

HERITAGE-BASED SUSTAINABLE URBAN DEVELOPMENT

UNESCO-IHCN and the Embassy of Switzerland in India

Conference papers

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Short Biography of Contributors

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Nicole Bolomey has been working as Programme Specialist Culture at UNESCO New Delhi over the past five years, dealing in particular with issues such as tangible heritage, world heritage sites and urban heritage. She has also managed the Indian Heritage Cities Network (IHCN) programme. Nicole Bolomey has a Master in Landscape Architecture and in Conservation Studies, and has a working and teaching experience of almost 20 years.

Neelkanth H. Chhaya has been a practicing architect and academic since 1977. He has done projects of institutional, residential, industrial, and recreational programmes in Ahmadabad and elsewhere. His practice has emphasized the adaptation of built form to physical and social contexts, especially landform and landscapes. He is also deeply interested in the cultural factors that affect architecture, especially in societies of rapid change. His projects have won major national awards, and he has also won several architectural competitions. Neelkanth H. Chhaya has taught at the University of Nairobi, at the Institute of Environmental Design, Vallabh Vidyanagar, and at CEPT University, Ahmadabad where he is at present Professor and Dean of the Faculty of Architecture.

Vikas Dilawari is a trained conservation architect with over two decades of working experience. He has executed several conservation projects for the government as well as for private clients, and several of these projects received national and international recognition, including the UNESCO Asia Pacific Heritage Award. Vikas Dilawari was instrumental within the Mumbai Chapter of the Indian National Trust for Art and Cultural Heritage (INTACH) to prepare the dossier for the nomination of Mumbai Chhatrapati Shivaji Railway Terminus as a world heritage site. Presently, he is Head of the Conservation Department of Kamla Raheja Vidyanidhi Institute of Architecture (KRVIA) Mumbai, and a member the Mumbai Heritage Conservation Committee (MHCC).

Marcia Haldemann obtained a Master Degree in Provincial Roman Archaeology from the University of Lausanne. After having obtained her Master in 2005, Marcia Haldemann worked for three years on various archaeological projects in Switzerland, France, Greece, Bulgaria, and Syria. She began to work at the Federal Office of Culture as a trainee in 2008, and managed the re-organization of the Swiss Federal Inventory of Swiss Heritage Sites (ISOS) in 2009. Since January 2010, Marcia Haldemann is ISOS Project Leader.

Akash Hingorani is a Delhi-based architect involved for many years in raising awareness on how Indian cities need to engage with their natural heritage, and transform their natural drainage channels into sustainable eco-corridors. He has also conceived and designed on a Public Private Partnership model the South Delhi Greenway, a 700 acres recreational open-space eco-corridor. Akash Hingorani is presently associated as an expert to the Unified Traffic and Transportation Infrastructure (Planning and Engineering) Centre (UTTIPEC) for the formulation of design guidelines for a comprehensive eco-mobility Master Plan for Delhi. The plan shall explore the possibilities of cleaning the open storm water drains and transform them into ecological corridors.

Ann Jacob obtained a Bachelor Degree in Architecture from the College of Engineering, University of Kerala, Thiruvananthapuram, and a Master Degree in Town Planning from the School of Architecture and Planning, Anna University, Chennai. Since 1982, she is Senior Town Planner in the Department of Town and Country Planning, Government of Kerala. Besides, Ann Jacob is presently heading the Circle dealing with planning legislation, art and heritage in the head quarters of the Department of Town and Country Planning.

Shikha Jain is Director of the Development and Research Organization for Nature, Arts and Heritage (DRONAH), an NGO with head office in Gurgaon, and Chief Editor of the biannual refereed journal "Context". Her experience in conservation comprises heading urban conservation projects for the Government of Rajasthan, Maharashtra and Punjab; steering conservation works funded by international organizations such as the Getty Foundation (USA) or the World Monuments Fund; and more recently assisting in the inscription of a world heritage site for India (Jantar Mantar, 2010). Shikha Jain has to her credit a number of books, papers and articles on the built heritage of India in national and international journals.

Isabelle Milbert is a Professor at the Graduate Institute of International and Development Studies, Geneva. Her teaching and research specialization includes modern Indian studies, urban management (heritage, slum rehabilitation, administration), and governance and international cooperation strategies in the urban sector. She is a member of the Executive Committee of the EuroIndia Centre, the Co-Convenor of the working Group on Urban Governance at the EADI (European Association of Development Institutes), and an Associate Researcher at the South Asia Research Centre (Paris, CNRS). Since 2006, Isabelle Milbert has also been heading the Indian wing of the international research project "CITADAIN" funded by the National French Agency for Research (ANR).

Anjali K. Mohan is an urban and regional planner based in Bangalore, working as an urban planner over the last 17 years. Her work experience comprises of national and international assignments related to institutional frameworks and policy environments, urban governance in relation to planning and development, and training and capacity building. Anjali K. Mohan has contributed to the design, compilation and execution of training manuals and handbooks for the government as well as the non-governmental sectors. Currently, she is pursuing her PhD on e-governance at the International Institute of Information Technology - Bangalore (IIIT – Bangalore).

Sabine Nemec-Piguet obtained her Master Degree in Architecture in 1978 from the renowned Swiss Federal Institute of Technology Lausanne (EPFL). Presently, she is the Director of the Office of Historical Monuments and Sites, Canton of Geneva, as well as Cantonal Curator for monuments. Sabine Nemec-Piguet led numerous works related to the preservation and protection of cities' historic areas and built heritage. Since 1999, she is also member of the Federal Commission for the Protection of Nature and Landscape.

P.S.N. Rao is Professor and Head, Department of Housing, School of Planning and Architecture, New Delhi. He is trained as an architect, civil engineer and urban planner, and has specialized and worked in the area of housing over the last two decades. P.S.N. Rao has been actively involved in various research and consultancy assignments including the Jawaharlal Nehru National Urban Renewal Mission (JNNURM), a flagship programme of the Government of India. Besides, he published over 100 papers and four books, and provided guidance to a large number of scholars undertaking studies on various aspects of housing in India.

Bernd Scholl studied Civil Engineering and Urban Planning at the Technische Universität Darmstadt, and completed post-graduate studies in Space Planning at the Federal Institute of Technology Zurich (ETH Zurich). Since 1987, Bernd Scholl is a partner in a planning office for city and regional planning located in Zurich, and since 2006 he is a full Professor for Spatial Planning and Development at the Institute for Spatial and Landscape Planning at the ETH Zurich. His teaching and research focal points are on land and spatial management in the local and regional development, space and infrastructure development, transnational tasks as well as development and organization of innovative planning processes and methods in spatial planning and regional development.



Foreword

A conference addressing sustainable development of historic and built heritage in urban areas declares from the outset its high ambitions. Firstly, because such an endeavour requires talented speakers from different backgrounds: practitioners as planners and architects; government representatives in charge of designing and ensuring proper implementation of relevant statutory provisions; and scholars holding and sharing empirical and theoretical evidence. Besides, a knowledgeable audience capable and willing to debate upon the speakers' ideas and contentions must be gathered, so that new insights can be gained. Secondly, the topic dealt with during the two days conference is multidisciplinary by nature: addressing "heritage-based sustainable urban development" demands a close look at topics as urban social dynamics, economic rationale, design and engineering, and culture and traditions just to quote a few.

Should one be afraid of such a challenge? I don't believe so, as the importance of contributing to the preservation of cultural and built heritage, which is manifestly threatened by vibrant urban growth in India as well as in Switzerland, is certainly a reason good enough to undertake such a task.

Tying-up with UNESCO New Delhi and with the Indian Heritage Cities Network (IHCN) from the very outset of the organization of the conference was a key decision, as the partnership allowed to pool resources and to reach a large network of individuals, resource persons, and institutions. This is clearly demonstrated by the significant number of speakers from India and Switzerland from various backgrounds. As per the latter are concerned, I am particularly glad that academic institutions as the Swiss Federal Institute of Technology Zurich (ETHZ) and the Graduate Institute of International and Development Studies of Geneva were represented during the conference, as well as government bodies like the Swiss Office for Culture and the Canton of Geneva.

Confronting and comparing the Indian and the Swiss realities, success stories, and failures was one of the strengths of the conference. Though in many regards the realities of India and Switzerland are very different, the presentations and discussions have shed light on a set of common underlying issues, from which one can learn by cross comparing. Worth mentioning here is, for instance, the need of fine tuning the distribution of powers and responsibilities on built and cultural heritage between the central and the local governments, a topic particularly relevant for two countries which have in common a similar federal political system. Another subject offering fertile background for a comparison of practices and evidence between Switzerland and India was the methodological approaches to safeguard the historical heritage. I am confident that discussions on these and other topics addressed during the conference were beneficial to all the participants.

"Heritage", in one of its common definitions, is equivalent to something transmitted from the past, a legacy, a mean for recollecting. The purpose of this book is also to leave a trace, and I believe that this publication will further contribute to the purpose of the conference.

H.E. Philippe Welti Ambassador of Switzerland to India

Preface

In many countries, historic cities have acquired an incomparable status in modern culture and in modern life; a status defined by the quality of the architectural and physical environment, by the persistence of the sense of place, and by the concentration of the historic and artistic events that form the basis for the identity of a people. Last but not least, they have become the icons of global cultural tourism and coveted places for the enjoyment of a different lifestyle and for cultural experiences for millions of people - Draft Recommendation on the Historic Urban Landscape 2010.

India is a cauldron of civilizations with a history of urbanization ranging from the Harappan civilization of 3000 BC right up to the achievements in urban planning of the 20th century. The cities of India, while reflecting multiple layers of history, diverse cultures, and varied traditions of the people living within, are under great pressures to adapt to the needs and aspirations of a fast growing urban population. The historic parts of India's cities, former urban centers, areas around monuments and urbanized villages, are today densely populated and often without proper services. They are in many instances designated as slums. Historic areas are however places of valuable resources and rich built heritage; the last bastions of disappearing crafts and traditional knowledge. These resources if properly recognized and utilized can become the core of the heritage-based sustainable development in a city. UNESCO has long advocated that sustainable development strategies cannot refer only to environmental, economic and social considerations, but must also be rooted in local cultures and traditions. In its 2001 Universal Declaration on Cultural Diversity it argues that the fourth pillar of sustainable development is cultural diversity. This has found its latest recognition in the 2010 UN Summit on the Millennium Development Goals, where a high-level round table on culture for development pointed out the central role of culture towards the attainment of the development goals and their sustainability.

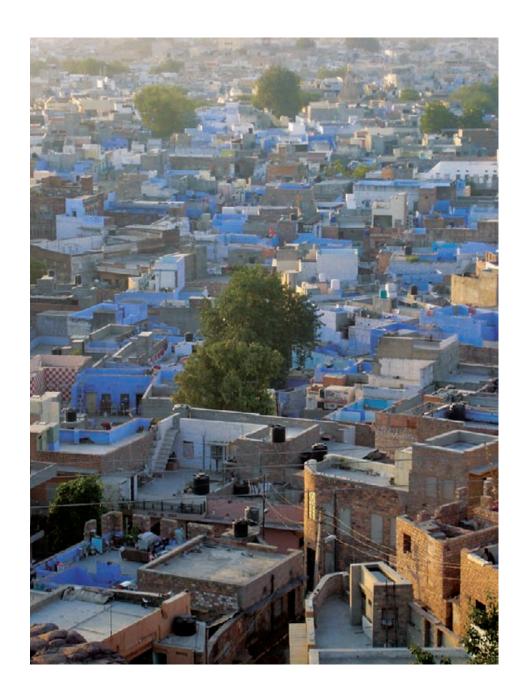
In India, UNESCO through its programme of Indian Heritage Cities Network is aiming at supporting the cities to better safeguard and utilize their heritage resources in a sustainable way while fostering heritage-based sustainable development. In this, the exchange of experiences and practices between city managers, planners, and researchers from across the globe is one vital activity. We are therefore happy having found in the Swiss Embassy an able partner for the organization of a conference to showcase the differences and similarities, in the Indian and Swiss experience for the safeguarding and development of historic cities.

In Switzerland, sustainable urban development has been attempted and tested for several decades. Decentralized governance is an age-old tradition, which has proven quite challenging for urban development and spatial planning. Therefore, in spite of many achievements, the Swiss planning system has recently become the subject of great debate, resulting in intensified research and testing of new methods. The planning system in India has gone through major changes in the recent past especially related to the implementation of the decentralized governance system enacted in the constitution in 1992. The empowerment of the local bodies requires, however, major efforts in capacity building for the local bodies to deal with town planning, urban regulations, and the protection of the natural and cultural environment. Therefore, we found it opportune to choose decentralized governance, planning and urban conservation in India and Switzerland as the key topic for this conference with the hope that the sharing of knowledge and experience would be beneficial to both sides.

This publication gives a summary of all the conference contributions and highlights concepts of sustainability in the context of urban development and particularly urban heritage. The papers present various tools that cities use to integrate heritage policy into the planning framework; case studies on planning methods and tools from different regions of India and Switzerland; challenges of historic housing and urban regeneration and the current trends and practices for achieving environmental sustainability in cities. I hope this conference is a beginning for more collaborative activities between the people, professional and cities of India and Switzerland and will show the way for the development of our historic cities in a sustainable manner.

Armoogum Parsuramen

UNESCO Director and Representative to Bhutan, India, Maldives, and Sri Lanka



SUSTAINABILITY AND URBAN HERITAGE: POLICY DIMENSION

Bernd Scholl

National Strategies for a Heritage-Based Sustainable Urban Development, the Example of Switzerland

Sanghamitra Basu

Policy Interventions and Management Guidelines for Historic Areas in India: Acts, Regulations and Toolkits

National Strategies for a Heritage-Based Sustainable Urban Development, the Example of Switzerland

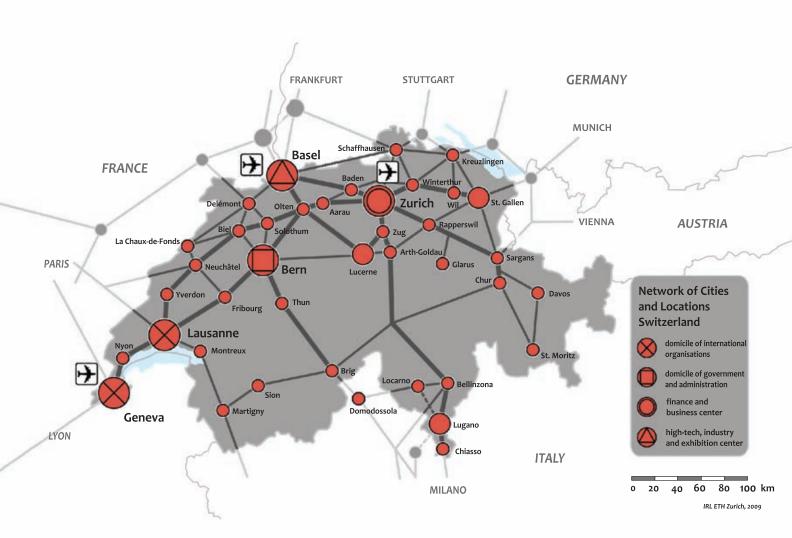
Bernd Scholl

Land is a limited and non-renewable resource. For this reason, the economical use of this vital resource is the core of every sustainable spatial planning and development strategy. In the past fifty years, the widespread use of land reached a level that caused serious ecological, economic and social consequences. Climate researchers have shown that, besides the global use of energy, the type and method of future land use can influence worldwide climate change.

By the year 2025, around 75% of the world's population will be living in urban areas. The growth of the world population and the increase in the amount of floor space per inhabitant will accelerate land consumption. In the highly developed European countries, more buildings were erected in the last fifty years than in all the previous generations. However, several of these countries now have a stagnating or even decreasing population. This means that the required maintenance and service of the expanded settlements and their infrastructure will have to be carried out by fewer people. If further expansion cannot be limited, a loss of the quality achieved to date could take place, even in the best settlement and cultural landscapes, subsequently causing heavy demands on the environment. Beside this, urban sprawl and non-integrated development of main infrastructures and social segregation could lead to the demolition of the urban heritage. For small countries like Switzerland, high quality preservation, renewal and a gradual development of the urban heritage are important location factors in attracting economic development.

Therefore, countries like Switzerland need to adopt a spatial development strategy that allows combining economic growth, limiting settlement areas and preserving the urban heritage in the mid-term to long-term perspective. This can be achieved using the principle of "redevelopment before new development" in regional land management and in complementary network of cities and locations. Thus, an important prerequisite for the implementation of the strategy is the availability of a high capacity and reliable transport system for an increasingly mobile population. The highly developed Swiss railway system is the backbone of this network.

Functioning networks of cities and locations are also a prerequisite to contain urban sprawl, using the guideline of developing settlement "inwards" by concentrating housing within the existing boundaries and improving the public transportation environment in the catchment areas. This task is important for Switzerland as a whole and will be consequently improved. But Switzerland, as a lot of other countries, will face challenges in the useful allocation of means. Setting priorities is therefore absolutely important. To achieve this there have to be defined "spaces of national importance" where local, regional and national actors in combined actions will prepare integrated concepts for development of such spaces, including priorities in the allocation of the always limited resources.



Policy Interventions and Management Guidelines for Historic Areas in India: Acts, Regulations and Toolkits

Sanghamitra Basu

Prevailing acts for the protection of historic monuments and precincts in India have been able to a large extent to protect individual enlisted monuments and precincts. However, when involving conservation of a living historic area that is of special significance, prevailing acts are rather prohibitive in nature. The process of weaving together new and old, and regenerating an old area with new functions is yet to emerge in the Indian context. Mere declaration of "prohibited" (100 meters) and "regulated" (200 meters) areas around heritage precincts are not sufficient for an area that is a living heritage.

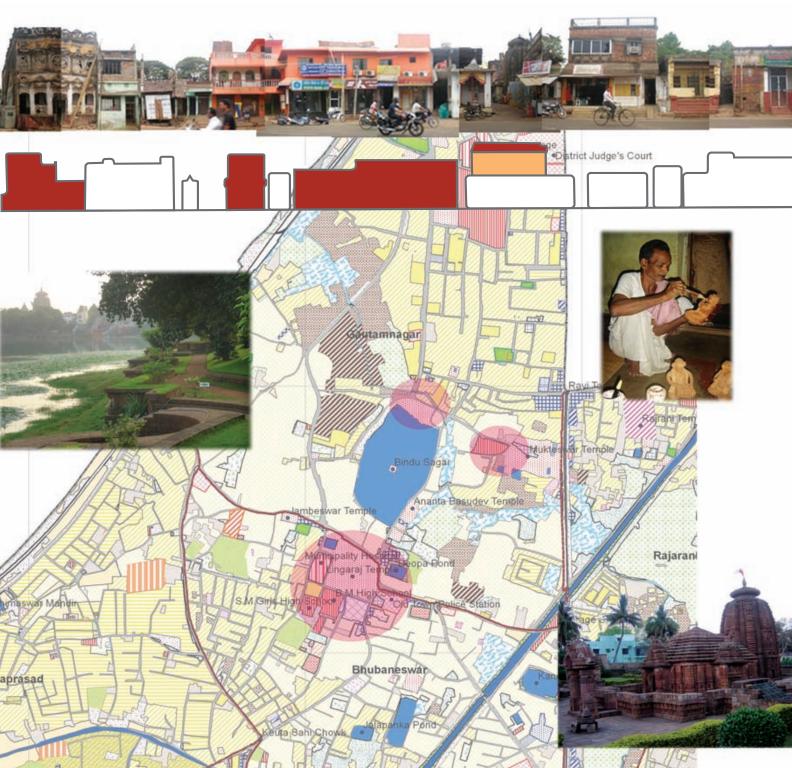
Most of the historic cities or heritage areas in India are not only significant for their historical monuments and precincts, but also for their rich and diverse mix of tangible and intangible heritage resources: built and natural heritage, communities of craftsmen and ordinary people with their beliefs, practices and rituals. In such areas, heritage precincts are generally interminaled with non-descriptive structures that are under a constant threat of demolition because of development pressure. Significant parts of such special areas are generally under private ownership where the need for development of the community cannot be denied. The role of multiple stakeholders is also an important issue. Under such circumstances. enactment of rules and restrictions need to be combined with incentives, public awareness as well as people's involvement. What is required is a pragmatic approach to make people understand that conservation is not a liability but a desirable approach for sustainable and holistic living, an approach that ensures better quality of life and also economical in the long run. This can only be achieved by supplementing the acts and regulations with city/area specific regulations as well as toolkits - series of guidelines that explain different aspects of heritage acts and related programs.

The need of such toolkits may be illustrated by three specific case studies. Firstly Bhubaneswar, the capital of Orissa, which has diverse types of heritage areas. In the recently notified Comprehensive Development Plan.1 each of the historic areas was designated and its future role in the overall framework of development plan was clearly specified. Various aspects such as tourism circuit, eco-friendly development, land use plan, all are in line with the need of conserving and promoting historic areas. Toolkits in the form of guidelines and available development options are being detailed in the zonal development plans. Secondly, the town of Bishnupur in West Bengal, with its rich heritage of terracotta temples and sculptures, an integrated water management system (now almost extinct), an intangible heritage of painting, music and weaving, is an example of the existence of an extraordinary heritage entwined with the most ordinary built environment of a small suburban town. The area has the potential of being declared a world heritage site but is languishing in utter negligence. Based on systematic study. documentation and analysis,2 management guidelines and action plans for sustainable development in the context of a proposed world heritage site are proposed. The third case study is China Town in Kolkata, a place of derelict structures possessively guarded by a strong community of Chinese population. It is gradually losing its battle to retain the identity

of the place. Scholarly work³ has shown possible regeneration options that are socially and economically sustainable.

In all three cases, attempts were made to broaden the concept of "conservation" and include an array of options ranging from protection, preservation to redevelopment, regeneration and renewal. The recently notified Ancient Monuments and Archaeological and Validation Act (2010) in India has a provision of forming "competent authorities" for identified heritage areas and to prescribe detailed site plans. How far it can achieve its declared goals depends on the ability to reinterpret acts and to explore the full potential of a particular site or area on a case by case basis as illustrated above. Thus, it needs a proscriptive rather than prescriptive approach that integrates conservation with development and is flexible enough to cater to varied types of situations. Such measures are necessary to enable authorities and people to look after the legacy in a socially and environmentally sustainable manner.

Comprehensive Development Plan for Bhubaneswar. 2009, ARP Department, IIT Kharagpur 2) Krithika Sridharan (2010). Bishnupur as a World Heritage Site. MCP dissertation, IIT Kharagpur, May 3) Banasree Mandal (2009). Development strategies for China Town, Kolkata. MCP dissertation, IIT Kharagpur, May



PLANNING METHODS AND TOOLS TO SAFEGUARD THE HISTORIC URBAN ENVIRONMENT

Anjali Mohan

Heritage as a Resource for Development: the Need for Integrated Planning

Isabelle Milbert

Administrative Aspects of Urban Heritage Conservation in India and Switzerland

Ann Jacob

Planning Methods and Tools Adopted in Kerala to Safeguard the Historic Urban Environment

Bernd Scholl

Test Planning – an Innovative Method to Safeguard the Historic Urban Environment

Heritage as a Resource for Development: the Need for Integrated Planning

Anjali Mohan

The term "heritage" constitutes a vast array of objects, memories and systems typically rooted in the past that a society and its peoples inherit. Being one of the oldest cultures, India has inherited a vast heritage, both tangible and intangible in nature, over several centuries of recorded and mythic history.

The tangible refers to the built, physical, architectural or natural elements, the latter including landscape features. environment, biodiversity of its fauna and flora, etc. The intangible, on the other hand, refers to knowledae. skills. practices. representations or art performed by communities rooted in a particular context. geography, social fabric or time-scale. It is also frequently referred to as "living heritage". While international institutions through various ratifications, validations, and conventions have served the purpose of raising awareness and ensuring the recognition of different forms and aspects of heritage in the country, Indian conservation practices have been traditionally rooted in the architectural paradigm.

Given the pressures of rapid urbanization in the country heritage, which constitutes an important economic, social and cultural resource of the place where it is located, is under continuous threat. This threat is further aggravated by the current approach which perceives heritage and its conservation in isolation from the larger development process. The inadequate definition of heritage and its current disconnection from the planning approach compromises both the spheres; the planning for development which results in creating enclaves and the protection and conservation of heritage that leaves gaps in the

development fabric. Even though planning processes base development on long-term vision, the recognition of heritage is largely from the perspective of a legal framework which views it as an object rather than a spatial concept.

Thus, on the one hand the blurred definition of heritage has created ambiguity which in turn has led to multiple interventions by multiple stakeholders often implemented without any coordination. On the other hand, the very practice of planning having little or no consideration for the various aspects of heritage has led to these two processes emerging as parallel, with little or no acknowledgement whatsoever of the other.

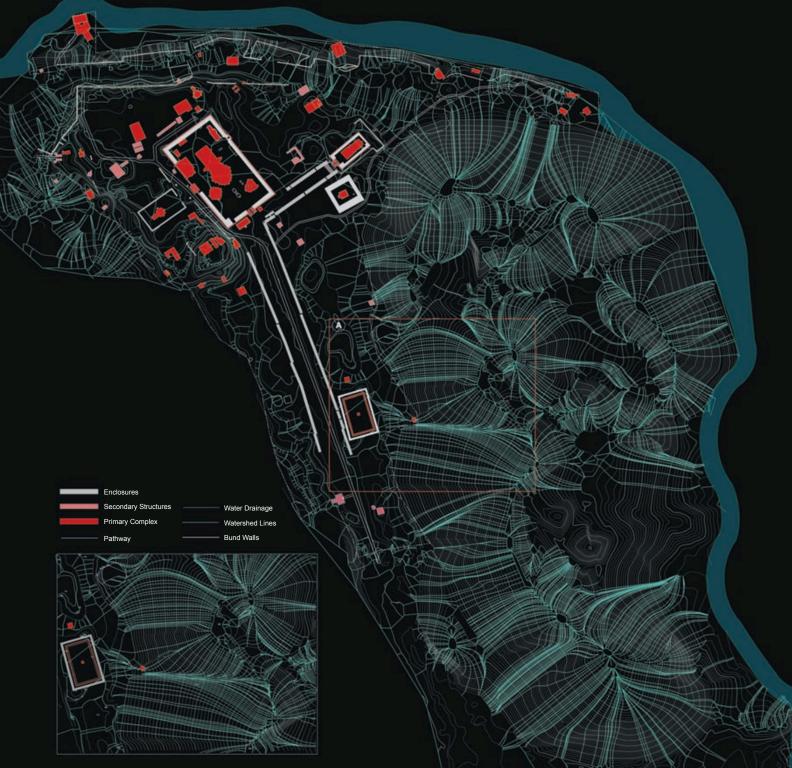
The usual limited planning approach which leads to indicate heritage area with its buffers zones around natural features (river, lakes, hills, etc.) deemed "unfit" for development leaves holes or enclaves in the plan, whereby the "planned" developments have their backs to the "hole". The challenge is therefore to articulate in a comprehensive manner all aspects of heritage within its spatial context. Planning for heritage conservation is the key to realize the full potential of this resource and this requires establishing public policies and strategies that can help prevent the loss of historic places.

The redefinition of heritage to include built, natural and living components becomes also critical to create a mandate for institutional frameworks to document and build the case for integrated heritage management as an important planning tool.

Another challenge is to protect and preserve

that heritage which remains largely unprotected and unrecognized. This would then require an acknowledgment of - and clarity on - the roles and responsibilities of local stakeholders, by those whose principal mandate is to protect and manage heritage at the state or central level. Additionally, it requires strengthening the capacities of planning agencies and local stakeholders to be able to integrate heritage in a strategic vision.

Local Self Governments provide the ideal platform as it is at this level that community discussion and education about issues related to historic resources and development is best articulated. Thus, a multipronged approach is the need of the hour which should necessarily begin with a redefinition of heritage with corresponding changes in the legal and statutory framework and institutional setups including capacity enhancement.



Administrative Aspects of Urban Heritage Conservation in India and Switzerland

Isabelle Milbert

Administration for heritage conservation involves several issues related to decentralization, popular support, private funding and international leverage.

A centralized mode of organization enables the administration to have a direct impact, with a body of high-level experts, and to put technical knowledge at the service of lower administrative strata. For instance, the Indian Archaeological Survey of India (ASI) is a Department of the Ministry of Culture. On the Swiss side, the Federal Office for Culture has a Department for Cultural Heritage and Historical Monuments which plays an important role of coordination (regulations, expertise), as well as the Federal Commission on Historical Monuments, which is an advisory body.

However, in both countries, most heritage conservation responsibilities are conferred to decentralized urban local bodies. In Switzerland, cantons and municipalities historically deal with planning and implementation of conservation. In India, the 74th Constitutional Amendment (1992) has decentralized responsibilities concerning most aspects of city management, including housing, infrastructure, preventing decay and promoting culture and aesthetics. At the moment, heritage conservation is only one of many priorities, while the local access to stable finance resources and the actual share of power between Mayors and state officials are not fully stabilised yet.

In both countries, dedicated citizens helped building policies to involve the administration in the conservation implementation. In the past, some old families played an important role as sponsors (Ahmedabad, Bombay, Geneva), sometimes giving an elitist touch to this process. Nowadays, the administrations at the federal and state level can rely on a body of official commissions, composed of experts and nominated citizens, such as INTACH in India, the Delhi Urban Art Commission or the Swiss Heritage Society. These Commissions pursue their goals mainly through publications, technical consulting in construction projects, advisory functions in planning committees, appraisals, legal action, and financial grants for pioneering projects. In Switzerland, a strong social movement is acting in favour of the maintenance of heritage conservation, while in India, obviously, development and the fight against poverty are often given the priority.

International cooperation between officials and experts has been very helpful: UNESCO, the World Bank and bilateral dialogue (Switzerland, Italy, the United Kingdom, the Netherlands, France) are key to demonstrate the complementarity (more than conflict) between built heritage conservation, socio-economic development and environment.

The most efficient cases of urban heritage conservation have been associating simultaneously different stakeholders such as public officials, private investors and dedicated members of the civil society by helping to focus funding and expertise on old neighbourhoods and original architecture settings. It is then easy to draw international attention and to use experts, architects, craftsmen, academics and artists to build up and document the process. with national impact on politicians, administration and the corporate sector (as in the cases of Bern and Zurich for instance, or the Neemrana Fort in Raiasthan and the Pol neighbourhoods in Ahmedabad). This process

implies a considerable task of training for the urban administration, and specific techniques of dissemination (heritage walks, heritage days and festivals) in order to build public support.



Planning Methods and Tools Adopted in Kerala to Safeguard the Historic Urban Environment

Ann Jacob

The need for conservation of heritage buildings and areas was institutionalized by law around one and a half centuries back in Europe. In India, introduction of Archaeological Survey of India (ASI) in 1861 paved the way for conservation legislation. The Constitution of India under fundamental duties mandates the citizens to value and preserve the rich heritage of our composite culture. This paper deals mainly with the legislations enforced in Kerala for safeguarding the heritage buildings and areas.

The Ancient Monuments and Archaeological Sites and Remains Act of 1958 empowers the Central Government to declare ancient monuments as having national importance and being notified as protected. Till 2000, ASI had declared only 3,606 monuments as protected. Kerala's share was only 26 in number – a meager 0.7%! In addition, there are around 300 monuments declared as protected by Department of Archaeology, Government of Kerala under the State Act. ASI has its own development controls around Centrally Protected Monuments.

The Kerala Municipalities Act (1994) and the Kerala Panchayat Raj Act (1994) empower local bodies to notify an area to control new constructions and defines special architectural guidelines for buildings. Coastal zone regulations prohibits/restricts new constructions in areas identified as historical/heritage by the Coastal Zone Management Authority. Town and country planning legislations applicable to Kerala, that is, The Travancore Town Planning Act 1108 Malayalam Era (1932) and the Madras Town Planning Act (1920) identify "preservation of objects or buildings of

archaeological or historic interest or of natural beauty" as matters that might be dealt with in a town planning scheme.

Vide provisions contained in the Kerala Municipality Building Rules (1999), the Art and Heritage Commission was constituted in Kerala in 2000 for advising the government and local bodies on matters related to heritage conservation. The Local Self Government Institutions has to insist on any architectural aspects if so advised by the commission. In the master plans for Thiruvananthapuram, Kochi and Palakkad Towns prepared under town planning acts in force, heritage zones are specifically earmarked with survey numbers and any developments/construction activities in these areas shall be done with the concurrence of the committee constituted by the Art and Heritage Commission.





Test Planning – an Innovative Method to Safeguard the Historic Urban Environment

Bernd Scholl

Planning experience demonstrates that farreaching errors are made at the very beginning of planning processes. Especially in areas that have strategic importance for sustainable urban development, a rapid and unprepared utilization of sole land parcels may lead to an inappropriate overall development.

In complex planning tasks where the problem definition is mostly ill-structured, it is essential to explore the problem before attempting to explore the solution. When treating problems of this kind we always have to consider the domain of "not knowing about not knowing". In everyday language we call these "surprises". In strategic tasks a big part belongs to this category, which we have to deal with in well designed planning processes.

Similar to explorative learning, exploratory planning (test planning) is based on incrementally proceeding and early assessment of chances and dangers that are linked with actions and evaluation of their consequences. Hence, in a test planning process several teams work simultaneously on the same task to explore the whole spectrum of possibilities for utilizing such areas. Therefore, the core function of test planning could be stated: as to test different possibilities and potentials of uses and their intensities for a specific area. Then, to estimate which actions are essential, if a certain conception should be implemented?

Test planning is distinguished thereby clearly from the traditional planning approach, as only based on the background of a possible use perspective it is clear, which information and which knowledge are necessary for clarifying and solving the explored problems and conflicts. This distinction is fundamental,

because the accumulation of unnecessary data heaps is avoided. Investigations are therefore also very efficient.

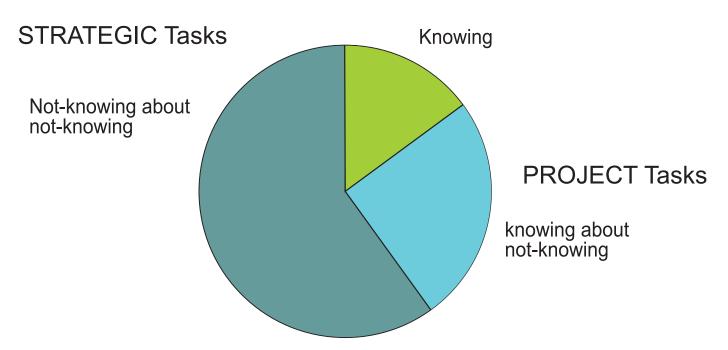
The following aspects represent the core methodological fundaments of the test planning process:

- The preparatory phase of a test planning process represents the first exploration of the problem. It is used to get the overview about the most important development activities in the planning area.
- A task description is not only essential for the planning teams; it serves as a first exploration of the problem.
- The roles should be differentiated among the participating representatives of the executive level (cities or company, politicians) and the technical level. The technical group including the autonomous experts and the teams should be able to explore the problem freely without prejudgments. In the meanwhile, the executive level is free to accept the recommendations of the experts.
- To achieve a sufficient wide spectrum of possibilities three or four teams should work in parallel on the same task.
- The task should be conducted on three levels. The overview level is important to explore the relations in the large spatial context. While the concept level is concerned mainly with the proposed concept for the development. On a third level a focus area that is crucial for the concept is explored to prove it.
- The process should be organized in three cycles, so that the proposed solution could be discussed and enhanced to a mature and robust spatial strategy.

- After the third cycle, the results of all teams should be systematically evaluated and summarized in the form of synopsis to allow a comparison among all proposals.
- The group of experts develops recommendations for the executive level based on the works of the teams, the synopsis and of course their experiences.

These maxims will be explained at actual European city planning projects.

ROUTINE Tasks



MAPPING AND EVALUATING URBAN HERITAGE

Shikha Jain Mapping and Evaluating Heritage

Mavita Baradi

Documentation and Listing of Built Heritage, Surat

Marcia Haldemann

ISOS – Federal Inventory of Swiss Heritage Sites

Mapping and Evaluating Heritage

Shikha Jain

The mapping of India's tangible heritage was initiated during the 18th century British colonial period with the formation of the Asiatic Society in Calcutta, leading to almost a century later, in 1871, to form the nationwide Archaeological Survey of India (ASI). Being a premier institution, ASI sets the trend for recording and documenting the built heritage at the state levels with the formation of State Archaeology Departments. However, the scope of these institutions remained limited till 2007 and at present the total count of protected monuments under ASI is only 3,650, with an additional 5,000 odd monuments under the states. The National Mission of Monuments and Antiquities (NMMA) launched in 2007 is a benchmark initiative of the Ministry of Culture allowing ASI to create a National Register including thousands of unlisted and unprotected heritage structures.

In its first phase, the mission aims to consolidate existing listings of built heritage as well as antiquities from various sources such as NGOs, state governments, municipal corporations, individuals, etc., with the primary contributor being INTACH, a nationwide NGO that has listed 40,000 built heritage structures/precincts in its 25 years of existence through a network of regional chapters across India. More recently, local municipal bodies in some cities have taken the responsibility of comprehensive heritage listing in their areas.

Achieving the target of creating a National Register comprising of the abundant tangible heritage of India and mapping and evaluating this heritage pose challenges. In the last decade, several formats of listing and inventories have been developed and used by

conservation professionals and NGOs. Digitalization, GPS and GIS serve as useful technologies in mapping of heritage while methods of participatory mapping are being encouraged to engage stakeholders' active participation in the process.

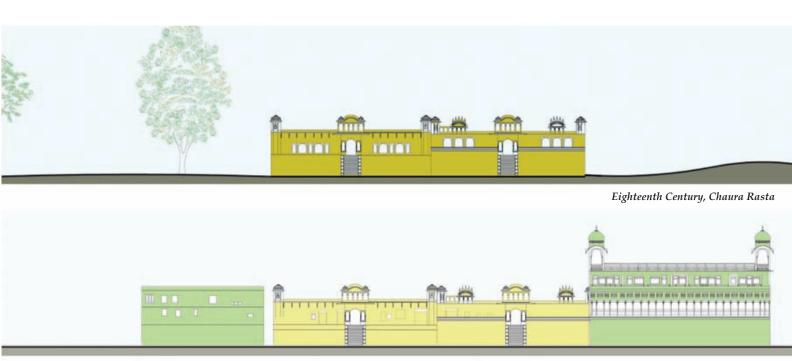
DRONAH (Development and Research Organisation for Nature, Arts and Heritage) devised certain processes of mapping and evaluating heritage at city level while preparing heritage management plans for the city of Jaipur in Rajasthan and Nashik in Maharashtra. A more comprehensive mapping and evaluation approach for a heritage site was established for the City Palace Complex, Udaipur as part of the Conservation Master Plan funded by the Getty Foundation.

The city level mapping process includes categorization of tangible and intangible heritage into four basic types: Built Heritage, Natural Heritage, Cultural Heritage, and Archeological/Archival Heritage. More specifically, the Built Heritage can be further categorized as per distinct architectural typology and characteristics. This categorization helps in formulating specific urban building controls for each type. For example, the built heritage for the city of Jaipur includes: fort and palaces, city walls and gates, temples and religious buildings, havelis (traditional courtyard houses), public and commercial buildings, wells and baydis (stepwells), cenotaphs, and historic gardens.

An updated documentation of the built heritage can be achieved only after appraisal of all previous initiatives for listing and mapping. Hence, it is essential to review all previous listing works in the area. The process of

mapping at city level includes phases as listing (primary data collection and inventory); grading in categories (the four categories of grading most commonly used in Indian cities are based on the significance, authenticity, integrity and nature of intervention allowed in a heritage structures / area); consulting strategy (which consists in getting feedbacks from professionals, government officials, local residents and local historians); and eventually analysis (determining the means for heritage protection, conservation, and reuse).

Listing and mapping of heritage needs to be an exhaustive process involving archival research, identifying structural innovations, planning principles, use patterns, architectural styles and layers of interventions for each. It should also include survey of surroundings and mapping of open spaces with analysis of the existing fabric, recording of traditional rituals, festivals and oral traditions. Mapping of heritage structures while preparing conservation area plans may also include preparing a set of drawings with topographical and architectural photogrammetry surveys, and assessment of the site environs and landscape, Supporting activities such as organizing training workshops to establish documentation processes should also be part of mapping of any heritage area.



Nineteenth Century, Chaura Rasta



Twentieth Century, Chaura Rasta

Documentation and Listing of Built Heritage, Surat

Manvita Baradi

Surat is one the most dynamic and fastest growing cities of India in terms of its economy and culture. It is the ninth largest city in the country and second in Gujarat state. It has a magnificent heritage value. One of the oldest port cities, Surat has had business linkages with more than 84 countries.

The history of Surat dates back to 300 BC. The old Hindu town of Suryapur, renamed as Surat in course of time, was founded during 1500-1520 AD. Earlier, Rander port flourished more than neighbouring Surat port. Its trading connections influenced the living patterns as well as architecture in Rander. These connections are still strong today with a large percentage of people, who have migrated or are working abroad, retaining their ancestral property here.

With changing pattern of cities and increasing demand of land, conservation of heritage has been a challenge for all levels of governance, especially at the local levels. The Urban Management Centre (UMC), also known as ICMA-South Asia was invited by the Surat Municipal Corporation (SMC) to document - and to prepare a comprehensive list of - heritage properties in Rander and the Central Zone in a consultative mode. UMC's mapping exercise for Surat heritage is unique in the area. The team went from door to door to survey old buildings and also took photographs of the inside of these structures.

This is one of the first comprehensive surveys done across the city, where almost 3,000 heritage properties were surveyed. The listing and documentation exercise identified living built heritage assets and undertook a detailed documentation of the same. The results of the

survey have been mapped and analysed using the GIS platform.

During its survey, UMC identified 4,450 properties in Rander and Central Zone. A detailed screening process based on the photographs taken was undertaken. After the documentation process, buildings have been categorized according to their requirement for technical assistance for conservation according to their age, their ownership, current building use, use of materials and their current structural stability.

The proactive role of SMC in initiating the heritage listing and documentation program shows the path to other cities which are grappling with similar issues. Now, the SMC is in the process of finalizing a heritage management policy.

UMC's mapping exercise holds noteworthy significance in heritage management. Communities deserve special mention. The work called upon interaction with the community, explaining the significance of the exercise and getting it to cooperate. Eventually, the grading was done and a database was created

Heritage management requires sustained efforts by the government and the community. Publications need to be brought out on the city's heritage in a variety of formats targeted at different users, including books, reports, brochures, guides, maps, and audio-visual products. Parallel to this is the need for local governments to support research and documentation efforts carried out by universities and research institutions, including trusts and other private commissions that are involved in heritage conservation.

Support could be provided for educational courses, training of personnel, and research activities. Setting up museums is useful for documentation and conservation activities. Holding exhibitions can also prove to be a beneficial exercise. Lastly, having an effective and enabling institutional and policy environment goes a long way in providing incentives for and sustaining heritage conservation. Developing specific conservation plans and land use controls, and integration into the city's overall master plans is important along with amendments in laws, legislations, rules and building codes.

Today, the importance of heritage conservation and inner city revitalization is increasingly being understood by local governments. The question remains as to how to prioritize this among other burgeoning demands of growing cities.



ISOS – Federal Inventory of Swiss Heritage Sites

Marcia Haldemann

According to Article 78 of the Federal Constitution, the Swiss Confederation must consider the issue of protection of natural and cultural heritage in the accomplishment of its tasks. In order to fulfill this duty and to maintain the proper balance of interests between natural and cultural heritage, it draws up and regularly revises the following federal inventories to provide a basis for making decisions: the Federal Inventory of Landscapes and Natural Monuments of National Importance (BLN); the Federal Inventory of Swiss Heritage Sites (ISOS); and the Federal Inventory of Historic Swiss Transport Routes (IVS). All three inventories are compiled on behalf of the Federal Council. For the ISOS, all heritage sites certified by the Federal Council are listed in the annex to the Ordinance on the Federal Inventory of Swiss Heritage Sites (ISOSO).

The inclusion of a site in the ISOS means that it deserves to be preserved intact. Exceptions may only be considered if opposing interests of national importance carry equal or greater weight. The ISOS is binding at the federal level (the Confederation must consider it in the fulfillment of its duties) and at the cantonal level (the cantons have to take it into account when drawing up their structure plans).

As of the 1st of June 2010, the ISOS lists 1,281 Heritage Sites of national importance. A list of heritage sites of regional and local importance was established next to the Federal Inventory.

Since 1973, all permanent settlements which counted more than ten buildings towards the end of the 19th century were visited and evaluated according to morphological, spatial and architectural-historical criteria.

The inventory covers cities, small cities, urbanized villages, villages, hamlets and so-called "special cases" like industrial complexes, power stations, monasteries, or historical hotels. In order to evaluate so many different types of sites, the ISOS created a grid which enables an equitable comparison of hamlets with hamlets, villages with villages and so on.

The ISOS does not evaluate sites on the basis of the quality of individual buildings. It assesses the local character of the sites in their entirety, by considering the relationship of the buildings to each other and the quality of the open spaces between them (squares, streets, gardens) as well as the relation of the sites with their surroundings (the landscape in general).

The inventory is based on the present stack of buildings. Each site is divided into several districts, groups of buildings and so-called "surrounding zones". An objective of preservation is attributed to each of these zones. The ISOS doesn't draw a line between ostentatious and modest buildings or old and new constructions if they are situated on the same square or street. It describes districts as single entities and recommends them for protection as such. Single objects are only marked if they constitute a "disturbing factor" or, on the contrary, a very important factor for the entity they belong to. "Hints" that help the orientation on the map are also indicated.

The ISOS is published in the form of a book. Each site is documented by means of map extracts, photographs, as well as a historical and a descriptive text. Recommendations for future planning are made in order to preserve architectural heritage for future generations.

The inventory not only serves as a basis for planning at the federal, cantonal or communal level, it also contributes to site preservation by providing a basis for decisions on the conservation of districts or individual buildings. Finally, it promotes and raises public and government awareness on the different types of settlements.

For more information: http://www.bak.admin.ch/isos



HOUSING AND URBAN REGENERATION

P.S.N. Rao Historic Housing and Policy in India

Isabelle Milbert

Planning Policies for Historic Housing: Carouge

Vikas Dilawari

Historic Housing and Urban Regeneration: Mumbai

Sabine Nemec-Piguet

Restoration of Residential Districts in the Historic Centre of Geneva

Historic Housing and Policy in India

P.S.N. Rao

Traditionally, housing in India was designed taking into account considerations of climate. materials, technology, functional requirements and cultural aspects. As a result, the gable roofs in Kerala, stone "jalis" in Rajasthan, "ikra" walling in hilly areas, courtyard forms and "vaastu" rules came into being. Indian cities abound in traditional or historic housing areas. Selected examples of this are the Katras of Shahjahanabad, Peths of Pune, Pols of Ahmadabad, Agrahara of South India, Mansions of Chettinad, Havelis of Raiasthan and Nallukettu of Kerala. In addition to the local native traditional influences, European influences also made a significant contribution towards historic housing in India. For instance. the British influence shaped the "Presidency Towns" viz. Mumbai. Chennai and Kolkata (and later Delhi); the French influence shaped Pondicherry; Dutch influence shaped Bhimlipatnam and Visakhapatnam; and Portuguese influence shaped Panjim and other settlements in Goa.

According to the Constitution of India, housing is a state subject and therefore, each state government can frame its own housing policy. Quite a few state governments have framed their housing policies. However, at the national level the Government of India has come out with a national housing policy which has been recast more than once. The various housing policies at the national level are National Housing Policy (1987), the National Housing and Habitat Policy (1998), and the National Urban Housing and Habitat Policy (2007). Unfortunately, none of these policies have addressed historic housing areas.

Some of the legal issues are: a) rent control

acts in various cities have had a major effect on housing in the inner city/old city/traditional housing areas; b) most of such housing is tenant occupied and since the legislation is tilted towards the tenants and eviction is very difficult, owners lose interest in the property and do not maintain the same (rents are highly depressed); c) tenants have no incentive to maintain such buildings; and d) over a period, the buildings deteriorate.

The challenges today therefore are as follows:

- Property values in old city centre areas have steeply gone up. On account of this, many owners of properties would like to redevelop their properties by demolishing the old building rather than conserving the same conservation is a highly uneconomical proposition.
- Poor maintenance leads to dilapidation and collapse.
- Most of the traditional housing has got transformed or completely vanished.
- Historic housing is mostly private property and therefore interventions are very difficult, unlike in other historic buildings (monuments).
- Commercial interests run high in the central city areas where historic housing exists. The real estate lobby is active in redevelopment.
- There are no laws for conservation of traditional/heritage housing areas.
- Ironically, because of the rent control acts, we still have some examples of historic housing left intact (for us to see !).

The Government of India has recently introduced a national urban renewal mission in various cities. However, a closer examination of the programme reveals that it has more to do

with improving core urban civic infrastructure and little to do with historic areas, let alone housing areas. Some interventions, like the transfer of development rights, have had a very limited impact in places like Mumbai.

By and large, historic housing in India is a neglected area and most property owners like to demolish and rebuild so as to get the maximum commercial value out of the property. With government policy loose and almost non-existent, historic housing areas are fast disappearing. There is therefore an urgent need to highlight the heritage value of historic housing and develop frameworks for their conservation.



Planning Policies for Historic Housing: Carouge

Isabelle Milbert

Carouge, which is part of the Geneva urban agglomeration, with 18,000 population, has managed to retain all its historic landmarks and neighbourhood atmosphere, while becoming a prosperous municipality, with all modern services and numerous small scale industry activities.

Carouge does not possess monuments of national interest, but the fact that the city has been entirely planned in the 18th century gives it a very special touch. The city was long preserved from new building activities and private developers' projects by its marginal position away from the prestigious lakeside. During the 19th century and till the 1960s, Carouge remained a poor Catholic neighbourhood of Geneva, reputed for its craftsmen and manufacture earthenware, metal, wood) but also for its rather unruly night life (bars, restaurants, music), with an important migrant population, contrasting with straight-laced protestant Geneva.

From the late 1960s onwards, a dedicated social movement, called Le Boulet (meaning "cannonball" or also "millstone") fought hard to ensure that every detail of the 18th century original setting would be respected (colours of the façades, organization of streets, and green areas).

An inventory was made, and the municipal plan has to respect a lot of constraints in most of the streets of Carouge. It is the same with private owners, who do not have the complete freedom in their restoration projects, for instance to change their facades.

From the 1980s onwards some gentrification took place, but the population is still very mixed

in age, revenues, activities and countries of origin. Carouge has retained a distinct municipal administration. Very lively and multiple action groups express their concern about the functioning of different services and also about heritage conservation issues. The authorities have therefore to work hand in hand with the population and house owners.

In a semi-direct democracy like Switzerland, the municipal authorities must justify their projects or they can face a negative vote in a referendum. This voting can also be initiated by some citizens, asking the municipal authorities to take action.

This was the case when the old very popular cinema, privately owned and situated on the ancient two-century old Market Place, was about to be sold to be transformed in a McDonald restaurant. The transaction eventually involved the investment of the municipality and today the cinema and adjacent café continue happily to be a landmark of Carouge and Geneva cultural life.

Carouge demonstrates a very attractive mix of careful heritage conservation, lively economic activities and municipal measures to favour social services and ecological concerns: garbage recycling enables the city to spare a lot, and public transportation is widely used. The historic tradition of encouraging artistic activities (ceramics, sculpture, painting, jewellery, and watchmaking) goes together with vibrant trade as well as industry in the periphery. Many visitors come to stroll around, and their presence is welcomed since the city has always displayed a lot of restaurants, craftsmen shops, music places and theatres.



Historic Housing and Urban Regeneration: Mumbai

Vikas Dilawari

Mumbai is a multifaceted city having antiquity and modernity happily co-existing. It has been defined by many architectural historians as the "finest city east of Suez". It is well known for its ensemble of public gothic revival buildings built in the 1870s and art deco stretch in the 1920s. These landmarks exist as they were balanced by a homogenous grain, that is, Mumbai housing stock having different typologies ranging from bungalows, colonial apartments, community housing like Parsee Baghs, followed by cosmopolitan art deco apartments of Marine Drive and the Chawls which was the housing for middle and lower income group. Being an island site with restricted land available for development, housing has always been a big issue for the city.

One of Mumbai major drawback has been its frozen rents due to the Rent Control Act of 1940s which has made its then good building stock neglected and in dilapidated condition. According to the census, Mumbai's housing fabric stock has approximately 16,142 cessed properties out of which more than 5,000 are more than 100 years old posing a big challenge. The government standard operating procedures unfortunately encourages reconstruction rather than repairs.

Unlike the western countries, the traditional Indian historic fabric does not last long for several reasons, these are: 1) subdivision of property, as several heirs and everyone wants their share resulting in quicker demolition rather than adaptive reuse; 2) growing needs of family and demand for space and population on increase; 3) utilitarian society rather than antiquarian society; 4) materials used are not the best that would last permanently, also the

tropical humid weather is very adverse to built fabric; 5) poor legislation and mechanism for its implementation; and 6) lack of funds and awareness.

Present trends reflect a clear battle between heritage and development rather than heritage being a "sensitive development tool". The original sustainable development concept of traditional housing was to have mixed use, that is, commercial below with high rents to subside the rents of residential above. The mixed land use kept the area safe and vibrant, the leases were prepared keeping the larger interest of the city/area in mind rather than individuals. Examples are: Cowasji Patel Tank area and Bhendi Baazar area.

Conservation and development are two different sides of the same coin and together they have a value. Yesterday's urban design or architecture like Dadabhai Naoroji Road is today's heritage, hence it is essential to have a stronger implementation mechanism of the legislation.

To re-include Cessed grade III and precinct properties within the purview of the city's heritage committee as the grain that is being redeveloped is resulting in high rise buildings which loads upon the fragile infrastructure of the city, and affects the quality of life with its intimidating scale. These new landmarks obliterate the clear legibility of the city with its public landmarks.

Other important issues to address include:

- It is essential that the existing listing and guidelines are reviewed and new precincts with definitive guidelines for skillful repairs and development are added.

- To have political support which will ensure that conservation and development go together.
- Conservation should address the needs of people but arrest the greed of developers.
- Removal of Rent Control Act from heritage properties to start with commercial listed premises; followed by residential premises.
- Quick permissions to encourage genuine restoration/skillful repairs/maintenance should be granted.
- To work out means of giving economic incentives that encourage conservation like additional floor space index (FSI) or transfer of development rights (TDR) to all listed buildings should be executed.
- Formation of three tier committee, that is, 1) for Urban Art Commission to determine the type of new development in and around historic areas, 2) for major structural alterations of listed buildings, and 3) for minor repairs and maintenance of listed buildings.
- To have the right people and institutes in these committees with known credibility in their respective fields and keeping its functioning as transparent.
- Spreading awareness, sensitizing the public and allowing good new sensitive development that can be the heritage of tomorrow.



Restoration of Residential Districts in the Historic Centre of Geneva

Sabine Nemec-Piguet

The life of a city is embodied in the urban and architectural forms that have emerged over the centuries. This heritage makes every town a special site with its own spirit. This unique heritage needs to be safeguarded. However, the value of an ancient city is not defined only in historic, aesthetic or sentimental terms. Faced with the growth of urbanization and its corollary, the unease arising from the squandering of resources, this heritage offers certain answers which are worth taking into consideration. At the dawn of the 21st century, our old city centers appear as places in which social and commercial diversity go hand in hand, in which the public space promotes exchanges, in which the density achieved through modern technologies is no longer equated with insalubrious conditions but rather with a rational use of space. In other words, a town in which the quality of its public places derives from the recognition of social and collective values inherited from earlier times.

In Switzerland, due to federalism, the Constitution enshrines the cultural and linguistic diversity of the country. The cultural policies remain entirely in the hands of the cantons. Switzerland is a semi-direct democracy which grants its citizens numerous political rights, including the referendum. This obliges the authorities to allow citizens to take part in the decision-making process through membership of special interest associations.

In Geneva, during the 1970s, following a number of demolitions of buildings, a significant popular movement emerged to oppose demolitions in city center residential areas. The success of the movement opened up a new era in the transformation of the city and helped

to create a political orientation in favour of the protection of the built environment. The heritage and environmental associations were incorporated into the process whereby decisions are made on planning permission and urban development.

These associations have a right of appeal against building permits issued by the cantonal authority. Furthermore, the law grants them representation on the consultative committees responsible for advising the cantonal authority. This is particularly true of the Monuments. Nature and Sites Committee. Every four years. the legislature ("Grand Conseil") appoints a representative of each elected party to sit on this committee. This particularity of Geneva was incorporated into the Law for the Protection of Monuments. Nature and Sites adopted in 1976. Particularly suited to the evolution in the understanding of the heritage, this law grants the cantonal government the power to adopt so-called "site plans", that is, development plans intended to preserve residential districts worthy of general interest.

The Office of Historic Monuments and Sites tried out multi-criteria approaches, defining the historic, architectural and social values and proposing many measures for the protection and the restoration of residential districts in the historic center of Geneva. Two laws voted by the people in 1983 combined to preserve areas constructed at the end of the 19th and the beginning of the 20th century. One of them was intended to keep affordable housing in the city by favouring the preservation and renovation of old residential buildings. To this end, tenants were protected by giving the state control over rents. The other law made it mandatory to

maintain the historic buildings in these areas which form the majority of the residential districts of the city center. After a quarter of a century of application, it is now possible to see the positive effects of these laws on the preservation and rehabilitation of the heritage. including particularly the fact that rundown buildings have been restored and improved by the installation of bathrooms and central heating, facilities which had previously been lacking. On the other hand, given the increased interest following the restored architectural quality and the upgrading living standards, a rent control limited to five years is insufficient to preserve affordable housing other than in buildings belonging to the city of Geneva and public law foundations.

The interest shown in the qualities of the traditional city highlights the potential for the conversion, upgrading and adaptation of old structures, as well as their capacity to meet the living standards of modern society. Far from ieopardizing economic growth, the preservation of these areas provides the collective memory with food for thought and favours the emergence of a stimulating dialectic. Once restored, the old residential districts make the city altogether a more attractive place. However, a cautionary note is in order; while the legislation so far enacted permits the preservation of the architectural and urban heritage in physical terms, the public authorities still need to preserve the vital intangible asset of social diversity.



ENVIRONMENTAL SUSTAINABILITY IN HISTORIC CITIES

Neelkanth Chhaya

Environmental Sustainability of Cities: Intersections of Nature, Culture and the Built Environment

Akash Hingorani

Revitalizing the Historic Water Channels and Waterways in Indian Cities

Nicole Bolomey

Historic Landscape and the Urban Environment

Environmental Sustainability of Cities: Intersections of Nature, Culture and the Built Environment

Neelkanth Chhaya

The human species is one of the many forms of life on earth. The anthroposphere, the world formed by human cultures is dependent on the lithosphere, the biosphere and the atmosphere for survival. All these realms of existence are interdependent and mutually necessary for conditions of survival to continue. After some centuries of forgetting, we have again begun to recall and remember that balance, between all these aspects of earthly manifestation, is a precondition for the dynamic equilibrium of existence. Human settlements are the frameworks for stabilizing certain ways in which humans, plants, minerals, animals and air maintain some coherent continuities and offer scope for the development of "anthropogenic biomes".1 We humans continually strive to create conditions for the appropriate use of space, resources and time. In order to do this we create social relations and cultural norms and forms, so as to fix specific relationships to nature - to the animal, vegetal, mineral, aqueous and atmospheric realms, for the survival of communities and individuals. It is evident, then, that the making of settlements is an activity of finding the most appropriate relationships between nature, culture and the built environment. This activity is necessarily a dynamic process, not allowing a once-and-forall resolution, but putting in place sufficient structure to allow both continuity and responsiveness. In this sense settlements resemble forms of life, using their structure and form to continuously respond to changing conditions, yet having well-established cycles of use and disposal of energy and resources, all set to variable cycles of time. We may thus view human settlements as open systems in which processes and flows are regulated to

maintain dynamic equilibrium. Yet each scale of study would necessarily have to keep in mind larger and smaller scales, as the overall system has the character of systems within systems within systems... When we study a settlement it is necessary to be mindful of the region as well as the dwelling unit and so on.

Over the period of the human occupation of earth-space, settlements and communities have developed many modes of organizing life processes and consequently many forms of society, economy, technology and cultural expression, all of which can be seen to reflect attitudes to nature. Risking oversimplification, one can recognize distinct phases of the human attitude to nature which have had characteristic settlement forms. Broadly these attitudes developed in sequence in history, vet all these modes prevail today in different parts of the world: unselfconscious participation. cultivation, exploitation, consumption, reflective participation. It is important to remember that the memories of each and all of these attitudes to nature are built into the structure, form and processes in human settlements today. The city or settlement is thus the evolved skeleton holding up the processes of human activity. The city is not dead heritage to be preserved but is the live tissue of culture which gives us the record of earlier experiences which may offer new possibilities of transformation in changing circumstances. The diversity enfolded into the historic city is a kind of rich genetic code which must be kept alive to offer options for survival.

The above understanding seems to suggest that the historical city is a vital resource of cultural adaptations to nature as recorded in the built environment. All these manners of

adaptation are valuable encoded pathways of action, which fold in the cultural forms into memorable built forms, ready to be reinvigorated when required. This is rather like a brain which retains acquired skills in neural networks, available when needed. Or like genetic diversity in ecosystems. Viewing nature, culture and built environments as independent and self-sufficient entities, or as organized in a hierarchy or sequence of importance, is detrimental to the evolutionary and survival value of all of these. It appears, then, that a systemic view in which nature, culture and built environments are interactive processes has to be reestablished. Such an approach would mean that we have to conceptualize and act in historic cities keeping some basic principles in mind. The following would serve as a list of brief reminders: orientation and approach, participation instead of mastery, the paradigm of oppositions, the paradigm of continuities.

Historic cities are thus not only examples of sustainability, but should really be considered systems of knowledge which may well give us insights into sustainable existence on earth, of human cultures and of natural systems. This knowledge is inscribed into the built environment, and we dare not erase it.

1) Erle C. Ellis, Kees Klein Goldewijk, Stefan Siebert, Deborah Lightman, Navin Ramankutty (2010). Anthropogenic transformation of the biomes, 1700 to 2000. Global Ecology and Biogeography, Vol. 19(5)



Revitalizing the Historic Water Channels and Waterways in Indian Cities

Akash Hingorani

The South Delhi Greenway Master Plan, which covers the 12.5 km long Barapullah Drain, was conceived and designed by architect Akash Hingorani. The master plan aims at transforming an existing dirty natural storm water drain into a beautiful eco-corridor with the help of decentralized biological wastewater treatment facilities and other bio-remediation means. It is worth noticing that such interventions were already successfully implemented in other places in India, as for instance in the Osho Park in Pune.

Part of the city of Delhi as we see it today results from the aggregation of previouslyexisting historical cities. The location of these ancient cities accounted for the natural topographic conditions prevailing between the ridge and the Yamuna river. In fact, the Barapullah storm water drain also functioned as a security barrier defining the edges of the settlements. Even today, it can be seen to be skirting around the fort walls of the ancient cities. like near the Qila Rai Pithora or the Siri Fort wall. Another interesting and notable example of linkage between natural and built heritage in historic Delhi worth mentioning here is the "Satpula" (that literally translates into a bridge with seven spans), a structure which was part of the Jahanpanah City wall and was built as a rainwater harvesting structure over the natural drain.

The Barapullah drain corridor holds a fantastic potential of being a natural eco-corridor linking the various ancient cities. The Greenway project aims precisely at transforming the drain cross section into a continuous ecological landscape corridor with walking trails, cycle tracks and a special non-motorized eco-

mobility corridor. The South Delhi Greenway shall link various parts of the city, and showcases Delhi's rich heritage - both built and natural - along with various existing monuments including ancient water structures. A trip along the greenway along the Barapullah drain would allow travelling across various centuries of Delhi's built heritage.

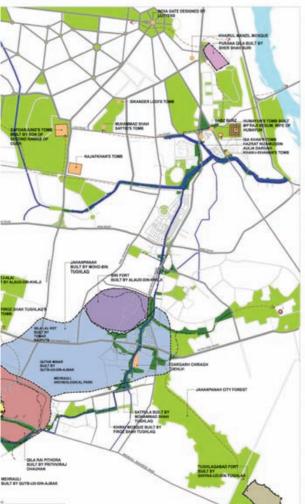
The ancient wisdom of understanding nature and working with it is nowadays, unfortunately. being lost, as man has started impacting his natural surroundings in ways that were not possible till a couple of centuries back, and sometimes these modern interventions can also cause irreversible damage to the natural and historic heritage of our cities. An instance of "quick-fix" interventions is when dirty drains are covered with reinforced cement concrete slab, as it was done in the past on the Barapullah drain itself. These works damage the cities' natural heritage. Besides, this "outof-sight-out-of-mind" approach is also not sustainable in environmental terms and would probably create more problems than what it wants to solve. Urban natural green corridors converted into concrete slabs lead to aggravation of the problems of urban heat island effect and also stop any chance of ground water recharge, which leads to increased volumes and velocities of urban runoff and to higher recurrence of flash floods.

Around the world, cities like Seoul in Korea have demonstrated that mistakes of the past need to and can be rectified. The city's authorities have decided and ordered to demolish a six lanes expressway to remediate the Cheonggyecheon stream and transform it into a beautiful urban landscape park. Today.

the stream not only represents an asset for the city, it has also become an international attraction for tourists.

Most of the Indian cities today are at the point where they have to make these important decisions as part of their urban evolution, and need to decide on how sustainable their development strategies are, and make usage of the opportunity to showcase the linkages between natural and built heritage.











Historic Landscape and the Urban Environment

Nicole Bolomey

The sustainability of urban development and the quality of urban living depend on how we treat the landscape in and around our cities. This involves a balanced approach between protection and change; the safeguard of natural resources; the respectful integration of the multiple historic cultural layers; the recognition of topography and view-scapes in the planning and design process; the appreciation of local values, the character and identity of a place; and, finally, the creation of new quality spaces in which people like to move, to meet and to live.

The following text picks out a few experiences, selected for their relevance in the Indian context, of landscape and its relation to urban development in Switzerland.

In the plains of Switzerland ("Mittelland"), the past 50 years have shown a serious degradation of the rural landscape through urban sprawl and seemingly uncontrolled development, leading to a semi-urbanized ribbon reaching from Lake Geneva to Lake Constance. At the same time, cities have greatly improved their planning and design, valuing public urban spaces as an important asset for the quality of urban living. Both phenomena can be related to aspects of decentralized governance, the distribution of powers between state ("Kanton") and local bodies ("Gemeinde"), and the capacities at both levels to implement sound planning and good design.

In Switzerland, the states have the power to develop regional spatial plans (structural plans), while the local bodies develop land-use plans and regulate construction. Although the national legal framework requests a clear

separation between constructible and nonconstructible zones, the preservation of the productive land, lake and riverfronts, and the best possible integration of settlements in the overall landscape, the rural local bodies have since the 1960s created land-use plans that allow for far more growth then needed, including, due to economic competition between the villages, all zones from residential to industrial in each village. The constructible zones reaching from one end of the village territory to the other, the landscape has become one vast, seamless stream of settlement, lacking character and local identity. Urban sprawl in the countryside has led to a lack of density, making public transport unsustainable and leading to increased use of cars. Finally, the expansion of urban centres is hindered by the fact that constructible land is located in each village, and not close to the urban centres where it is most needed.

Even if in Switzerland educational levels are excellent, direct democracy works better than in most countries, and people are affluent and well travelled, the separation between private and public interest at local level, a myopic view of spatial development, as well as lacking capacities for good planning and design at rural local bodies are still a challenge; even after 50 years of implementation. Thus, the vivid public debate of past years is aimed at better protection of the rural landscape; a stronger impact of regional planning; and a way to amend the pitfalls of decentralized governance in spatial development.

The cities, however, in the past 30 years, have come to stand as examples for good practice of planning and urban design. Moving away from the car-driven visions of the 1960s, vibrant pedestrian areas have replaced congested roads; parking lots have made way for public squares; medieval city centres and derelict industrial sites have become prime locations; rivers, once cursed to flow underground are resurfacing to become key elements of a green urban environment, often twinned with cycletracks and walkways. What Indian cities of today are fighting for, from hawkers and nalas to cycle rickshaws, we are re-introducing to enrich the quality of urban life.

The key to success, for example in Zurich, can be traced back to the improved technical capacity at the urban local body: the creation of a department of urban design, acting in tandem with the previously existing departments of planning and of construction; the up-gradation of the horticulture department to a technically competent department moving from flowerpots and beautification to the design of much needed public spaces; and the introduction of public private partnerships. national and international competitions, assuring quality of urban and architectural design. Stakeholder consultation and base democracy may make processes more tedious, and may at times inhibit extravagant solutions - they are, however, a warrant for a city that is liveable for all.



Conference Programme

DAY 1 - Thursday 9 September

Inaugural Session

Inaugural Address by H.E. Philippe Welti, Ambassador of Switzerland to India
Opening Speech by Mr. Armoogum Parsuramen, UNESCO Director and Representative to Bhutan, India, Maldives, and Sri Lanka
Vote of Thanks by Dr. Mattia Celio, Science and Technology Counsellor, Embassy of Switzerland
Introduction to the Conference Sessions by Ms. Nicole Bolomey, Programme Specialist Culture, UNESCO

Session I - SUSTAINABILITY AND URBAN HERITAGE: POLICY DIMENSION

Chair: Mr. Chetan Vaidya, Director, National Institute of Urban Affairs, New Delhi

Concepts of Sustainability in Heritage-Based Urban Development

Mr. Chetan Vaidya, Director, National Institute of Urban Affairs

Sustainability, Heritage and Urban Development: Current Scenario, Issues and Challenges in India

Mr. Aromar Revi, Director, Indian Institute for Human Settlement, New Delhi

National Strategies for Heritage-Based Sustainable Urban Development, the example of Switzerland

Prof. Bernd Scholl, Professor for Spatial Planning and Development, Federal Institute of Technology Zurich (ETH Zurich)

Policy Interventions at State / City Level: the Case of Kolkata, Bhubaneswar, Bishnupur in India

Dr. Sanghamitra Basu, Associate Professor, Indian Institute of Technology Kharagpur

Session II - PLANNING METHODS AND TOOLS TO SAFEGUARD THE HISTORIC URBAN ENVIRONMENT

Chair: Ms. Anjali K. Mohan, Urban and Regional Planner, Integrated Design, Bangalore

Heritage as a Resource for Development - The Need for Integration within the Planning Framework

Ms. Anjali K. Mohan, Urban and Regional Planner, Bangalore

Administrative Aspects of Urban Heritage Conservation in India and Switzerland

Prof. Isabelle Milbert, Graduate Institute of International and Development Studies, Geneva

Planning Methods and Tools for Historic Urban Environment: the Case Study of Kerala, India

Ms. Ann Jacob. Senior Town Planner. Cochin

Test Planning - An Innovative Method to Safeguard the Historic Urban Environment

Prof. Bernd Scholl, Professor for Spatial Planning and Development, Federal Institute of Technology Zurich (ETH Zurich)

Session III - MAPPING AND EVALUATING URBAN HERITAGE

Chair: Dr. Shikha Jain, Director, DRONAH, Gurgaon

Mapping and Evaluating Heritage

Dr. Shikha Jain, Director, DRONAH, Gurgaon

Mapping and Evaluating the Historic Heritage of Surat, India

Ms. Mavita Baradi, Director, Urban Management Centre (ICMA), Ahmadabad

The ISOS Federal Inventory for Mapping Heritage Sites in Switzerland

Ms. Marcia Haldemann, ISOS Project Leader, Swiss Federal Office for Culture, Bern

DAY 2 - Friday 10 September

Session IV - HOUSING AND URBAN REGENERATION

Chair: Prof. P.S.N. Rao. Professor and Head. Department of Housing. School of Planning and Architecture. New Delhi

Housing Policies in India in the Context of Historic Housing

Prof. P.S.N. Rao, Professor and Head, Department of Housing, School of Planning and Architecture, New Delhi

Swiss Planning Policies with a focus on Historic Housing

Prof. Isabelle Milbert, Graduate Institute of International and Development Studies, Geneva

Housing and Urban Regeneration: Case Study of Mumbai

Mr. Vikas Dilawari, Conservation Architect, Mumbai

Housing Rehabilitation in the Historic City of Geneva

Ms. Sabine Nemec-Piguet, Director of the Office of Historic Monuments and Sites, Canton of Geneva

Session V - ENVIRONMENTAL SUSTAINABILITY IN HISTORIC CITIES

Chair: Prof. N H Chhaya, Professor and Dean, Faculty of Architecture, Centre for Environmental Planning and Technology (CEPT), Ahmadabad

Environmental Sustainability of Cities: Intersections of Nature, Culture, and the Built environment

Prof. N.H. Chhaya, Professor and Dean, Faculty of Architecture, Centre for Environmental Planning and Technology (CEPT), Ahmadabad

Revitalizing the Historic Water Channels and Waterways in Indian Cities

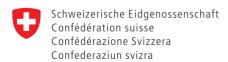
Mr. Akash Hingorani, Architect and Planner, Oasis Design Inc., New Delhi

Historic Landscape and the Urban Environment

Ms. Nicole Bolomey, Programme Specialist Culture, UNESCO

Concluding session - INTERNATIONAL EXCHANGE AND COLLABORATION ON HERITAGE-BASED SUSTAINABLE URBAN DEVELOPMENT

Moderation: Dr. Mattia Celio, Science and Technology Counsellor, Embassy of Switzerland and Ms. Nicole Bolomey, Programme Specialist Culture, UNESCO



Embassy of Switzerland in India



