

CONSTRUCTION MIRROR

An outlook of the Construction & Infrastructure Industry



INDIAN TRADITIONAL ARCHITECTURE

METRO RAIL - AN UNMATCHED REAL ESTATE CATALYST

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FACE TO FACE

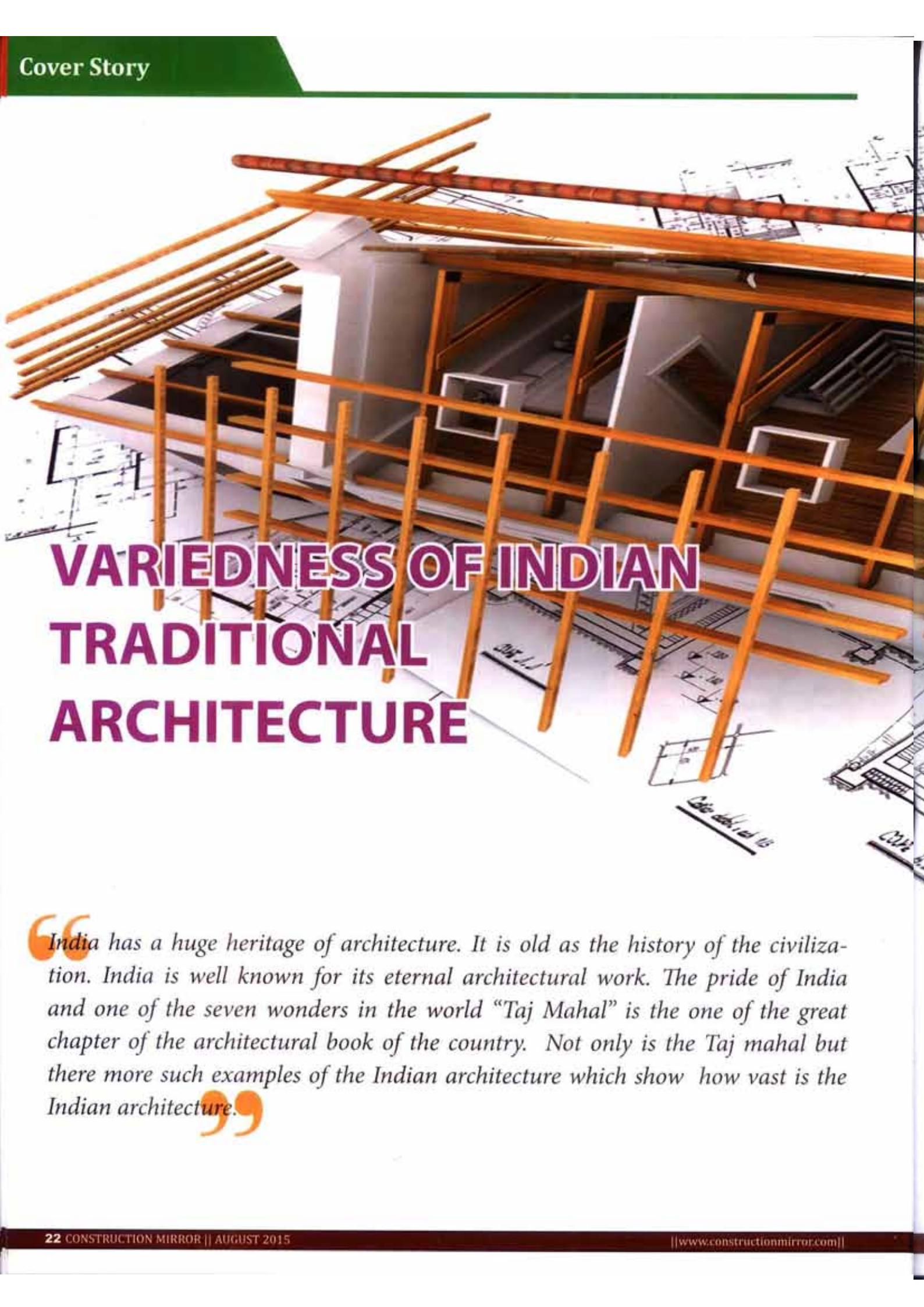
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EVENT SPECIAL



CONSTRUCT INDIA 2015

International Building & Construction Show



VARIEDNESS OF INDIAN TRADITIONAL ARCHITECTURE

“India has a huge heritage of architecture. It is old as the history of the civilization. India is well known for its eternal architectural work. The pride of India and one of the seven wonders in the world “Taj Mahal” is the one of the great chapter of the architectural book of the country. Not only is the Taj mahal but there more such examples of the Indian architecture which show how vast is the Indian architecture.”



India has a diversified culture and varying socio-economic conditions. It also has a long history of traditions which have developed into a defined pattern of human growth and settlement creating a very rich heritage in different parts of the country.

Traditional architecture has evolved through the various aspects of climatic conditions, social bondage, and economical growth including religious and regional aspirations. It has been able to grow in the extreme climatic conditions of our country and the architecture and planning norms have also

developed in a human scale, respecting the solar movement, wind direction as well as flood protection and other safety and security measures.

The much talked about "green architecture" in terms of sustainability and use of appropriate material and technology has been intelligently demonstrated in most of the cities particularly Jaisalmer, Jodhpur and Jaipur in the extreme hot and dry climate. Traditional architecture speaks of mutual shading, wall-window ratio, courtyard planning, landscape and water bodies, to create a very healthy,

cool and comfortable habitat in even the extreme hot climate of Rajasthan.

The play of materials like mud walls and stone jaalis, have also been helpful as a thermal mass to minimize heat gain within the building. Traditional architecture is a means of respecting our natural resources to eventually help us in conservation of water in the scarcest places of hot desert climate like the state of Rajasthan. The creations of Baolis, Kunds and Stepwells are a great source of inspiration to be developed further for creating smart cities. It needs to be understood that tradi-



Prof. Charanjit Shah
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tional architecture incorporates a very strong relationship between functional and socio cultural platforms thus using the step wells as art and dance performance platforms as well.

Talking about traditions, we should consider a simple historical fact: The previously built Indian cities were simple yet intelligent with an abstract use of basic design principles and minimal technology. Then we can ask ourselves, what if we can envision the same traditionalist approach in the present?

Understanding cities is vital to understanding our civilization. Therefore, redefining a smart city, we should take a lead from our traditional architecture which shall be a treasure of professional support in developing and redeveloping our cities, enabling us to create not just "smart" but "sustainable

cities" as well.

Restoration of Water Resources

Revival of our water resources such as of baolis, kunds, lakes and stepped wells, an entire category of architecture that is slipping off history's grid, would be the first step towards improving living conditions in a smart city. "Baoli" was much more than just a water reservoir in its golden days; it was a candid retreat for the locals from blazing summers and a gathering place for recreation. Restoring our natural water resources can help us in dealing with hot temperatures and fluctuating water availability.

Building Orientation

This basic design strategy is given less importance than it deserves. Rather than adding intelligent facades to avoid the harsh sunlight, placing a building along its N-S direction can result in maximizing daylight and minimizing heat gains, letting the structure breathe and thus reducing the need for energy consumption in the hot and dry climatic conditions.

Courtyard Planning

A courtyard continues to define a

perfect spatial organisation since the time of Havelis in Rajasthan. Being the heart of the haveli, it also served as a climate modifying factor. Courtyard planning emerged when the concept of air-conditioning did not exist. Technology was minimal and it all depended on the sheer magic of architectural concepts, plans, forms, elevations, sections and details to achieve a comfortable living. Borrowing this planning principle from our past, we can ensure a moderate temperature and better articulation of spaces in our



Streets of Jaipur reflecting

current buildings.

It is safe to say that with the rate of urbanization increasingly rapidly, what is required on our part, as designers, is consciousness and a careful reinterpretation of our definition of 'traditional yet smart architecture.' Learning from our traditions does not mean that we start building like our ancestors, but to go back in context and take advantage of the successful ways of building construction.

Thus, in today's global contest of creating global smart cities, we need to understand and respect the tradi-



Adalaj Stepwell Gujarat



Agrasen Ki Baoli New Delhi

tional architecture of India which is rich in technology and has a practical approach towards development of any settlement through passive designs and its applications. One needs to understand to implement the high valued research oriented traditional architecture so as to penetrate into the real grounded settlements which need not be treated as just a mass of brick and concrete but as a living organism which breathes and is embodied with nature.

To conclude, I look upon to be inspired by the traditional architecture to orient our minds towards the development of contemporary smart cities of tomorrow in the most sustainable way.



Mutually Shades Streets of Jaipur



is the hall mark of timeless architecture. Traditional Indian Architecture has ably demonstrated the universality of its communication as well as its validity within multiple values systems. This is achieved essentially by relying on spatial experiences derived through narratives - dynamic perception of space while in motion - its 'Kinesthetics'. The interactive process of encoding and decoding between the space and perceiver then becomes the key aspect of orchestrating spatial narratives.

Deciphering their implications in the physical manifest, it unravels the inherent virtues of traditional Indian

Architecture and interprets them as universal dictums, relevant to reinstate in contemporary times.

Current trends in architecture are very evolved and responsive to the users need. With an unprecedented upsurge in the real estate prices, it has become very important to design buildings which provide an efficient footprint at optimum cost to the end users, while striking a balance between private and open public spaces. While there is always a commercial inclination towards building more sellable spaces, it has become more imminent with time to create a larger picture which

In India, we live in three time zones simultaneously: moorings of the past and aspirations for the future combine with the realities of the present, making it alchemy of conditioning over millennia. The past continues as living traditions - relevant and valid to the present.

History is a function of time and space. Material, construction, style and 'isms' are conditions of the context. Even form and scale are aspects of conditioned learning but the experience is eternal, human, universal and intuitive.

Experimental richness and ability to identify with pluralistic value systems

