Evolution of Landscape Architecture and Urban Design discourse in B.Arch. Schools, India

Shweta Gupta¹, Renjin Cherian²

¹Shweta Gupta, BMS School of Architecture, Yelahanka, BLR -64 ²Renjin Cherian, BMS School of Architecture, Yelahanka, BLR -64

Abstract - Architectural Discourse in a typical B.Arch. program across architecture schools in India was dominated by the "Star Architect", for the most part in post independence India. It probably continues to do so in many schools or is at least an inherent thinking block in the minds of most young architects. However there are many compartments that post independent India can be categorised into, depending on the location and associated growth pattern. The late 90s to 2000s heralded a construction boom in the country, importing many building prototypes mainly from the western world.

Landscape Architecture and Urban Design were more peripheral in this context, being limited to historical studies and as a secondary context to the architectural built form. Landscape Architecture was seen through a decorative lens, to be considered post finishing the construction of a building, as an afterthought, as mere decoration. On the other hand Urban Design was not necessarily taught even as an elective in many schools. It was found buried under the aegis of town planning, in very introductory formats in B.Arch. schools. At best it found a place in master's programs trying to imagine the future India but tied to history in its thinking. Economic growth and associated development became the focus, further blurring boundaries of development, planning and design.

Amongst the major centers of architectural training, the School of Planning and Architecture, New Delhi, Centre for Environmental Planning and Technology (CEPT), Ahmedabad and Sir J J College of Architecture, Mumbai and many other schools in Mumbai, a certain shift in this viewing lens started to occur post liberalisation in the 1990s. Growth fuelled urbanisation and urban sprawl forced the focus on these disciplines at the bachelors study level also.

This paper brings forth observations in these changes and how the viewing lens and discourse of these two disciplines now informs architectural education, particularly outside these centres of excellence.

Key Words: Discourse, architectural education, viewing lens

1.INTRODUCTION

At the time of independence, there was only one architecture school namely Sir J J College of Architecture, one training institution i.e., the Indian Institute of Architects in Bombay. In 1952, India set up two apex educational institutions for architecture. One autonomous school SPA at New Delhi focused on development issues in architecture design and built environment, and another is attached to IIT Kharagpur with a strong inclination towards environmental technologies and performance. These institutions produced great architects for

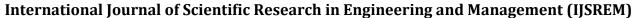
the development of the country, then again, most of their thoughts were influenced by Western philosophies, theories and research attempting to find footing on Indian grounds to represent its spirits and symbols. One of the influential architects, Balkrishna Vitaldhas Doshi (1927-2023) graduated from Sir JJ College, trained under Charles-Édouard Jeanneret (Le Corbusier 1987-1965) in Paris, France and returned to India in 1954. In the same decade, Jeanneret was invited by Prime Minister Nehru to design the new city of Chandigarh. BV Doshi assisted Le Corbusier in projects for Chandigarh as well as in Ahmedabad. He played a major role in the Ahmedabad Education Society (AES) to establish the School of Architecture in 1962 providing diploma programmes at Ahmedabad (later named Centre for Environmental Planning and Technology University). It was one of the early institutions which had a legacy of documentation, and research apart from training students in professional practice.

Reflecting on a number of educational institutions offering architecture programmes, in 1972 there were 16 colleges, 45 in 1992, 104 in 2004 and nearly 550 colleges in 2020. The number of institutions has grown suddenly. In 2005, the Council of Architecture looked into promoting research and advancing education in architecture, the sub-committee then laid out certain recommendations and established the National Institute of Advanced Studies in Architecture now renamed as Council of Architecture Training and Research Centre (COA-TRC) to facilitate research in architecture for teachers and students. (Das, 2023)

This sudden and extreme increase in the number and locations of these institutions has brought forward possibly many discrepancies and variations in architectural education. But also many experiments and innovations in thinking and discourse.

The Council of Architecture (CoA) has been constituted by the Government of India in the Ministry of Education under the provisions of the Architects Act, 1972, enacted by the Parliament of India, which came into force on 1st September, 1972. Ministry of Education, Department of Higher Education is the nodal ministry / department of CoA. The Act provides for registration of Architects, standards of education, recognized qualifications and standards of practice to be complied with by the practicing architects. The Council of Architecture is charged with the responsibility to regulate the education and practice of profession throughout India besides maintaining the register of architects. For this purpose, the Government of India has framed Rules and Council of Architecture has framed Regulations as provided for in the Architects Act, with the approval of Government of India.

There are 471 institutions, which impart architectural education in India leading to recognized qualifications. The standards of





Volume: 07 Issue: 12 | December - 2023 SJIF Rating: 8.176 ISSN: 2582-3930

education being imparted in these institutions (constituent colleges/departments of universities, deemed universities, affiliated colleges/schools, IITs, NITs and autonomous institutions) is governed by Council of Architecture (Minimum Standards of Architectural Education) Regulations, 2020, which set forth the requirement of eligibility for admission, course duration, standards of staff & accommodation, course content, examination etc. These standards as provided in the said Regulations are required to be maintained by the institutions. The COA oversees the maintenance of the standards periodically by way of conducting inspections through Committees of Experts. The COA is required to keep the Central Government informed of the standards being maintained by the institutions and is empowered to make recommendations to the Government of India with regard to recognition and derecognition of a qualification. (Council of Architecture, New Delhi, 2023)

With these guidelines and approvals, there is a range of university affiliated institutions, autonomous institutions and universities with their syllabus outlining study content and learning objectives. These as is then observed have variations which need comparison and definition. For example at IIT Roorkee and Goa University the subject of Landscape Architecture is introduced in 4th semester itself, whereas Visvesvaraya Technological University (VTU), Belgavi introduces it in 6th semester. Sequence also has a powerful impact in the influence of a thinking framework for the young student and architect in the making, which needs reflection.

11. LANDSCAPE ARCHITECTURE

As observed earlier the viewing lens of landscape architecture was decorative and secondary to the architectural building.

Britannica defines landscape architecture as the development and decorative planting of gardens, yards, grounds, parks, and other planned green outdoor spaces. Landscape gardening is used to enhance nature and to create a natural setting for buildings, towns, and cities. (Editors of Encyclopaedia, 2023) This definition finds its way in syllabi and right up to the larger public understanding of the profession.

The VTU syllabus of 2009, defined its learning objectives as follows - "To introduce students to the discipline of landscape architecture and to develop basic skills required in handling simple landscape design projects". Focussing on definitions and classification of landscape elements, as a 7th semester subject, the focus was mainly on site, planning and material studies towards small scale landscapes. It intended the application of landscape design for site plans, small gardens, residential and urban spaces, street and site furniture etc. Further at the 8th semester level an elective was offered namely "Ecology and Architecture". However the detailed syllabus was left to the colleges to develop individually, which incorporated some of the broader sustainability discourse at BMSSA. The main benefit of elective courses in higher education is the flexibility achieved, because these courses allow students to study subjects that satisfy their interest, abilities, and career determination. (Ghonim & Eweda, 2018, #235-236)

However between 2015-2021, the syllabus revisions at VTU started to incorporate the wider lens of ecology within its B.Arch. syllabus. The learning objectives however did not change, only an additional study module was added toward Biodiversity and ecological studies. This inclusion however cursory does allow the discourse to set afoot with the wider environmental lens which is much needed in contemporary training and practice.

It is always within the purview of pedagogy to extend itself beyond prescribed syllabus. The value of access and time with the student is significant to enable exposure and learning in pace with contemporary concerns and the concerns of the future. In the age of the anthropocene, where climate change and change brought about by human intervention, the ecological lens then becomes the default lens for landscape studies at any scale.

It is imperative for us to reframe our languages, starting with probably understanding the architect as a built environment professional first and then the architect of a specific built entity. This reframing enables the visualisation and framing of ecological context, which must then determine the architectural intervention. Rather the narrow desire of built form dominating the landscape, or becoming the first sighting, it is needed that the ecological context frames the built response and thereby becomes a part of the natural landscape, and finds glory in it. Traditional and vernacular approaches have much to teach us in this regard. Informal and organic environments, built and unbuilt also incorporate the simplicity of following nature and lead us to some timeless prototypes, such as those in difficult terrains. Ian McHarg in his seminal work titled "Design with Nature", outlined detailed studies to understand the geography one finds themselves in, before building. In fact the argument being that nature studies bring forth patterns and vectors that can lead to the development of nature aligned built prototypes. This becomes extremely relevant to development approaches of emerging nations like India, to seek our roots and the future direction with ecology, rather than the hegemonic pedagogies borrowed from other geographies.

Noted works of well known Indian Landscape Architects such as Ravindra Bhan and Shaheer Associates reflect the acknowledgement of man and nature link. Contemporary western practices such as Turenscape also offer the student an effective study of an ecology first approach. Study modules including these and many others aid in a robust exposure and discourse of landscape architecture at the environmental scale.

Goa College of architecture updated its B.Arch. syllabus in 2013. The previous version introduced landscape architecture in the 4th semester, same as IIT, Roorkee. The 2013 syllabus reflects the need for contextual understanding prior to

International Journal of Scientific Research in Engineering and Management (IJSREM)



Volume: 07 Issue: 12 | December - 2023 SJIF Rating: 8.176 ISSN: 2582-3930

determining the formative influences of architecture. Earth sciences are introduced in the first three semesters with theory of landscape architecture finding a place in the 6th semester. Sir J J College of Architecture also introduces Environmental studies right from the first semester as per its 2012-13 revised syllabus. Colleges based in Mumbai have acknowledged the impact and considerations of rapid urbanization from the past few decades. These colleges moulded the urban context and framing in the production of architecture, much prior and much more as compared to other colleges in the country. Initially though it brings forth the urban design framework to architectural studios, also incorporated by other universities such as VTU. However it must be noted - Diverse urban landscape is an important cultural driving force for urban sustainable development. (Yutian LU et al., n.d., #)

Observing the state of modernism in his 1934 book Technics and Civilization, Lewis (Mumford, 2010) claimed the tools and technologies of each generation as a window to understand its foundational human characteristic. (Fard, 2020, #)

Urban Green Space (UGS) in cities has been treated as an essential element in sustainable urban development. On one hand, it is broadly acknowledged UGS is a critical factor to guarantee human health, especially mental health, for people living in the high-density urban 'grey forest' (Harting et al., 2014, Lee and Maheswaran, 2011, Sharifi et al., 2021). On the other hand, UGS also can be used to improve the urban environment and reduce the threats from rampant urban environmental issues, such as growing urban stormwater problems (e.g., pollution and flooding) (Ashley et al., 2018, Kimmelman, 2017), heating island issues (Liu, Zhang, Zhang, Zhang, & Teng, 2021), air and noise pollution (Ahn, Lee, & Hong, 2021). Therefore, considering the limitation of UGS resources, it has been widely accepted that UGS should be developed in multi-functionality to support sustainable urban development (Belmeziti, Cherqui, & Kaufmann, 2018). (Jing Jia et al., 2023, #)

The development and spread of Renewable energy (RE) resources and technologies help to realize important economic, environmental and social objectives in the 21st century. (Maryam Norouzi et al., 2021, #)

All the above scales and upcoming needs dictate that the awareness and application of technologies needed for a better ecologically aligned future. India has a rich and ancient history with a human and environmental connection. Putting ecology first has been the foundation of culture and the built environment. Thesis and dissertation projects of final year students have increasingly reflected these concerns in the past decades across architectural institutions in India. The COA has awarded excellence in thesis to bring innovative ideas to the fore, and allow young architects to jumpstart new approaches in practice. This shift in the viewing and teaching lens is ever evolving but is bringing significant benefits in the development of more aware and better prepared built environment professionals and architects.

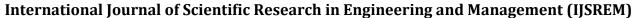
1II. URBAN DESIGN

In recent times, the global discourse surrounding the definition of "good architecture" has undergone a notable evolution, witnessing a shift towards designs that prioritize both people and context. This transformation serves as the bedrock for the teaching of urban design at the undergraduate level, where an increasing emphasis is placed on cultivating an understanding of architectural principles that resonate with the human experience and respond to specific contextual nuances.

A noteworthy aspect of this evolution is the demographic composition of students enrolling in B.Arch programs. Many of these students come from urban backgrounds, a factor that significantly shapes their thought processes and perspectives. When faculty members introduce fundamental concepts of urban design using renowned texts authored by figures like Kevin Lynch, Gordon Cullen, and Jane Jacobs, students from urban upbringings find a relatability that stems from their lived experiences in cities. An interesting observation emerges from the heightened urban awareness of these students. Their familiarity with urban issues creates a unique opportunity for faculty members to engage in more profound discussions on a wide array of topics related to the city. This dynamic interaction not only enriches the learning experience but also provides a platform for exploring innovative solutions to complex urban challenges.

However, the strengths of students in the B.Arch course present certain challenges. The comprehensive nature of urban design tasks, such as documenting neighborhoods, collecting data, and interacting with local residents, demands considerable effort and time. Despite these challenges, the students' capabilities shine through in the development of urban design strategies. These strategies, once formulated, are poised for presentation to city councils or citizen groups, creating a bridge between academic endeavors and practical, real-world applications. This process becomes particularly invaluable for cities and neighborhoods in developing countries that are actively engaged in collecting data for the allocation of funds to citizens. B.Arch schools, acting as repositories of extensive data and studies conducted by students, stand as potential catalysts for positive urban transformations by collating and utilizing this information for the collective betterment of cities.

Despite the potential impact, urban design faces challenges such as the need for holistic thinking and the protracted timeframe required for the conceptualization and materialization of ideas and strategies. This prolonged process can pose a challenge to student engagement, especially when compared to subjects like interior design, which offer more immediate gratification and tangible outcomes. Balancing the long-term vision of urban design with students' desire for quicker results remains a nuanced challenge within architectural education.





Volume: 07 Issue: 12 | December - 2023 SJIF Rating: 8.176 ISSN: 2582-3930

1V. CONCLUSION

There is a need to explore more frontiers towards ecological & people centric design and generating a meaningful engagement for the students.

Global education is being gradually implemented in the educational process through a project co-financed by the European Union "Modern education for the knowledge society". This project is taught at universities as a voluntary two-semester course assessed according to the credit system. Global education responds to current issues in the world. Among the basic thematic units that global education focuses on are:

- x Globalisation and mutual interconnection
- x Global problems and development cooperation
- x Multiculturalism
- x Environment with respect to global aspects
- x Human rights

(Katarina Slobodová Nováková, & Zuzana Giertlová, 2016, 305-310)

Globalisation, localism, genius loci, sense of place, placemaking, history, geography and the anthropocene are blurring the boundary between the disciplines of landscape architecture and urban design. A paradigm shift is now emerging as there is a strong potential in the exploration of these disciplines and studios coming together.

The significant shifts in climate, trade and culture are enabling authenticity and reinvention alongside universal applications. The evolution of mental health studies and human rights has brought more awareness and human connection. The experiential quality of spaces and places, the impact of built and unbuilt environments on human well being and more sustainable forms of production force the pedagogical practice to be far more interdisciplinary than ever before. This is the way forward.

REFERENCES

- 1. Yutian LU, Sun XU, Songxue LIU, & Jiayu WU. (n.d.). An approach to urban landscape character assessment: Linking urban big data and machine learning. Sustainable Cities and Society, 83. ELSEIVER.
 - https://doi.org/10.1016/j.scs.2022.103983.
- Maryam Norouzi, Mansour Yeganeh, & Talal Yusaf. (2021). Landscape framework for the exploitation of renewable energy resources and potentials in urban scale (case study: Iran). Renewable Energy, 163, 300-319. ELSEVIER ISSN 0960-1481. https://doi.org/10.1016/j.renene.2020.08.051.
- Katarina Slobodová Nováková,, & Zuzana Giertlová. (2016). New Models of Theoretical and Practical Education in Urban Environment (On Example of Experience-based Pedagogy in Slovak Towns). Procedia - Social and Behavioral Sciences, 228, 305-

310. ELSEIVER. https://doi.org/10.1016/j.sbspro.2016.07.045.

- Jing Jia, Sisi Zlatanova, Hailong Liu, Mitko Aleksandrov, & Kefeng Zhang. (2023). A designsupport framework to assess urban green spaces for human wellbeing. Sustainable Cities and Society, 98. ELSEIVER.
 - https://doi.org/10.1016/j.scs.2023.104779.
- 5. Ghonim, M., & Eweda, N. (2018). Investigating elective courses in architectural education. Frontiers of Architectural Research, 7(2), 235-236. ELSEIVER. https://doi.org/10.1016/j.foar.2018.03.006.
- Fard, A. (2020). Cloudy landscapes: On the extended geography of smart urbanism. Telematics and Informatics,
 https://doi.org/10.1016/j.tele.2020.101450.
- 7. Editors of Encyclopaedia. (2023, November 12). landscape architecture. Britannica. Retrieved December 13, 2023, from https://www.britannica.com/art/landscape-architecture
- 8. Das, D. (2023, July 14). Reformation of Architecture education in post-independent India. LinkedIn. Retrieved December 13, 2023, from https://www.linkedin.com/pulse/reformation-architecture-education-post-independent-india-deepak-das
- Council of Architecture, New Delhi. (2023, December 13). About us. Retrieved December 13, 2023, from https://www.coa.gov.in/index1.php?lang=1&level=0 &linkid=3&lid=4