

**MKSSS's Dr. B.N. College of Architecture, Pune**  
Affiliated to Savitribai Phule Pune University

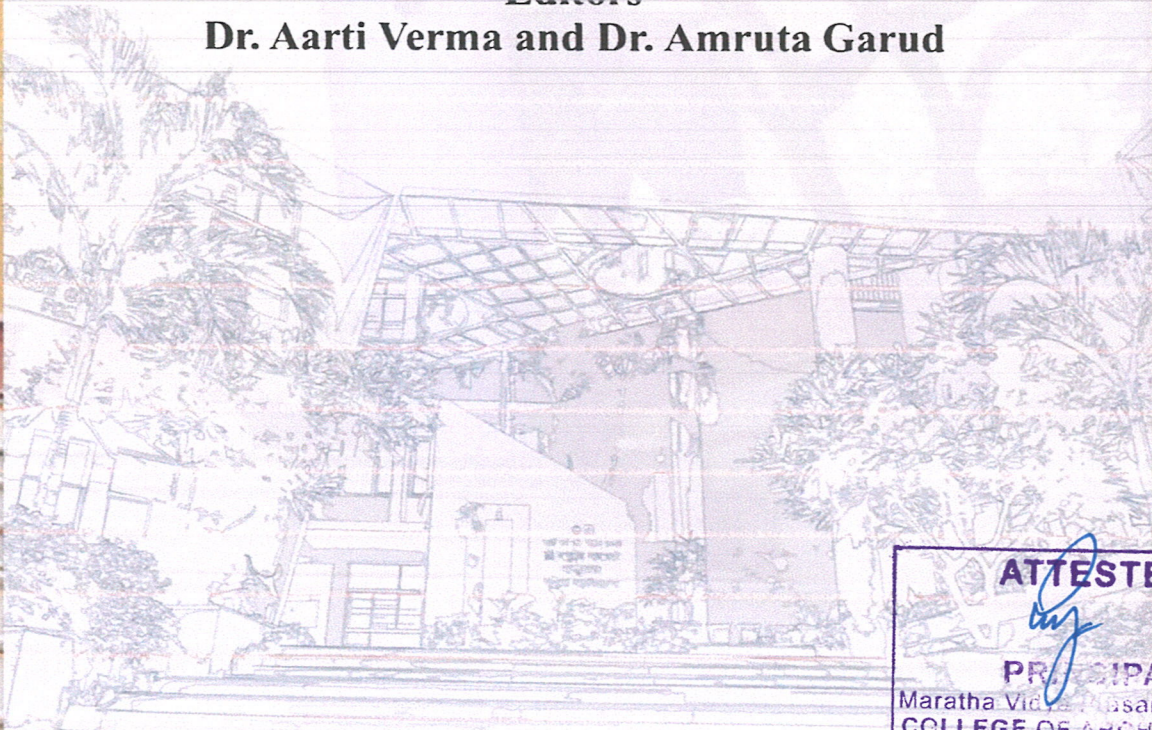
**BNCA Research Hub (BRH)**


# **Built Environment and Beyond: Theory and Practice**

**18th and 19th October 2022**

**Conference Proceedings  
Peer Reviewed  
eBook ISBN: 978-81-955887-1-8**

**Editors  
Dr. Aarti Verma and Dr. Amruta Garud**



**ATTESTED**  
  
**PRINCIPAL**  
Maratha Vidya Prasarak Samaj's  
**COLLEGE OF ARCHITECTURE**  
Nashik



Editors:

Dr. Aarti Verma

Associate Professor,

MKSSS's Dr. Bhanuben Nanavati College of Architecture

Pune 411052

India

Dr. Amruta Garud

Assistant Professor,

MKSSS's Dr. Bhanuben Nanavati College of Architecture

Pune 411052

India

## Conference Proceedings

Peer-Reviewed

eBook ISBN: 978-81-955887-1-8

This publication is based on the “National Conference on Built Environment and Beyond: Theory and Practice” held on 18th and 19th of October in 2022 at Dr Bhanuben Nanavati College of Architecture for Women, Pune. The event was organized by BNCA Research Hub (BRH).

Published in India in 2022 by BNCA Publication cell.

C/O Maharshi Karve Stree Shikshan Samstha's (MKSSS)

Dr Bhanuben Nanavati College of Architecture for Women, Karvenagar, Pune – 411 052

(Affiliated to Savitribai Phule Pune University)

Contact: 91-20-25474062 / 25476966

mail@bnca.ac.in; [www.bnca.ac.in](http://www.bnca.ac.in)

Copyright © BNCA Research Hub (BRH), BNCA Publication Cell

This work is subject to copyright. All rights are reserved by the Publisher, whether the whole or part of the material is concerned, specifically the rights of translation, reprinting, reuse of illustrations, recitation, broadcasting, reproduction on microfilms or in any other physical way, and transmission or information storage and retrieval, electronic adaptation, computer software, or by similar or dissimilar methodology now known or hereafter developed. The use of general descriptive names, registered names, trademarks, service marks, etc. in this publication does not imply, even in the absence of a specific statement, that such names are exempt from the relevant protective laws and regulations and therefore free for general use. The publisher, the authors and the editors are safe to assume that the advice and information in this book are believed to be true and accurate at the date of publication. Neither the publisher nor the authors or the editors give a warranty, expressed or implied, with respect to the material contained herein or for any errors or omissions that may have been made. The publisher remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

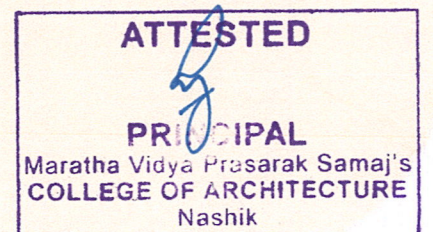
Printed in India

Cover Page designed by: Dr. Amruta Garud

Proofreading by: Dr. Vasudha Gokhale

Publication support: Dr. Amita Pradhan

Published by: BNCA Publication Cell





# Contents

## TRACK 1: ARCHITECTURAL EDUCATION

<b>Embedding Creative Art In The Landscape Design Studio At Post Graduate Level: A Pedagogical Approach</b> Ar. Amruta Barve and Dr. Swati Sahasrabudhe	15
<b>Pedagogical Approach To Study Vernacular Settlement In Kodagu, India Through Experiential Learning</b> Ar. Surabhi Gadkari and Ar. Khushboo Chandwania	23
<b>Importance Of Placemaking In Success Of Urban Mobility</b> Ar. Suruchi Ranadive and Ar. Purva Shah	31
<b>Encouraging Student Interaction With Specialist Professional Consultants</b> Ar. Vijaykumar Pawar	39
<b>The Use Of Virtual Reality And Neuro-Feedback Technology In Architectural Academia</b> Dr. Vaishali Anagal and Ar. Deva Prasad	47
<b>Contextualizing Pedagogical Approach For Structural Literacy For Architecture Education</b> Ar. Kanchan Atnurkar and Dr. Sujata Mehta	55
<b>Architectural Student's Attitude And Response Towards Experiential Learning By Adopting Inquiry-Based Learning In Building Material Education</b> Dr. Dharati Wankhade and Ar. Shweta Albal	63
<b>Role Of The Landscape Immersion In Zoo Design</b> Tejaswini Dhapate and Dr. Parag Narkhede	73
<b>Heritage Responsive Cities: Case Of Ahmedabad</b> Ar. Arundhati Nagargoje	79

## TRACK 2: DESIGN AND THEORY

<b>Identifying Parallels Between Music And Architecture</b> Dr. Sanjeevani Pendse and Dr. Vasudha Gokhale	91
<b>Adaptation Potential Of Our Residences Post Covid-19 Lockdown</b> Vrushali Pokharkar and Dr. Aarti Verma	103
<b>Space Design For Better Learning Environments</b> Ar. Mrudula Kulkarni and Dr. Amruta Garud	115



# Encouraging student interaction with Specialist professional consultants

**Ar. Vijaykumar Pawar**

MVPS's College of Architecture, Nashik

[vijaypawar.cans@gmail.com](mailto:vijaypawar.cans@gmail.com) (✉)

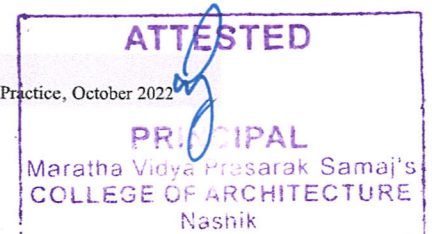
*Abstract— 19th and 20th century were the period after Industrial revolution and 21st century began with Electronics and cyber revolution. Since 1990's itself world rapidly oriented towards globalisation and use of computers in all sectors of the life. World just became like a Global village. This revolution touched almost all sectors and industries. Architecture and Construction is one of that. Use of computers, various advanced software definitely provided great exposure to students and professionals as well. These advancements introduced in Architectural education but the speed of changing technology and construction techniques is far more than the academics. In last 30 years, demands of market and architecture also changed globally. If you want your students to perform on international platform then instead of introducing them with the advanced practicing in profession its always advisable to give them exposure during senior classes. The changing technology, machinery and management concepts resulted in speedy construction and it made possible to execute the unbelievable concepts, ideas into reality. Advanced technology totally changed the scale and given total freedom to designers to think out of box. Drones are used for surveys and establishing global co-ordinates it is now advanced than even total station. In Eastern countries like Singapore, Hongkong, China, Vietnam and in Middle east the changing scale of architectural projects inviting our talent to perform and most of our students are struggling for international opportunities in job. Some of them may getting the opportunities to work with international players but not immediately at the beginning of career but after the struggle to understand and study these advanced and updated technologies and practices. So, I strongly feel that, we must invite the experts working with such projects rather than just introducing them the theory. It will definitely boost their confidence and skills.*

*Keywords— Professionals; Students; Technology; Advanced; Latest*

## 1 Introduction

In India formal education of Architecture started in 19<sup>th</sup> century after the foundation of Sir J.J. College of Architecture, at Mumbai in the year 1913. It is said that, British were in need of draftsmen for drawing preparation and to execute their design ideas. So almost all the buildings designed and constructed by British are following their own style and architecture. After 1947, India initially invited Architect like Le Corbusier for designing capital city Chandigarh but after that, most of the Indian Master Architects like Ar. Charles Correa, Ar. Balkrishna Doshi, Ar. Lauri Baker tried hard to bring "Indianness" in their buildings and Architecture. Even before that, India has had a rich cultural and architectural heritage like Ellora Ajanta Caves, Beautiful North & South Indian temples. Khajuraho, Hampi - Badami, Shor temple and Konark sun temple are few of them. Fort Architecture was evolved and progressed since Bahmani period to Chhatrapati Shivaji Maharaj's Hindavi Swarajya. Rani Ahilyabai Holkar also took initiative in 18<sup>th</sup> Century and built, renovated so many temples, ghats and palaces. Ghats and Temples at Maheshwar and Varanasi are the best examples of quality and heritage structures constructed before 300-400 years. Indian Architecture was developed and progressing in the region and country almost during last 1000 years.

After Industrial revolution in 19<sup>th</sup> and 20<sup>th</sup> century the influence of Technology and Machinery increased in Architecture and in architectural education too. 21<sup>st</sup> century began with revolution in the field of Electronics and computers. In 1990-91, Communism failed in Russia and after the dissolution of USSR, since 1990's itself world rapidly oriented towards globalisation and use of computers in all sectors of the life. World just became like a Global village. This revolution





## 8 Conclusions

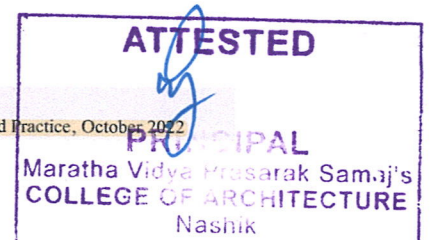
In upcoming years, advanced technological developments are going to impact all sectors of life. Architecture is one of them. Introduction of these advanced technologies in academics and then the use of those in profession are going to take architecture profession to new level. Additive design involves both human and artificial intelligence in the design and construction process as well. Considering the current pace of changing technology in near future more robots and technicians will work together to design and build a building with great efficiency. Today many of the technologies, software are still in the stage of experimentation and explorations, and may need some time for final results. Efforts needed to use this upcoming technology as widespread architectural tools like MS Office, AutoCAD, photoshop used today. Undoubtedly this technology and tools are the future of architecture and profession which must be promoted and taken care of during academics as well.

### Conflict of Interest

The authors have no conflicts of interest to declare.

### Web-References

www. construction week-Dubai  
<https://www.re-thinkingthefuture.com;>  
<https://share-architects.com;>  
<https://blog.enscape3d.com;>  
<https://biog.enscape3d.com;>  
<https://blog.enscape3d.com>  
<https://ascelibrary.org;>  
<https://www.propelleraero.com;>  
<https://www.designblendz.com>  
<https://www.smartcitiesdive.com;>  
<https://share-architects.com>  
Tecla-3d-printed-home. (n.d.).<https://www.dwell.com/article/tecla-3d-printed-home-mario-cucinella-architects-wasp-28cde493>





**BRH** is a hub of activities conducted at BNCA related to Research in Architecture and allied / specialized disciplines working on individual and collaborative research. BRH aims to become a versatile, inclusive, and holistic knowledge building platform not only at local and national level but also at international level. BRH intends to provide varied scales and types of opportunities for students, researchers, innovators, mentors, experts, professionals, and funding agencies across the city, state, nation, and world to participate, conduct, collaborate, publish and to execute their research potentials and innovative concepts through forming and evolving Research Clusters of various subject domains as a long-term objective. This platform is envisioned to act as a Regional Research Centre to facilitate and nurture the culture of research in architecture and allied disciplines, encouraging collaborative and participatory research from academia and industry/practice.

Swati Sahasrabudhe, Ph.D.  
Professor, Head, BRH (BNCA Research Hub)

महर्षी कर्वे स्त्री-शिक्षण संस्थेचे  
डॉ. भानुबेन नानावटी  
वास्तुशास्त्र  
महिला महाविद्यालय

