



RESEARCH MAGAZINE

VOLUME : 01 APRIL, 2019

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2019

AKHIL BHARATIYA MARATHA SHIKSHAN PARISHAD'S

ANANTRAO PAWAR COLLEGE OF ARCHITECTURE

PUNE- 411009

Pune - 411 009.

VISION

Giving environment friendly education in GREEN CAMPUS. Create awareness for natural resources with social concern, and to become a responsible citizen.

MISSION

- Train the student's the students to apply their knowledge in designing the socially concerned spaces with efficient utilization of natural resources.
- Inculcate the spirit of research, train in profession with commitment to excellence.
- Acknowledge students the relation of natural and built environment in globalised architectural context.
- Develop leadership qualities among students.

OBJECTIVES

- Imparting quality education for all levels.
- Provide healthy environment for physical, intellectual, emotional and spiritual growth of students and staff.
- Create aesthetically sensitive, socially acceptable and technologically competent architecture pattern.

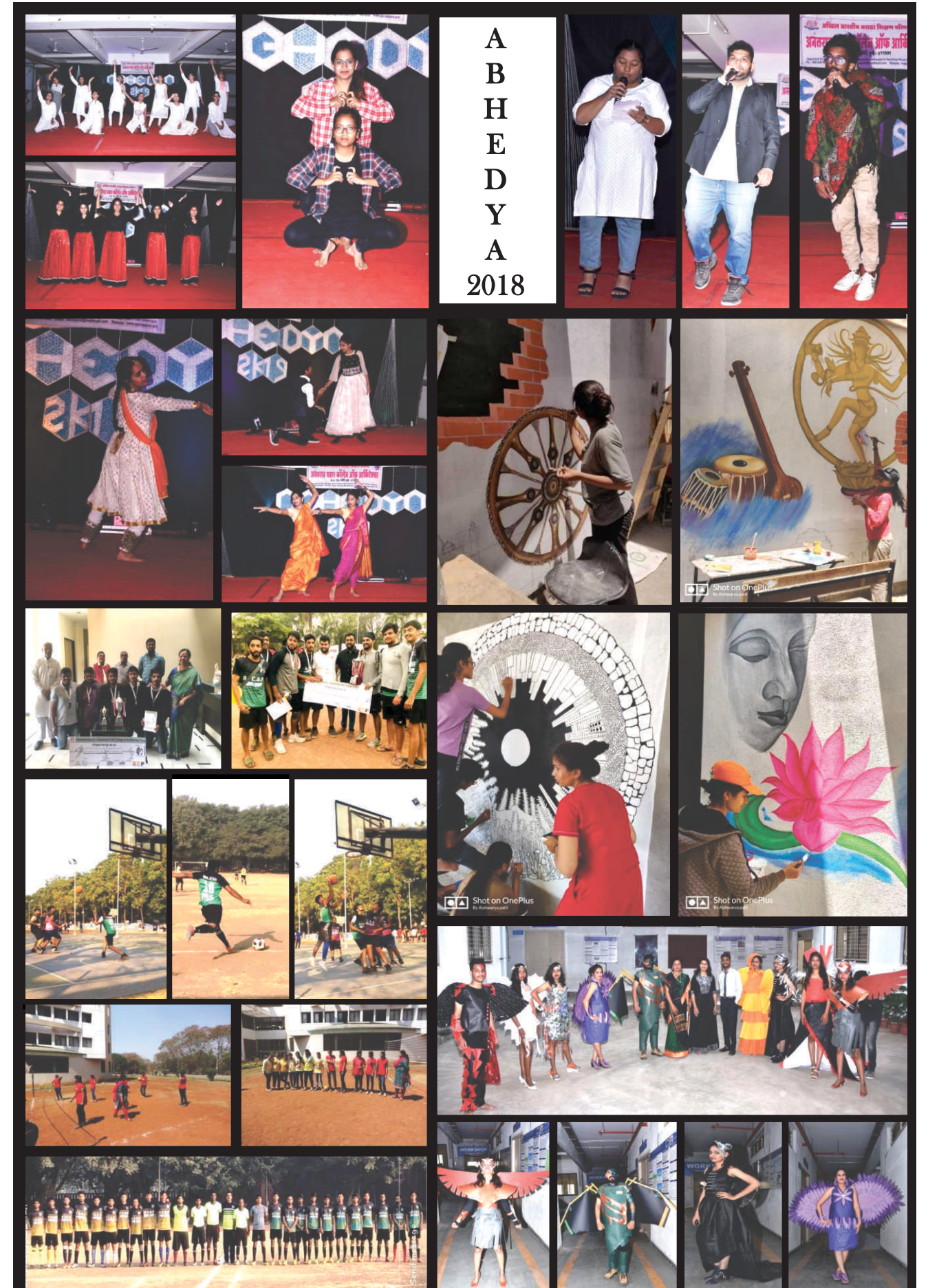


AKHIL BHARATIYA MARATHA SHIKSHAN PARISHAD'S ANANTRAO PAWAR COLLEGE OF ARCHITECTURE

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OUR INSPIRATION



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HON. MRS. PRAMILA B. GAIKWAD
General Secretary

MESSAGE

I give warm wishes to all Faculty and Students of Architecture for Publishing our First Research Magazine "**ASPIRE 2019**".

This is a unique activity as since last 2-3 years I was constantly interacting with faculty for publishing their Research work. Faculty has also taken interest to Participate in different Seminars, Workshops, Conferences with respect to Research.

The Topics selected by Faculty and Students are of social concerns and to be proved for the betterment of society.

I expect this will happen Regular feature in which other institute can actively participate and give a different direction to social concern Issue.

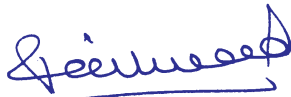
Myself and our Trustees will help at all times with our Positive support to organize Research Paper Conference in future at National and International Level.

I wish ALL THE BEST to "**ASPIRE 2019**" and First Batch of Architecture Students.

With my all support and best wishes I again congratulate the whole team of APCOA for Publishing the First Volume of Research Magazine "**ASPIRE 2019**".

Thanks,

Regards,



MRS. PRAMILA B. GAIKWAD

General Secretary,

Akhil Bharatiya Maratha Shikshan Parishad

Parvati, Pune - 09



HON. SHRI. SANDEEP KADAM
Chairman, College Developer Committee

MESSAGE

It's my great pleasure and satisfaction to bring out the Research Magazine "**ASPIRE 2019**", First issue of Anantrao Pawar College of Architecture. As research in Architecture is a Multidisciplinary and creative field, I can see our Faculty and Students have really put in efforts to write down research papers and put in efforts to learn and produce a very Creative outcome from all subject heads.

"**ASPIRE 2019**" magazine is an collective efforts of Faculty and Students to bring down all Diverse topics under one magazine, which is very challenging.

This year our First Batch of Final Year students (2014-2019) is passing out from their Mother institute Anantrao Pawar college of Architecture.

I congratulate and wish them **ALL THE BEST** for their bright future and excellent career ahead.

I congratulate all the Research Magazine committee members of "**ASPIRE 2019**" and College Faculty, and students for their efforts to establish the strong foundation of our College.

My best wishes and support are always with all ACOA Family.

Thanks,

Regards,



MR. SANDEEP KADAM

Chairman, College Development Committee,
Anantrao Pawar College of Architecture,
Parvati, Pune - 09



DR. RAJENDRA B. KOLI
Principal

FROM PRINCIPAL'S DESK

It gives me an immense pleasure to present our First ever Research Magazine “**ASPIRE 2019**” This Publication is possible due to continuous hard work and stage wise scrutiny and Presentation of Research Paper by Faculty and Students for last one year “2018-2019”.

Faculty has been motivated by management as well as our Research Advisory Committee experts from time to time. This Platform has proven talent of faculty and students for Interdisciplinary Topics of research and social concerns. For successful completion of Research Papers, seminars, workshops conducted at institute level and final evaluation had conducted in February 2019 by expert Architects with Multidisciplinary Specialization.

This year Fourth Year B.Architecture students had an opportunity to work on new subject “**Research in Architecture**” introduced by Savitribai Phule Pune University. This activity will help them to have strong confidence to work for further Post Graduation and Ph.D. Programme. The importance of this feature is also that our First Batch of Architecture is (2014-2019) entering in Noble Career of Architectural Profession. This publication will be our regular event to provide platform for interaction between expert Architects to faculty and students.

Once again I appreciate continuous and dedicated work of Faculty and Students.

I wish **ALL THE BEST** for our First Batch students and winners of Research Paper Competition.

Best Wishes

With Regards,



DR. RAJENDRA B. KOLI

Principal,

Anantrao Pawar College of Architecture,
Parvati, Pune - 09



PROF. SHILPA INGAWALE
(Students Research Paper Coordinator)



PROF. ALAMAS MIRSHIKARI
(Staff Research Paper Coordinator)

EDITORIAL

It gives us immense joy and satisfaction to introduce our very own college Research magazine "**ASPIRE 2019**". As the word itself describes about hopes and ambition towards achieve something good same as we have tried to churn out creativity through this Research Magazine. A lot of efforts have gone into the making of this Research Magazine. The best thing about this Research Magazine is that it represents the creative side of Faculty as well as students to come on one platform and publish their papers on diverse topics in Architecture. This Research Magazine includes Staff Research Papers, Selected Students Research Papers, Reports of Workshops, sketches by students and report on cultural events. Overall it is cumulative efforts of all which has brought through this Research Magazine.

Special thanks to our Principal Dr. Rajendra Koli for motivating, inspiring and guiding throughout the process. Also gratitude towards our Management and Research Advisory Committee for great support. We hope you enjoy reading this issue as much as we have enjoyed documenting it. This will definitely prove asset to library as valuable reference material in Research work.

With Warm Regards,
Anantrao Pawar College of Architecture,
Parvati, Pune - 09

Prof. Alamas Kadar Mirshikari
Research Magazine Co-Ordinator

PHOTOGRAPHS



TEACHING & NON TEACHING STAFF

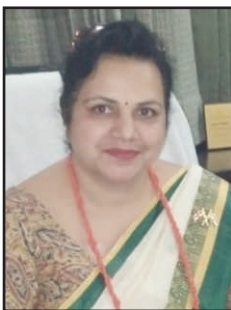


FINAL YEAR STUDENTS

ABMSP'S
Anantrao Pawar College of Architecture, Parvati, Pune - 09

WELCOMES
COA
COMMITTEE MEMBERS

Visit on 19th & 20th April, 2019



Prof. Rashmi Ashtt
(Director - Principal, Hindu School of
Architecture, Sonapat, Haryana)



Prof. Deepti Rana
Associate Professor
Amity School of Architecture and Planning, Lucknow

EFFECT OF WWR, ON DAYLIGHT & THERMAL COMFORT OF HOSPITAL PATIENT ROOM

Prof. Shailaja Bhagwat

Associate Professor

Shailaja_bhagwat@hotmail.com



Abstract : Today, management of energy consumption is becoming important. Nowadays lots of efforts are made to make an environment friendly structure, or retrofit the existing structure which will eventually reduce the energy demand of the built structure. Windows act as an interface of indoor and outdoor spaces. It characterizes energy use and visual comfort patterns in building. Selecting their orientation and proportions is part of early design stage decisions. Hospitals are typically considered as one of the most energy demanding building types. Patient rooms comprise of almost 60% of the volume of hospital building; hence it becomes essential to give proper consideration to this while designing the health care facility. The study aims at finding the ideal window area or a range of ideal window area for optimal thermal & daylighting performance in the context of Pune climate, which will give the appropriate day lighting levels prescribed by NBC, at the same time reducing the electrical load for heating & cooling. Methodology adopted for this is computer modeling & simulation of the typical patient room for various combinations of orientations, WWR, horizontal & vertical shading devices. Simulation results will help in studying overall performance of patient room in terms of day lighting, thermal comfort, WWR & shading devices in the warm & humid climatic conditions of Pune.

Key Words : WWR (Window to wall ratio), Daylighting levels, thermal comfort, orientation

1. Introduction:

Control & Management of energy consumption is becoming more and more important due to the rapid depletion of fossil energy resources and the increased environmental problems caused by them.

Windows can contribute significantly to the healing process, reduction of pain, length of stay in hospitals, through the provision of daylight. (Shariful H. Shikder) A daylight window has various objectives to fulfill such as adequate daylight without discomfort glare, visual & psychological comfort & ventilation (Beltrain, 2004). Therefore it is necessary to evaluate window design for maximum performance. But in general as an architect lack in designing on these aspects. Health care is undergoing revolutionary changes in terms of technology, services, psychology & designing. Patient centric designing of hospitals is the need of the day. Today safety, ease, comfort of patients is the core principle of designing of hospitals. This change focuses on designing of patient room. Herman Miller Interviewed over 550 architects, designer & hospital staff members. (Yufan Zhang*, 2011) Window opening behavior has become of specific concern to a number of researchers. This is mainly because of the importance that windows play in the indoor environment & occupant comfort. The window performs a quite complicated multi - purpose function. A sensible and acceptable balance has to be achieved among many variables, such as heat input, natural light penetration,

sound transmission & air movement, which mean patient need to take an active role in the operation of windows and almost immediately experience the results of their actions. (Ansari, 2014) Patient room design has an influence on performance of the hospital. Hospital design is about creating physical environment which has its direct impact on the patient recovery. Recent researches advocated that certain design elements should be considered in the design of a hospital building to promote the healing environment which is critical to the patient recovery rate and safety. Architects and designers need to play vital role in coordination with the hospital administration and staff at the early stage of project conceptualization so that all the required steps can be well preplanned and implemented for a successful design and functional hospital building with a healing environment.

1. AIM:

To compare the effect of orientation & WWR (window to wall ratio) on daylighting & thermal comfort for a typical patient room in the context of warm & humid climate.

2. OBJECTIVE:

- To understand the critical balance between day lighting & thermal gains through windows.
- Understanding the role of fenestration designing for Patient room in hospitals.
- Effect of orientation on thermal gain.

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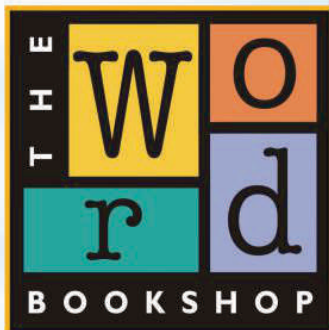
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HERITAGE CONSERVATION: DNYANESHWAR SAMADHI TEMPLE, ALANDI, PUNE

Prof. SHILPA INGAWALE
Associate Professor
shilpkrti@rediffmail.com



Abstract : Cultural sole i.e. Religious places in India have though having rich heritage are in a threat of diminishing or ruin due to increasing pilgrimage overpopulation, lack of its awareness of cultural significance or unaware of implementation of conservation policies. Same threat is seen for a town Alandi one of the major historical and religious place in Maharashtra, famous for Vitthal bhakti. The old temple complex has a issues of structural conservation, uncontrolled pilgrimage or footprints, lack of guided trails and basic facilities, which fetch the issue of disaster management due to stampaid at festival time. The next threat is found for its socio-economical condition, due to global market and lack of traditional skill learning facilities like Tulsi beads necklace etc.

Keywords : Conservation, Religious, Heritage, Wari, Pilgrimage.

Introduction:

India is known as the country of varied culture and spiritualism and its religious nature since Vedic civilization. In Maharashtra Vitthal Bhakti is a unique major thread of faith in Vitthal Bhakti in 'Varkari Sampraday' in Hindu religion Maharashtra. The procession of lakhs of people move to Pandharpur by walking from various religious places associated. It lies 30 km form Pune and is having population 28,645 as per 2011 census. It comes in semi-ariated zone with average rainfall 691 mm.

Alandi is one of the places of Bhakti movement in Maharashtra. The great saint Dnyaneshwar Maharaj having divine power who spent his major life span in Alandi. The **Samadhi** temple structure of Dnyaneshwar Maharaj itself has a outstanding value for the devotional faith of major population of Maharashtra.

Alandi is one of the popular pilgrimage connected with different sites, like **Ashtyavinayakyaatra**, Shirdi in Nasik, Mahalaxmi of Kolhapur, Khandoba of Jejuri, 12 jyotirlingayatra & many more in Maharashtra.

Significance of Study:

Alandi has become the one of the important places from 12th C, named as in Vedic scriptures with named as Anandvan, Shivpeeth, Kapil, Vaarun, Alkapuri, Alka, Alankavati, Alankapuri in various Yugas.

Cultural and environmental behavior:

As the whole construction is found in stone and lime masonry has a wide threat of oil paint application done by Temple committee. Many places weathering of stone and cracks due to water seepage is found. Main wall has shown

the vegetation growth some places on coping. The heritage conservation of **Samadhi** complex along with the structural conservation has to be dealt with two other major aspects i.e. disaster management issues during festival and pilgrimage management.

Scope and Limitation: Alandi is a pilgrimage town, in Maharashtra whose built heritage is not yet documented and protected.

Maharashtra too has many religious sites and pilgrimage places for different faiths. Alandi is one of the bestowed places in Maharashtra state. (NIDM Report) With the heritage conservation efforts mainly concentrated in big cities, the heritage area conservation of small religious town like Alandi is important. Area conservation is important as much as built monuments due to the change in conservation practices. Hence it becomes necessary to conserve the Dnyaneshwar maharaj Samadhi Temple under Heritage building conservation with all heritage conservation strategies to safeguard it for future generations to come.

1. AIM:

Identifying the needs of Heritage Conservation of historical religious Dnyaneshwar Samadhi, Temple Complex Alandi.

2. OBJECTIVES:

1. To identify nature of Alandi and Bhakti cult i.e. **Varkari Sampraday** with other main religious schools of Maharashtra.
2. To analyse the **Varkari Sampraday** as a important phase of evolution in medieval period, in Hinduism.

GUEST LECTURES AND WORKSHOPS



Prof. S. M. Phadtare delivering lecture on Housing Typology on 10th July 2018



Ar. Amol Talekar delivering lecture on Design Process in Architecture on 19th September 2018



Prof. Neha Sathe talking with students on Time and Stress Management on 03rd October 2018



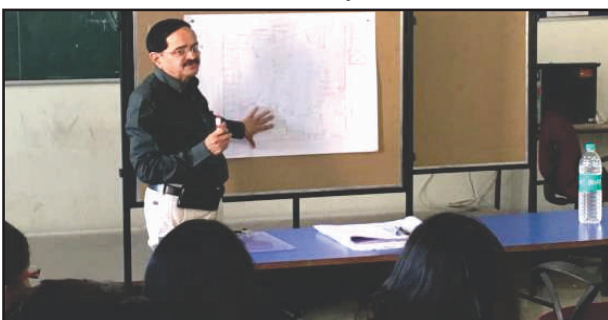
Mr. Jitendra Sutar and Mr. Vilas Chormale Giving demo on Sculpture and Painting on 29th December 2018



Er. Vishal Joshi and Er. Tushar Jagtap (Sr. Executive Business development) giving guest lecture on 28th January 2019



Ar. Prashant Gadre explaining about Auditorium good planning strategies on 13th February 2019



Ar. T. D. Gadgil, Sangli doing assessment of students auditorium planning on 22nd February 2019



Disaster Management Workshop by National Disaster Response Force (NDRF), Govt. of India on 13th March 2019

GREEN AND SUSTAINABLE BUILDING CONSTRUCTION

Prof. SHARAYU A. MAGDUM

Associate Professor
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Abstract

Green building concept, in broader terms, involves a building, which is designed, built, operated, maintained or reused with objectives to protect occupants health, improve employee productivity, use wisely natural resources and reduce the adverse environmental impact. In other words the green building process incorporates environmental considerations into every stage of the building construction. This process focuses on the design, construction, operation and maintenance phases and takes into account the lot design and development efficiency, energy and water efficiency, resource efficiency, indoor environmental quality, building-owner maintenance and the building's overall impact on the environment. Selection and use of eco-friendly materials with related or better features than traditional materials is the prime aspect of Green building design. Among the directions for solutions is to be found in new material applications, recycling and reuse, sustainable production of products or use of green resources, Careful selection of eco-friendly sustainable building materials may be the fastest way to start integrating sustainable design concepts in buildings. Therefore, Selection of construction materials that have minimum environmental burdens is useful in the sustainable development of a nation. This paper is the overview of the study to analyze how green and sustainable material contribute to lessen the impact of environmental degradation, and generate healthy buildings.

Keywords : Green building, Sustainable development, Modern building techniques, Cost efficiency, Environment friendly

Introduction

The term "Green" refers to environment friendly practices from building design to the landscaping choices. It also optimises & Economic energy use, water use, and storm water and waste

water reuse. The term "Green Building" applies not just to products, but to construction strategies, building design and construction practices and promotes the economic health and well-being of family, the community and the environment.

A smart step towards personal economic rewards, green building has positive social and environmental ramifications that assert your commitment to the future and the way we live for years to come Buildings have a tremendous impact on the environment, using about 40% of natural resources extracted in industrialized nations, consuming virtually 70% of electricity and 12% of potable water and producing between 45% and 65% of the waste disposed in our landfills.

Additionally, they are responsible for a massive amount of harmful emissions, accounting for 30% of greenhouse gases, due to their operation and an additional 18%

induced indirectly by material exploitation and transportation. Simultaneously, the poor quality of indoor environments may result in health issues to employees in office buildings, hence, reducing efficiency [1-3].

From the environmental impact perspective, the building sector has a significant effect on the entire environment. Residential buildings represent a large percentage of the built environment, and the selections of materials and layouts are necessary for the general sustainability. Considerable initiatives have been carried out by the research community worldwide, in order to find alternative sustainable building materials and low technology methods, which result in a more sustainable and affordable construction adhering to the comfort standards needed today. Selection of construction materials which have minimum environmental burdens is useful in the sustainable development of a country.

Therefore, building related contribution to environmental issues is large and therefore essential. Selecting environmentally preferable building products is an excellent method to boost a buildings environmental performance. While there is obviously an immediate need for new technologies to optimize the application of low-

STUDY TOUR FIRST YEAR

SETTLEMENT STUDY - TITAVE VILLAGE, RADHANAGRI, KOLHAPUR

DATE: 11th to 14th November 2018



Aim:

- To understand the history, culture, lifestyle and settlement pattern of village as an Architectural point of view.
- The Tour was planned in accordance with architectural style and to study the vernacular architecture, its style and traditional building techniques used till date.



Objectives:

- To understand the availability of local material, its use, application according to climate, culture and its lifestyle

Tour Coordinator: Prof. Gourav Vinchu

Prof. Prashant Patil

Prof. Vaishali Dandekar

THIRD YEAR

SETTLEMENT STUDY- PANJIM, MADGAON, GOA

DATE: 5th to 11th JULY 2018



Aim:

- To understand the history, culture, lifestyle and settlement pattern of Goa which comes in Kankan region situated in Sea shore.
- The Tour was planned in accordance with different architectural style. It was also a combine studio and interaction session with GOA college of architecture.
- Panjim, Madgaon and Goa had their bundle of beautiful experience for Third Year Students.
- The students were enjoy a activity of beach cleaning as social concern.



Objectives:

- To understand the availability of local material, its use, application according to climate, culture and its lifestyle
- Analyzing the different techniques used for construction with respect to climate and its culture.

Tour Coordinator: Prof. Shilpa Ingawle

Prof. Prashant Patil

Prof. Vaishali Dandekar



IMPACT OF RAPID URBANIZATION ON WATER BODIES THE CASE OF KOLHAPUR CITY

Prof. ALAMAS KADAR MIRSHIKARI

Assistant Professor

alamas.mirshikari17384@gmail.com



Abstract:

Water is an essential and precious natural resource for human beings and hence early civilization existed along the water bodies as water provided everything which was needed for flourishing of the city. Kolhapur city being located in the Deccan Plateau region and its undulating topography it has been dotted with number of water bodies forming integral component of its physical environment. Kolhapur once known as “City of Lakes” had about 24 major and minor lakes in an around the city. But due to Rapid Urbanization and uncontrolled growth many of the water bodies have been totally lost, many have been shrunken in size while some of them got polluted with discharge of untreated domestic and industrial effluents. Hence, much of the landscape has been ignored by urbanisation which results in decline in water table, resultant water crises and flooding. This study makes an attempt to analyze the transformation of common properties (Lakes) into private ownership and put forth a systematic methodology by identifying the issues of Lakes and conserving Lakes for further restoration giving back historical identity to the city.

Keywords: Undulating Topography, Rapid Urbanization, Uncontrolled Growth, Industrial Effluents.

Introduction :

Water bodies are one of the most prime elements responsible for environmental sustainability in an urban fabric. Formation of water bodies and its Ecological Sustainability of any city depends upon various natural Parameters such Topography, Geology, Hydrology, catchment area watershed area etc. These water bodies’ acts as sources of drinking, agriculture, domestic use, also they form the natural ecosystems such as flora and fauna. This acts as sponges during floods in urban areas. According to Venice Charter 1964, Historic assets remains witness to the present day of their old age traditions and its the responsibility of the future generation to safeguard these assets.

1. AIM: Understanding the reasons for loss of water bodies and its environmental impacts.

2. OBJECTIVES:

To understand the role of Anthropology and human settlement in loss of water bodies.

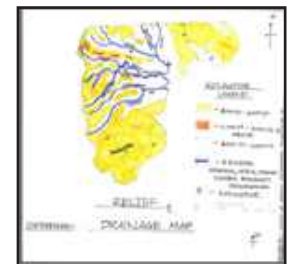
3. METHODOLOGY:

01	Primary Data collection	Field Visit GIS mapping
02	Secondary Data collection	Literature, Books Papers

HISTORY OF LAKES OF KOLHAPUR CITY:

Kolhapur was known as “**City of Lakes**”.

It had about 24 lakes during 18th century in an around the city. Kolhapur city lies at a lower level Due to its undulating elevations surrounded by all sides with hills.



Figures : Topography, Relief, Drainage and Hydrology maps Source: -Study of urban geography - Prabhakar M.

Urbanization And Growth of City:

Rapid urbanization since 18th century till the present day shows vast changes in decline in the number of water bodies and green areas whereas an increase in the built spaces. As the city is growing lakes have been encroached and been vanished which once acted as a source of drinking and had lots of ecological, social, religious, cultural and use values. Due to growth of Industrialization many people started settling around the water bodies for commercial purpose.

Growth of Industrialization in 19th Century:-

Due to growth of Industrialization many people started

MEMENTO DESIGN COMPETITION- FIRST YEAR

FIRST PRIZE – Rutuja Wagh

Concept : Here the two vertical elements together balance each other. The two elements represent teacher and student relationship. Hence the combination of these two helps to make a perfect relationship.



SECOND PRIZE – Gaurav Changediya

Concept: The memento has both the forms L and rectangle.

L shape symbolizes the starting in student's life of first year student. And the rectangular shape represent the dominance, which represent stability as student move ahead in future classes, hence become more defined in their final year of student life

THIRD PRIZE – Saili Dighade

Concept: As adaptation is necessary in life, one should get adapted according to surrounding. So this memento represents how student get adopted to new college environment. The lower portion represent the college environment and upper inserted part represents how student is getting adapted to the new college environment.



THIRD PRIZE – Rushikesh Patil

Concept: Combination of both forms represents student teacher relationship. The twisted form represents confusion in student's life. And teacher role is bringing up student in all circumstances.

STAFF ACTIVITIES AND ACHIEVEMENTS



Workshop on “UNIVERSAL DESIGN APPROACH” and “ARCHITECTURAL RESEARCH BASICS”
by **AR. KAVITA MURUGKAR** on 16th August 2018



PROF. ARCHANA LADKAT Presented Paper in International Conference on “LIBRARY AND INFORMATION SCIENCE (LIS 2018)” at Bangkok, Thailand on 8th to 10th August 2018

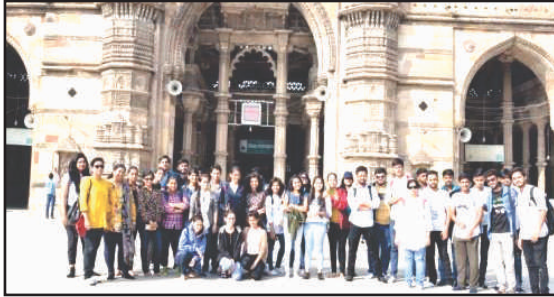


Workshop on “RESEARCH PAPER WRITING IN ARCHITECTURE” by **DR. VASUDHA GOKHALE**
and **DR. MEERA SHIRODKAR** on 16th January 2019



Workshop on “ARCHITECTURAL EDUCATION IN RURAL AREAS” on 23rd January 2019 at S. B. Patil College of Architecture, Islampur. Principal and Faculty with Chief Guest **Ar. Vijay Garg**, President, COA, New Delhi

STUDY TOUR
SECOND & FOURTH YEAR
SETTLEMENT STUDY - AHMEDABAD BHUJ VILLAGE, GUJARATH
DATE : 27th Nov to 6th Dec 2018



Aim:

- To understand the history, culture, lifestyle and architecture of Gujarat State. Specially Ahmedabad, Bhuj and Gandhinagar.
- To Extend the knowledge of History of Architecture and design strategies according to the climate consideration and architectural parameters, This tour was planned accordingly.
- This tour was planned for second year and fourth year students as per their syllabus and related to their design assignment.
- Students were taught about the different types of museum, hospital, institutional building as they have a design assignment related to this.
- They also visit some recreational center and studied different architectural style.



- The students visited Numerous buildings namely CEPT University, IIM, Bhuj General Hospital, Sabarmati Ashram, NID, Hunar Shala, LLDC, Khamir Village, White Dessert, Vichare Museum, Sheyas Folk Museum, Akshardham Temple, Kankaria Lake, etc.
- Onsite sketching, Interviews, Photographs made the tour very informative as well as memorable.



Objectives:

- To understand the availability of local material, its use, application according to climate, culture and its lifestyle
- To understand the Jain Architectural style
- To understand the earthquake resistant structures at Bhuj
- Analyzing the techniques used for construction to combat the climate in a sustainable way

Tour Coordinator:
Prof. Shailaja Bhagwat
Prof. Sharayu Magdum
Prof. Alamas Mirshikari
Prof. Gourav Vinchu



SUSTAINABLE WASTE MANAGEMENT IN RURAL AREA

Prof. VAISHALI K. DANDEKAR

Assistant Professor

kdvaishali@gmail.com



Abstract : Waste management system is essential for clean and sustainable environment in villages. Waste management system can enhance the life quality and good health of village. Due to lack of awareness and attention from the government, villages are facing bad disposal situation. There are around 6,38,000 villages in India with 60% of Indian population lives in villages itself for good health and hygiene. But the challenge is to have a proper waste management system in our village today. Hence a shortcut is taken by burning the solid waste or letting, untreated wastewater into the river. This is happening because of ignorance of using waste for the well-being of the village. One can look at waste as a source of income for villages in India. Thereby improving the living conditions of the people of the village with a sustainable waste management system.

There are incentives by the Indian government on this concern. There are imitative such as **Swach Bharat Abhiyan** started in cities.

Keywords : Waste management, villages, wastewater, sustainable waste management system

Introduction :

The defination of rural sustainable waste management of a village can be waste prevention and resource recovery. It is a system that is best suitable to the society, economy and environment. The system can be capable of maintaining itself over time without reducing the existing resources. Table 1 Habitat scales and activities in a Sustainable Waste Management System. Source (Klundert, 1999) Involvement of villagers is one of the strength of sustain ability in a system. This gives a feeling of responsibility for the village self-sustainable, while forming If the political and economic interests are served in village system, this system might keep going on in the village (Klundert, 1999). If a waste management systems is required to be integrated with other systems in villages. As seen in fig1, compost made from organic waste can lead to a closed-cycle system within the village. Here when organic waste is recycled to valuable fertilizer, it reduces the burden

of transportation to nearby big cities, for purchase of these chemical fertilizers. This in turn makes the sustainable loop in village.

Condition of Indian villages in present scenario

For better jobs opportunities people move from villages to towns/cities. According to Socio-Economic Census 2011 (World Bank). The land owned by the village residents have declined. Across India there is a wide shift in rural areas towards non-farm income, as non-farm sector grows much more strongly than agriculture. This is creating immense pressure on villages and the bigger cities

Habitat scale	Collection and disposal system	Resource recovery system
Household level	Storage at source	Prevention Separation at source Reuse at source
Village level	collection Transfer storage Final disposal and treatment	Sorting and pre-treatment collection Reuse Recycling Composting

Table 1 Habitat scales and activities in a Sustainable Waste Management system Source (Klundert, 1999)

INTERVIEW - First Year B. Arch.

Ar. Bhalchandra Patil, (Principal Architect, Fusion Architects, Kolhapur.)
Prof. Chandrakant Ghewari (S. D. Patil College of Architecture, Islampur)



Ar. Bhalchandra Patil
(Principal Architect, Fusion Architects, Kolhapur.)



Prof. Chandrakant Ghewari
(S. D. Patil College of Architecture, Islampur)

Ar. Bhalchandra Patil, graduated from DYPCET, Kolhapur. He is a senior practicing architect practicing from last 20 years & has established his own firm, Fusion Architects, Kolhapur. Being a Contemporary architect he emphasis on creative Ideology. He has worked on residential, commercial & various multidisciplinary projects.

Prof. Chandrakant Ghewari, Is into academics for last 25 years with Deccan Institute of Technology for Interior Design & Master of Valuation (Real Estate) course. Presently he is Professor at S.D. Patil College of Arhitecture, Islampur, Karad. He has also Worked on various residential and industrials projects.

First year students during their settlement study at Titave, Kolhapur got a chance to interact with Ar. Bhalachandra Patil & Prof. Chandrakant Ghewari.



First Year students with Ar. Bhalchandra Patil,
Ar. Chandrakant Ghewari and faculty
members of APCOA

They explained students the importance of vernacular architecture & rural development. Students observed vernacular architecture & its co-relation with natural surroundings. Both the experts explained the beauty of building elements, construction systems with traditional life patterns & how these systems are still working in contemporary architecture. During settlement study students also noticed the thrust of modern building materials & techniques in natural setting of villages. So they advised budding architects to take the challenges for energy

conservation in new built form & architecture.

Overall settlement study was appreciated by both the experts with respect to different building forms, documentation, details, village layouts & proposal for lake & River Ghat Redevelopment.

SOUND AND ARCHITECTURE - A MUSICAL SPACE

Prof. GOURAV VINCHU
Assistant Professor
argourav0709@gmail.com



Abstract:

We are aware of what our environment looks like. Even people have strong memories associated with smell or odor. But sound is a much ignored element in Architectural spaces. There is a lack of enlightenment at the front of sounds in Architecture, regarding caring about sound. Humans do not flourish under sensory deprivation. All our senses including our hearing need positive stimulation. Architects do not design visually silent environments. Usually colors lighting and textures are used to enhance the spaces in architecture. The scope of this paper is to sensitize our perception to the subtler realms and expressions of the manifold sonic vibrations and their frequencies within and around us, also to enhance the relation between sound and Architectural spaces.

Keywords:

Sonic Landscapes, Frequencies, Acoustical Environment, Sound, Aural, Aesthetics.

Introduction:

Architecture is an experiential journey of our built environment. Architecture has the potential to acknowledge the feeling, the emotions, the desire and pleasurable capacities of the people, to create an interest of people in different spaces. Multisensory architecture finds its relevance in this context. Most of the architecture created is the privileging of vision over the other senses in design, keeping in mind its visual and physical appreciation. But our perception of architectural space is always perceived by the all senses. Traditionally there are 5 main sense - the sense of sight, hearing, touch, taste and sense of smell. Architecture is the formation of vastu energies and sound is the expression of vastu energies. Through sound vastu energies become sensory perceptive. The auditory experience or Aural Architecture is much neglected element in architectural design, which needs to be integrated into the design process.

Aural Architecture

While acoustic architecture focuses primarily on the acoustic physics of objects and geometries, aural architecture emphasizes the experience of space in terms of behavior and emotions. Because auditory spatial awareness, which is the basis for aural architecture, depends on a social value system, the role of acoustics varies among individuals and cultures. When evaluating the aural experience of space, two independent phenomena must be simultaneously considered: Space

changes our experience of sound and sound changes our experience of space. Sound sources and spatial acoustics are inseparable. This bilateralism creates an interdisciplinary complexity that fuses physical and social sciences. Hearing is a means by which people acquire a sense of where they are, connecting them to dynamic events and spatial geometry. Auditory spatial awareness allows people to sense the elegance of a plush office, the emptiness of an uninhabited house, the depth of a dark cave, the quiet of a city covered in snow, the vastness of a railroad station, and the openness of a beach front. Each of these situations can be described in the language of aural architecture, which includes at least five types of experiential spatiality: navigational, social, aesthetic, symbolic, and musical.

DISCUSSIONS:-

Space and Sound

Terms like *sound* and *space* are seemingly quite simple, in their everyday usage, yet when we begin to look past their conventional definitions, things start to get complicated. We find it difficult to talk about one without the other, and questions arise as to the workings of, and potentials in, that relationship. Certainly, in a strictly physical sense, *sound* and *space* cannot be separated; sound, as mechanical vibration, needs room to unfold, and matter to modulate. This means that an acoustic experience is, by its very definition, a spatial one as well. And yet, there is always more to it.

INTERVIEW - Second Year B. Arch.

MR. NOORUL KHAN CURATOR

Post Graduation in Museology from Museology Department at Faculty of Fine Arts in Maharaja Sayajirao Gayekwad University of Baroda.



Name : Mr. Noorul Khan

Email Id : noorulkhan1908@gmail.com

Designation : Research Scholar in Museology

Mr. Noorul Khan is a Research Scholar doing Research on traditional conservation method of cleaning metal object and preserving them in Vechaar Utensils Museum and documenting the ancient art and handicrafts of India. Further he is researching on clay storage chamber called *Kutiya* in Bhargain Village at Kasgunj district of UP.

In interaction with students of S.Y.B Architecture Khan sir stated that, It is an effort to cherish and preserve our rich cultural heritage and rare artistic skills and wisdom of our craftsmen.”**VECHAAR MUSEUM**” is an extensive study of utensils from thousand years old to present times that have evolved over different periods of history as a result of our changing needs and environment. The range varies from leaves or a ground jug, to modern stainless steel and glass utensils. The metal utensils cover everything



Mr. Noorul Khan interacting with students

from brass, copper, bronze, zinc to German silver. Interaction session helped students not only to update their knowledge but also gave them the basic ideology of museum design and its various aspects which truly plays important role to make a workable and functional design.

During the discussion with students he explained that the ideology of this museum is to basically connect people to its tradition, culture and of course, the Nature. The



Utensils at VECHAR Museum

old utensils fascinate people and also reminiscence them of history. The campus is environment friendly, it is actually built from all the local materials which brings the unique touch to the museum and it quite helps to get in touch of the vernacular architecture. He also focused on Most important factor while designing Museum is circulation and the type of lights to provided internally for highlighting the exhibits.

Interaction session helped students not only to update their knowledge but also gave us the basic ideology of museum design and its various aspects.

URBAN FABRIC & CULTURAL IDENTITY ALONG STREETScape LENS : SENSE OF PLACE

Prof. PRASHANT PATIL

Assistant Professor

prashantpatil109@gmail.com



Abstract : Heritage precinct in core is giving aesthetic & symbolic value to the city, which reflects our past & culture through it. Heritage precincts always talk about architectural significance of that city which includes the building materials and construction technologies of the past era. Building elements, artifacts etc. which were designed and used. Climatic & environmental aspect which were analyzed and used to design streets, building orientation, Door-window styles etc. It reflects the environmental significance. A surroundings of heritage precincts shows us cultural landscape & rapid changes nearby as per time.

Keywords: Sense of Place, Heritage precinct, symbolic value.

Introduction :

According to urbanization & modernization; How these streets are functioning and cater to a new era for festivals or cultural events. Streets where we can go anywhere & any time, where we can come together, where we were grown. For crowded or chaotic places everyone is responsible. When the places become like a chaotic?

Some of the main reasons for the same are Parking on the street (main drive way), Vendors vending on footpath, extensions of shop front, hawkers, fruits-flower and unauthorized parking on road, Car and bus routes on small width road, increasing population and low services & increase in more numbers of vehicles on road. Main threat behind it is urbanization & modernization.

1) How the sense of place is matter with heritage precinct?

- 2) How the socio-cultural life & heritage precinct are incorporated in day to day life?
- 3) How the urbanization & modernization demolish the sense of place & the characteristics of the heritage precinct?
- 4) What are the social factors which hampers the heritage precincts?
- 5) How the heritage precincts are acted in the festival time or any other cultural event?

Research Hypothesis:

How heritage precinct and surrounding streets are functions in tier II cities like Kolhapur, Sangli, Satara & what are the new possible attributes adhere it.

1. AIM: To achieve urban, cultural value of the precinct as before it has from the sense of place lense.

2. OBJECTIVES:

To understand Sense of Place including place attachment & how it can help people to appreciate ethical aspects for cities

3. METHODOLOGY:

The behavioural observation look at the urban place. Discussed the local issues of the urban precinct. Look for the case studies as applied before. Designed new policies which will help to get historic importance of that place

Imagibility & Identity

1. Paths: People observe the city while moving through it, and along these paths the other environmental elements are arranged and related.

2. Edges: They are the boundaries between two phases, linear breaks in continuity: shores, railroad cuts, edges of development, walls. **Relationship** Type of Bond Process

1-Biographical historical & familial being born in & living in a place, develops over time. 2-Spiritual emotional, intangible feeling a sense of belonging, simply felt rather than created. 3-Ideological moral and ethical living according moral guidelines for human responsibility to place, guidelines may be religious or secular. 4-Narrative mythical learning about a place through stories, including: creation myths, family histories, political accounts & fictional accounts. 5-Commodities cognitive (based on choice & desirability) choosing a place based a list of desirable traits and lifestyle preferences, comparison of actual places with ideal. 6-Dependent material constrained by lack of choice, dependency on another person or economic opportunity.

3. Districts: Most people structure their city to some extent in this way, with individual differences as to whether paths of districts are the dominant elements.

INTERVIEWS - Third Year B. Arch.

Ar. Dean D'cruz

(Director, Architectural Firm)
**MOZAIC, BARDEZ,
GOA**

Ar. Mangesh Prabhugaonkar

(Director, Architectural Firm.)
**MANGESH PRABHUGAONKAR & ASSO.
ALTO PORVORIM, GOA**



Name : Ar. Dean D'cruz

Email Id : architecture@mozaic.in

Director, Architectural Firm - Mozaic

Place : Bardez, Goa - 403 521, India

Ar. Dean D'Cruz graduated from, Sir J. J. College of Architecture, Mumbai & Joined a Senior Architect **Gerard Da Cunha** as an assistant in his office "**Architecture Autonomous**", Goa. **In 2001 he co-founded Mozaic, with general collaboration between disciplines as the core ethic.**

His current emphasis is on urban interventions, sustainable principles and conservation. His major projects are hotels, resorts, spas, residences & interiors in Goa and all over India. He has received many prestigious awards such as Designer of the year in 1999, Hospitality Pinnacle award for hotel architecture, institutional Architecture award, Excellence in Interior Design Award and many more.

Our third year Architecture students got opportunity to talk and interact with the famous architect Dean D'cruz in his office, MOZAIC, Bardez, Goa. A nicely designed office merging with nature inspired all our students and faculties.



Name : Ar. Mangesh Prabhugaonkar (Director, Architectural Firm.)

Mangesh Prabhugaonkar And Associates

Email Id : mangootata@gmail.com

Place : Alto Porvorim, Goa - 403521, India.

Ar. Mangesh Prabhugaonkar has graduated from Sir J.J. school of Architecture, Mumbai. He is a Chairman of IIA Goa chapter & Secretary, ISOLA (Indian Society of Landscape Architect). Presently he is associated with Goa College of Architecture (GCA) as design chair.

He has shown excellence in all his projects such as Vaddem lake beautification, various goan houses many commercial, residential, public landscapes and Architectural projects. Many of his projects are awarded and recognised for Architectural designing and landscape design. He gave strong inputs on student's positive behaviour in architectural education and the future practice methods to be followed to become successful in Architectural profession. Also gave brief about the working of IIA and other institutes which help in growing a student of Architecture in academic and professional career ahead.

He explained importance of time management in academic days. One has to cope up with time and the endless efforts towards new learning are the key to one's professional success.

REFERENCE MANAGEMENT SOFTWARE

Mrs. ARCHANA N. LADKAT

Librarian

amore170@gmail.com



Abstract: Reference Management (RM) software is widely used by researchers and students. Librarians are often called upon to provide support for these products. The present study compares four prominent RMs: EndNote, Cite U Like, Ref Works, Mendeley, and Zotero, in terms of features offered and the accuracy of the bibliographies that they generate. To test importing and data management features, fourteen references from seven bibliographic databases were imported into each RM, using automated features whenever possible. To test citation accuracy, bibliographies of these references were generated in five different styles.

Keywords: RMS Tools, Zotero, EndNote, citation style, Functions of RMS.

Introduction:

A large percentage of libraries provide instruction on the supported application and instructional materials. The libraries supporting Ref Works were more likely to use the Instructional materials provided by Reworks. [1]. Reference Management Tools are categorized into four types, 1.Reference guides 2.Reference management education 3.Reference manager's 4.Reference generators. Reference managers are allows to researchers to store, organize, create, and share to others. [2]

There are many different referencing conventions in common use. The two most commonly used formats, the 'author, date' system and footnotes or endnotes. Even though different journals may use a slightly different format for the bibliography, they all contain the same basic information. The most basic information that each reference should have is the author's name, the title, the date, and the source. We will need these details to provide accurate references, and to enable to locate the information again at a later date, should it be necessary to do so. Reference management (or bibliographic) software allows to manage all the references we need for papers, reports, essays or thesis by enabling to keep them in our own personal database or library. It allows us to:

- Search easily for a particular reference to which need to refer back
- Print or save a list of references
- Insert citations into our document & automatically produce a bibliography in whatever style we require.[3]

Definition of RMS:

According to Telstar's definition, a Reference Management Software "enables an author to build a library of references by entering the details of each reference in a structured format." They usually support mechanisms for organizing sets of references by tagging or use of 'folders', and will generate references, citations or bibliographies in a range of referencing styles. Most packages support ways of importing records.[4]

Various Styles of References:

1. Humanities

- Chicago
- MLA (Modern Language Association)

Sciences

- ACS (American Chemical Society)
- AMA Citation Style
- IEEE (Institute of Electrical and Electronics Engineers)
- Electrical Engineering Citation Style
- NLM (National Library of Medicine)
- Vancouver (Biological Sciences)

Social Sciences

- AAA (American Anthropological Association)
- APA (American Psychological Association)
- APSA (American Political Science Association) Other than this styles some renowned journals uses their own citation style

INTERVIEW - Fourth Year B. Arch.

Ar. Sandeep Virmani (Executive Vice Chairman, Hunnarshala Foundation)
BHUJ, GUJARAT



Name : Ar. Sandeep Virmani

Email Id : hunnarshala@yahoo.co.in

Executive Vice Chairman, Hunnarshala Foundation

Place : Bhuj, Gujarat

Ar. Sandeep Virmani is the executive vice chairman of Hunnarshala Foundation and has been the managing director since its creation in 2001. Established since Eighteen years in the Kutch region, Sandeep Virmani took advantage from this remote and arid district conditions to gain holistic understanding on the fields of water harvesting, organic agriculture, renewable energy, nomads' living conditions and sociology.

Hunnarshala Foundation is an NGO that functions to strengthen and revive vernacular architecture and train the local artisans with newer advancements in technology. It also strives for their empowerment and observes that they are given sufficiently remuneration. The foundation has collaborated and been a part of projects like Indira AwasYojana, Kosi Flood Rehabilitation, Kutch Earthquake Rehabilitation, and numerous others.



Ar. Sandeep Virmani while interacting with students at Hunnarshala campus

The aim of this interview was to create an interaction of the students with the foundation's professionals, actively working in the field of architecture. The interview was a dialogue between the students of Second and Fourth year B. Arch and the executive vice chairman of Hunnarshala Foundation.

The students interacted with Ar. Sandeep to know more about Hunnarshala and its projects. He said that the foundation has been named after a guild of artisans founded by **Maharao** of Kutch, around 100 years ago. Hunnarshala has helped the residents of Kutch to rebuild their habitats which were destroyed in the 2001 earthquake. Since then, the foundation

has trained and used the skills of local artisans to implement vernacular construction in rural as well as urban areas. He also talked about designing with the sustainable materials. He said that one only needs to design with such materials and techniques which have been adopted by the villages since centuries, and that itself starts making a design truly unique.

The students interacted with him on various levels like the builder-artisan relationship. To this, he replied that the artisans are the most financially harassed class of our society, and this goes well unnoticed. We as architects need to address this situation and take steps towards humanity.

He concluded saying that the urban areas need vernacular architecture more than the rural ones to reduce carbon footprint by avoiding the use of cement and steel, and turning towards earth as a building material.

RESEARCH & THESIS WORKSHOP

22nd and 23rd February 2019

(Expert Remark)

- Experts :**
1. Prof. Dr. Ashish Rege, Goa College of Architecture, Panaji, Goa.
 2. Prof. Vinit Mirkar, Principal, IES College of Architecture, Mumbai.
 3. Prof. Pramod Gawari, Professor, SoA University of Mysore,
 4. Ar. Harshad Bhatia, Architect and Urban Designer, Mumbai.
 5. Ar. Rita Mody, Practcing Architect, Goa.
 6. Dr. M. N. Chandrashekhar, Dean, School of Architecture, Bengluru.

About the experts:

The experts were a bunch of stalwarts from profession of architecture and education occupying top posts and experience and expertise in varied fields like Urban Design, Vernacular Architecture, etc.

Aim of the Workshop:

Aim of the workshop was to expose the thesis students to the plurality of the opinions and views on the Architectural Projects and imbibe the spirit of enquire and deepen the importance of methodology in formulation of the design programmes. Along with that to inculcate in fourth year dissertation students the importance of research to go in to even the smallest of the issues related to architectural projects and fathom deeper with unbiased opinion developed with reasoning and specificity.

Participants' Interaction:

Vigorous interaction and healthy debate was observed during presentation of the projects as some participants were faculty and students from other colleges.

Outcome of the workshop:

The workshop gave opportunity to the participants to present their work and get feedback from the experts in the form of suggestions and constructive criticism which will help the participants to improve their Thesis and Dissertation Projects.

Organizers:

The workshop was successfully organized under the guidance of Principal Dr. Rajendra Koli along with the contribution of all teaching faculty and non-teaching staff.





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PROF. VINIT MIRKAR
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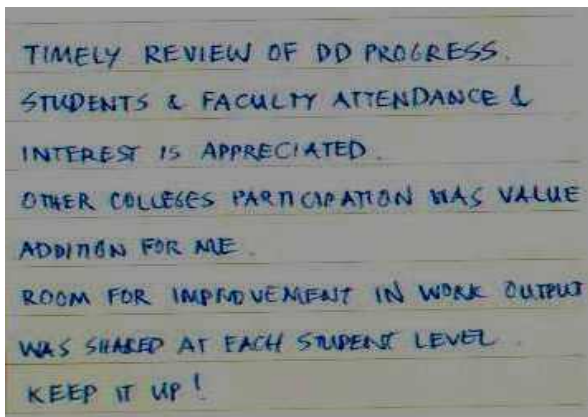
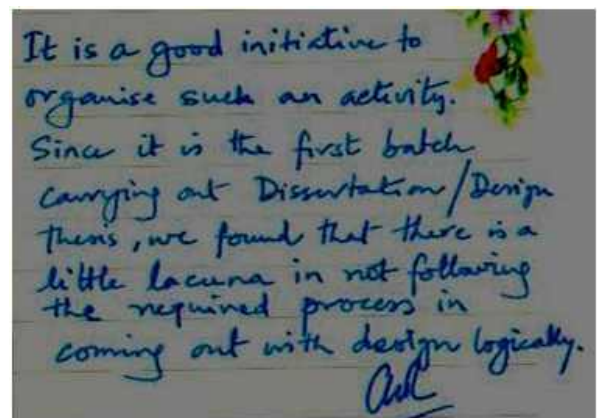
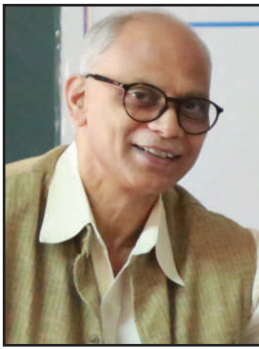
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RESEARCH AND THESIS WORKSHOP : 22nd and 23rd Feb. 2019

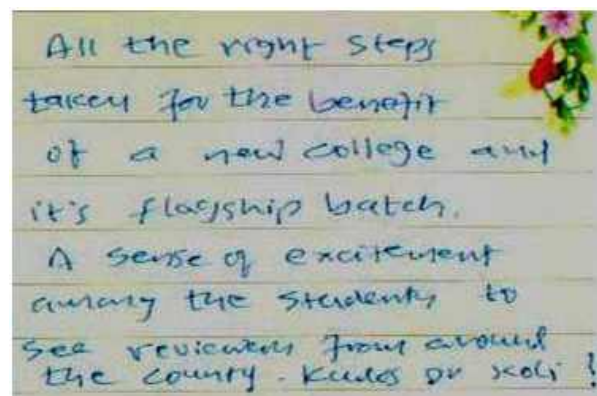
We the faculty and students proudly state that in the history of Architecture colleges in Pune, we have successfully arranged two days Research and Thesis Workshop for students of fourth year research and final year thesis. The eminent personalities in field of architecture practicing & academicians all over India were called for their expertise lectures.

EXPERTISE FEEDBACK IN THEIR HANDWRITING

PROF. DR. ASHISH K. REGE



AR. HARSHAD BHATIA



DR. M. N. CHANDRASHEKHAR



EXPERTISE FEEDBACK IN THEIR HANDWRITING

PROF. VINIT MIRKAR



Very well organised workshop. Very important initiatives to give exposure to the students from the small towns. And timing & this workshop is appropriate kept. With you all a great success. Best wishes.

AR. RITA MODY



STUDENTS...
• Lack of Exposure to the built Environment via physical study or research
STUDENTS
• In depth involvement is needed
FIRE MANAGEMENT
• A super organized visit for us... Hope the students learnt from our feedback.

AR. PRAMOD GAWARI



Very good event, good exposure to students @ the by the various experts @ the initial stage of their thesis & research work, verily it helps students to proceed in their thesis in a direction,



Students presenting their work in front of expert members

RESEARCH AND THESIS WORKSHOP

Date: 22nd and 23rd February 2019

4th and 5th Year B. Arch.



Expert Guest with Principal, Teaching and Non teaching Staff



Expert Guest with Principal, Teaching, Non teaching Staff and 5th Year Students of Thesis Workshop

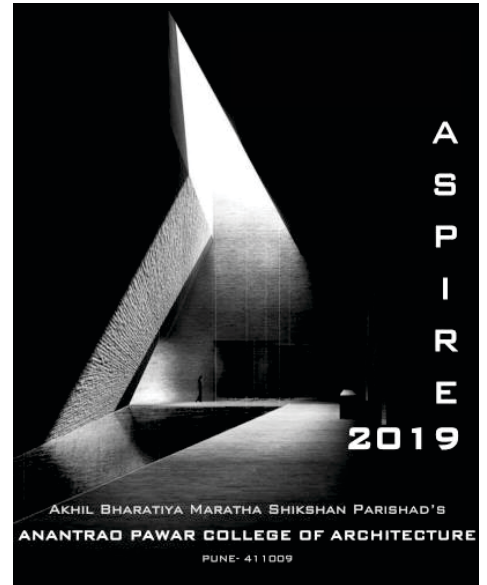


Expert Guest with Principal, Teaching, Non teaching Staff and 4th Year Students of Research Workshop

RESEARCH MAGAZINE COVER PAGE DESIGN COMPETITION

1. FIRST PRIZE : Divya Hanamghar (Fourth Year B.Arch.)

Concept : The poster portrays, "to direct one's hope or ambitions towards achieving something which also literally means "ASPIRE". It also "shed light on" different topics that students have chosen for research. And poster also depicts 'A' in ray of light which is our magazines starting letter "ASPIRE".

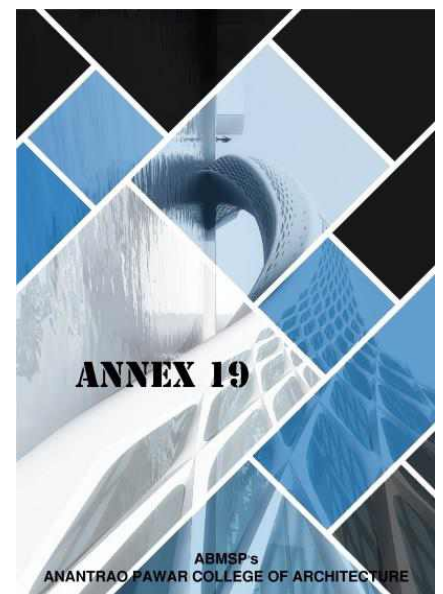


2. SECOND PRIZE : Rushikesh Rajurwar (Fourth Year B.Arch.)

Concept : "Genesis" means transformation, transient and translucent of structure. Transformation means conversion the searches and getting into it. Research in Architecture is a through and through talk process which transforms the way of methods and therapy with transient means a symmetric flow.

3. THIRD PRIZE: Suraj Salvi (Fourth Year B.Arch.)

Concept : The word 'ANNEX' means adding parts to a greater entity. Research in Architecture is symbolized by the annexation of square pieces that reveal a bigger entity otherwise incomplete. Such is the nature of research, that it refers the existing facts and joins the findings to explore a topic deeply.







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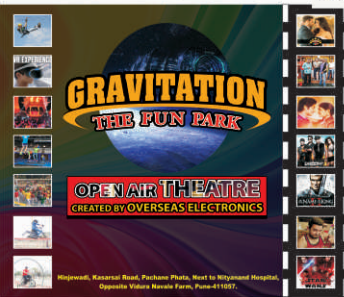
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05	Mr. Sitaram Shankarrao Jadhav	
06	Mr. Raghunath Bhagawantrao Taware	
07	Prof. Shailaja Arjun Bhagwat	Principal Nominated HOD
08	Prof. Sharayu Amol Magdum	Teachers Representative
09	Prof. Shilpa Anand Ingwale	Teachers Representative
10	Prof. Almas Kadar Mirshikari	Coordinator, College Quality Assurance Committee
11	Prof. Archana Nilesh Ladkat	Teachers Representative (Ladies)
12	Mr. Sushant Shitole	Non Teaching Representative
13	Dr. Rajendra Bhangari Koli	Principal/Secretary

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2	Dr. Girish Kulkarni	Ex. Director , Department of Technology, Shivaji University, Kolhapur
3	Dr. K. Sudhakar	Head of Department , Jawaharlal Nehru Architecture and Fine Arts University, Hyderabad
4	Prof. Pramod Gawari	Professor , School of Architecture & Planning, Mysore University, Mysore.
5	Ar. Prashant Deshmukh	Practicing Architect , Prashant Deshmukh & Associates, Pune

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1	Dr. Rajendra Koli	Principal	M. Arch., Ph.D.
2	Prof. Mohan Sawant	Design Chair	B. Arch.
3	Prof. Shailaja Bhagwat	Associate Professor	M. Arch.
4	Prof. Sharayu Magdum	Associate Professor	M. Arch.
5	Prof. Shilpa Ingawale	Associate Professor	M. Arch.
6	Prof. Almas Mirshikari	Assistant Professor	M. Arch. Ph.D. Pursuing
7	Prof. Vaishali Dandekar	Assistant Professor	M. Arch.
8	Prof. Anupama Sonpitale	Assistant Professor	M. Arch.
9	Prof. Gaurav Vinchu	Assistant Professor	B. Arch.
10	Prof. Prashant Patil	Assistant Professor	M. Arch.
11	Prof. Rahul R. Dhanokar	Assistant Professor	B. Arch.
12	Prof. Sunil R. Shastri	Assistant Professor	B. Arch.
13	Prof. Anand G. Apte	Assistant Professor	B. Arch.
14	Prof. Bharat R. Barhate	Assistant Professor	M. Arch, Ph.D
15	Prof. Balasaheb B. Abhang	Assistant Professor	A.T.D, G. D.Art (Painting) & Diploma in Art Education
16	Mrs. Archana Ladkat	Librarian	MLISC, SET, Ph.D. Pursuing

NON TEACHING STAFF

Sr. No.	Name of the staff	Designation	Qualification
1	Mr. Shushant K. Shitole	Office Superintendent	M.Sc. (International Business Management)
2	Ms. Komal S. Jadhav	Accountant	B.Com, MCM
3	Mrs. Smita N. Bankar	Junior Clark	B.A M.A.(Economics)
4	Mr. Rahul S. Devkar	Peon	S.Y.B.A
5	Mr. Ajay T. Kakade	Peon	12TH Science

VISITING FACULTY

Sr. No	List of Visiting Staff	Qualification
1	Prof. Taher Saifuddin Sami	B.Arch
2	Prof. Rajendra Panditrao Hire	Bachelor of Engineering
3	Prof. Mohan Vasideo Nikam	B.Arch
4	Prof. Vikram Navin Shah	B.Arch
5	Prof. Sandip Jaytirtha Joshi	M.Arch (Conservation)
6	Prof. Abhijeet Arvind Joshi	M.Arch (Environment)
7	Prof. Prashant Vasant Gadre	B.Arch
8	Prof. Prashant Pandurang Patil	B.Arch
9	Prof. Ashok R. Pungavkar	B.Arch
10	Prof. Tejas Sawant	B.Arch

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		Prof. Shailaja Bhagwat	Member - Coordinator
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4	SC - ST (Reservation Cell)	Dr. Rajendra B. Koli	Chairman
		Prof. Shailaja Bhagwat	Member
		Mrs. Smita Bankar	Member - Coordinator
5	Right to Information Committee	Dr. Rajendra B. Koli	Appellate Authority
		Prof. Shailaja A. Bhagwat	Public Information Officer -Coordinator
		Mr. Sushant Shitole	Information Office
6	Students Grievances Committee	Dr. Rajendra B. Koli	Chairman
		Prof. Sharayu Magdum	Member - Class Teacher IV & Coordinator
		Prof. Alamas Mirishikari	Member - Class Teacher II
		Prof. Shilpa Ingwale	Member - Class Teacher III
		Prof. Vaishali Dandekar	Member - Class Teacher I
7	Anti Ragging and Anti Ragging Squad Committee	Dr. Rajendra B. Koli	Chairman
		Police Sub Inspector Dattawadi Police Station	Member
		Prof. Alamas Mirishikari	Member -Teaching staff
		Mr. Sushant Shitole	Member - Non Teaching staff & Coordinator
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		Mr. Ghatge S. B.	Hostel Co-ordinator
		Mr. Purshottam V. Hundekar	Parents Representative
		Mr. Krishnarao Sonawane	Parents Representative
		Mrs. Mangala Bhate	Parents Representative
		Miss. Shravanee Shinde	Students Representative
Mr. Siddhant Sakure	Students Representative		
8	Women's Grievances Committee	Prof. Alamas Mirishikari	Chairman
		Prof. Sharayu Magdum	Member
		Mrs. Archana Ladkat	Member - Coordinator
		Mrs. Smita Bankar	Member
		Law College Representative	Member

GUEST LECTURES AND WORKSHOPS

Sr. No.	Name of Guest Lecturer	Date of Lecture	Topic
1	Mrs. Shailaja Sarangale	27 th June 18	Positive Thinking
2	Ar. T. D. Gadgil	10-Jul-18	Mudgaon Historical housing evolution & significance
3	Dr. Ashish Rege	10-Jul-18	Old Portuguese housing settlement of Margao, Goa.
4	Mr. Nitish Chandan	10-Aug-18	Social Media: Pros & Cons
5	Prof. S. M. Phadatare	11-Aug-18	Housing Typology
6	Ar. Kavita Murugkar	16-Aug-18	Universal Design Approach Research in Architecture
7	Dr. Arun Adsul	05-Sep-18	Good Teachers & Behaviour
8	Prof. Neha Sathe	03-Oct-18	Time & Stress Management
9	Ar. Amol Talekar	19-Sep-18	Design Process in Architecture
10	Mr. Jitendra Sutar	29-Dec-18	Sculpture Demo
11	Mr. Vikas Chormale	29-Dec-18	Portrait Demo
12	Otis	28-Jan-19	Lifts & Escalators Planning & Mechanism
13	Ar. Ashok Pumgaonkar	8 Feb 19	Auditorium Planning & Designing
14	Ar. S. W. Gadre	13 Feb 19	Auditorium Acoustics Planning
15	Ar. T. D. Gadgil	22-Feb-19	Commercial & Auditorium Design
16	National Disaster Response Force(NDRF)	13-Mar-19	Disaster Management



Mrs. Shailaja Sarangale delivering lecture on Positive Thinking on 27th June 2018



Ar. T. D. Gadgil sir, Sangli delivering lecture on planning aspects of Kala Academy on 10th July 2018



Dr. Rege sir, Principal GCA, (Architect-Urban Planner and Ph.D) delivering lecture on Old Portuguese housing settlement of Margao, Goa on 10th July 2018



Mr. Nitish Chandan talking with girl students of all colleges of ABMSP's Parvati Campus on 10th August 2018

SKETCHES FIRST YEAR STUDENTS



SAYYAMI DHAMAL



SAYYAMI DHAMAL



RUTUJA WAGH



ABHIJEET SONAWANE



ARTI PENDU



RUTUJA WAGH



ARTI PENDU



SHUBHAM KHARAT



RUTUJA WAGH

SKETCHES FIRST YEAR STUDENTS



ASHIYA MAPARE



ASHIYA MAPARE



SAKSHI GHOGRE



ASHIYA MAPARE



SAKSHI GHOGRE



SAKSHI GHOGRE



SAKSHI GHOGRE



SAKSHI GHOGRE



ASHIYA MAPARE

A VISIT TO LONAND AND FALTAN

NIRMAL WARI ABHIYAN

DATE :- 13th & 15th July 2018

The students of 2nd and 4th year B.Arch visited to Nirmal Wari Abhiyan at Lonand and Fultan, Pune with Prof. Gourav Vinchu, Mrs. Archana Ladkat and Mr. Vikas Dharvatkar on the occasion of *Ashadi Ekadashi*. This visit was planned to understand social issues concern and it shows responsibility towards society.

The aim of the visit was to understand the social values and culture of our nation.

The students helped people in *Nirmal Wari* for their needs and students created a social awareness about the environment and cleanliness of spaces.



Students and Faculty is helping people to create awareness about Environment

'STREET PLAYS COMPETITION'

Co-ordinator: Prof. Archana Ladkat

Date: 18th Feb 2019

Pathnatya Team

Second Year students have prepared street play on voting campaign for creating awareness among the students for voting, also **SWAYAM ROZGAR** competition for motivating the business environment. On 18th Feb 2019, Student Development department, Abasaheb Garware College had organized district street play competition. Street play is form of a theatrical performance without specific audience. They are especially seen in public places. Street play is considered to be the free form of acting, because one doesn't have a microphone or loudspeakers.

The guest of honour and judges for the event were well known personalities; Dr. Pradeep Kumar Mane & Dr. Varsha Todmal. The main motive of this competition was to educate people by raising various social issues. The topics given were as follows:

1. Matdaar Raja Jaga Ho, 2. Jala Saksharta, 3. Ek Paul Swachate Kade, 4. Swayam Rozgar.



3. Methodology:

1. Identification of typical patient room.
2. Modeling & Simulation of model in Ecotect.
3. Data analysis of simulation results.

• **Primary Data Collection:**

- Modeling of sample patient room in Ecotect Software.
- Simulation of model for identified parameters for thermal & daylight.

• **Secondary Data Collection:**

- Climatic data collection & analysis of Pune region.
- Literature Review

There are in general three standard patient room designs which are generally seen in planning of hospitals. They are in board, nested & outboard patient room designs, out of which the study carried out by Ahmed Sherif it is found that inboard & nested are found to be best options as compared to out board patient room design. Taking into consideration these factors and general survey of patient room designs, a sample model of hospital patient room is made.

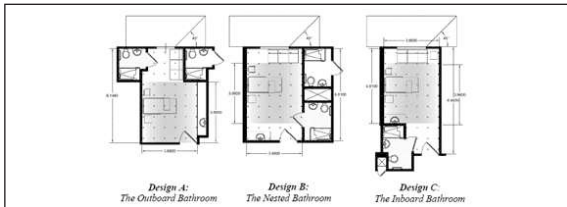


Fig 1: Different Types of Patient Rooms.

Ref: Energy Efficient Hospital Patient Room Design: Effect of Room Shape on Window-to-Wall Ratio in a Desert Climate by Ahmed Sherif.

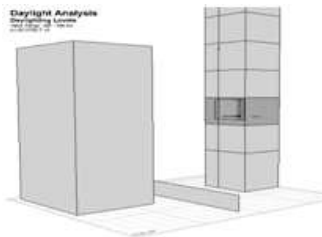


Fig 2: Sample patient room designed for study by Author

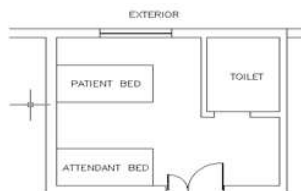


Fig 3: Ecotect model of Sample patient room designed for study by Author

Ecotect software is used to investigate the performance of this sample room in terms of all variable parameters such as wwr, orientation, shading devices & thermal performance.

Simulations were conducted using the climatic data of the city of Pune, India (18° 32'N, 73° 51'E, alt. 560 m). The tested patient room was assumed to be located on the second floor level of a hospital building. Since the urban setting was selected for the simulation one five storied building is considered in front of window for all the orientations. (Five storied building is selected as this is a general trend observed in Pune.) For different WWR ranging from 30% to 70% along with four different orientations daylight levels were calculated with only horizontal & with both horizontal & vertical shading device. In addition to this fabric gains were also calculated for the above configurations of WWR & orientation. (Refer Appendix I)

Table 1: Parameters considered for sample patient room

Depth of horizontal & vertical shading device	0.45 M.
Habitable Area of patient room	14.98 (w/o toilet)
External wall	230mm bk. Wall with 10mm internal plaster & 15mm thk external plaster.
Glass	5mm thk clear glass

4. Simulation Results:

4.1 Daylight Analysis:

In this stage the daylight performance of the building was conducted in Ecotect. The plane of reference was considered to be at the height of bed(0.9M.). The study was carried out to achieve min 300Lux level at the study plane. This is prescribed requirement as per NBC standard building code, which facilitates the examination & other patient activities. Upper limit of the daylight level is 500 lux above which daylight becomes glare & uncomfortable.

Through the simulations it is observed that, daylight levels with 30% WWR are very less than the prescribed levels whereas with 70% WWR it is too much. Thus desired WWR for patient room is suggested to be 40-60%. In addition to this, windows with both horizontal & vertical shading devices perform better than with



only horizontal shading devices for warm & humid climate.

In addition to this, daylight performance varied in terms of orientation. The graph clearly indicates that among all four directions East orientation gives maximum daylight followed by North, West & South orientation.

4.2 Thermal Analysis:

In this stage thermal performance is studied for all possible WWR & orientations. In this study three critical months representing three seasons of warm & humid climate were selected namely Summer-May, Monsoon-June & Winter- January (IMD Data). Thermal loads through fabric gains were evaluated.

Simulation results for the thermal performance shows that variations in thermal loads vary marginal with different WWRs ranging from 30 to 70%. Major variation is seen in the thermal loads as per the seasonal variation. Summer months out of the entire year are found to be critical in terms of thermal loads.

5. Discussion & Conclusion:

Results of this study demonstrate that solar penetration is a critical concern affecting patient room design and window configuration. Windows are the component which admits daylight as well is the means of heat gain hence it becomes crucial design parameter which cannot be altered in future. Hence it is very important to maintain the balance between the daylight & thermal comfort. The results of this paper demonstrated the need for a careful consideration of the size of windows and openings in relation to patient room design. Simulation Techniques proved useful in identifying the window configurations that satisfy both the energy and day lighting requirements at the same time.

The study shows that we get maximum daylight from the windows oriented to the west followed by East, North & least from the windows orientated to the south for the WWRs ranging from 30% to 70%. It is also observed that heat gain through fabric is maximum form west façade followed by south, east & north.

We get maximum daylight from west façade, which is far above the prescribed levels of the standards. At the same time we get maximum heat gain from this orientation so west orientated patient rooms will be highest energy consumers hence not recommended.

East & North oriented patient rooms receives adequate daylight at the same time receives comparatively low thermal gains, hence are most preferred.

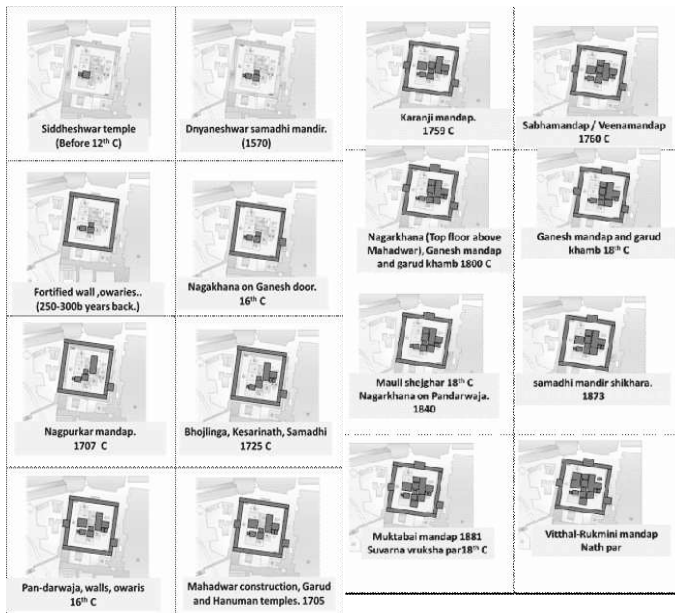
Whereas south receives minimum daylight & relatively high thermal gains hence not preferred. This indicates that while planning a patient room various permutation options can be tried in terms of wwr, orientation, & thermal gains. Depending upon the site constrains the best possible option can be worked out.

In addition to this it also becomes essential to understand the patient's psychological & visual comfort

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7. Yufan Zhang*, P. B. (2011). Factors influencing the occupants' window opening behaviour in a naturally.
8. Tareq Maher Ayyad (2011). The Impact of Building Orientation, Opening to

3. To study the mythology and legends, heritage, rituals and other religious aspects related to Alandi town and the Dnyaneshwar Samadhi Complex
4. To understand saint Dnyaneshwar's life and associated places in Alandi, along with the other important **varkarisampraday** saints.
5. To compare the main four religious schools (**VarkariSampraday**) of Maharashtra, places w.r.t. religion shaping architecture of places.



(Fig-1) Alandi Samadhi Temple Evolution (Development wise)

3. Methodology :

To meet the objectives of study, set out in previous section following Qualitative and Quantitative methods are used.

- Literature review : gave a broader aspect of significance of **wari culture**, **bhakti** movement and its **sampraday**. also various cultural and associational values.
- Observation method :
- Interview or inventory and documentation.
- Graphical and audio-visual Documentation method.

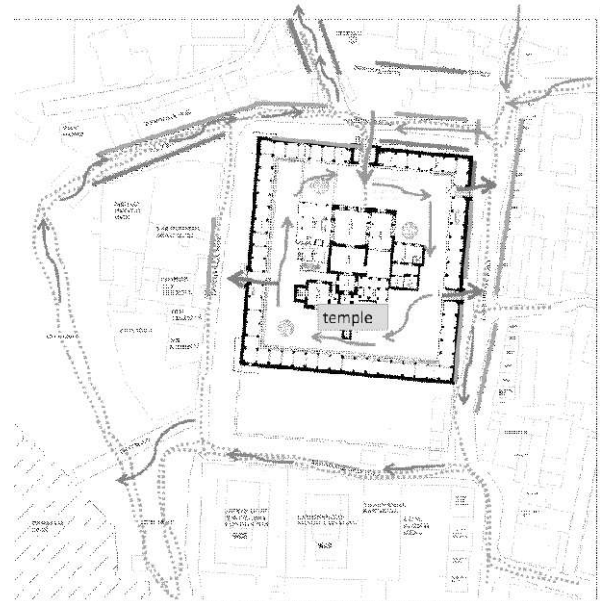
3.1 Context of study :

Alandi is a town and a municipal council in the Pune district in the state of Maharashtra, India. located on the bank of the **Indrayani River**, 18.8 km (11.7 mi) in Khed Taluka of Pune District, India, near the northern edge of city of Pune. It has an average elevation of 577 meters (1,893 feet). The town is popular as a place of pilgrimage

and the resting place of the 13th century Marathi **Bhakti Sant Dnyaneshwar**. It lies 30 km from Pune and is having population 28,576 (2011) as per 2011 census. It comes in semi-arielclimatic zone

Aspect of pilgrimage :

The pilgrims daily or at **wari** time can be guided by the trails options. The inside movement of temple shall be restricted till the load of people from inside is released. The **Mahadwar** entrance will be in gate and the Ganesh door will be exit gate as shown by arrow they will go along the river and exit from the front road of **Mahadwar** gate. The small temporary stalls will be shifted along the front road on **Mahadwar** side to make the exterior wall of temple free from the encroachment.



One entrance and 3 exits will reduce the overcrowding of visitors at festival times.

Following aspects to be identified and followed to avoid risk in disaster time.

- A. TYPES OF RISKS IN CASE OF HERITAGE BUILDINGS & PRECINCTS
- B. ASSESSING MAGNITUDE OF RISK
- C. HERITAGE IMPACT ASSESSMENT
- D. MITIGATION MEASURES

Regulated Pilgrim circulation: One entrance and 3 exits will reduce the overcrowding of visitors at festival times. (Pilgrim movement shown by arrows)

The types of Hazards	Proposal
Natural : river flood	The movement of pilgrims will be stopped entering the temple. The pan door should be locked nobody will enter or exit from that side. The Ganesh door and Hanuman door will be used for exit.
Natural : earthquake	The people will gather in open courtyard and then to be guided to go out safely.
Manmade : fire Hazard	The fire extinguishers to be located at all entry and exit points.
Manmade : Stampede / vandalism :	The excess flow of people will be restricted from outside and the volunteers will guide people from all 3 doors to exit safely.



PROJECT LEVEL AND RECOMMENDATION.

- Alandi being a important town in point of rich cultural and religious base, has to be protected by making a solution oriented policy for all issues regarding, Heritage, Pilgrims, risk management, village sustainability by their livelihood, maintaining temple.
- The same points can be applied for sustainability of all other religious places of **varkarisampraday**.
- The historic Urban Landscape approach (HUL) will help in achieving conservation of the place. The continuum of traditional knowledge system and management system is ensured by HUL approach.(ref: by Ar. Vaishali Latkar 2016, a article on Jejuri)
- HUL (N, 2017) approach focuses on sustainable urban heritage management by including practices, traditions, communities as independent attributes to value.
- The **Tirth-kshetra vikasyojana** or the Pilgrimage Development scheme should result in improved quality of built environment respecting the heritage of place provision of required & appropriate infrastructure.
- The green pilgrimage initiative launched in 2011 in Italy by Alliance of Religious and Conservation in

association with World Wildlife Fund can be looked, as a way of responding challenges posed by modern pilgrimage practices.

- Newly launched national mission on Pilgrimage Rejuvenation and spiritual augmentation drive (Prasad) by Indian Tourism Department and Heritage City Development and Augmentation Yojana (HRIDAY) initiatives can be seen as a step towards achieving this goal. The regionally important 12 pilgrimage sites are already identified under this scheme. Its stress is on encouraging religious tourism stressing sustainability and of local craft handicrafts, cuisines a range of intangible heritage, International guidelines & existing schemes together can pave a way for sustainable future of such '**LIVE RILIGIOUS PILGRIMAGE SITES**' like Alandi and many more in Maharashtra and further in India. (**Davlbhakta**)

CONCLUSION :

- Heritage Conservation policies will lead to increase in social awareness of this religious culture and reduce the threat of diminishing or ruin it due to increasing pilgrimage overpopulation.
- Heritage Conservation guidelines, w.r.t. disaster management and pilgrimage controlled movement are needed.
- The guided pilgrimage trails and basic facilities will prove a successful and safe pilgrimage during festivals.
- The efforts of structural Conservation will certainly prove a best option to retain the religious, heritage and historical significance of a Samadhi temple.
- Local traditional skill like **Tulsi** beads necklace, Tabla making, etc will surely last long by concentrating, documenting and f the learning facilities to increase socio economy of this place.

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impact building materials, it is also true that there are several technologies or systems, currently in use. Their strategy has been referred to as effective in spreading ideas about best practice to dedicated green advocates, builders and individuals seeking for an alternative means of determining the material-selection process, very few such systems are available that support the effective and substantial use of local and recycled building materials in the design-decision making phase of a building [4-7].

During the last 30-40 years we have been sensing the bitter experience of global warming, ozone depletion, resource depletion, energy scarcity, ecological toxicity, human toxicity, acid rains etc. Though we cannot avoid affecting the environment, the green buildings will aim and contribute towards minimizing the environmental impact. It should also be emphasized that green buildings do not only contribute towards a sustainable construction and environment but it also brings lots of benefits and advantages to the building owners and the users. It contributes towards lower development costs lower operating costs, increased comforts, healthier indoor environment quality, and enhanced durability and less maintenance costs. The uncertainties in application of green building concept. The most significant fact being that there is very little publicly available data regarding manufacturing process that document energy consumption, impact on natural resources, CO₂ emissions for each building material etc. Therefore, undoubtedly, to a certain degree [8].

Aim: To suggest guidelines that ongoing development continues to improve the capacities and capabilities of the system to strengthen efforts in construction industry.

Objective:

- Primary Objectives :
 1. To find out information about various aspects involved in green building construction.
 2. To identify required material properties accountable for environmental protection.
- Secondary Objectives :
 1. To study the climate related aspects with respect to sustainable building construction.
 2. To study the green and sustainable building concepts.

Methodology

- Collection of data through
 - a. Primary data source: the information will be collected directly from concerned authorities interviewed through open ended and close ended questions.
 - b. Secondary data source: Documents, Web search, Research journals, periodicals.

Discussion

There are a number of features which can make a building 'green'. These include:

- Efficient use of energy, water & other resources
- Use of renewable energy, such as solar energy
- Pollution and waste reduction measures, and the enabling of re-use and recycling
- Use of materials that are non-toxic, ethical and sustainable
- Consideration of the environment in design, construction and operation
- Consideration of the quality of health of occupants in design, construction and use
- A design that enables adaptation to a changing environment
- **Material Selection**

Use of toxic substances in the construction may be harmful to the overall health of a building's occupants. In spite of an increasing awareness of the environmental health problems regarding exposure to a number of products. Evaluation of building products, from the gathering of raw materials to their ultimate disposal, gives a better perception of the long-term costs of materials. A material's life cycle could be well organized into three construction stages, Pre-Building, Building, and Post-Building stage . These stages parallel the life cycle phases of the building itself. The assessment of building materials' environmental impact at every phase enables a cost-benefit analysis over the lifetime of a building, instead of merely an accounting of initial construction costs.

The pre-building stage

The Pre-Building Stage explains the production and delivery process of a material up to, but not including, the point of installation. This consists of finding raw materials in nature as well as extracting, manufacturing, packaging

and transportation to a building site. This particular stage has the most possibility of creating environmental destruction. Knowing the environmental impacts in the pre-building phase will result in the wise selection of building materials.

The post-building stage

The Post-Building Stage refers to the building materials when their performance in a building has run out. At this stage, a material could possibly be recycled in its entirety, have its elements reused back into other goods, or perhaps be thrown away. From the perception of the designer, perhaps the minimum measured and least recognized stage of the building life-cycle occurs when the building or material's useful life has been exhausted. The demolition of buildings and clearance of the resulting waste has a substantial environmental cost. Degradable materials may generate harmful waste, alone or even in mixture with many other materials. Inert materials consume gradually scarce landfill space. The adaptive recycle of a present structure sustains the energy that went into its materials and construction.

Principles of Sustainable Building Design

- Healthy interior environment

All possible measures are to be taken to ensure that materials and building systems do not emit toxic substances and gasses into the interior atmosphere. Additional measures are to be taken to clean and revitalize interior air with filtration and planting

- Energy efficiency

All possible measures are to be taken to ensure that the building's use of energy is minimal. Cooling, heating, and lighting systems are to use method and products that conserve or eliminate energy use.

- Ecologically benign materials

All possible measures are to be taken to use building materials and products that minimize destruction of the global environment.

- Environmental form

All possible measures are to be taken to relate the form and plan of the design to the site, the region and the climate. Measures are to be taken to relate the form of building to a

- Appropriate Design

All possible measures are to be taken to achieve an efficient, long lasting & elegant relationship of use

areas, circulation, building form, mechanical systems & construction technology.

Conclusion

An prospect towards carbon reduction is the unmatched use of green construction techniques whereas build forms have 40% contribution in carbon emission. The common tool to evaluation will be the green building rating tools.

Materials are the essential components of buildings construction. Chemical, physical and mechanical properties of materials as well as an appropriate design are accountable of the building mechanical strength.

Materials which are domestically created and sourced which decreases transportation costs and CO₂ emissions, they could consist of reused materials, they possess a lower environmental effect, they are thermally effective, they need less energy than conventional materials, they make use of renewable resources, they are lower in harmful emissions and they are economically sustainable.

Recommendations:

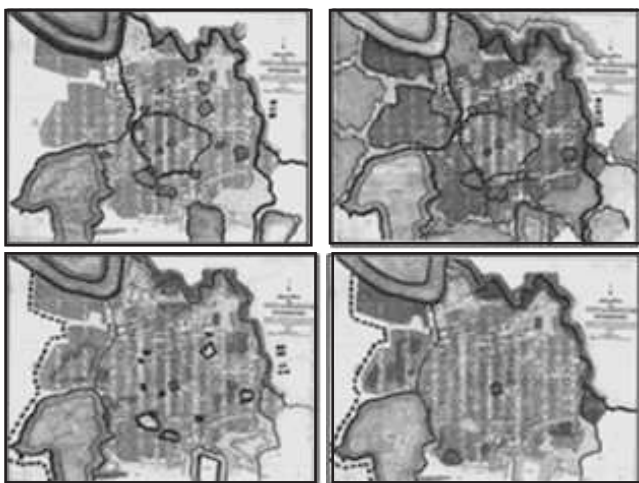
In order to mitigate the effect of buildings along their life cycle, Green Building (GB) has become a new building philosophy, pushing the application of more environmentally friendly materials, the implementation of strategies to save resources & lower waste consumption & the improvement of indoor environmental quality, among others. This might lead to environmental, financial, economic, and social benefits.

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settling around the water bodies for commercial purpose. As water provided source of drinking and use purpose which was needed for the growth of the city. These water bodies were encroached by slums, industries and residences, hence water bodies since 18th century were in good state but in 19th century this water bodies started becoming a neglected space and place where effluents and wastes got dumped into the lakes. Hence most of these lakes started getting filled up and slowly started getting deteriorating and vanished. This resulted in flood in 1964 where most of residences were under water cover.

water for industries as well as drinking purpose. The waste which was generated out of the industries was directly thrown into the lake bed and thus started becoming a unused water body. These lakes started getting encroached. Till 19th century lakes were in good state Till end of 19th century 20 Lakes got vanish.



Figures: Growth of Kolhapur city from 18th century till 20th century.



Figures:- Industrial Establishment in Kolhapur and Flood of Kolhapur city in year 1964

STATUS OF LAKES OF KOLHAPUR CITY:

Due to its natural topography most of the water bodies were formed in an around the Kolhapur city.

In year 1828 there were around 20- 28 Number of Lakes which was built by Shahu Maharaja of Kolhapur city for drinking as well as agricultural purposes. These water bodies had lots of Religious, socio cultural, use and aesthetical values These lakes were acting as a source of

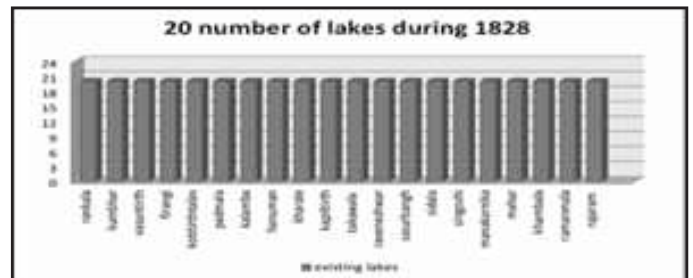


Figure 1 - No. of Lakes in 18th Century

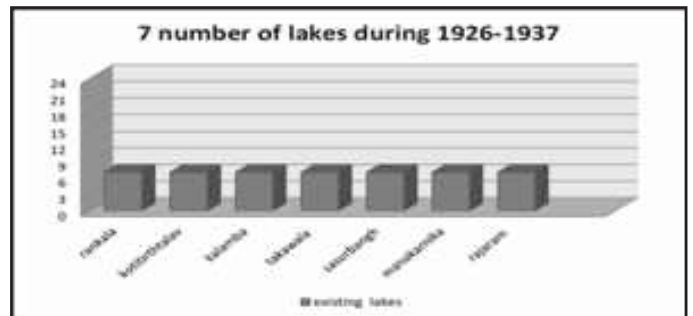


Figure 2 - No. of Lakes in 19th Century

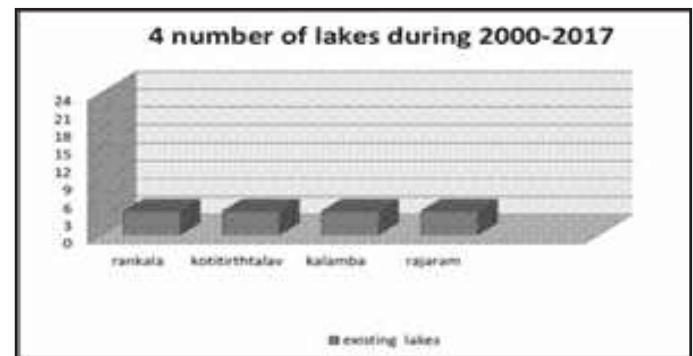
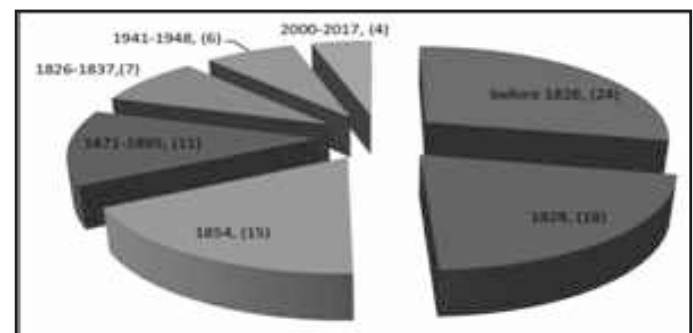


Figure 3 - No. of Lakes in 20th Century



Figures: Environmental status Report of Kolhapur; Pie chart :- Author

Factors Responsible For Degradation of Lakes:

Various Factors responsible for Degradation of Lakes :

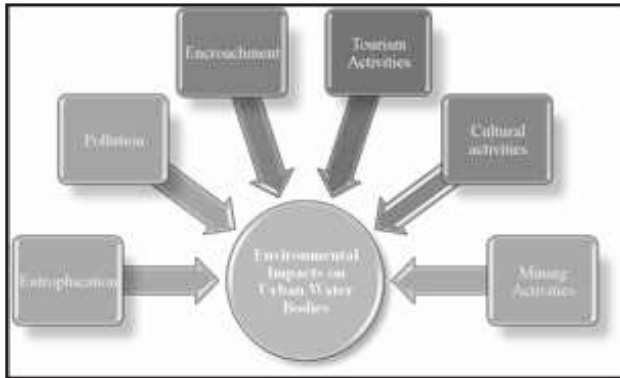


Figure: chart showing Factors responsible for degradation of lake

Issues of Existing Lakes:

- Discharge of Industrial Effluents in Lake Water
- Discharge of sewage into the Lake
- Garbage Dumping on the Lake edges
- Contamination of water due to dumping of garbage and waste thrown into the Lake Bed.
- Eutrophication and Siltation of the Lake Bed
- Privatisation of Kolhapur Lakes
- Ganesha Idols Immersions
- Washing of clothes, vehicles and Domestic animals in the Lake
- Deposition of water hyacinth on the Lake water
- Eutrophication of Plants and animals
- Depletion of surface and ground water table
- Deterioration on Lake water Quality
- Ecological Imbalance ie Loss of Flora and Fauna
- Deterioration of Edge along the Lake
- Foul odour due to presence of Algal bloom and other

Current Situation of Lake:



Image: Washing of clothes and vehicles on the banks of lake.

Conclusion:

Unplanned growth and rapid urbanization has not only led to deterioration of natural resources but also has resulted in loss of flood carrying capacity which once acted as sponges which has led to urban floods. Disappearing of these water bodies or lakes has resulted in declination of ground water table. Every cities are blessed with natural resources like Lakes due to its rich and Natural Parameters associated along. These lakes acts a source of Restoration of water, Maintains Ecological balance, Enrich Ground water table, enhances Flora and Fauna and also acts as sponges for collection of water and prevention during Flood.

Recommendations:

Discharge of untreated sewage should be stopped by giving solutions like diverting the outflow pipe by not letting the water to be mixed into the Lake Certain Ecological Techniques like Bioremediation and Phytoremediation to be applied for treating the water quality of the Lake.

Plantation along the Lake bed so that water runoff could be controlled and maintained, hence increase in ground water table.

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Role of government for upliftment of villages

Saansad Adarsh Gram Yojana(SAGY) The goal of SaansadAdarsh Gram Yojana is to translate this comprehensive and organic vision of Mahatma Gandhi into reality, keeping in view the present context. The SaansadAdarsh Gram Yojana was launched on 11th October, 2014. (Chatterjee)

- ♦ Encourage minimization of waste through in-house backyard composting, vermicomposting and biogas generation. (Mondal, Nongovernmental Organization in India)

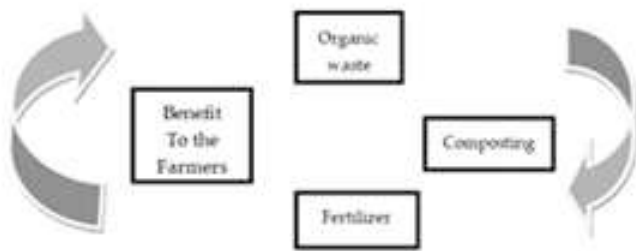


Figure 1 A closed loop is formed



2.3.2 Swachh Bharat Mission(SBM)

The Government of India had launched *Swachh Bharat* Mission on 2nd October 2014, to achieve *Swachh Bharat* by 2019. The Mission aims to strive to the problems that were hindering, the progress and by focusing on critical issues affecting outcomes.

New efforts for villages

NGO's in rural India

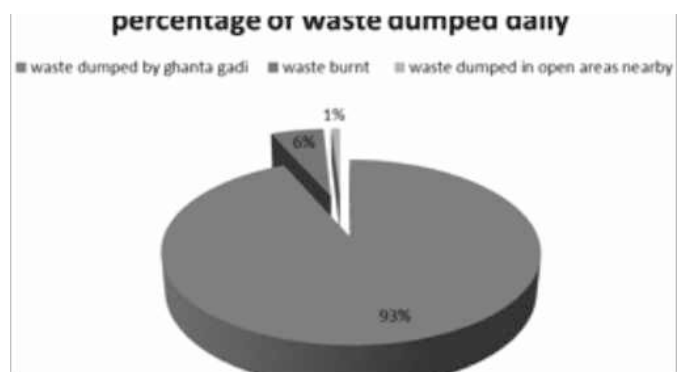
The Indian government contemplate an active role of NGOs in developing self-dependent communities. These NGO groups taught these villagers, how to use their resources for their own development.

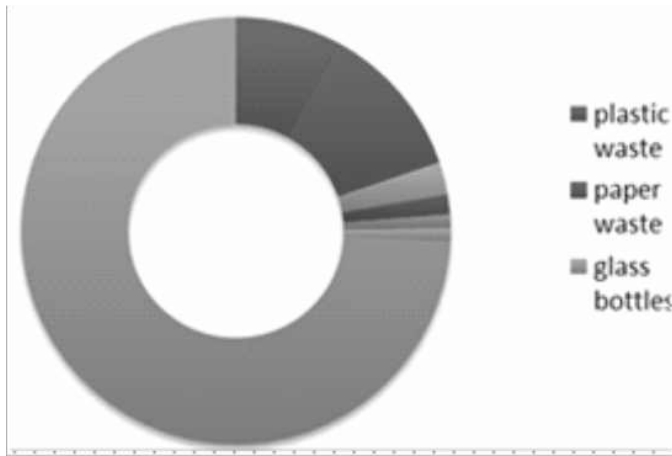
- ♦ Create mass awareness, ensuring public participation in segregation of recyclable material and storage of waste at source.
- ♦ Provide employment through organizing door-to-door collection of waste.
- ♦ Ensure public participation in community based primary collection system.



Waste getting into river streams the river stream

Existing percentage Solid waste management of Khed-Shivapur After sampling & surveying.





5.0 Conclusion

Sustainable waste management at village level aims at preserving the natural environment and create sustainable means of income for the people of the village. Due to vast population of India there will always be a difference in income level of the people. This provides an option for the poor other than giving up agriculture and shifting to bigger cities. Waste management aims to help people to improve the living standards of the entire village by considering “*waste as Gold and not waste as thrash*”. The recycling industry might be able to provide an opportunity for the people in this village with the help of sustainable waste management system.

A sustainable waste management system avoids excessive use of natural resources. This technique follow's the three principles of recycle, reduce and reuse. These technologies are proven and are in use currently with a great degree of success. A village should become sustainable in itself by proper managements of its renewable resources, to, establish the system of reusing and recycling the waste to protect environment. It's a need of the time to focus on Improving the quality of air we breathe, quality of water we drink and nutrition value of food we eat in villages.

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Sound is Space less

Every space (a room, building, lung, organ, cave, instrument, street, etc.) has its own acoustic character - its own capacity to mould sound - owing to its shape, size & material composition. Reflections, for example, produce echoes. When accumulations of echoes - big & small, loud and quiet - begin to overlap & blur together, we call it *reverberation*. A bathroom, for example, has a short, sharp reverberant character; whereas the sounds that fill a gothic cathedral may move, swell & linger for ten seconds or longer. Every space also has a built-in potential to be excited by specific vibration frequencies. That is, they may ring, hum, or "sing" when particular tones are struck within them. This phenomenon is known as *resonance* & every object or space (including rooms, buildings, bodies, instruments, etc.) has its own resonant frequency. These are the material factors that preoccupy sound artists, instrument designers & musicians, enticing them to adopt sound's point - of - view & experiment with different combinations of vibration and space.

Sound as element of space

The soundscape or Sonic landscape, or the acoustic environment, as it may be termed, can be perceived by human being in varied range. It may range from urban design to wildlife ecology. The Acoustical environment is the combination of all the acoustical resources of a given area i.e., a natural sound & human caused sound - as modified by the environment. The study of soundscape includes natural animal vocalizations, sound of weather, sounds of natural elements and environment & sounds created by humans for example - musical composition & human activities such as conversation, work & sound of mechanical origin resulting from use of industrial technology.

Sound and perception of architectural spaces

The auditory experience: - Vision is directional while sound is Omni directional. Thus sight isolated while sound is Omni directional. Acoustical character of a space can lend intimacy or monumentality, invitation or rejection, hospitality or hostility; for example an echo created in a narrow street or inside an empty cathedral yields the space its own identity & connects us to the space, by creating specific memories. The form the volume & the material, contributes to the sound generation in its interior and exterior spaces.

Soundscape and Sacred Architecture

Any religion is closely associated to its Aural environment. The unique Aural environment of religious spaces acquires symbolic meaning. This is evident in various faith traditions including temples, mosques & churches.



Fig1. Ringing bells, chanting mantras, recitation of aarti and strotram are characteristic to soundscape of temples.



Fig2. Playing Shehnai and Tabala instrument in wedding ceremony are characteristics to soundscape of Wedding hall.



Fig4. Playing music in DJ party characteristics to soundscape of Disco theque.



Fig3. Playing instrumental music during dinner or lunch party in hotel are characteristics to soundscape of hotel or party space.

Any religion is closely associated to its Aural environment. The unique aural environment of religious spaces acquires symbolic meaning. This is evident in various faith traditions including temples, mosques & churches Temple bells Ringing bells, chanting mantras, recitation of aarti & strotram are characteristic to soundscape of temples. In every Indian temple different kinds of bells have been used since time immemorial. There is a similarity between the sound of the bell & the sound of "Aum"; in fact there is some inner relationship. The sound of the bell continues charging the temple all the daylong & the sound of "Aum" also charges the temple with its vibrations. Temples are designed & constructed in such a way that sound can reverberate inside. These direct & reverberating sound interact with our frequencies within, thus making us aware of vibration nature of our existence. People who are visiting the temple should ring the bell when entering the



temple. The bell is made in such a way that when they produce a sound it creates a unity in the Left & Right parts of our brains. The moment we ring the bell, it produces a sharp and enduring sound which lasts for minimum of 7seconds in echo mode. The duration of echo is good enough to activate all the seven healing centers in our body. This results in emptying our brain from all negative thoughts. This bell sound is also absorbed by the idol and vibrated within the Garbhagriha (inner sanctum) for ascertain period of time. The ringing of the bell in temple produces what is regarded as an auspicious sound. It produces the sound Om, the universal name of the Lord. There should be auspiciousness within and without, to gain the vision of the Lord who is all-auspiciousness. Even while doing the ritualistic aarati, we ring the bell. It is sometimes accompanied by the auspicious sounds of the conch & other musical instruments. An added significance of ringing the bell, conch & other instruments is that they help drowned any inauspicious or irrelevant noises and comments that might disturb or distract the worshippers in their devotional ardour, concentration and inner peace. When the conch is blown, the primordial sound of Om emanates. Om is an auspicious sound that was chanted by the Lord before creating the world. It represents the world and the Truth behind it. Ancient India lived in her villages. Each village was presided over by a primary temple & several small ones. During the aarati performed after all important poojas & on sacred occasions, the conch used to be blown. Since villages were generally small, the sound of the conch would be heard all over the village. People who could not make it to the temple were reminded to stop whatever they were doing, at least for a few seconds and mentally bow to the Lord. The conch sound served to briefly elevate people's minds to a prayerful attitude even in the middle of their busy daily routine. Mantra & Stotram Mantra is a projection of cosmic sound. Mantra is the principal of vibration, born out of conjunction of Shiva & Shakti. Mantra is the primordial energy, which is the latent within the mantras of mystic syllables. Mantras is a mystic sound combination composed of sanskrit letters. A simple mantra consists of atomic monosyllabic sounds such as "Krim", "Hrim", "Shrim", "Aim" & more complex mantras are composed of a sequence of such syllables.

Application of Soundscapes

Soundscape element can be successfully employed to strengthen the construction of architectural spaces. The audible attributes of physical space have always contributed to the fabric of human culture, as demonstrated by prehistoric multimedia cave paintings, classical Greek open-air theaters, Gothic cathedrals,

acoustic geography of French villages, modern music reproduction, and virtual spaces in home theaters. Auditory spatial awareness is a prism that reveals a culture's attitudes toward hearing and space. Some listeners can learn to "see" objects with their ears, for example, we can all hear spatial geometry such as an open door or low ceiling.

Sound In Architecture:

Sound in architecture is often misrepresented or misguided as architects place emphasis on the visual aspect of a building. While we cannot deny the marvel and beauty of such structures and are often mesmerised by the facades. We tend to forget how sound and other elements are affected by the structures. Sound in architecture can separate a normal building from an iconic one. While architecture has a strong visual aspect as it combines strong forces of design, art, history, science & engineering and influences. It often lacks an important element of aural pleasure not making it memorable as it deserves to be.

Conclusion

Designer should understand the significance of soundscapes or Aural environment as a very effective tool for expression of architectural spaces. Soundscape elements can successfully employ to strengthen the experience of our built environment. Designers typically consider only the visual parameters which are included in the fundamentals of basic design, but the Sound component is missing which define Aural Architecture i.e. a aspect of real & virtual spaces that produces an emotional, behavioral & visceral response in inhabitants. Generally, people do not have much awareness on the intersection of sound & wonderful architecture. Acoustic design is an essential part of a successful design of a building.

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4. Nodes: They may be primarily junctions, places of a break in transportation, a crossing or convergence of paths, moments of shift from one structure to another.

5. Landmarks: Landmarks are another type of point-reference, but in this case the observer does not enter within them, they are external.

Identity:

This phrasal word used since late 1970's. It is more than the attachment, related to social identity, like gender & social class. It is related to observation & interpretation w.r.t. environment. There are two types consists of memories, values thoughts, ideas and settings and another type consists of the relationship between different settings: home, neighborhood and school. Identity of a place which is historic background, unique character & significance of aesthetics. Identity is the most important thing in Fundamentals of Architecture & Heritage rich precinct. The awareness that shows, history of a place & Architectural characteristics used in that era. Heritage precincts are the main focal point of the city where reflects the community gatherings in events & the social life.

Table 1: Relationship of the space with the Memories

	Relationship	Type of Bond	Process
1	Biographical	historical and familial	being born in & living in a place, develops over time
2	Spiritual	emotional, intangible	feeling a sense of belonging, simply felt rather than created
3	Ideological	moral and ethical	living according moral guidelines for human responsibility to place, guidelines may be religious or secular
4	Narrative	mythical	learning about a place through stories, including : creation myths, family histories, political accounts & fictional accounts
5	Commodities	cognitive (based on choice and desirability)	choosing a place based a list of desirable traits & lifestyle preferences, comparison of actual places with ideal
6	Dependent	material	constrained by lack of choice, dependency on another person or economic opportunity

Table 2: Different levels of sense of place(Relph, 1976)

Row	Variety of surface	Description
1	Apathy towards the place	Sense of place is not considered in the literature, but can be used to measure sense of place.
2	Knowledge of being located in a place	In this level people are familiar with the place; they identify the symbols of the place but they do not have any particular emotional connection to the place and its symbols. Therefore, they do not integrate themselves with the place.
3	Belonging to a place	In this phase, people not only are familiar with the place but they have an emotional connection with the place. In this stage, people distinguish the symbols of the place and in contrast to the previous stage those symbols are respected.
4	Attachment to a place	People have a strong emotional relationship with the place. The place is meaningful and significant to people. In this regard, the place has unique identity and character to the users via its beloved symbols
5	Identifying with the place goals	In this level, people are integrated with the place; moreover the goals of the place are recognizable by the people. The users also are very satisfied with these goals; hence they have a deep attachment to the places.
6	Involvement in a place	In this level people have an active role in the place. They would like to invest their own resources such as money, time, or talent in the activities of the place. Therefore, as opposed to previous levels that were mostly based on attitude, this stage is probed mainly through the real manners of the people
7	Sacrifice for a place	This level is the last and also the highest point of Sense of place. Deepest commitment to a place is the main aspect of this phase. People would like to sacrifice of important attributes and values such as prosperity, freedom, or, life itself.



Discussion:-

Recently the concept of sense of place has been changing & we are recognizing in terms of Architecture & urban context. It has different meaning on the point of view of sociology, culture & psychology. Relationship varies between sense of place & people perception of social attachment is very difficult to express in research. Sense of place is depending upon individual perception of that place and space with the special behavior & emotional characteristics.

Conclusions:

***The Architecture of sense of place Implication for Designers and Planners**

***Sense of place is important in improving the quality of architectural space**

***The Value and Significance of Cultural and Historical Heritage**

Building facades redesign some in sympathetic facades outputs were focused on the commercial activities and bazaars facade redesign original character image add architectural elements Elements and activities signs, sheds, all activities and elements new additions include streetscape elements that meet the community needs and character enhancement lighting, painting, and signage redesign highlighting character forming and creating character, signage was related to shops and bazaars activities, lighting was related to street furniture & sidewalks furniture elements redesign important addition to improve visual image and aesthetic value an architectural additions can revitalize the lost identity in the street, it used material, elements, colours, scale and symbols of historic character Sense of place is related to human sense of place & their perception of physical environmental characteristics. This all related to subjective experience such as memories, traditions, history, culture society which is intangible aspect & other part is physical environmental such as Design, Landscape etc. Which is tangible. Sense of place is again related to people emotions in that environment. So important is that to save and focus on the identity of the place with futuristic design or intervention. So we can imagine the sense of that place according to historic values, identity of that place was is before. According to physical character and historic content we can design such places which is helps up to bring back historic value & identity.

Table 3: Draft Solutions through the Streetscapes

Building facades redesign	redesign some in sympathetic facades	outputs were focused on the commercial activities & bazaars facade redesign
	original character image	add architectural elements
Elements and activities	signs, sheds, all activities and elements	new additions include streetscape elements that meet the community needs and character enhancement
Lighting, painting, & signage redesign	highlighting character	forming and creating character, signage was related to shops and bazaars activities, lighting was related to street furniture and sidewalks
Furniture elements redesign	important addition to improve visual image and aesthetic value	an architectural additions can revitalize the lost identity in the street, it used material, elements, colours, scale, and symbols of historic character

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2. Aims & Objectives: Twenty Nine Reference Management Software's, Name of software developer and also latest version of software mentioned in this paper because the main aim of this paper is to find out online Reference Management Software's.

- To identify Reference Management Software.
- To elaborate functions of Reference Management Software.

3. Methodology : Online survey method has been used for data collection of Reference Management Software's.

4. Discussion : When we begin our research for any piece of work, it is important that we record the details of the entire information find. References Management Software's helps us to manage the bibliographic citations and also fulfils 4th law of S. R. Rangnathan "Save time of users" but everyone are not aware about the Reference Management Software's.

Table.1: Identified Reference Management Software's :

Sr. No	Name of Software	Name of Software Developer	Latest Version of Software
1	Aigaion	Aigaion developers	2012-01-18 (2.2)
2	Bebop	ALaRI Institute	2009-11-10 (1.1)
3	BibBase	Christian Fritz	2013-07 (v3)
4	BibDesk	BibDesk developers	2013-05-04 (1.6.1)
5	Biblioscope	CG Information	2012-04-01 (9.0.8.8)
6	Bibsonomy	University of Kassel	2013-11-18 (2.0.37)
7	Bibus	Bibus developers	2009-10 (1.5.0)
8	Bookends	Sonny Software	2012-1-14 (11.2.4)
9	Citavi	Swiss Academic Software	2014-02-17 (4.3)
10	CiteULike	Oversity Limited	
11	Colwiz	colwiz Ltd	2013
12	Decear	Otto-von-Guericke University	2013-10-17 (1.0)
13	EndNote	Thomson Reuters	2013 (X7)
14	JabRef	JabRef developers	2013-01-12 (2.9.2)
15	KBibTeX	KBibTeX developers	2013-12-29 (0.5)
16	Mendeley	Elsevier	2012-11-15 (1.5.2)
17	Papers	Springer	2012-11-22 (2.4.0)
18	Pybliographer	pybliographer developers	2010-10-14 (1.2.14)
19	Qiqqa	Qiqqa	2012-07 (v44)
20	Rebase	rebase developers	2014-02-28 (0.9.6)
21	RefDB	refdb developers	2007-11-05 (0.9.9)
22	Reference Manager	Thomson Reuters	2010 (12.0.3)
23	Referencer	Referencer developers	2013-05-07 (1.2.0)
24	RefWork	RefWorks / ProQuest	2013
25	SciRef	Scientific Programs	2012-11-20 (1.0)
26	Sente	Third Street Software, Inc.	2013 (6.6)
27	Wikindx	Mark Grimshaw	2013-05-13 (4.2.1)
28	WizFolio	WizPatent	2011-01 (Avatara)
29	Zotero	Roy Rosenzweig Center	2013-12-18 4.0.17.1)

Famous software:

1. Mendeley Reference Manager
URL: https://www.mendeley.com/?interaction_required=true
2. EndNote Reference Manager
URL: <https://endnote.com>
3. RefWork:
URL: <https://www.refworks.com/>
4. Zotero:
URL: <https://www.zotero.org/>

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Fig.1 Mendeley home page

- Import citations from bibliographic databases and websites
- Gather metadata from PDF files
- Allow organization of citations within the RM database
- Allow annotation of citations
- Allow sharing of the RM database or portions thereof with colleagues
- Allow data interchange with other RM products through standard metadata formats (e.g., RIS, BibTeX)
- Produce formatted citations in a variety of styles
- Work with word processing software to facilitate in-text citation.[19]
- Retrieval of reference information from online bibliographic databases
- DOIs and other persistent identifiers for bibliographic information
- Automated management of PDF files
- Open Access for easier access to full-text content
- Web-based reference management easier for

collaboration and use across multiple devices.[3]

Two main functions:

- a. Building a database of citations, useful for keeping track of and organize the documents useful for one's research
- b. Formatting bibliographies and citations when writing paper.[4]

Conclusion: In this technological age Reference Management Softwares are saves the time of Students, Teacher, and Researchers. Reference Management Software helps users within creation of reference list, Research Database, and sharing of database.

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IMPACT OF OCCUPATION ON TRADITIONAL HOUSES OF KOLI COMMUNITY - A CASE OF VARSOLIKOLIWADA, ALIBAG, MAHARASHTRA

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Abstract : This research is based on the backdrop that a house, being a human product of practical character, has an ability to show how the daily occupational activities influence its form. Modernization is taking over the house forms without giving enough thought to the traditional aspects. This research objectifies fishing occupation and focuses on studying various layers of traditional houses with respect to occupation. This is done by documentation of traditional Koli houses, activity mapping and interviewing the practicing *Kolis* in Alibag, Maharashtra. It is aimed to analyse the impact of occupation on the traditional house forms of the *Koli* community.

Keywords : Traditional, Occupation, Koli, House form, Fishing

Introduction:

Kolis community have been an integral part of the Indian society since ancient times. Fishing has been their traditional occupation and a substantial generator of income. Modern industrialization on the current scales has been responsible for the decreased scope of development for such traditional occupations.

The fishing is usually limited to the nearby fishing zones in shallow waters, which is why the size of the catchment area is quite small. There is a high demand for this fish in local markets as well as markets of Mumbai. To cater the needs of daily fishing, there are certain spaces located in and around the houses of these fishermen that establish a pattern or link between spaces.

According to Rakoff (1977), a house is a meaningful cultural object. The house is endowed with meaning according to culture's worldview and ethos by builders, dwellers and observers on different basis.

Factors affecting house form :

According to the theory put forth by Rapport (1969), socio-cultural forces, including religious beliefs, family and clan structure, social organisation, a way of gaining a livelihood, and social relations between individuals are the primary factors affecting house form. The secondary ones are climate, the availability of certain materials, and constraints and capabilities of a specific level of technology.

Introduction to study area:

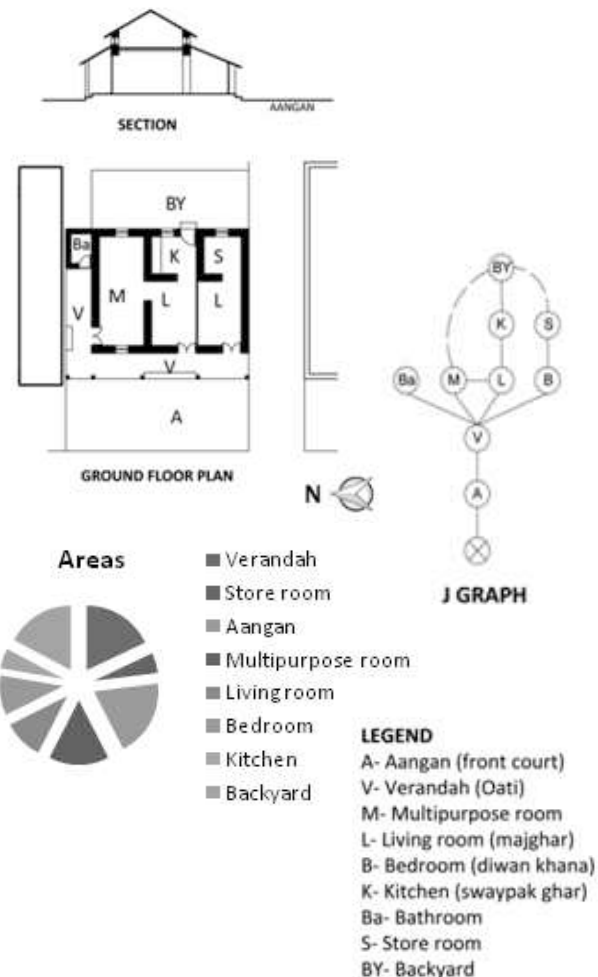
VarsoliKoliwada is located in *Alibagtaluka* of Raigad district in the coastal stretch of Konkan in western Maharashtra. It is located at a distance of just 2 km from the city of Alibag, bordering the urban area. Tourism has

been on a rise since the last decade but no significant effect is recorded on the traditional settlement.

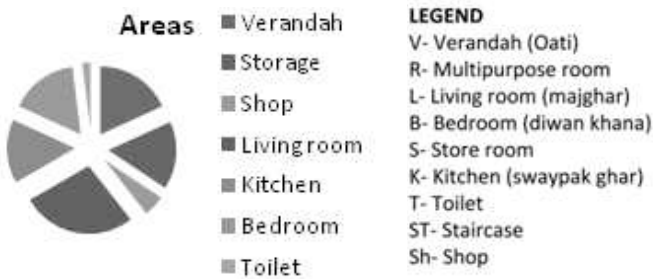
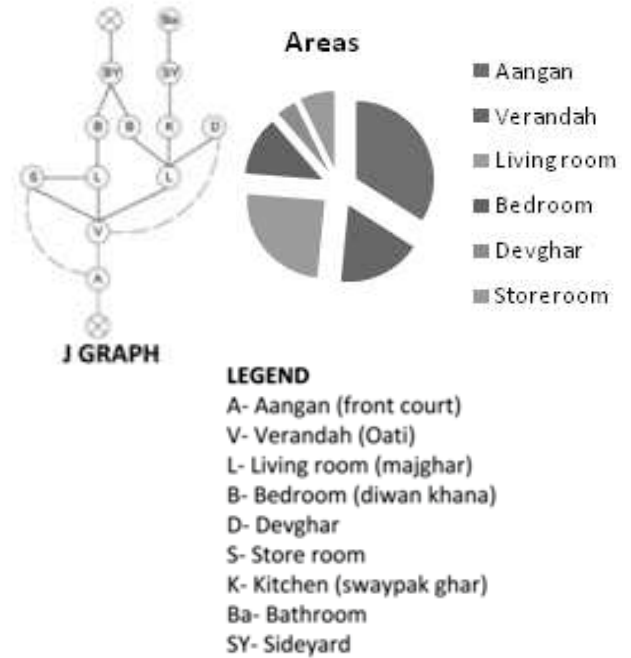
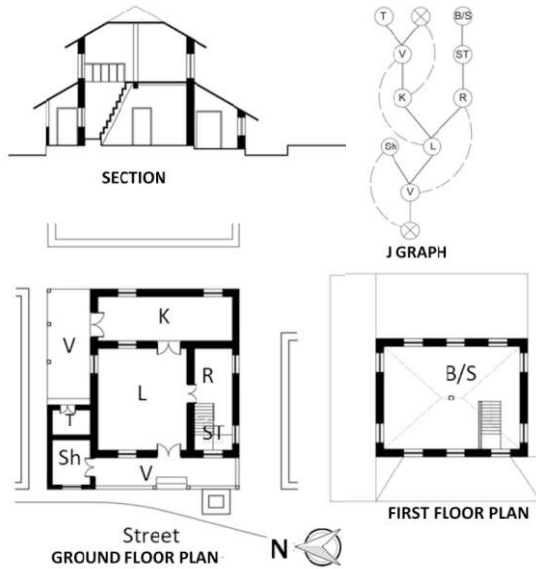
Discussion

Case 1: Mr. Monesh Jaynakhava - Row House

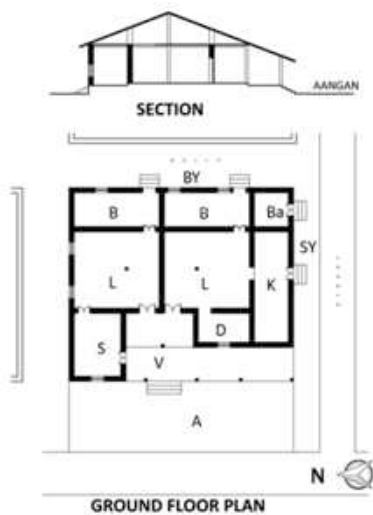
House located closer to the creek



Case 2: Mr. Subhash Bhubu - Detached house; house located in the core of the settlement



Case 3: Mrs. Poshitai Malvi- Semi-detached house; house located on the periphery of *Koliwada*



Findings:

The occupation of fishing is mostly confined to the sea and docks, which is why not many related activities are carried out near the housing premises. It plays a considerable role in influencing the spatial organisation of the house.

Factors influencing the spatial configuration

- Location of storage
The storage needs to be dry, moisture free and easily accessible.
- Location of workspaces
The fishing related activities are generally smelly and unclean which is why they are not carried out inside the house. Open or semi-open spaces are utilized.

Conclusion:

The analysis concludes that the occupation has a significant impact on the spatial organisation of houses of the Koli community. Based on the analysis, it is concluded that the modern needs demand larger household spaces than work spaces. This can be achieved by keeping the spatial organisation intact and building houses with larger spaces suiting the needs.

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PERCEPTION OF HOUSING ENVIRONMENT AMONG MID RISE DWELLERS

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Abstract:

The rapid growth in population is originally promoting the construction of high rise buildings. This high rise buildings are helping in saving precious land which can be utilized for agricultural and industrial purposes, can lower the cost of facilities like water supply, transport, electrification, drainage etc. Fortunately, by the 70s, there was awareness of the problems like physical, mental and social – created by the high rise structures. High rise buildings were sometimes accused for causing fear, dissatisfaction, stress, behaviour problems, lower physical activity, suicide, poor social relations, and social isolation, reduced helpfulness, and hindered child development. So to study how socially and psychologically a building influences its occupants living particularly on 7th to 9th floor of mid-rise buildings in Pune was surveyed. But at the end through research the findings indicated favorable perception of the housing environment by the residents of midrise buildings irrespective of their gender.

Keywords : Midrise, Residents, Perception.

Introduction

A high growth in population and changes in the life style of human beings have turned people to be city oriented and agriculture which was previously the main occupation of people has slowly and gradually given way to occupations in the fields of industry, trade and commerce. All these factors have made a large section of the population rushing to the cities creating thereby tremendous and unmanageable space problems.

There is little possibility for horizontal expansion in the cities to facilitate accommodation of such flow of people. So, the reason for rapid increase in constructing tall buildings includes all the above-mentioned factors. Therefore the 2-fold planning has been done in pune^[5]. The first way out has been the expansion of city limits and including the suburbs within the boundaries of the cities. The other way, has been the vertical expansion of the available spaces providing maximum possible accommodation to as many numbers of people as possible through the construction of High-rise as well as mid-rise buildings. Any building which is more than 10-storey or 33 m high from reference datum comes under High-rise^[9].

Literature review

The residential environment is known to be an important determinant of quality of life and well-being (Lawrence, 2000). Therefore, the question whether “living in mid-rise housing is good or causing problem” is now being asked by social scientists in various fields including Environmental Psychology^[8]. We can praise mid-rise living in such a way

that by constructing mid-rise living we can save land which can also be used for agriculture and industrial purpose, it also helps in Lowering the cost of facilities like water supply, transport, electrification, drainage etc. But by seventies some negative opinions were raised by criticizing high rise living in many contexts.

These buildings have often been accused for causing many unpleasant consequences, namely fear, dissatisfaction, stress, behavior problems, and poor social relations, reduced help fullness, and hindered child development (Cappon, 1972; Angrist, 1974; Conway and Adams, 1977). Some researchers (Hird, 1967; Cappon, 1971; Mitchell, 1971; Jephcott, 1972; McCarthy and Saegart, 1978) have found high rise buildings as isolating people in depersonalized living spaces, causing loneliness and anxiety, of lowering their interest in community affairs and so on. The present investigation aims to study the nature of housing environment perception among the mid-rise residents of Pune city.

Methodology

Beginning from literature Review, it continued with a practical investigation involving casual interviews and semi structured interviews. The research was limited to 7th to 9th floor due to vertical expansion of city due to urbanization. The questionnaire also contained items like floor numbers & number of years the respondent had been living in the present dwelling unit, and satisfaction or dissatisfaction with the present residence with reference to psychology in relation to space and the reasons behind it.

Findings: First the respondents were asked to pick their preferences and dislikes regarding mid-rise living, from a list provided.

Table 1: List of preferences and dislikes of 20 mid-rise residents

Preferences	Dislikes
Security	Smaller spaces
Allotted parking area	Connectivity to ground space less
Better facilities	Noise pollution
Easy maintenance	Heavy wind flow
Good view	
Good light and ventilation	

The feedback of 20 residents were marked and evaluated respondents include people living on respective floors. The number of years they've been living in the residence for at least 5 years. This ensures an unbiased and more realistic data collection.

Table 2: Residents living on 7th floor [parameters are rated out of 10].

Building name	View	Light	Air Ventilation	Balcony	Privacy	Elevators	Noise pollution	Passage
1.Windor county	7	8	8	7	9	7	8	9
2.Mansar i	9	8	8	9	9	9	8	8
3.Kinaya	6	7	9	6	9	7	7	9
4.Majestic tower	9	6	9	9	9	9	8	9

Table 3: Residents living on 8th floor [Parameters are rated out of 10]

Building name	View	Light	Air Ventilation	Balcony	Privacy	Elevators	Noise pollution	Passage
1.Windor county	8	9	9	8	9	7	8	9
2.Mansar i	9	9	9	9	9	9	8	8
3.Kinaya	7	7	9	6	9	7	7	9
4.Majestic tower	9	6	8	9	9	9	8	9

Table 4: Residents living on 9th floor [Parameters are rated out of 10]

Unit name	View	Light	Air Ventilation	Balcony	Privacy	Elevators	Noise pollution	Passage
1.Windor County	9	9	8	8	9	7	9	9
2.Mansar i	9	9	8	9	8	9	8	8
3.Kinaya	6	7	9	6	9	7	7	9
4.Majestic tower	9	6	8	9	9	9	7	9

Fig: 4 Overall Percentage Wise Satisfaction of User with Mid Rise Dwellings

Analysis and discussion : Upon analysis, it is found that although the literature study showed unfavourable perception of midrise dwellers about housing environment, there are similar opinions which maybe generalized to reach important conclusions, the face – to – face casual interviews have given an insight to the various characteristics that affect the way people perceive vertical housing. These characteristics include the user's background, previous experiences, age, social circle, expectations and preferences.

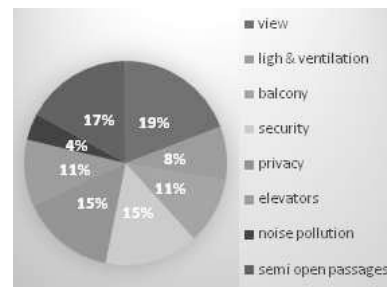


Fig 4.

When interviewed residents 19% residents were fully satisfied with their view, 17% of residents need more interactive spaces in passages, 15% of residents were satisfied with security

and privacy, 11% residents were having problem with elevators as there was no maintenance done and balcony had some privacy issues, 8% residents were satisfied with light but in some cases service ducts obstruct light and ventilation, only 4% residents were not having any problem with noise pollution due to ground space

Conclusion

This research is a small attempt to understand how people perceive mid-rise dwelling systems in Pune. The comparative analysis of the housing environment perception it is found that the reviews regarding elevators in building is not good it needs to be improved and about noise pollution it also needs improvement by giving proper sound insulation. However, from the research it is relatively clear that people in Pune have a positive perception towards high rise dwelling. These findings will help architects and planners while planning housing with these perceptions. This paper speaks of ways in which vertical expansion can be made easier and better for the people. Furthermore, it's the responsibility of the developer and designer to ensure the provision of proper facilities to the dwellers, in order to have qualitative designs and thus increasing its acceptability

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THE COLOUR INCLINATION IN PRE SCHOOL OF AUTISTIC

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Abstract: Since the rate of children diagnosed with Autism Spectrum Disorder (ASD) with an Autism Spectrum Disorder (ASD). Concerning children with autism spectrum disorder (ASD), neuro developmental disorders with unusual sensory processing, some anecdotal evidence from parents, caretakers, teachers of student with ASD and persons with ASD themselves suggests that children with this disorder may perceive colour differently to Typically Developed children. It becomes crucial for architect and building designer to contemplate on the appropriate approaches to design inclusive educational building to benefit the users. This research will look into that which colours play important role in classroom of Autistic preschool to give them comfort and healthy environment.

1. INTRODUCTION:

Autism spectrum disorder (ASD) has gained much attention as an important characteristic that affects the way individuals experience modern learning environments. ASD affects cognitive performances within a social, communicational, and behavioural area of functioning^[1] If classrooms & learning environments are not designed to accommodate students with developmental disabilities, it can be assumed that they will not learn these important skills and may struggle to live in our society^[11].

A. AUTISM

“Autism spectrum disorder is a serious neuro developmental disorder that impairs a child's ability to communicate and interact with others. It also includes restricted repetitive behaviours, interests and activities. These issues cause significant impairment into social, occupational and other areas of functioning”^[12] Autism is considered “the most severe developmental disability. Appearing in the first three years of the life of a child, it involves impairment in verbal and nonverbal communication. Some people with autism have limited interests, strange eating or sleeping behaviours or a tendency to do things to hurt themselves, such as banging their heads or biting their hands”^[13].

B. COLOURS AND THE BUILT ENVIRONMENT

Understanding the role of Colour within an environment, such as how differences in decibal level effect of visual observation, mood, Activities & stress levels, provides the necessary framework when designing environments for individual differences^[3]

C. AUTISM AND THE BUILT ENVIRONMENT

Appropriate interior design can help accommodate for

individuals with autism. Methods such as way finding, sensory zoning, and adoption of escape spaces are unique options discussed among researchers as possible, and evidence based, ways to assist individuals with autism^[4]. Though these ideas have promising implications, limited recommendations have been made within the regulatory system of designs for buildings.^[5]

D. AUTISM AND COLOUR

Colours appear more vibrant to autistic children. Of the autistic children tested, 85% saw colours with greater intensity than that of non-autistic children.^[15]

Monochromatic colour schemes (different tints and shades of the same colour) instantly create a peaceful environment. For example: light pink, medium pink and dark pink.^[15]

Analogous colour schemes (three colours side by side on the colour wheel) create balance. For children with ASD, consider cooler colours, such as blue, blue-green, and green, or blue, blue-violet and violet.^[15]

3. METHODOLOGY:

The behavioural observation took place. Four classrooms were identified in two school based on their colour combination of classroom and behaviours were recorded from 10 participants.

A. DISCUSSION

1. The materials used in the current study consisted of six 35 cm × 50 cm cardboard rectangles coloured red, yellow, pink, blue, green, white, or brown.

They were given colours cardboard and told them to pick the colour which they liked. Participants were tested individually in a quiet room under daylight conditions. All of the six cardboards were presented to the participant,

who was seated on a chair and asked to pick the colour he liked. Their preference rank among the cardboards was measured by forced-choice paired-comparison procedure. Each time, the participant picked the colour, a preference for that colour was recorded. For the statistical analysis, the preference score was computed for the colour by subtracting its preference rank from the number of the stimulus colour after this activity I got some colours choice from them and I compared this with colour perception of psychologist.

2. I also discussed about colours around them like in open space and all indoor surrounding colours. and result compared with pallets chosen by student and perception of psychologist.

B. RESULTS:

80% participant picked blue colour first, then 70% participant

Choice green colour and 50% pink same 50% brown and 30%, 20% and 5% participant choice white, red, yellow respectively.

C. COMPARISON OF COLOUR PERCEPTION FROM PSYCHOLOGIST AND COLOURS CHOSEN BY ASD.

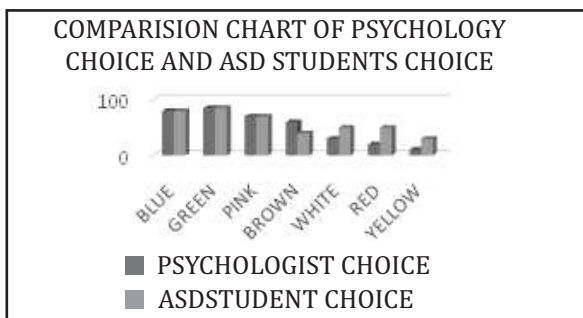


Fig.2 - Shows that colours chosen by psychologist and student with autism are approximately same.

5. CONCLUSION:

Regarding ASD children, the results of the current study are like their preference score for yellow, red & white was low & that for green, blue as well as that for brown was conversely elevated. the fact should be noted that children with ASD were certainly likely to avoid yellow red & bright white & conversely, to favor green, blue, pink and brown.

In second activity when discussed surrounding colours they liked the space which coloured with pink, blue, green & brown colour & These findings are certainly those predicted by our hypothesis outlined above. In order to explain these results, the fact that the yellow & red colour

had the highest luminance value among the colors tested should not be dismissed. The observed aversion to this color might reflect hyper-sensitivity of children with ASD to luminance.

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SPATIAL IMPACT OF OPEN AIR THEATRES ON KATHAK DANCE PERFORMANCES.

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Abstract : *Kathak* is an Indian classical dance performed in all over the India. Specifically in Pune *kathak* is widely performed as Pune has great *kathak* exponents and also great number of viewers. These shows are also organised in open air theatres. The aim of this research is to study the spatial impact of open air theatre on dancer's performance. The research methodology chosen is surveying with the help of questionnaire given to the professional *kathak* performers and documenting their experiences. Also observing the common features of performance spaces required for *kathak* dancer's to perform and comparing it with the open air theatres. The dancers who performed filled the questionnaire and from the other methodology adopted, the conclusion is spaces in open air theatres like stage, seating area, level differences impacts the performances of *kathak* dancers.

Key Words : Stage performances, enclosures, openness, indoor, outdoor

Introduction :

Every dance performance exists in space and time with its unique energy and motion. The space of the performance & its entire environment impacts the communication between artist and audience. (Sharon Lowen) Framed by the night sky, temple sanctum or velvet black stage curtains, the dance synergy melds with subtle and not-so-subtle variations in the rasa evoked.

Solo classical Indian dance choreography makes use of the dancer's personal space which can be expanded or contracted to the space available as long as the dancer knows where centre is located.

Background : *Kathak* is the one of the main genres of ancient Indian classical dance & is traditionally regarded to have originated from the travelling bards of North India referred as Kathakars or storytellers which wandered around & communicated legendary stories via music, dance & songs quite like the early Greek theatre having the impact of local architecture & landscape. some examples shows how the space impacted while performing in temples holistic Ramayana Mahabharata & *Bhajan Kirtans*.

Scope : The research would include the study of open air theatre from dancer's point of view for performance and comparative analysis of dancers' opinion and experience for an open air theatre with respect to the stage to be covered while dance, seating layout of the audience facing the stage.

Limitations :

1. Kathak performances are the aspect of study. The performance space considered for study is only open air theatre.
2. Professional dancers' experience is considered.
3. Mostly focused on the solo performances.

Objective :

- to study the spatial characters of the open air theatres favourable for dance performances such as stage, seating area, surrounding ambience and backdrop of the stage.
- To find out the limitations while performing in open air theatres.

Research methodology :

- Primary Data collection of various articles, books, researchers reviews by documenting and analysis.
- Layout standards for any performances.
- Case studies live and from literature.
- Users experiences & their remarks by questions and inventory method.

Literature study:

Space requirement for a solo dance performance : In an auditorium the below stage dimensions are optimum for a solo dancer to perform and cover the stage in order to connect with all the audience seating at different corners. This size is the average of all the auditorium stages in Pune.

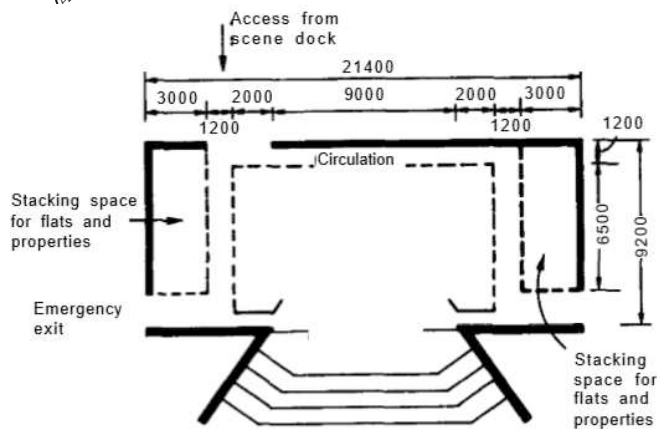


Figure 1 - Eversion of Kathak Space standard as per Kathak dance

Some basic standard requirements of the stage for performances as per,.....

- The stage should be wooden as it produces good sound of footwork.
- The audience seating area should be slanted towards stage @ 8 degrees.

2. Relation between open spaces and *kathak* dance :

- The performances were performed in *mandapa* & *ardha mandapa* of the temples. People used to gather in temple premises & the performances used to last from evening to dawn.
- Since then space becomes medium connecting the audience with the dancer.

Shaniwar Wada a Case study : Shanivar wada is 286 years old structure, continues to reflect the pride of Maratha empire till today. It is a cultural heritage of Pune city. Located in Kasba Peth, Pune having seat of Peshwa Empire till 1818 & it is located in the core of the city. Now a days daily, over 300 tourists all over from the globe visit this place.



Image of Shaniwarwada & Open Air Theater

- Total area of open air theatre : 1300 sq.m
- Dimensions of the stage : 18 m X 9.5m X 1.2m Back drop : Shaniwar wada itself
- Material used for stage : RCC
- Length of the stage : 18m Radius : 9.5m

Findings : After interviewing the dancers of different age groups, gender & experience graphical charts were made for data analysis.

Conclusion and Analysis :

1. A solo dancer has to cover the whole stage in order to connect with the audience at every corner, so the large stage of open air theatres makes the dancer to put more efforts in covering the stage.
2. For good performance and foot work sound quality they require wooden stage which is not available in open air theatres.
3. But the open air theatres creates good atmosphere for performers and audience.
4. As the audience may be sitting at lower level than the level present in auditoriums, it may be inconvenient for dancers to connect with the audience.

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