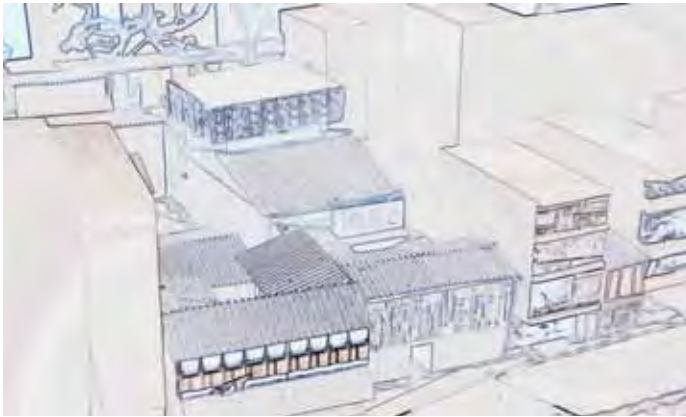
Other materials in the additions would be wood, steel, glass and green roofs. A system of harvesting rainwater and solar panels are meant to be added to the project.



Outdoor area by the coffee shop.

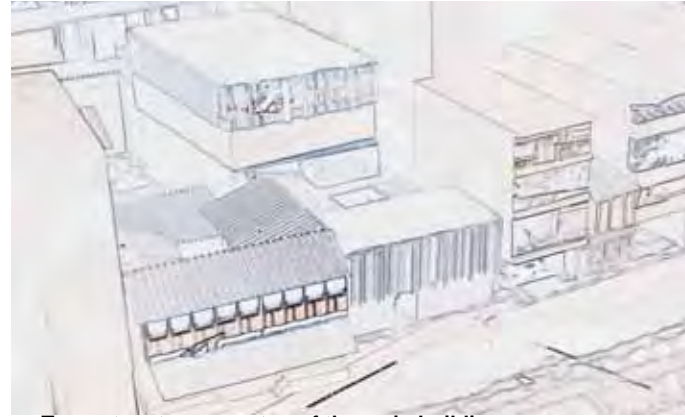


Section through the wada complex.



Model studies from the workshop.

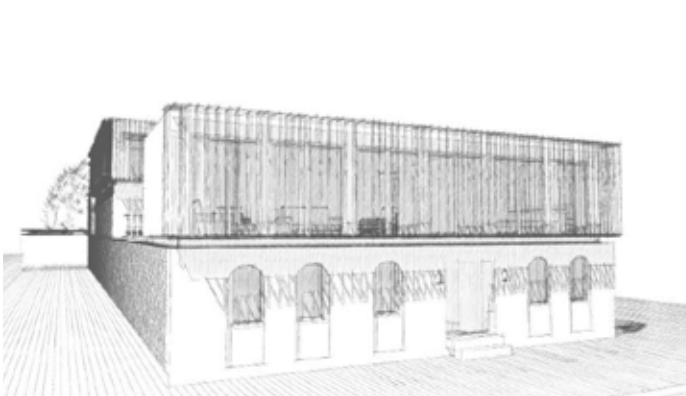
Small addition on top of the existing structure.



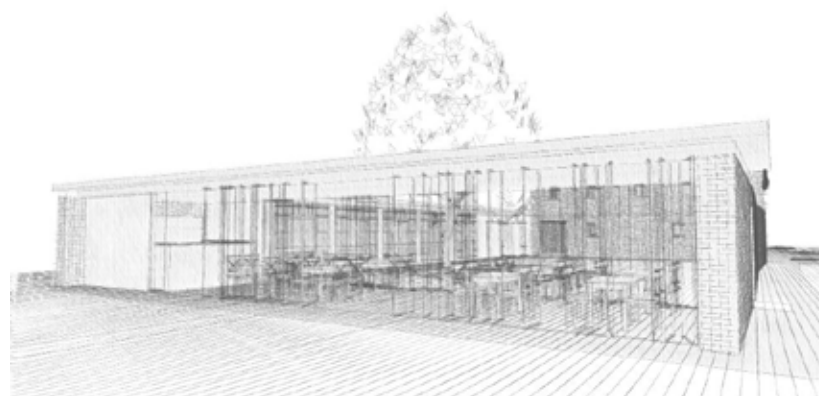
Two extra storeys on top of the main building.



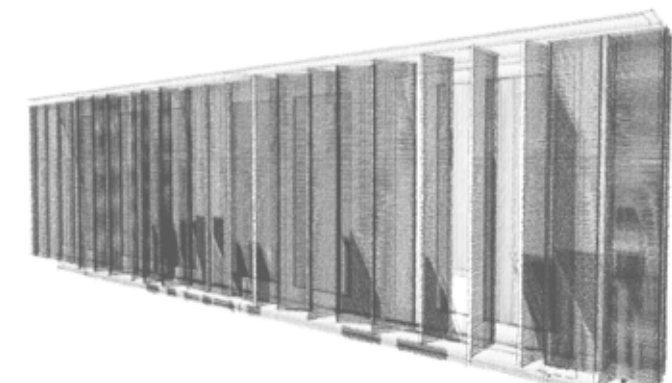
The first version of the proposed addition.



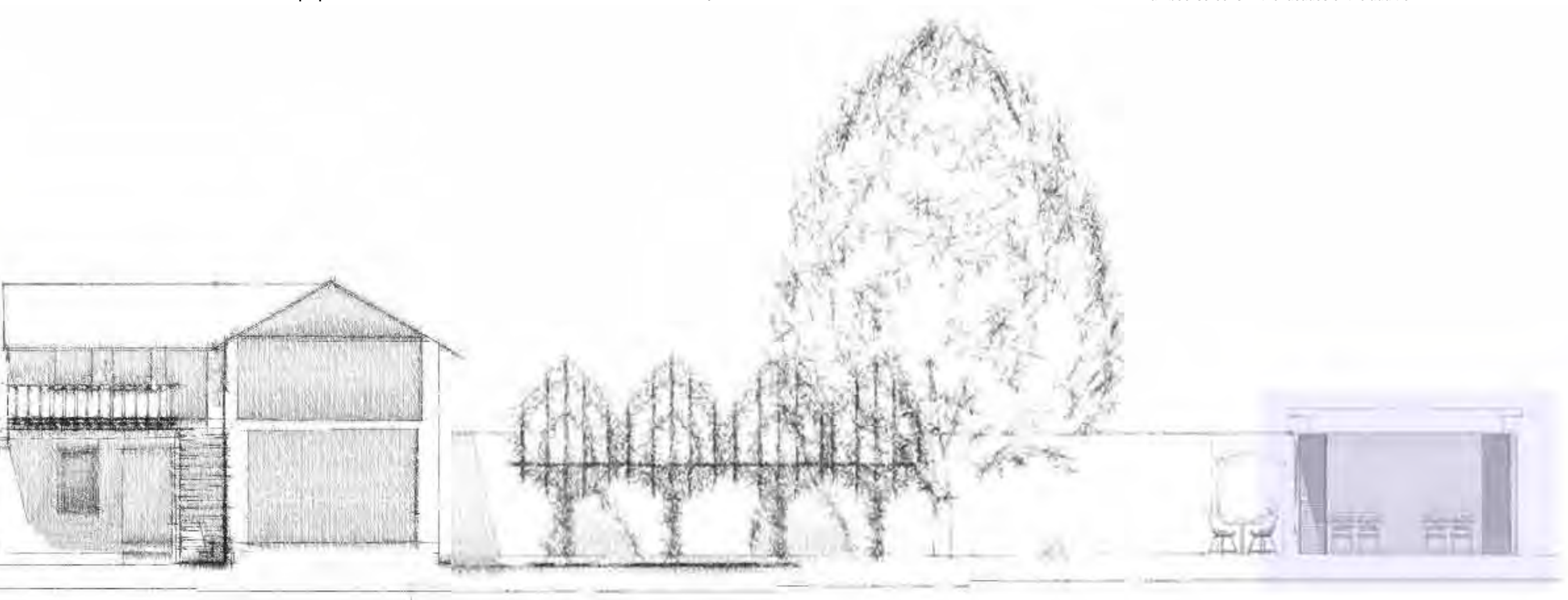
The first version of the proposed addition.



The new coffee shop from the street.



Bamboo screens in the facades of the addition





FISH MARKET STREET

Eva Larsson

Kersti Björkman Lilja

Matti Shevchenko Sandin

Stina Svantesson

FISH MARKET STREET

In the afternoon an anonymous small and quiet street northeast of Shaniwar Wada in Kasba Peth, Pune. The next morning the street has transformed itself into a lively fish market. Outside the houses, on the porches and on the coarse sand of the street, blankets are spread out and filled with glittering fresh fish and seafood.

Interviews and conversations with people in the street show a well-satisfied community where tradition and identity have created values that can act as a foundation for the future development of the area.



Location of Fish Market Street in relation to Shaniwar Wada to the left.

Bhoiraj Bhao

The street known as Bhoiraj Bhao has a surface of sand and gravel. The daily fish market is connected to a fruit and vegetable market and a mutton market in adjacent areas. Brightly coloured facades with balconies face the street. Most of the buildings are residential of 2-3 floors.

On the east side of the street the majority of houses were erected or rebuilt with government grants after the big flood of 1961. One of these is a larger tenement house of 4 floors that accommodates a school for Muslim girls, some offices, and on the ground floor, a big community hall. This house was built by the local authorities in 1968, together with two small temples. A third small temple is located in the northeast. Next to the tenement is a house from the 19th century with a gym on the ground floor and offices on the upper floor.

On the west side some of the houses are older than 1900, but none are the elaborate traditional wadas with courtyards. The lack of courtyards makes the street the main social space. In

the street the fish traders work, children play cricket in the evenings and the residents arrange ceremonies and festivals, such as the Ganpati and the Navrati festivals. Every evening at eight o'clock there is a ceremony by the temples.

Opposite the tenement house is an open space which is also used as a parking area for auto-rikshas, motorcycles and bicycles. At the north and in the south ends of the street are buildings from the 1990s housing public toilets and bathrooms.

Opinions from inhabitants

The purpose of this case study was to put together suggestions for the possible development of this ordinary but representative area for a future conservation plan of Pune's historic city

core. One course of action could be to create larger development areas by erasing parts of the concrete structures from the 1950-1970's. Several of the houses in Fish Market Street are from the 1960's so one initial question was if these buildings were dysfunctional and ought to be replaced by modern structures.

From a conservation point of view such renewals should assess the cultural heritage values of the area. Outsiders can fairly soon identify material values using internationally recognised methods. But intangible values such as identity and traditions include the thoughts, wishes and needs of the people living in the district and are more difficult to grasp in a short time. Thus during a two-day survey of Fish Market Street 16 short interviews and many conversations with people in the street were carried out.



Vegetable market.

The inhabitants are lower middle class and working class. About one third of those interviewed owned their house. Many of the men and some of the women earn their living as fish traders. Another common occupation for men is auto-ricksha driver.



Stone plinth used for socialization.

A majority of the people in the street and in the surrounding areas are members of the Bhoi Samaj caste. Members of Bhoi Samaj were traditionally carriers of palanquins and were also involved in transporting soil and gravel to building sites. Fishing later became a major source of income. Driving an auto-ricksha can be seen as a continuation of work in transportation. Bhoi Samaj have their own interpretation of religion and also a tradition of involvement in athletic and acrobatic sports. The importance of exercises is expressed by the voluntary work of several of the young men who keep the gym hall open and in good condition for anyone to use free of charge. Money is raised by their participation in acrobatic competitions.

Many families have small houses of one room accommodating many people, mostly relatives. Most people sleep on mats that are rolled out on the floor when going to sleep.

The rents vary from 40 rupees to 750 rupees a month, while property owners pay a tax of 1200 rupees per year. The rents and the taxes are low but the facilities are few. Electricity can not be used on Thursdays and water is usually off in the middle of the day. There are cold water taps outside the houses and the street has two public toilets with bathrooms. The 4-floor building has toilets and bathrooms on each floor.

Most of the tenants know their landlord and often the landlord lives in the same house or in the area. Many families have lived in the neighbourhood for generations and have relatives and family members in other households in the street.

The inhabitants are in general content with their situation although some families would like a private bathroom or toilet.

Young people hope to stay in the area when they have grown up. The general opinion is that Fish Market Street is a very good place to live in.

Advantages

- Social interaction.
- Social networks and security.
- Closeness to food shopping.
- Closeness to the city core.

Disadvantages

- Rent regulations are an obstacle for property owners to maintain and repair the buildings.
- Economic constraints for tenants.
- Lack of hygiene facilities.
- Overcrowding.



Young people want to stay in their neighbourhood.

Concrete and timber-frame houses

The buildings along the street occupy almost the entire plot. Some plots are situated in the middle of the street and are therefore undeveloped. Older buildings are timber-frame houses with brick infill, a traditional building technique in India, whereas the houses from the late 1960s are of concrete. However, even the concrete houses often have traditional decorations. The buildings in the area are usually repainted before the annual September Ganpati festival. Most houses have sheet metal roofs.

The age of houses is revealed through the size of the often visible bricks and architectural features such as balcony railings, roofs, windows and doors. Some houses have had their top floor removed with the interior staircase preserved and the upper part now covered by a sheet metal roof.

Meter-high stone plinths form foundations to the houses due to the recurrent flooding during the monsoon. On the entrance side the protruding stone platform creates a porch or veranda that is used as a market space for selling fish or other products, especially during the monsoon season. The veranda is also a popular place for inhabitants to sit and socialize. It is considered a semi-private area and people using the street can sit on any veranda.

Tangible heritage values

Bhoiraj Bhao - Fish Market Street - is a typical street for Kasba Peth. Though it has been changed with some new additions after the flood of 1961, it still has kept its identity as a small-scale street. To trace this identity we looked at the characteristics of the street in relation to the historic area of Kasba Peth.

Examples of tangible heritage values are the preserved street route and the wideness of the street, the small scale revealed in the small sizes of the plots and the volumes of the buildings.



Traditional building in Fish Market Street.



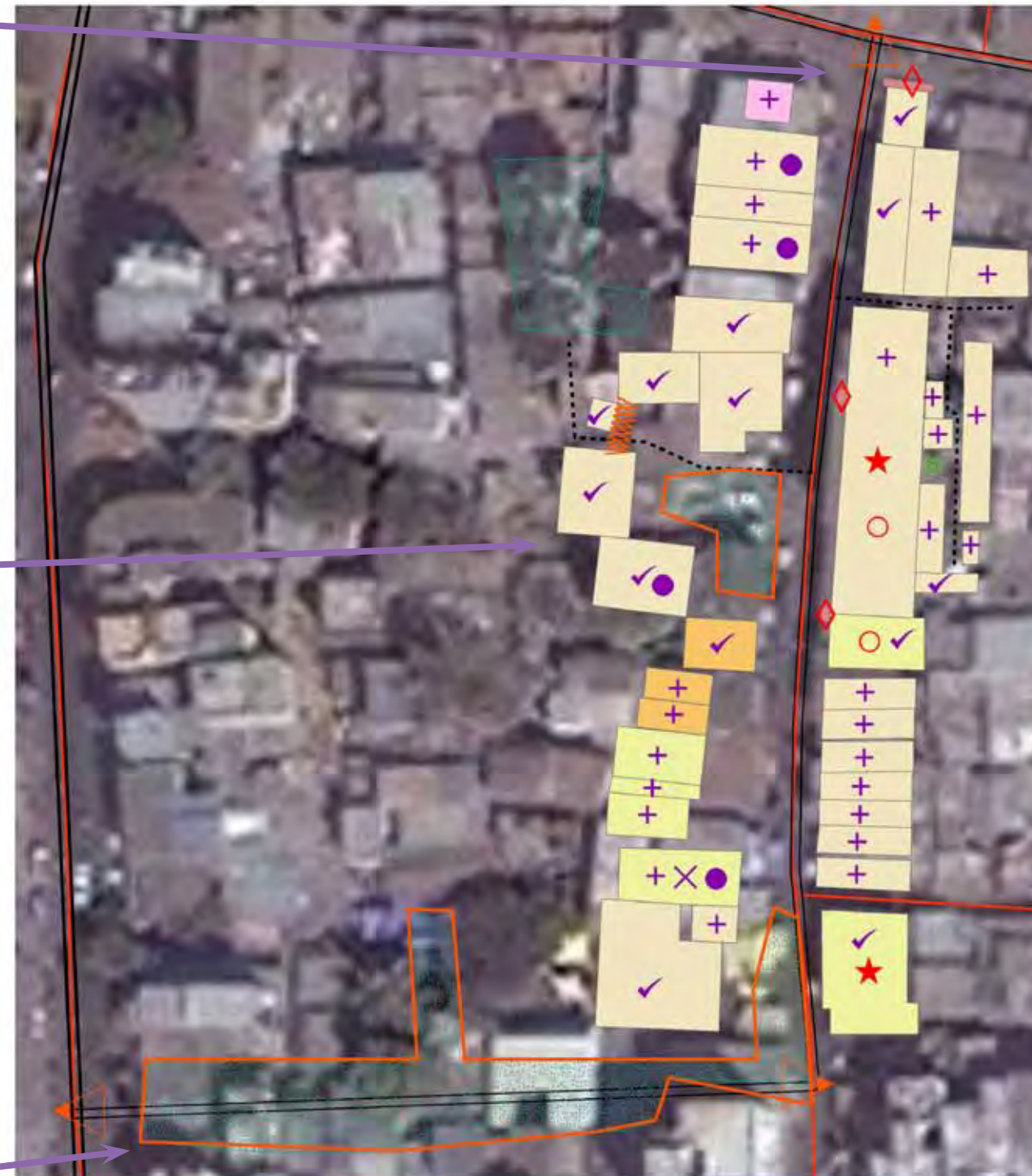
Small temple in the north part of the street.



Open space with possibilities.



Vegetable market adjacent to Fish Market Street.



Legend

Buildings

Type

- Religious Building
- Wada 1700-1800
- Wada 1800-1900
- Building 1900-1970
- Art deco 1920-1940
- Contemporary post 1970
- Unclassified

Building status

Type

- Heritage at risk
- Good condition structurally
- Not maintained
- Maintained

- Roads Centrelines
- Road 4 wheel traffic
- Road 2 wheel traffic
- Path

- Landmark
- Open Public Spaces
- Spatiality
- Significant tree

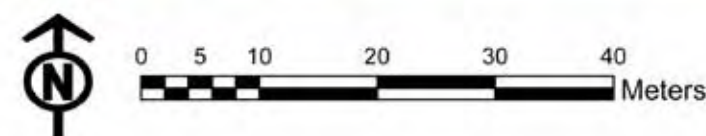
- Barriers

Views

Direction

- View West
- View South
- View North
- View East

- Religious place
- Cultural place



KKH MejanArc/BNCA 2012

The contrasting colour scheme of buildings is another typical and valuable characteristic of the street. Others are the stone platforms/verandahs in front of the houses and other semi-public areas for socializing, such as the small temples in the street and the community hall.



High building from 1968 with multi social functions.



Symbol of the Bhoi Samaj from a membership webpage.

Individual buildings in the area do not hold conventional great cultural values. They can therefore not be valued as individual monuments, but as parts of the whole historic environment. Many of the small buildings along the street represent a traditional type of building that is now becoming increasingly rare and therefore more unique.

Some of the values could be traced in the construction techniques. Many of the buildings are representative of traditional building techniques like the timber-frame houses with brick fillings or brick buildings, and are therefore of historical value. Wooden details incorporated in the structures, such as balcony parapets and windows shutters, doors and decorated beams are of artistic value.

The tradition of craftsmanship and material knowledge is a value of importance.

The concrete buildings in the street, built after 1961, are good representatives of their time and have from start related to the other buildings, symbolizing a historically significant event that is of interest for the area and for the street.

Intangible values

Fish Market Street is important not only because of its material values but also due to its immaterial or intangible values. It is mainly people and not the mere structures that create the values here.

The semi-public areas are important components of every day life and the use of the street. In Fish Market Street nearly every building has the typical stone plinth/veranda which provides this street with great social values. The balconies and the street bound open spaces also provide venues and social values to the street.

The 4th floor tenement house is of high density and has multiple social functions. The unit is an important and popular building in the street and has many social and economic values. Idols for processions during the Ganpati festival are prepared and stored in the building. This festival is one of the most popular annual events and has been celebrated here in an unbroken tradition for 200 years, forming an integral part of the identity of the area.

According to the inhabitants this is a secure environment where residents know each other and place great value in this. Security is a value of importance since it is a product of the environment itself. To overdevelop or make other drastic changes could jeopardize the different components. The dominant Bhoi Samaj caste has been living in the area for centuries. There is pride and a feeling of continuity in living and working there in the food trade. The value of continuity is one of the most important immaterial values of the area. Fishing, the fish trade and the transport business have been linked to the caste since the time of the construction of the Shaniwar Wada. From that perspective this tradition is recognized as a great intangible value connected to the street. The caste system is a complex matter and has been forbidden in India since

the 1950s. One of the objections to the system is that it does not facilitate social movement. However the community unity brought about by the caste system has in this case created immaterial values from which the area could benefit future development. If these values are recognized they could help to avoid the gentrification of the area.

Examples of physical features carrying cultural values important to safeguard:

- Street width and street paving: do not encourage four wheel traffic, but instead create possibilities for children's play, grocery selling, social networking.
- Stone plinths/verandahs: semi-public areas for socializing, resting, contemplating, washing, and also for sale of groceries. Use is not restricted to the residents of the house.
- External water taps near verandahs: create possibilities to participate in street life while performing household work.



External water taps.

- Balconies: open upper floors facing towards life in the street.
- Small temples in the street: integrate religion and spiritual practices with everyday life.
- Spacious community hall: creates possibilities for organizing social events. Not restricted to the residents of the house.
- Gym: health center and social meeting place, open to everybody in the neighbourhood and free of charge.

Condition of buildings

The buildings in Fish Market Street are largely in poor condition due to lack of maintenance. The flood of 1961 hit the area hard and is a contributory reason to this.

Some of the single-storey buildings in the street were at least one floor higher in earlier times. Damage to the structures has led to some of the upper floors being removed. This can be discerned in the gables of the neighbouring houses.

Many buildings have inadequate roofing resulting in significant damage during the autumn monsoon rains. Some have subsidence indicated by cracks in the plaster facades.

Concrete buildings from the 1960s show extensive damage in the facades where pieces of concrete have fallen off. This may be evidence of defects in the materials or corrosion in the reinforcement of the structure.

The interiors of the houses and apartments in the street are generally well maintained.

Outlines for development strategies

With some exceptions, the buildings of the 1960s have proved to be well-functional and carriers of important heritage values, especially the 4 floor tenement building with its socially uniting functions. The idea of erasing these buildings is not recommended in Fish Market Street. Instead more conservative interventions are suggested.

It is vitally important to ensure that the heritage values, the general character of the street and the advantages of the area will remain unharmed. Therefore, new buildings and major alterations to existing houses should be subject to regulations concerning the height, the adaptation of facades to the existing architecture, including the choice of materials, colours, etc.

The participation of the inhabitants in the area must be the foundation of all development interventions. The community hall could be used as a meeting point for discussions and information between residents, architects, conservationists, urban planners and others.

Suggested interventions:

- Two houses, 1052/1 and 1052/2, have been torn down. On these plots new structures could be built.
- On some houses a second floor has been raised. On other buildings an extra floor has been added. An extra floor added on to some of the smaller houses would create more space and possibilities for the residents.
- Traditional techniques and materials should generally be used in the restoration of the buildings. Alternative replacement material to the damaged concrete of the 1960's buildings should be investigated.

- The public toilet and bathroom buildings should be extended and renovated. Additional toilet buildings would improve the hygiene situation. A possible location is an empty space in the north part of plot 1120, behind the high tenement building.

- Fish Market Street has a road surface of gravel and sand which is beneficial during the monsoon season. However, it makes it difficult to keep the street clean. A pavement that could be kept clean and also respond to the large quantities of water from the monsoon rains would be an improvement.

Below: Suggestions for an added upper floor. Left: Buildings in their present state. Right: Top floor added or extended.



SMALL STEPS TOWARDS LOCAL SUSTAINABILITY

The general needs and wishes of local inhabitants (as interpreted from interviews), are to remain living in the area as owners or tenants. Living conditions would be improved by general maintenance and clean-up of surroundings; improved health and hygiene; improved supply and coverage of electricity and water. Needs and wishes tend to be towards the necessary, simple and cost-effective with few expressions of individual luxuries.

The ideas and suggestions here are local solutions suitable for an urban setting. They are low tech, self maintainable; limiting the use of natural resources and adapted to the current urban structure with regards to heritage values.

Local electricity

Most buildings are connected to the power grid, but not all have a continuous supply of electricity. Local small-scale solutions with photovoltaic solar cells on roofs and walls are viable. One solution is panels on a stand with adjustable tilt and swivel, or a servo sun tracker.



Example of solar cell panel on stand

Nighttime supplies also requires storage, such as banks of batteries. This could be installed as a shared resource for a block or the whole street with limited cabling.

An alternative for the side of a house are folded panels which are less sensitive to placement angle.

Local Water heating

Water heating by thermal solar panels is a resource efficient local solution. Small-scale water heaters on roofs can provide a household with sufficient hot water for washing and cleaning.

Local cooling systems with a heat exchanger based on thermal solar panels can be applied to larger buildings containing offices and schools (one example is the swedish DesiCool).



Example of solar water heater system

Taking heritage and skyline into account

To least disturb the skyline, old installations on roofs should be removed or moved. Equipment can preferably be centred on the roof, so as not to be too visible from street level. Panels and tanks should also not be shadowed from south/south-east.



Example of solar cell tiles, a discrete and elegant solution

Waste management

The waste produced is organic and non-organic, both a possible and useable resource. One issue of resource use is avoiding individual installations of toilets and plumbing in homes.

The public toilets could be enhanced by adding new facilities on unused parts of plots. Existing facilities could be expanded with more toilets along with showers and/or baths. The interior could be refurbished with sanitary tiling, drains and ventilation. Cleaning might be a task shared by the local community.

Public facilities would provide better access to waste and easier waste management, like connecting to a local biogas plant.

Organic waste and small-scale biogas

Waste from the public toilets and organic waste from the market, (both animal and vegetable), could be used for local biogas production. There are several off-the-shelf family size biogas plants that produce around 2 kg of raw biogas/day, providing cooking gas for a household. Larger biogas plants could be considered for the whole street area.



Example of household size biogas plant

Non-biodegradable solid waste

Locally sited containers for sorting and storing different non-organic waste materials are necessary. Waste fractions might be metals, plastic, textiles, glass, cardboard, paper, chemicals. The handling, recycling and resale of waste could preferably be local, but a communal system for transportation and handling of some fractions might be needed.

Fish trading and health issues

Goods traded at the market are mainly fish, vegetables and mutton, without sufficient provisions for food safety. One alternative discussed is a modern central market hall, an expensive and resource-consuming alternative.


But first and foremost it would radically change the structure of the market street socially and economically, and risk putting traders out of business. There are advantages in keeping the current market structure and solve the practical problems with low-tech and low-cost solutions.

Today fish is sold outside each trader's house on blankets directly on the ground, without proper cooling and protection. Melting water and fish waste runs directly into the street.

The cart could be equipped with flat side-surfaces for display, handling and packaging, handles for hauling and pushing, boxes on the side for knives, tools, bags, etc. A glass cover with a middle hinge would protect the food. Four large wheels make it easy to move, and raised on its side it could be stored in a small space.

Biomass fuel stoves pose a significant ecological problem causing deforestation and health issues primarily for women. In Pune indoor stoves are mainly fuelled by propane, but outdoor stoves for biomass are also used. Cooking outdoors is also of social importance and convenient during the hot season.

Solar Ibex, an efficient and foldable solar stove

[illegible]

The open space, a plot approximately 9 x 9 meters with no current development, functions as a rather mistreated parking space. A suggestion is to enhance the environment and social connectivity by removing the vehicles that pose a barrier and cluttering of the street. The space is enough to create a small garden with an open area for leisure, gatherings, games, cooking, small-scale city farming etc.



The space could be generally restored, cleaned, with a new surface aligned with the new surface suggestion for the street. Surrounding walls could be restored and possibly painted, with benches and stools added. Reasonably mobile pot plants could be added, with small fruit trees, vegetables and berry shrubs.

General criterias:
Low-tech. Possible to self build, manual production. Low-cost. Alternative/recycled material. Local material. Limited resource and material use (“less is more”). Sustainable, energy efficient construction practices and transportation.

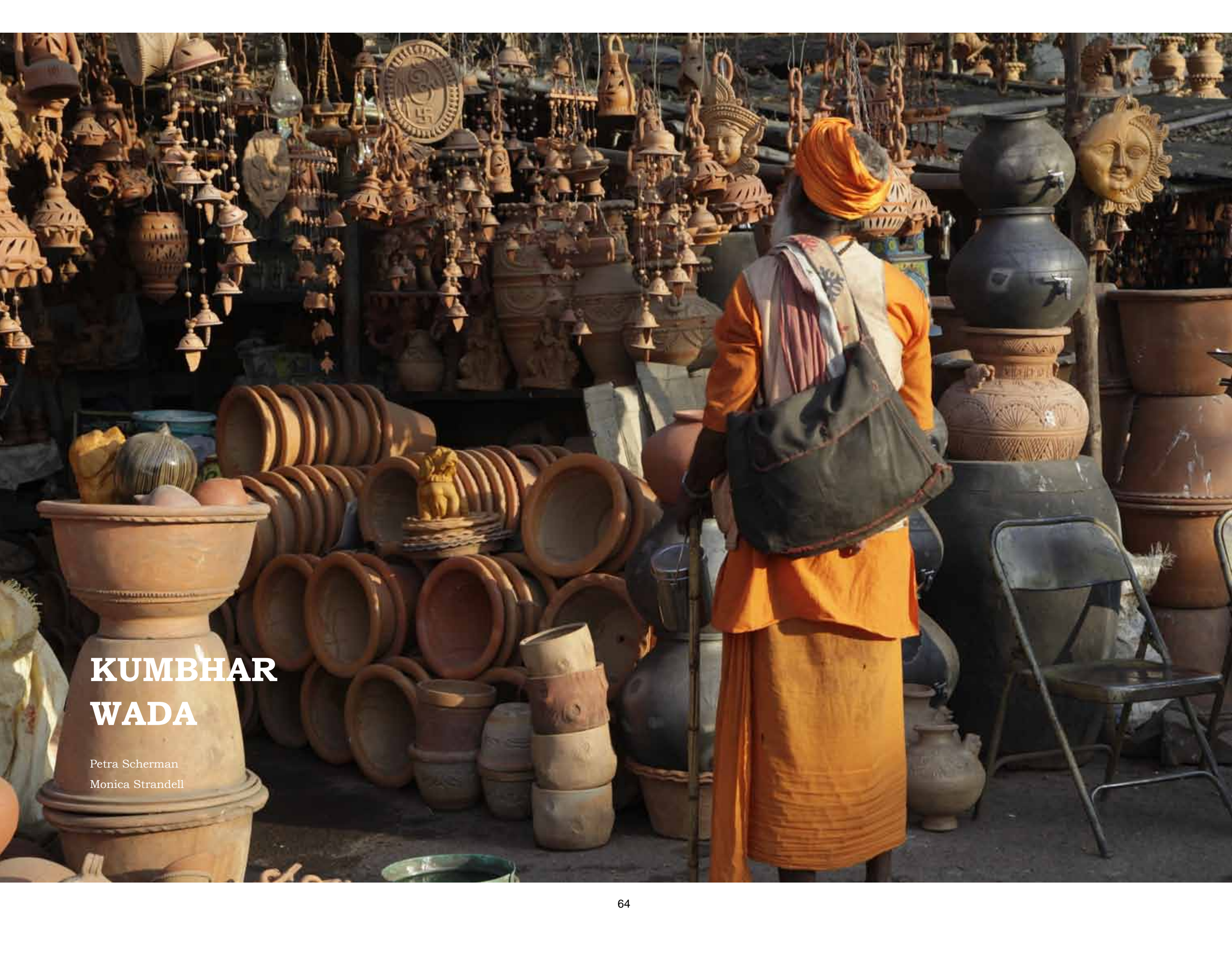
Plinths uses least material and ground work. Cement mix is needed due to rainfall and damp. A blend might be “pozzolana” (flyash/slag/calced clay) or recycled pulverized construction debris. Reinforcement could be recycled scrap iron.

A load-bearing frame is easy to erect, of recycled/certified timber or a precast cement mix. An alternative is load-bearing light-weight walls of ferrocement or bricks of fly ash/sand/lime.

If not load-bearing, walls could be blocks of fly ash/sand/lime phosphogypsum (fertilizer industry byproduct), burnt clay/fly ash bricks. If available, adobe blocks from local loam or stabilized compressed earth blocks are viable. If insulation is needed rice husk ash blocks might be used.

Flat with proper drainage to be used as a veranda, or sloped for runoff. With sheet metal insulation is needed for thermal comfort. Clay tiles are traditional and could be recycled. Bamboo matt corrugated sheets is a new material with good thermal comfort and could be manufactured locally.

Recycled units and materials, wood, stone, brick.



KUMBHAR WADA

Petra Scherman
Monica Strandell

KUMBHAR WADA

— CONSERVATION OF INTANGIBLE VALUES THROUGH CULTURAL PLANNING

In Kumbhar Wada the past of old Pune lives on. Kumbhar Wada is the ancient pottery makers' quarter in Kasba Peth, a district in the city's historic core. *Kumbhar* means potter and *wada* a place or area. The *kumbhars* have kept their traditional craftsmanship alive in Pune since the era of Shivaji Maharaj (1630-1680), founder of the Maratha Empire.



When Pune was a small British garrison town in the 19th Century the *kumbhars* were located on the outskirts of town, a perfect location close to the Mutha River where they had access to the water and space required for carrying out their craft. Today Kumbhar Wada is at the centre of Pune's city core. Many of its inhabitants still work as *kumbhars*, a traditional occupation of their caste. *Kumbhars* are part of the larger caste group, *vaishyas*, one of the four so-called *varnas* (castes) for craftsman and trading families and have for long made a living from these activities.

Some years ago the potters' workshops were pushed out to Mundhwa, far from Kumbhar Wada. But they still have their homes in the old quarter. Thus they produce the *kundis*, flower pots, and other ceramics at a distance, then have to transport their wares back to town and sell them in Kumbhar Wada. Here the potters traditionally used the pavements near



Small scale and safety for children are some of the intangible values in Kumbhar Wada.

their homes to display and sell their pots, but due to the widening of the street this is now illegal.

During *Diwali* (the Festival of Light) in November, all of Kumbhar Wada is lit with lamps of all sizes. People come to the district where they can buy a variety of small *diyas* – open oil lamps with a floating wick – and pots in different shapes and colours. There are not only traditional items on sale as the artisans are constantly experimenting with new products to offer their clients.

The houses in Kumbhar Wada are packed along labyrinthine lanes, the majority small in size and built with the thick mud walls typical of Deccan villages. Most of the traditionally tiled roofs are now covered with corrugated metal sheets. Many of the district's inhabitants live in very poor conditions.

Yet Kumbhar Wada could be described as a tranquil island with the modern ever-changing city flowing around it. The area has the same unique character as the streets in Tambat Ali, another part of Kasba Peth where the *tambats*, or cop-

persmiths, live and work. Modern life has partly changed the lifestyle in Kumbhar Wada, but to a large extent people live and work here as they have been doing for generations. Most of the inhabitants hope for better living conditions, but would like to stay in the district. Its central position in the city, the togetherness and strong bonds between people and to the area gives Kumbhar Wada's inhabitants a strong sense of identity and continuity.

Kumbhar Wada has struggled against the invasions, conquest and plunder thrown up by history and has so far survived. Yet in recent decades it seems that modern urban planning might end the long pottery tradition in Pune. In 2012 there is no cultural protection for Kumbhar Wada, a vital part of Pune's tangible and intangible heritage, although INTACH has plans to start a rescue project for the district, similar to its efforts for the coppersmiths of Tambat Ali.



Social life in the street.

Cultural planning – a method for safeguarding the intangible

Cultural planning in its contemporary form is a concept developed by academics and practitioners in Great Britain such as Franco Bianchini and Lia Ghilardi, who have written extensively on the subject. According to Bianchini, the origins of cultural planning go as far back as ancient Greece where a similar concept was used.

Cultural planning was introduced to Sweden in 2007 by Lia Ghilardi, founder of Noema, a London-based cultural planning consultancy which has used this method for twenty years. It started at Doncaster in northern England, when the city looked for a new cultural image after the industries that had formed it and gave its dominant character were closed down. Cultural planning projects have been realized in Canada, Australia, Africa and Europe with good results and the concept is continuously developing.

Cultural planning integrates the arts and culture into a wider social context and is a complement to conventional planning. It provides a toolkit for analysis and produces an inventory of material. Its approach is humanist and brings *cultural software* to light. Analysing structures and building networks it is demanding but economic – it uses existing resources while also including materials with ‘non-aesthetic’ qualities. It is an interdisciplinary method, culturally sustainable and anchored within place.

From a cultural planning perspective, *cultural capital* has a more profound long-term value for cities than a label such as “*capital of culture*”. In the long run this is more attractive to citizens, tourists and visitors. The city is looked upon as a cultural phenomenon *itself*. *Quality of life* makes a place consequently competitive, attracting investment and expertise.

To discover and reveal existing conditions, rather than to design and sell artificially constructed ones is the core of place branding carried out with cultural planning. The process works both ways – the city is a collective entity of different interests that must not be contradictory.



Workshop for idols.

Among the key elements of cultural planning are such concepts as cultural sustainability, spirit of place, citizen dialogue, cultural DNA (the ‘genetic’ blueprint for maintaining a vital community) and cultural mapping.

Cultural sustainability

A crucial aspect of cultural planning is incorporating the notion of cultural sustainability as an outcome of its community-based approach. Some of the benefits of cultural sustainability are:

- Social and political: builds trust, safety and health, gives orientation in a rapidly changing environment
- Economic: the cultural economy extends value as a raw material for tourism, arts and crafts, experience
- Environmental: nature, aesthetics, architecture and cultural heritage
- Symbolic: media, tourism, awareness and pride as a motor for inhabitants

Spirit of place

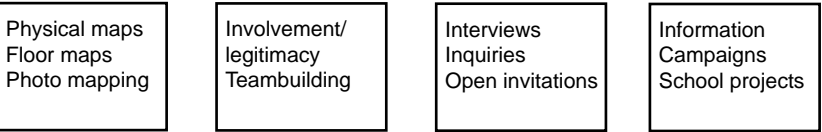
Spirit of place grows out of a complex mix of physical, historical, economic and environmental factors, among them local tangible and intangible heritage and values, landscape and climatic conditions. It can also have a spiritual dimension. Spirit of place bestows a strong identity, making an area vibrant and appealing to live in and visit. Its inhabitants share a common mindset – a gallery of images characteristic of place, a source of recognition and of discovery.

Citizen dialogue - an area of possibilities

In cultural planning citizen dialogue is a key to discovering intangible values. There is often no existing structure for the establishment and the marginalised to meet. Class, social segregation and caste have deep roots and don’t dine together at the dinner table. Cultural planning is a *methodology* of great use in deconstructing barriers – to rethink. *Citizen dialogue* in cultural planning tries to define human needs and by encouragement, build new citizens.

Cultural Mapping - DNA Analysis

Cultural mapping is the main working tool in Cultural Planning. The cultural DNA is analyzed by maps, photos, interviews, citizen dialogue, etc.



The traditional life of Kumbhar Wada is not lost in modernity.

After the mapping the process continues with the following steps:

CULTURAL MAPPING > SWOT ANALYSIS >
THEMES > SURVEY PLAN

A Method for Kumbhar Wada?

Possible projects

- Community centre/wada centre
- Development of ceramic production, including hand-crafted building materials such as adobe bricks (INTACH)
- Festivals
- Tourism infrastructure (heritage walks, open handcraft workshops, bed & breakfasts, cafés and show rooms)
- Open Wada, “Life in a Wada”, storytelling etc.

Expected goals

- Increased local job opportunities
- Improved sanitation
- Maintenance of houses
- Participation in development plan for Kumbhar Wada

Challenges

Cultural planning is a method that requires time to build solid trust among stakeholders, including the target area’s inhabitants, to give feedback – a process that could take at least one and a half years. The process would then need to face the specific challenges of Kumbhar Wada:

- Road widening measures
- Gentrification
- Ownership and controlled rents
- Exploitation by developers
- Working and housing opportunities for the young generation to stay in the area
- Rescue plan for Khumbar Wada and its craft production



Even the absence of beauty has a value.

THE SPIRIT OF KUMBHAR WADA

- Small scale neighbourhood
- Homogenous population, strong identity
- Spirit of community, feeling of solidarity and safety
- Local craftsmanship that has kept the relationship between working and living
- Religious practice - spirituality
- Open spaces with shared facilities
- Medieval character preserved from Deccan times



WELCOME TO KUMBHAR WADA

Project 1



On arriving in India the tourist is often warmly welcomed. Probably no traveller to the country has not been greeted with 'Welcome to India' at some point during their stay. Visiting Kumbhar Wada is no exception. The atmosphere is friendly, smiling people invite you to tea and are curious about which country you come from. Even though foreigners generally seen as 'rich', people here are proud of their origins and accomplishments, despite their often (from a Westerner's point of view) very basic life.

Kumbhar Wada has all the potential for increased tourism, but the difficult question is how to make that possible without losing its thriving cultural values in the process, turning these values into a constructed product for consumption.

Tourism – future prosperity or future conflict?

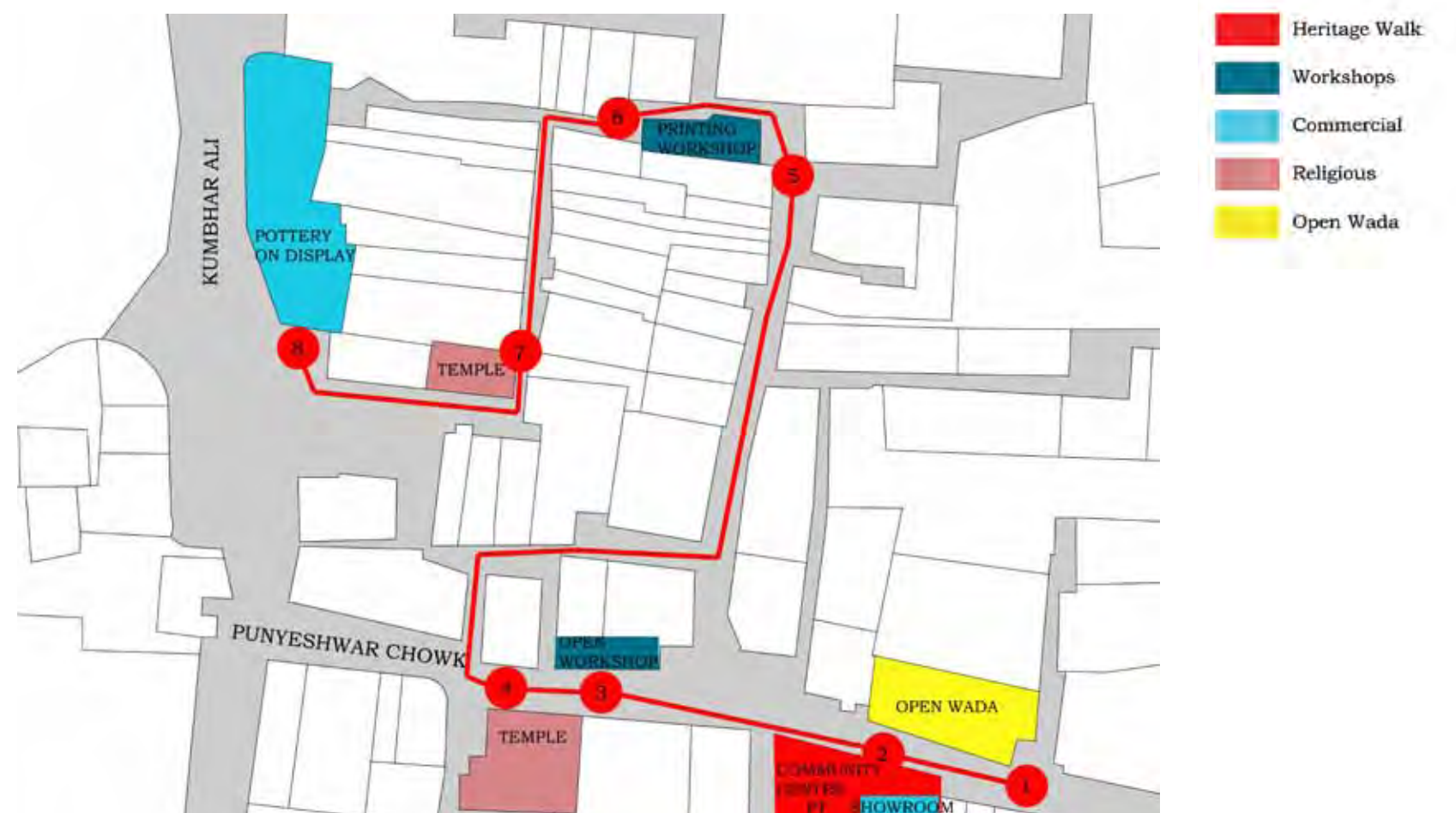
Attempts at tourism projects must be rooted in the *kumbhar* pottery colony so that the craftsmen can continue their original livelihood, selling their products not only to tourists, but to the domestic market. This domestic market is important, as is keeping the link between life and work and maintaining local customs and traditions. The aim should be to keep Kumbhar Wada alive with a prosperous future, as a vital part of the city's fabric, without being completely dependent on income from tourism. This would make it continue to be a vibrant place to live and visit.

Development should not mean to *give away* local resources but to let creativity, through integration of citizens in the process, be an engine for their own future and the development of the area as a whole. Using the tools of cultural planning such as mapping, citizen dialogue and defining spirit of place is a soft method of doing this.

Tangible, intangible and intrinsic values

In the tourist industry human forms of expression are often a source of income. Oral traditions – myths and legends, hand-crafts and performing arts, rituals and festivals are intangible assets that fascinate a visitor. They co-exist with tangible values like the built environment. Genuine authenticity of experience has a hard economic value on the tourism market today and the industry is based on the consumer's sense of experience. Kumbhar Wada offers just such a range of cultural expressions.

The intrinsic value of Kumbhar Wada – its inner value – is *good in itself*. It comes from real origins and can not be designed. This is an instrumental value that can be used for tourism purposes but *on its own terms*. Using heritage as a resource is more functional, useful and socially aware than artificially creating new values. Tourism based on cultural planning uses not only the tangible and intangible, but intrinsic values.



Proposal for a Heritage Zone: Tourism infrastructure with Heritage Walks, Community / Visitor Centre and Open Wada.

Tourism infrastructure

Heritage walks/ guidebook

Local maps pointing out the key sights, built heritage and other notable features of the area and a *guidebook* are obvious publications for tourism purposes. Also suitable for a self-contained area like Kumbhar Wada, where everything is within walking distance, are heritage walks. *The Indian Heritage Cities Network* (IHCN) has, for example, worked on developing heritage walks as a tool in furthering the regeneration and economic development of their historic cities.

Open workshops

Visiting open workshops, gaining a deeper understanding of craft production makes buying the finished product more meaningful and is an experience in itself. For the craftsman it makes it possible to control the chain from production to customer. Open workshops could be included in a heritage tour and craftworkers could also provide *hands-on workshops* for school projects or visitors; this teaching role could be an additional source of income.

Cafés and Bed and Breakfasts

There are no restaurants or cafés or in Kumbhar Wada at present. This is an opportunity for part-time potters or women to increase local job prospects. When promoting the area to visitors such eating facilities will be certainly be asked for. This is a chance to serve *local specialities* on a small scale.

Bed and breakfast accommodation are *small scale commercial alternatives* where inhabitants can share their lifestyle, welcoming visitors in their home and at the same time maintaining a livelihood. For the visitor this is a low-cost option, more genuine in experience and often brings a pleasant exchange between landlord and guest.

Craft Showroom

A larger showroom where ceramic goods can be displayed could be housed in, for example, an open wada, a community centre or a larger workshop. A display for Kumbhar Wada products in shared premises would lower costs and *kumbhars* having difficulties in displaying their products on pavements due to road widening measures would have the option to sell their products there.

Festivals

The area could hold special programmes during festival periods such as *Diwali* or the *Ganesh Festival*. Special *diyas* (small clay oil lamps) are already sold in the district for these occasions and the festivals could also be promoted for visitors not acquainted with local customs. During the festival periods inner courtyards are open for visitors and planned activities could take place around the temples and chowks.

Community Centre/ Visitor Centre

For round-table discussions between inhabitants and external stakeholders it would be of great value to have a locally-sited centre where they could meet, talk and work. It would assume a symbolic importance with regard to the integrative aspects of the planning process.

A community centre could also act complementary base for visitors, providing tourist information, publications and services. In short, it would be a multifunctional hub for practical and public relations purposes. In cultural planning a building facing an uncertain future is often chosen for such a centre. By using a positive context the 'ugly' or unregarded can find a new aesthetic in an already existing environment.



Cultural planning in practice.

Life in a Wada

There are a couple of larger wadas in the *kumbhar* area. To help finance their conservation and find future solutions for the continued existence of these old wadas, while providing a livelihood for their residents, one possibility is for families to partially open their houses to the public. The wada, as an example of a living traditional family house, would be an educational resource and a perfect way for the older generation (at their own pace) to pass on knowledge to younger generations and the interested public.

Courtyards might be used for smaller groups of visitors to participate in washing or cooking preparations or spiritually-focused activities. Fixed opening hours on particular days would safeguard the privacy of residents, while making it possible for women and older family members to have an



Knowledge for future generations in an open wada.

extra source of income within the home. Thus the problem of daycare for children is dealt with and at the same time a new professional opportunity is opened up.

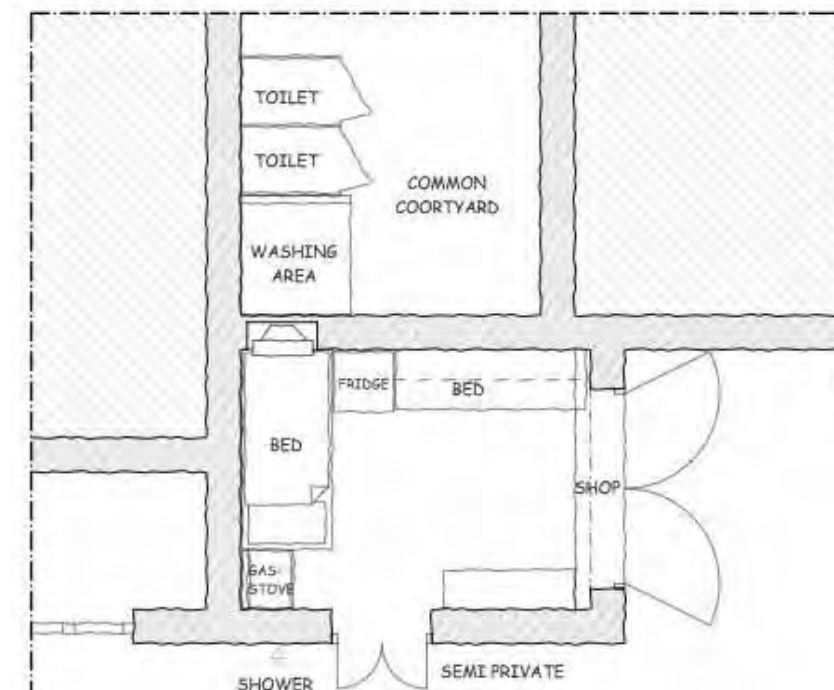
These open wadas could also act as a setting for storytelling. *The storytelling method* has been frequently used in cultural planning with great success. It involves all participants and is inspirational and engaging for everyone. Learning by storytelling and at the same time experiencing the environment, trying out crafts and everyday activities is a useful technique – one way of acquiring a deeper understanding where the visitor can reflect over past and present, incorporating themselves into a wider fabric. Given the rapid changes of modern life as people try to orient themselves in a new transient reality, a living heritage such as that found in Kumbhar Wada is perhaps more important than ever before.

KUMBHAR WADA RESCUE

Project 2

Kumbhar Wada is a valuable area from developer's point of view. However rent control legislation makes it possible for its inhabitants to stay in this area of high land values. Both life and work in the potters' colony is small scale. A small living area with their functions both inside and outside is typical. The normal living space – including households in a three-storey wada – is one room with a kitchen

Kumbhar Wada Rescue is an integrated project using cultural planning perspectives. It aims to safeguard the handcrafted pottery tradition and the intangible values of the area. The project would rely on inclusion of the craftworkers and other inhabitants of Kumbhar Wada. Its aim is the empowerment of all local people through the diversification of pottery production for different uses and thus creating higher incomes. Ceramic production could be extended to include the production of tiles and sun dried clay bricks (adobe) for renovation of historic structures as well as for new builds.



Darekar house.

Pushba and her husband Chandrakant Darekar are tenants in the same one-room house including kitchen where they have raised four children. The rent is 1000 rupees per month (c. 15 Euro).



Chandrakant with his brother and sister-in-law.



Traditional building with adobe

The increased production of adobe could be a spin-off from existing ceramic production. This would be additional income for the kumbhars, since adobe production needs little machinery but human labour. The use of such traditional materials will hopefully rise in the future due to their beneficial ecological aspects and the increasing awareness of conservation. Adobe is a historically proven conservation material and with its climate balancing properties and low energy impact, also a material for the future. One issue is the requirement for a large horizontal space where bricks can dry for approximately two weeks. However, this could be solved by using flat rooftops (reached by external elevator) for this purpose as could the river banks during dry season.

The use of such traditional materials will hopefully rise in the future due to their beneficial ecological aspects and the increasing awareness of conservation. Adobe is a historically proven conservation material and because of its climate balancing properties and low energy impact, also a material for the future.



Thick adobe walls are typical of the small scale houses in Kumbhar Wada.

Page 10:

Bottom left: In the gable of Darekar's house they run a small shop with amenities.

Bottom middle: Pushpa Darekar is working outside her house.

Bottom right: Manufacturing idols.

Top left: In the attic of this ruined wada Mangala Bhosale lives with her husband.

Top middle: Mangala Bhosale in her room with one bed, a table and a cupboard. There is electricity, telephone, television and an electric fan.

Top right: The girl has a mobile phone in her hand, but right now she is using the public telephone outside a small shop.

ARGUMENTATION

Cultural planning has proven to be a very successful method, especially in smaller areas. The work of INTACH in the *tambat* community in Tambat Ali where the organisation has worked with safeguarding handcrafts there had a similar effect in terms of conservation of intangible values. Cultural planning can thus be of great help for the future work with the *khumbhar* colony, adding also a framework for the community planning as a whole. Aspects defined in *Agenda 21 for Culture* (2004) concerning promoting local democratic governance and maintaining cultural diversity are also applicable with this method.

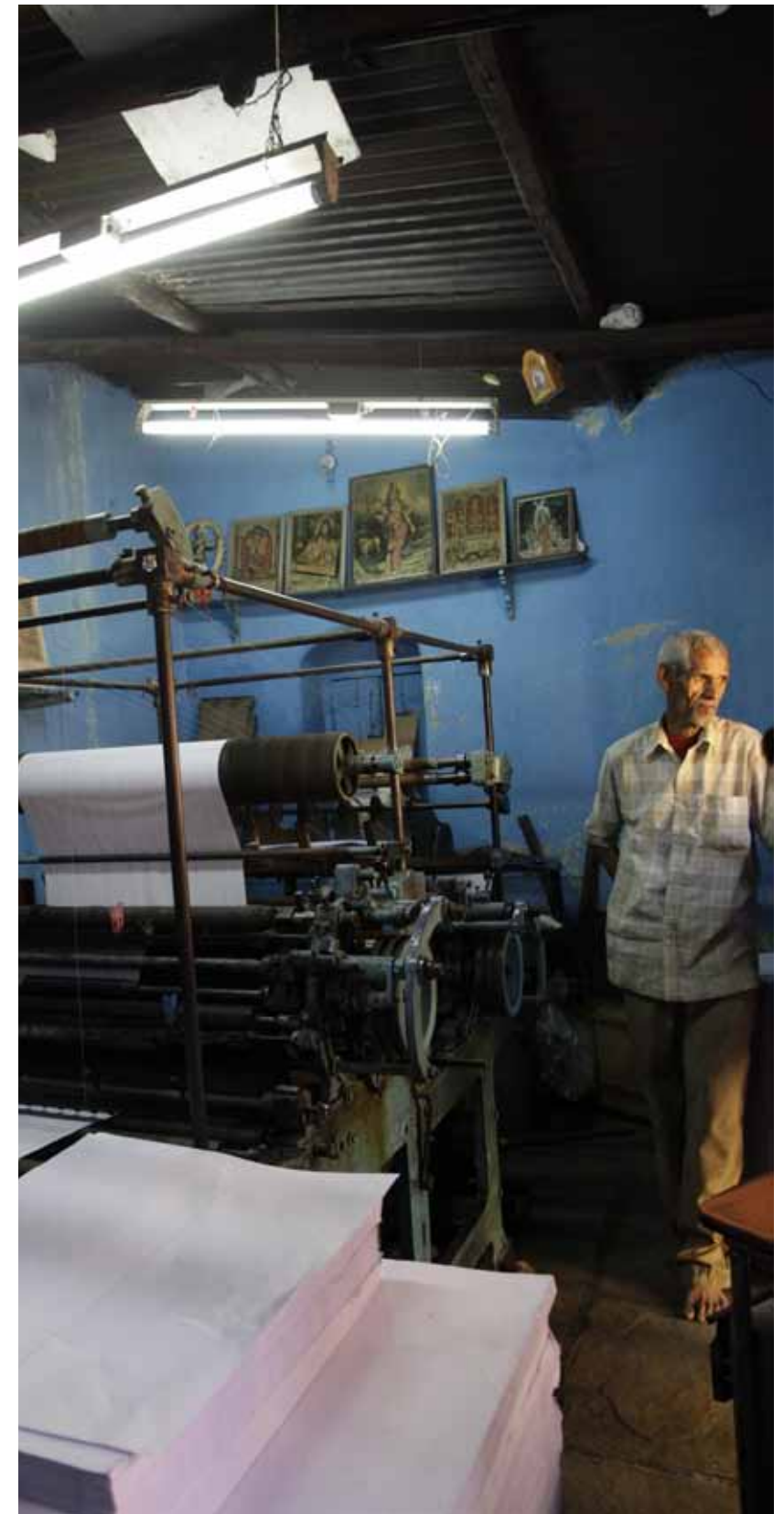
If cultural rights are to be seen as a fundamental component of human rights, the people in Kumbhar Wada face a great risk in the near future of losing their identity and lifestyle: living and working as *kumbhars* in Kasba Peth. It is clear that there are several possibilities for continuing a stable pattern of economic, social and cultural sustainability in the district.

From a human rights perspective the people of Kumbhar Wada can be seen as a minority group with rights to their own heritage legacy. The conservation of the unique identity of Kumbhar Wada can make this heritage become a newly-revealed asset – potentially setting in motions a chain of events that could bring economic benefits and cultural development to the area and to the whole city.

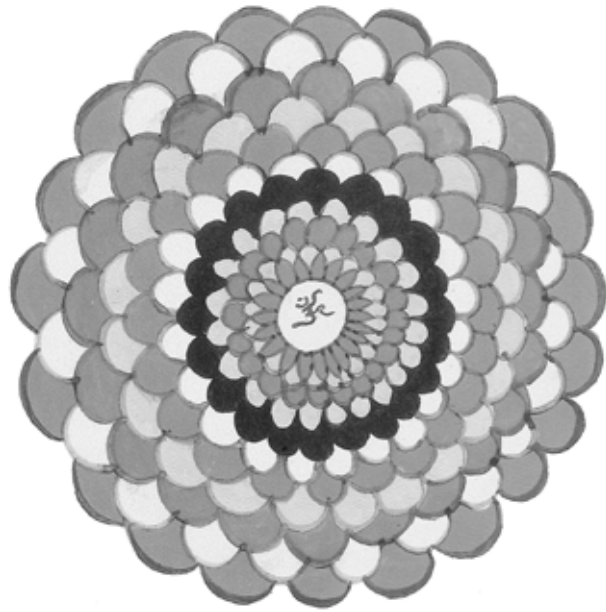
The spirit of Kumbhar Wada is unique and its distinctive cultural-historical values go far outside the borders of India.



Modern building next to pottery workshop.



Printer in a workshop printing lines on sheets of paper for notebooks.



THE RITUAL LANDSCAPE AND ITS TANGIBLE AND INTANGIBLE VALUES

by

Ulrika Lily Lebélia

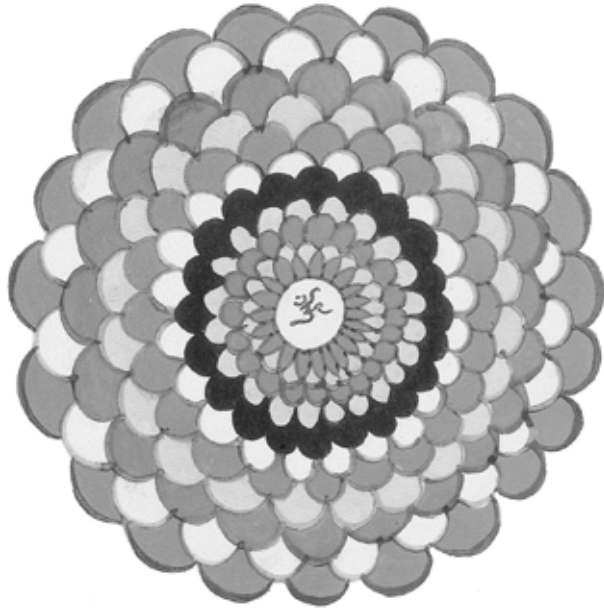
Indian ritual art draws the maker or the viewer into a relationship. It is an experience, repeated daily, which leads towards integration. The ritual act is a performance, the creation of a work of art. People look to symbols and signs, images and myths, to solve the daily problems of living, as well as for spiritual nourishment.

India has an art exclusively practiced by women. It is a traditional ritual art of great antiquity and full of meaning. These artworks known in different parts of India are commonly called Mandana or Kolam and are drawn on the ground with a solution of chalk and pigment. Their designs are essentially abstract or geometrical and celebrate the cosmic rhythms of life, the sacraments of life and great events in the life of a person, such as marriage. They also celebrate festivals and the seasons.

The landscape of this integrated ritual art represents intangible cultural values.

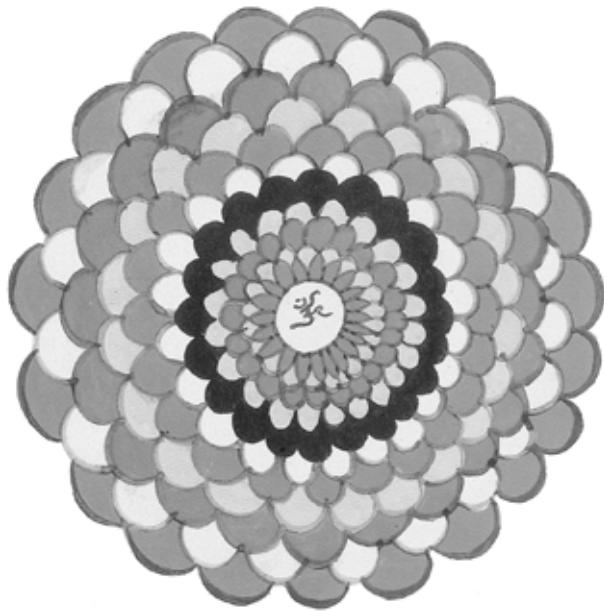




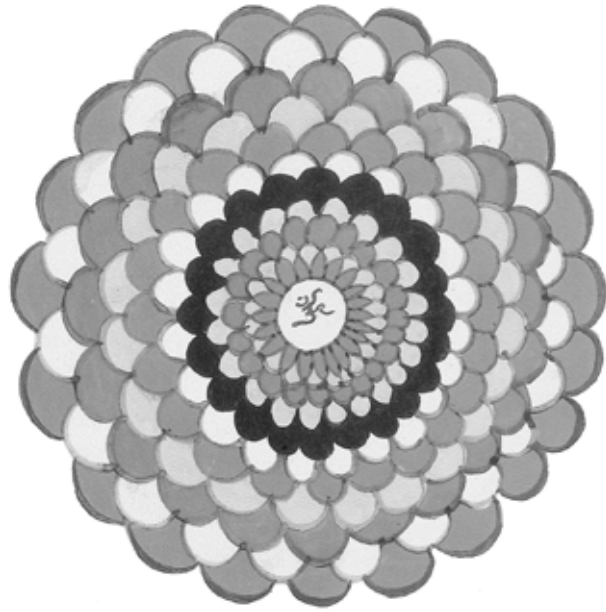


The entrance to a shrine or a temple is sacred and so is the threshold, for it marks the division between the sacred and the profane worlds. The domestic door makes a clear distinction between the outside world and the inside world. Many doors are vividly decorated and richly ornamented.

For the authenticity of this cultural heritage to endure, it is imperative it remains respectfully preserved.







Ritual art touches every aspect of life from conception to cremation. Myth gathers around ritual objects and icons. We understand that human identity is to a large extent a function of places and things. Identification is the base for man's sense of belonging.

Contemporary Hinduism is a complex religious system. It encompasses different cults which are focused around various gods, principally Shiva, Vishnu, Devi or Shakti. There are many diverse schools of thought, many gods and goddesses. In the wider environment temples and shrines create a ritual landscape. They have to come to serve as objects of orientation and identification.

"The spirit of a place is defined as the tangible and intangible, the physical and the spiritual elements that give the area its specific identity, meaning, emotion and mystery. The spirit creates the space and at the same time the space constructs and structures this spirit."

(Quebec Declaration 2008)

Sacred places function as centres where the divine and human worlds meet.





CONCLUSION

The heart of historic Pune is still at the centre of the wider urban context. It is vibrant with activities and has a diverse urban fabric, but has lost its role as a municipal centre. However, its historic role as **Pune's centre still dominates the city core through the richness of its surviving structures**, as well as the dominating building scale. All this will very soon disappear with the consequent loss of the city's particular identity and character without urgent action.

From a global point of view, Pune's is not an unusual situation. There are many historic city centres which have lost their municipal function, as well as having faced a long period of degradation. In many of these places, the notion of every city being unique has been used as an asset for preservation, up-grading such areas into well-preserved districts, both in terms of improving the urban environment and for tourism.

However, the greatest challenge for Indian cities is to **integrate urban sustainability with social sustainability**. This marriage is the greatest task on any urban planning authority's desk. Thus, reducing poverty and inequality should be embedded as a fundamental issue in discussions of urban sustainability and outcomes. In the case of Pune's inner city core, it is the poor – urban and semi-urban – who will be directly affected by such plans, since they are the ones living and working in these particular areas of interest.

Our initial method – the scenario workshop – aimed at developing, through project activities and practice, an academic applied research program model, engaging professionals in India and Sweden to work together from a common starting point and providing an eye-opening experience which could also include all stakeholders in the process.

The research objective of this collaborative project was to **develop alternative models for the rapidly transforming Indian urban landscapes**. The different examples shown in the proposals for projects in Pune's historic core have all reached the conclusion (similar to those reached by slum clearance projects) that **a socially and environmentally sustainable long-term approach can only be reached through micro-scale projects carried out in collaboration with local inhabitants**. As well as the changes they bring about, these projects must be allowed to be gradually realized over time, avoiding large-scale attempts at quick solutions that might erase hidden intangible values which only gradually reveal themselves.

The objective of the project has been to arrive at ideas and a framework for **innovative planning models considered through a small-scale inclusive approach**. Equitable development should **include the users** of the urban environment in planning and decision-making. Sustainable global development needs local knowledge at micro-level merged with the knowledge of experts, enabling local conditions to become potentials for beneficial environmental, social and economic urban changes, creating new knowledge within the practice of sustainability. The approach to conservation must be holistic, by forging **links between scientific research and local wisdom** – one of the goals of INTACH and supported by this study.

A model of the training and engagement of practitioners, confronting the synergy of expertise and local knowledge, could become a very direct way to bring about a positive impact on these issues, since it would allow practitioners to insert the acquired local and expert knowledge into their daily professional activities. They would also learn how to discover such **potentialities in their own local contexts** – whether social, physical, resources-based or economic – and how to address them as part of **urban sustainable development**.



BIBLIOGRAPHY

Diddee, Jaymala and Gupta, Samita: *Pune – Queen of the Deccan*. 2003

Gordan, Rebecca: *De fattigas arkitektur*. 2010.

Nevase, Ramesh J: *Shaniwarwada – The glory of Pune City*. 2007

Nissen, Foy: Pune Cantonment chapter in *Aspects of Conservation in Urban India*, Sten Nilsson (Lund University Press). 1955

Gupta, Samita: *Glimpses of Pune's Heritage - A Mosaic*. 2004

Lundberg, Kerstin och Hjort, Christina: *Att fånga platsens själ - Handbok i Cultural Planning*. 2010

Yatin Pandey, Ahmedabad architect and activist, in a column in DNA India the 12th of March 2012.

Interviews:

Archana Tanwad, civil engineer and retired civil servant D L Deshpande in the residences in Kasba Peth, Pune, the 20th of January 2012.

Rajiv Raje, professor, architect and member of the Board of the City Development Plan in Pune the 24th of Januari 2012.

INTBAU India - Pune Charrette 2010. www.intbau.org

www.culturalplanninglaboratory.se

Financing partners:



Students 2011/2012:

Gaga Bonnier. *Interior architect*

Sarita Dale. *Architect*

Hillevi Gebring. *Architect*

Eva Larsson. *Building conservationist*

Ulrika Lily Lebelia. *Artist*

Kersti Björkman Lilja. *Building conservationist*

Anniina Meriläinen. *Architect*

Anna Reuter Metelius. *Building conservationist*

Elisabet Näslund. *Journalist*

Thomas Petéus. *Conservator*

Matti Shevchenko Sandin. *Art historian*

Petra Scherman. *Building conservationist, Museum teacher*

Monica Strandell. *Photographer and journalist*

Stina Svantesson. *Building conservationist*

Rebecka Tarschys. *Journalist*

Béatrice Coppieters't Wallant. *Architect*

Joakim Granström. *Interior architect* (part time student)

Staff:

Tina Wik. *Professor, Architectural Conservation*

Cecilia Sagrén. *Junior lecturer, Architectural Conservation*

Fredric Bedoire. *Professor, Architectural History*

This work is the result of the post-graduate course Architectural Conservation, at Mejan Arc, Royal Institute of Art, Stockholm, Sweden. A multidisciplinary post-graduate course, 60 credits, for architects, landscape architects, interior architects, urban planners, building conservationists, curators and others, with an architectural degree or equivalent and at least one year's relevant professional experience.

English language editing: Helen Walasek, London, UK
All photographs by the authors if nothing else is written.

Cover photo: Monica Strandell

Printed 2012, Stockholm

Print: Crimson

Copyright © Architectural Conservation, Mejan Arc,
Royal Institute of Art and the authors/photographers.

ISBN – 91-86016-41-5



Royal Institute of Art/Kungl Konsthögskolan
Mejan Arc, Architectural Conservation
Box 163 15, S-103 26 Stockholm, Sweden
Visiting adress: Flaggmansvägen 1, Skeppsholmen
Phone +46 8 614 40 00
www.kkh.se



Kungl. Konsthögskolan | Royal Institute of Art