ISAS Working Paper

No. 303 – 30 July 2018

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'Paths Uncharted' – Balkrishna Doshi, Pritzker Laureate¹

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On 7 March 2018, the Hyatt Foundation announced the selection of Professor Balkrishna Doshi of India as the 2018 Pritzker Architecture Prize Laureate. The Pritzker Architecture Prize is recognised internationally as architecture's highest honour, the equivalent of the Nobel Prize, were there one for architecture. Doshi is the 45th Pritzker Prize Laureate and the first to hail from India. Deeply influenced by two icons of 20th century architecture, Le Corbusier and Louis Kahn, Doshi placed his own imprint on his work; shaped by the ecology, environment, and cultural norms of his homeland, leading to an architecture sensitive to the socio-economic milieu in which people lived. Some of the most celebrated of his projects are in low income housing³. Without going into the economics and policy challenges, this paper contends that Doshi's approach to architecture remains as relevant as ever, and if embedded in the design, it can lead to housing that is sustainable and imparts a sense of belonging, continuity and hope.

¹ "Paths Uncharted" is the title of Balkrishna Doshi's autobiography, an allusion to the seemingly unexpected detours his life took.

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The phrases 'low income housing' and 'affordable housing' are used interchangeably in this paper.

Introduction

On 7 March 2018, Professor Balkrishna Doshi of India was awarded the Pritzker Architecture Prize Laureate for 2018 by the Hyatt Foundation. Internationally recognised as architecture's highest honour, the Pritzker Architecture Prize is the equivalent of the Nobel Prize.⁴

Announcing the award, Pritzker quoted that Doshi's "[d]esign converts shelters into homes, housing into communities, and cities into magnets of opportunities." Pritzker continued, "The life work of Balkrishna Doshi truly underscores the mission of the Prize – demonstrating the art of architecture and an invaluable service to humanity. I am honoured to present the 40th anniversary of this award to an architect who has contributed more than 60 years of service to us all." An architect, urban planner and educator for the past 70 years, Doshi was chosen for the award for being "instrumental in shaping the discourse of architecture throughout India and internationally."⁵

The award citation declared that "Doshi has been instrumental in shaping the discourse of architecture throughout India and internationally. Influenced by masters of 20th century architecture, Charles-Édouard Jeanneret, known as Le Corbusier, and Louis Kahn from the United States, Doshi has been able to interpret and transform architecture into built works that respect eastern culture while enhancing the quality of living in India. His ethical and personal approach to architecture has touched lives of every socio-economic class across a broad spectrum of genres since the 1950s."

The 2018 Jury Citation states that, "Over the years, Balkrishna Doshi has always created an architecture that is serious, never flashy or a follower of trends. With a deep sense of responsibility and a desire to contribute to his country and its people through high quality, authentic architecture, he has created projects for public administrations and utilities, educational and cultural institutions, and residences for private clients, among others." The Jury continued, "Doshi is acutely aware of the context in which his buildings are located. His

The Pritzker Architecture Prize. https://www.pritzkerprize.com/laureates/balkrishna-doshi. Accessed on 21 July 2018.

⁵ Ibid.

⁶ Ibid.

solutions take into account the social, environmental and economic dimensions, and therefore his architecture is totally engaged with sustainability."⁷

Following news of the award, Doshi spoke of the influences that shaped his views on architecture, "My works are an extension of my life, philosophy and dreams trying to create treasury of the architectural spirit. I owe this prestigious prize to my guru, Le Corbusier. His teachings led me to question identity and compelled me to discover new regionally adopted contemporary expression for a sustainable holistic habitat." Corbusier and Kahn have left a deep imprint on Doshi's work, but from his very first project, Doshi found his own voice, his own philosophical approach shaped largely by his experiences growing up in India, and by the climatic, socio-economic and environmental concerns germane to the setting. That approach was passed on to generations of his students, spanning an ongoing career over more than seven decades.

Doshi is the 45th Pritzker Prize Laureate and the first to hail from India. The 2018 Pritzker Architecture Prize ceremony commemorated the 40th anniversary of the prestigious award. It took place at the Aga Khan Museum in Toronto, Canada, on 16 May 2018. At the ceremony, Doshi presented a public lecture, at the John H Daniels Faculty of Architecture, Landscape and Design at the University of Toronto.

Past laureates include Frank Gehry (1989), the architect of the iconic Guggenheim Museum in Bilbao. Pritzker laureates with work in Southeast and East Asia include I M Pei (1983) who designed the OCBC Centre and the Gateway Towers in Singapore, the distinctive Bank of China building in Hong Kong and the glass Pyramid at the entrance to the Louvre; Norman Foster (1999) whose firm designed the South Beach complex as well as the Apple Store in Singapore and, more recently, the spectacular Millau Viaduct in Southern France; the plans for the new capital of Andhra Pradesh at Amaravati in India designed by Foster + Partners; Rem Koolhaas whose work includes the CCTV Tower in Beijing, informally and unsurprisingly christened 'Pants'; and Jacques Herzog and Pierre de Meuron (2001) whose 'Bird's Nest' or the Beijing National stadium was probably the most photographed site during the Beijing Olympics in 2008. Doshi's work is entirely in India, and heavily

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⁷ https://www.pritzkerprize.com/laureates/balkrishna-doshi

https://archinect.com/news/article/150053353/my-works-are-an-extension-of-my-life-notable-designs-of-201 8-pritzker-prize-laureate-balkrishna-doshi - Doshi's remarks (quoted extensively in the media) following announcement of the 2018 Pritzker Architecture Prize.

concentrated in Gujarat. Amongst the front-runners for the 2018 award was Moshe Safdi, architect of the iconic Marina Bay Sands in Singapore, the Holocaust Museum in Tel Aviv and the Khalsa Heritage Centre in Anandpur Sahib, India.

Mainstream India media is prone to going into hyperdrive when an Indian athlete wins a medal at international games; or is photographed with finger nails painted in national colours generating a burst of nationalist fervour; or a school kid of Indian origin wins the Spelling Bee in the United States; or a corporate executive of Indian heritage is appointed Chief Executive Officer of a major corporation. The reaction to the singular honour bestowed on Doshi was curiously muted, barely receiving mention outside the design and architecture media, beyond a few news stories on the day of the announcement, and even less coverage of the award ceremony and the widely appreciated laureate address delivered by Doshi. Perhaps this was reflective of how distant the affordable housing challenge is perceived, or the modernist, yet vernacular and humanist approach that embodies Doshi's work.

Bio-sketch

Born in 1927 in Pune, Doshi grew up in a joint family and studied at JJ School of Architecture in Mumbai. Over the years, he worked with Le Corbusier and Kahn. Beginning in 1962, Doshi collaborated with Kahn as an associate to build the Indian Institute of Management (IIM) at Ahmedabad, embarking on a decade long collaboration.

Among the formative influences on his life and work, Doshi recalls two incidents from his childhood. On a visit to a brick kiln, the sight of a woman carrying bricks on her head while descending to a tin-roof shed with four columns left such a lasting impression on the young Doshi's mind that he designed his residence around four columns. Another incident Doshi recalls a woman who came to his grandfather, a carpenter, and narrated an incident of domestic abuse by her alcoholic husband. Doshi his friends visited the lady's house in a slum and found that it utterly bare, with no furniture at all. The memories of the two incidents shaped his approach to affordable housing for the poor.

After graduating from the JJ School in Bombay, Doshi began his architectural career in Europe. Following a stint in London, he apprenticed at Le Corbusier's Paris atelier – a period that shaped much of his philosophy and approach to architecture. He later went on to oversee the construction of some of his mentor's pivotal projects in Chandigarh and Ahmedabad.

Doshi's early works were influenced by these architects as can be seen in the robust forms of concrete which he employed, an embodiment of the 'Brutalism' or the use of raw concrete, popular from the 1950s through the 1970s. However, Doshi took the language of his buildings beyond these early models. "Kahn used to say you talk to a brick and it talks back to you. I would like to extend that by saying that I talk to nature and nature talks back to me", says Doshi. "And nature is silent...it does not need to shout to create a sense of activity⁹."

His Work

Doshi's iconic projects include Aranya Low Cost Housing (Indore) which won the Aga Khan Award for Architecture in 1996, ATIRA low-cost housing (Ahmedabad), Vastu-Shilpa – his office, Sangath (Ahmedabad), ECIL Township (Hyderabad), IFFCO Township (Kalol), the Jnana-Pravah Centre for Cultural Studies (Varanasi), the Sawai Gandharva (Pune) and the Tagore Hall (Ahmedabad). He has over 100 projects to his credit at Vastu-Shilpa, including the famous Hussain-Doshi Gufa (now called Ahmedabad-ni-Gufa), IIM Bangalore, the Centre for Environmental Planning and Technology (CEPT) University campus, Shreyas School, Bharat Diamond Bourse, the National Institute of Fashion Technology in New Delhi and the Physical Research Laboratory. His own key projects include the Ahmedabad School of Architecture (1966), which he both designed and founded, and the barrel-vaulted studio he created for his studio Vastu-Shilpa in 1981.

Aranya

The most important of Doshi's work has been in low-cost housing, his interest in which can be traced back to his childhood. He undertook his first project for low-income housing in the

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[&]quot;B.V. Doshi: The man nature talked back to", Maulik Pathak, *LiveMint*, 11 March 2018. https://www.livemint.com/Sundayapp/mFNXMDLAiIzpjP7FstV0BK/BV-Doshi-The-man-nature-talked-back-to.html. Accessed on 23 July 2018.

1950s. During an interview in 1954, Doshi observed, "It seems I should take an oath and remember it for my lifetime: to provide the lowest class with the proper dwelling." This oath was reflected in Aranya and other low-cost housing projects he undertook over his career, including the Co-Operative Middle-Income Housing in Ahmedabad in 1982, and several others. Housing is contextualised within the broader ambit of private, public and semi-public spaces, and how these spaces relate to the broader city. The conceptualisation and planning are testimony to Doshi's vision of the importance of urban design and in understanding how cities work.

Doshi designed the Aranya Low Cost Housing project in Indore in 1989. Aranya currently accommodates a population exceeding 80,000 in 6,500 residences, ranging from single room homes to spacious dwellings. It integrates low-income and middle-class housing through a system of houses, bright spacious courtyards and a network of internal pathways. The fluid contours and transitional spaces between living and community spaces reflect the Indian ethos of continuity between living and community spaces and nature.

While Aranya may not be replicable in today's urban India due to space constraints and rising real estate prices in major cities, the principles underlying Aranya offer useful insights into the design of sustainable low income housing in India that offers a congenial setting for the evolution of communities rather than utilitarian bricks and mortar abodes.

Doshi's work reflects an acute awareness of the context in which his buildings are located – a principle often overlooked in the design of low-income affordable housing. His designs are cognitive of the social, environmental and economic dimensions – as a result, his architecture is informed by the imperative of sustainability. The use of patios, passages connecting buildings and covered walkways offering respite from the elements are reflected in the designs of the School of Architecture (1966), now a part of the CEPT that he founded, and the IIM Bangalore (1992); Doshi's work creates spaces that provide relief from the harsh sun, draw upon breezes and provide a sense of continuity between the buildings and surrounding nature.

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[&]quot;Balkrishna Doshi: The work of India's Pritzker Prize winner", BBC News, 8 March 2018. https://www.bbc.co.uk/news/world-asia-india-43326825. Accessed on 22 July 2018.

In recognition of this approach, the award citation observed that, "Over the years, Balkrishna Doshi has always created an architecture that is serious, never flashy or a follower of trends. With a deep sense of responsibility and a desire to contribute to his country and its people through high quality, authentic architecture, he has created projects for public administrations and utilities, educational and cultural institutions, and residences for private clients, among others." An LIC housing project in Ahmedabad that Doshi has built gives a sense of community living in the middle of the hustle bustle and high-rise buildings in a posh area of the city. The leitmotif running through Doshi's career is sustainability and recognition of the human development aspect.

Legacy

Architect Yatin Pandya, founder director of Footprints E.A.R.T.H, who worked with Doshi at Vastu Shilpa for over two decades, in a tribute to his mentor spoke, "Doshi is a role model for all architects today. Although his works are never about fanciful, glitzy or glamorous designs, he has helped shape the thinking of many generations. His buildings are not only about 'awe' but are also about the 'aura' they create for times to come. What is also unique about his career is that apart from building buildings, he has also built institutions and schools, and has contributed immensely his engagement with the academic world. His contribution to research is also very noteworthy."¹²

Doshi has steered clear of iconic structures, eschewing a personal branding that is common among major architects. His work provides a blend of the orderliness and form with the seeming chaos and informality that seems to be India. Yet, there is a clear imprint reflecting the local ethos and sensitivity and accommodation of the local. What works in Ahmedabad is unlikely to be appropriate for the more temperate climate of Delhi.

Doshi believes that good architecture has hidden consciousness. His work has sought to bring together the modern and the vernacular. Brutalism adapted to the harsh Indian sun, the monsoon rains and humidity, and the imperative of finding shelter and space for the community. "Indian architecture is connected to nature as well as sustainability and is

¹¹ The Pritzker Architecture Prize, op. cit.

^{12 &}quot;B. V. Doshi: The man nature talked back to", op. cit.

humane is character. In our culture we talk about relationships, sharing, compassion and aspirations but of higher order which has an impact on larger percentage of society. So we can ask questions that are we really following any of these, either partially or fully and are we really trying to achieve this with the kind of technologies we have now and will be available tomorrow? Can our people spend less time in commuting? Can they spend more time with their families? Will there be a way to cultivate by spirit and body within natural, quiet and nourishing surroundings?"¹³

Relevance Today

Can Doshi's work inform India's pressing need for low-cost housing? Are the principles underlying his philosophy relevant in today's densely crowded urban spaces?

India is rapidly urbanising, facing the challenges developing countries face with migration to cities. The endemic shortage of affordable housing is reflected in the growth of slums. The growth of slums is accompanied by an increase in health-related problems due to poor or non-existent sanitation and the absence of basic amenities, such as sanitation and water.

The government estimated a shortfall of more than 18.78 million homes at the beginning of 2012, of which 95 per cent were in the poor segments¹⁴ of society. The urban housing shortage is projected to increase to 30 million by 2022. The widening gaps between rising demand and an inelastic supply has resulted in rapidly escalating prices, driving millions of migrants to slums. Drawn by high returns, the rapid growth of new townships and housing projects has been primarily catered to the needs of the middle and higher income groups.

Housing in India is a 'state subject', so individual states have the mandate to formulate housing projects for the economically disadvantaged. The challenges are formidable. Aside from the severe paucity of funds, efforts at scaling up housing for this socio-economic group is hobbled by high real estate costs, scarcity of land, poor construction, the inability of the target groups to obtain mortgage loans and, of course, affordability. Given the magnitude of

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¹³ Ibid.

Deloitte "Mainstreaming Affordable Housing in India Moving towards Housing for All by 2022", August 2016.

the problem, it is imperative for the central government, state government, local authorities, the private sector and civil society, especially those with stakes and an interest in affordable housing, to come together. This will also require capacity building at all levels of government. As local government is the closest to the eventual stakeholders, municipal and other civic authorities should have a clear understanding and appreciation of the priorities and exigencies of housing.

Over the past two years, the government has been proactive in this area. The aspiration to provide 'Housing for All by 2022' is backed by several policy initiatives. To attract funds to the affordable housing sector, the government has granted infrastructure status to affordable housing, which should ease access to funds and attract private investors directly and through public private partnerships to this sector. Financial incentives include the abolition of stamp duty and tax relief. However, private investors will be forthcoming only when the regulatory regime is streamlined. As is the case with most policy initiatives, much will depend on how these address the bottlenecks that have hobbled public construction projects.

The public sector's experience with affordable housing thus far has been almost entirely confined to the provision of housing for government employees. During a period when availability of land was not as much of a constraint as it is today, and land prices were moderate, the main concern was the quality of construction. In the absence of any competition among property developers, the quality was generally shoddy. A cursory view of any such housing scheme reveals the sharp contrast with the quality of housing at Aranya – nearly 30 years after it was completed. More pertinently, it is quality of life at Aranya that makes a powerful and compelling case for incorporating the humanist elements that Doshi translated into congenial housing that was designed to engender a sense of community.

In the past, affordable housing has consistently been the domain of the public sector, executed by public sector authorities, with architects drawn from the public sector. These structures reflected a functional approach paying little heed to 'living conditions' that could be foreseen. Over a short period, many started decaying and falling apart due to shoddy construction. More pertinently, they rapidly evolved into new urban ghettoes, with pervasive damp and darkness, and inhabitants who viewed them as places to come and sleep, rather than find the salience of a 'home'.

What elements can we take away from Aranya, the LIC housing district, and other affordable housing projects designed by Balkrishna Doshi?

The first is harmony with nature. In tangible terms, that entails cognisance of sunlight and air flows, which assumes great significance during monsoon months when high humidity levels, coupled with temperatures in the high 30s and low 40s, result in extremely uncomfortable sauna-like environment. Design that allows for wind flows enhance prospects for healthy living as free air circulation helps clear pests and the spread of damp within the living quarters. The design of the Housing Development Board (HDB) flats in Singapore offer some insights into architecture that seeks to optimise design to capitalise on wind flows.

Construction flaws abound in affordable housing projects. The most common among these are plumbing leakages which can compromise not just the structural integrity, but also raise health issues. Access to basic sanitation services, water supply and urban transport systems is essential. Projects distant from transport networks often remain unoccupied as transportation can consume scarce household resources and time.

Light wells or air shafts aim to provide light and air flows within the buildings. In most affordable housing projects they serve the opposite purpose – creating dark, damp, pest-infested areas that often serve as a dumping ground for inappropriately disposed garbage. Rather than enhance a sense of community, the squat square design of such buildings, serves to engender an atmosphere of alienation, and a breeding ground for pests, including rodents.

India should look at examples from other countries for this. The development of a masterplan that incorporates spaces for affordable housing is essential. Without transport links, there will be little incentives for people to move into such habitat.

Aranya's design revolves around integrated apartments that, while not compromising on privacy, flow into each other. Some of these flaws became evident following investigation of the tragic Grenfell Tower fire in London in June 2014. Again, the structure of HDB blocks is instructive as it minimises areas with constrained light and air flows, and through simple linear blocks, maximises air and light flows, and provides community spaces in the front and back. Common spaces and areas set aside for foliage also serve to enhance a sense of ownership, which makes a quantum difference not just to the quality of life, but also creates

incentives for maintenance and sustainability of the project. As incomes rise, the demand for better quality housing will increase. Taking a longer-term perspective on public housing by allowing for the upgrading of facilities is pragmatic, and a useful and low-cost solution to a challenge that will crop up over time.

Conversely, the lack of affordable and liveable or poorly designed housing can have severe effects on health, productivity, morale, the cost of living and on prospects for inclusive growth. Housing complexes with poor drainage, endemic damp spaces (ubiquitous in tropical monsoon conditions) often experience outbreaks of dengue, malaria and other diseases transmitted by mosquitoes and other pests.

Doshi's work and philosophy have much to offer and inspire in the design of affordable housing. An important insight from the work of Doshi and, indeed, other remarkable architects, such as Laurie Baker, who have worked tirelessly to provide decent affordable housing to the poor, is cognisance of local conditions, including climate, topography and access to essential resources including public transport, sanitation facilities and water supply. It is evident that the issue, if not dealt with effectively, can have tremendous negative impact on the country's economic growth and poverty reduction efforts.

Glenn Murcott, himself a Pritzker laureate and Chairman of the jury, in an evocative tribute to Doshi said, "Prof Balkrishna Doshi produced a body of work that has made consistent contributions to humanity and the built environment through the art of architecture. Balkrishna Doshi is unique. No architect living today has thought so long and so deeply about the spiritual dimensions of architecture. He is recognised as a sage of the profession. Doshi is the perennial student – forever eager to learn. It is this openness of mind open to learning that ensures his relevance for decades to come. How does architecture serve humanity? Environmentally sensitive architecture reverberates through his students who are spread out all over India."¹⁵

The climatic, weather, topographical and urban sprawl variations across India demand local solutions. There are successful examples in Secunderabad, satellite neighbourhoods of Chandigarh and elsewhere but these are too few and far between. It is incumbent upon

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At the Pritzker Prize award ceremony on 16 May 2018, hosted by the University of Toronto, courtesy the Aga Khan Foundation.

government authorities to recognise the principles underlying Doshi's work across seven decades and endeavour to flesh out the positive externalities these considerations engender to lay the foundations of a sustainable invigorating urban landscape.

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