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Architectural Storytelling: The Subjunctive Mode of Architectural Conceptualization and Experience in the Works of Balkrishna Doshi

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ABSTRACT This article looks at the written stories *The Revelation*, *The Sacred Spring* and *The Legend of the Living Rock* that accompany three built works in India – the Husain Doshi Gufa (Ahmedabad, 1992–95), the National Institute of Fashion Technology (Delhi, 1997) and the Bharat Diamond Bourse (Mumbai, 1998) – of Indian architect Balkrishna Vithaldas Doshi. The stories open up the process of architectural making, calling into question standard distinctions between author and reader, between architect and user or others involved in the making process, and between description, narration and built work. Through them, Doshi's architecture acquires an elusive property of being not theirs, not his, neither this nor that. Its spaces are alive – they evolve, grow and tell stories themselves long after the architect has left.

Introduction

Indian architect Balkrishna Vithaldas Doshi (b. 1927) worked in Le Corbusier's office in Paris between 1951 and 1954 and later supervised construction of Le Corbusier's works in Chandigarh (Punjab) and Ahmedabad (Gujarat), India. Doshi admits that it was hard to be a

proponent of modern architecture in the newly independent India.[1] During the 1951 inaugural ceremony for the Ahmedabad Textile Millowners' Association Building, designed by Le Corbusier, Minister of State Morarji Desai was surprised to see the detached toilet and staircase blocks. "Is this what modern architecture is all about," he asked, "with inside organs exposed?"[2] Doshi describes how he concocted "bizarre stories" to account for Le Corbusier's buildings and make them seem acceptable. For the Sanskar Kendra Museum, Ahmedabad, of 1954, he explained that the Municipal Corporation had actually asked Le Corbusier to design a milk dairy; the ramp was provided for the buffaloes to reach the main floor. The mezzanine floor, he said, was for storing their feed, and the square holes in the ceiling allowed the feed to be spread across the floor below.[3]

Doshi wrote that:

> thinking up and narrating such stories, which in a way denigrate my guru's work, was the mask I had to wear to face subtle, not so subtle, and at times outright hostility and condemnation of the completely new architecture I stood for or represented.[4]

Although these stories were invented to stave off criticism, what they also did was to find and convey meaning that was appropriate to a particular context. They helped to acclimatize modern architecture to the Indian milieu. Stories are integral to Doshi's architecture and take many forms in his architectural creations – verbal (oral and written stories), visual (through his architectural drawings, which are heavily influenced by sixteenth–eighteenth-century Indian miniature paintings) or tectonic (through his buildings). This article looks at how Doshi weaves stories to materialize his architecture and how his architecture allows for more stories to be created by involving others.

The first section looks at Doshi's written stories, *The Revelation*, *The Sacred Spring* and *The Legend of the Living Rock* that respectively accompany three built works: the Husain Doshi Gufa (Ahmedabad, 1992–95), the National Institute of Fashion Technology (Delhi, 1997) and the Bharat Diamond Bourse (Mumbai, 1998).[5] Doshi's stories narrate the intent and character of his architecture. They assume the form of a palimpsest, with layers of memories, expectations and fantasies along with meticulous descriptions of site and project characteristics, the history of the place, chance encounters and events during the execution of the buildings. Doshi seamlessly weaves these real and unreal fragments into his writings.

The stories work to remove the emphasis on the physical, material image of architecture and go beyond being a means of explanation. They extend an invitation to all those involved to collaborate in and feel part of a continuous narrative, converting the architectonic process into a social, collaborative act as opposed to an idiosyncratic exercise on the part of the architect. Doshi's built works themselves then seem to have a spatial fecundity that produces yet more stories. The

second section of the paper describes how his built work has a degree of incompleteness and openness that allows users to add to and embellish its base condition. Users are given a chance to make their own stories, and hence feel a sense of ownership and attachment to the built.

For Doshi, architecture is "never about resolving a problem; it is about discovery in the joy of making."[6] His architectural process is different from those practices where the architectural creation is seen as an end in itself – where the architect designs, the builder builds and users use, in that chronological order. In many traditional buildings, in India as elsewhere, architecture functioned primarily to frame religious life, revealing cosmic and transcendental meanings in the material world. Based on a mythical and iconographic program, this was a mode of architectural creation that involved "living stories that articulated people's lives," resonating with their identity and growing out of their culture, rather than being imposed as a one-off solution by a trained expert or professional.[7]

Contemporary architectural practices tend to concentrate on making buildings that are considered "complete." Designed in an office using advanced digital tools of representation and analysis, they manipulate objectified Cartesian space in their focus on practical uses. They are "like scientific prose," converting the subject into a "solitary consumer" and a "passive observer inhabiting architecture."[8] Dalibor Vesely describes the current version of the architectural profession as "a mosaic of expert knowledge brought together either as abstract systems or as the intuitive improvisations of personal vision" and marketed as a commodity.[9] For Vesely, no such system or vision can replace the unity or inseparability of the different levels of knowledge (geometric definition, material imagination, experiential aspects – some more articulate, others more implicit) required for the genuine creativity of the art of building.[10] Richard Sennett points to a similar systematization and homogenization in contemporary urban design, and claims that it is part of a process of "de-skilling" people, preventing them from practicing the everyday skills of sharing with others to make up for what we may individually lack, skills that are needed to make a complex society work.[11] He asks that we should counter this by learning to work in the subjunctive mood, a mood which facilitates the opening of an indeterminate open mutual space for cooperation.[12]

The subjunctive mode of the verb in English grammar is used to describe that which could happen, rather than that which has happened or will happen. It refers to desires, suggestions, unlikely events or possibilities rather than to objective facts. Subjunctive verbs open the possibility of conversation and exchange; they do not limit narrative to that which is definitively given. This article argues that Doshi's stories and his built works give his architecture a subjunctive character – architecture viewed through not only a positivistic lens but also an imaginative, oneiric and fantastical one, opening a space for the

interaction of people, space and time. His stories and built works function as "open work," described by Umberto Eco as something that has no particular subject, but within which instead a great variety of potential meanings coexist. The open work presents to the reader a "field of possibilities." Its "deliberate and systematic ambiguity" invites collaboration and involvement between the public and the author or, in Doshi's case, between users, other players in the architectural making process, and the architect.[13] This article aims to show how the subjunctive mood gives to Doshi's architecture an elusive property of being not theirs, not his, neither this nor that. The spaces are alive. With time, like living beings, they evolve, grow and tell stories themselves long after the architect has left, lending an extravagance that offers unlimited interpretation for use in a time when perpetual programmatic obsolescence tends to be the lived architectural reality. Doshi's works are acts of unearthing, composing and celebrating stories, offering the possibility of extending architectural thought beyond the theoretical and the practical, to revive in it contemplation, participation, reverie and emotion.

The Storyteller and the Stories

Born in Pune, Maharashtra, Doshi studied architecture at the Sir J. J. School of Art in Mumbai in the late 1940s. He established his own office, Vastu-Shilpa (Environment Design) in Ahmedabad in 1955, on his return to India from Paris and while he was still supervising Le Corbusier's Indian projects. Since then, he has become known not just as an architect but also as an educator – he was the founding director of Ahmedabad's School of Architecture from 1962 to 1972, and of the city's School of Planning from 1972 to 1979. This year, he was awarded The Pritzker Architecture Prize for "significant contributions to humanity and the built environment."[14]

Doshi grew up as part of a deeply religious extended family amidst the quotidian religious rituals, ceremonies and stories from epics which were told by family elders every evening.[15] These epics, particularly the Ramayana and Mahabharata, often described as myths, are called in India *itihasas*, or "histories." They are understood not as a "figment of the imagination" but as narratives inextricably interwoven into people's lives and used as "a point of reference to continuously evolve and influence the living patterns and attitudes of human societies of the past, present and future."[16] In the mid-1960s Doshi became deeply interested in Indian traditions and heritage. He studied the Bhagavad Gita and was enchanted by the *shlokas* or verses that dealt with the fundamental truths of life.[17] In his study of traditional buildings and scriptures, Doshi became aware of the "deep absorptions of different cultures" in the Indian fabric and how they were adapted to new situations to create a whole new symbolism. "Ever since then, I have been questioning the basic issue of

not only order, not only tradition, but what is the real essence of creativity?"[18]

For Doshi, the notion of historical architectural style is a limited one to be set aside so that "we realize that what we are presently perceiving is through our memories of past and present, as layers seen together and not as fragmented issues of art, architecture or life."[19] Looking at traditional Indian architecture, Doshi was intrigued by the "patina of a place changing over time," subject to many different influences.[20] The spaces that emerged between built forms and the coexistence of fragments from different periods and styles fascinated him. He sought to create a similar unison of fragments in his work. For example, in Delhi's National Institute of Fashion Technology (NIFT) (1997), each building in the complex adopts a different architectural language, making reference to different times and places. Doshi used storytelling to explain to his colleagues and clients the varied imagery and multiple layers of the architecture. These stories originated orally; they were elaborated bit by bit over the course of the design process and combined with accounts of things that happened during the project's evolution before being written down – in the case of the NIFT – as *The Sacred Spring*.

At the NIFT, the central courtyard, flanked by the main buildings of the complex, was intended to replicate the feeling of a traditional square and foster a sense of community. Doshi conceived of the atmosphere like a bazaar, its theatrical element heightened by activities, spontaneous and otherwise, of students and visitors. Discussing a conceptual drawing of the courtyard with an intern working in the office, Doshi realized that she could not imagine the space as theatrical, magical, almost sacred.[21] He told her that long ago the site had featured a beautiful village with a central sacred pond. It was a place of pilgrimage, the only source of water in the vicinity, found only after digging very deep. People gathered here to sing, dance and to select their future spouses. Platforms and steps were made around the pond to facilitate rituals and other more spontaneous activities. Gradually many exquisite homes were built around it. The archaeological authorities acquired the site and passed it on to the Fashion Institute, asking it to preserve what it could of its sacrality, and also to "add a present-day dimension to it."[22]

The intern was thus pushed into the world of fantasy and fiction; Doshi's story meant that she no longer found herself engaged in gratuitous formalism. At the building's inauguration, many people asked Doshi if the water of the spring were sacred and, if so, whether this should be made more publicly known.[23] In the story, a sense of history was invoked which the architecture could then recreate. In reality, the courtyard, water feature and steps refer to a past that never was. But Doshi's was a poetic history, a fantasy that could be materialized in order to usher in a sense of the past. It was not just the intern for whom a

feeling of mystery had been engendered; the synthetic construct of story and building sparked the imagination of a much wider audience in their engagement with it.

The story of *The Sacred Spring* reifies the opposition between truth and falsehood by fabricating a real falsehood, or a false reality. It does so in order to shift the emphasis from either, to allow instead for the "recognition of the impossibility of deciding" between the two, or, more all-subsuming, for the "non-recognition of any need to decide."[24] The story's role is to contend that fiction, invention and imagination are not falsehoods but ways of bringing about a richer reality. Like historical fiction, a genre that inspires writers to explore "systems of knowing" more deeply through "imaginative understanding," the story's poetic fiction allows for the structuring of past and present to be reconceived and re-experienced.[25] It helps to outline "new ways of being in the world."[26]

The Revelation is a story that accompanies the project called Husain-Doshi Gufa (1992–95) in Ahmedabad. Indian painter M. F. Husain and Doshi worked together to see how they could challenge each other, and how art and architecture could question and interpret each other. The resulting underground art gallery with multiple connected domes and interior tree-like columns was called Amdavad ni Gufa because of its subterranean, cave-like form (a *gufa* is a cave) (Figure 1). Through the built form, the architect challenged the artist who could not hang his paintings on the curvilinear walls and had instead to use both walls and ceilings as his canvas.[27]

The Revelation gathers together the wide range of sources of inspiration for the Gufa. It blends formal references with an account of the way the Gufa was made – through a combination of digital and traditional techniques. According to the story, after several failed attempts to find a form for the Gufa, Doshi visited the site in search of a clue. That night he had a dream in which the body of a large tortoise-like form appeared to him, like the mythological turtle Kurma, second avatar of the Hindu god Vishnu, preserver of cosmic order.[28] Unlike a normal tortoise, the one in Doshi's dream was long and had two large mouths, one at each end, interconnected with shells of different shapes and sizes. The tortoise questioned Doshi's approach to architecture, and reminded him of the

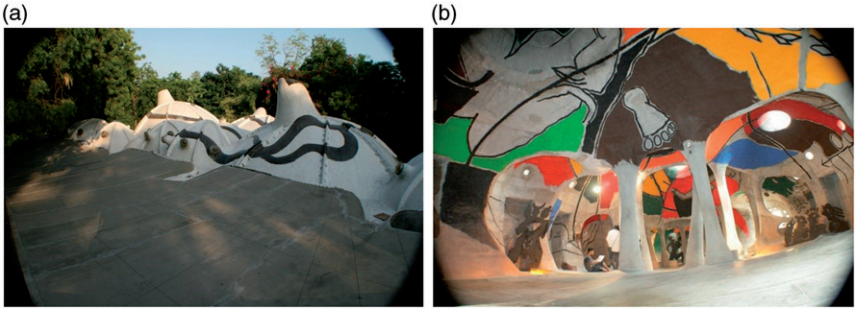

Figure 1
Amdavad ni Gufa, Ahmedabad: (a) exterior and (b) interior views, 2015. Photographs by the author.

discoveries made by Giulio Romano and others during the post-Renaissance and Baroque period:

> He [Kurma] emphasized how the definition of space and form were gradually being dissolved, three-dimensionally, and how the sky was becoming part of the interior space. He even talked about optical illusion(s) [...] and how they are essential to make us realise that the space and form that we see are part of the infinite, and hence timeless and illusory.[29]

The tortoise urged him to think beyond the functional to bring about a seamless integration of space and structure in a form akin to a living being. "In short, what I want you to do," said the Kurma, "is start afresh, forget that you are an architect and design this building using your innermost sensibility. Become and be part of the process rather than an outsider."[30]

The story describes how, from sketches of caves and other objects mimicking the form that Doshi had seen in his dream, evolved a series of hand molded thermocol and clay models. This required rethinking standard construction methods and techniques. Doshi and Husain chose ferrocement technology, with a structure of very light steel reinforcement wrapped in chicken wire mesh covered by a rich mortar mix of cement and sand, for which no foundations were required. To enhance the cave-like feeling of the gallery, the contours of the site were retained, rather than being leveled, with a thin concrete floor slab simply poured over them.

No trained mason, the story recounts, was prepared to apply the cement sand mortar on the curved mesh, as there were no straight lines or levels, and there was no shuttering around the curvilinear forms to hold it. In the dream, the Kurma had pointed out

> that as you progress, grow in your understanding of the universal governance, you will have the opportunity to combine the skills available from [...] engineers, contractors, masons, labourers, architects, clients, suppliers, etc. Because each one within him has an instinct which tells him how life works. If you can take help from them without hindrance from your ego, you will be able to build architecture which is profound.[31]

Doshi sought help from the tribal people from the local forests who could easily adapt their skill of applying clay by hand, used in the construction of their mud houses. They were employed to hand press the mortar around the mesh; it was then covered with a compacted layer of vermiculite followed by a mosaic of pieces of broken china. The porthole windows on the domes were oriented to allow in maximum light and the minimum amount of heat to mitigate the hot climate of Ahmedabad. The interior of the Gufa comprises two large rotundas intended as meeting

rooms to discuss issues of art and culture. During the building process, the local tribal people, practicing familiar construction techniques, felt able also to perform their usual rituals of dance and worship around the site for nine days. This in turn inspired M. F. Husain to paint the mythological cobra, Sheshnaag, on the exterior of the domes – Sheshnaag, one of the primal beings of creation, is said to hold all the planets of the universe on his many hoods; Vishnu is often depicted resting on him.[32]

Doshi's story is a mix of fantastical fiction, technical knowledge and empirical accounts of events. It incorporates hallucination, dream and mythology together with the happenings on the construction site to describe the architectural creation not only in "essentialist, 'just so' terms" but also from "provisional, 'as if' perspectives."[33] The story brings forth the social nature of architecture – at the Gufa, architectural design, construction and embellishment came together in an act of fellowship, all with reference to a deeper understanding of what it might mean to make, to order or to give shape to things – an act of fellowship to be continued through the building's use. Doshi's architectural thinking is not solipsistic, but asks to be developed in common. There are many contributors to the architectural story, many players who make it possible.

The Legend of the Living Rock is the story that accompanies the building of the Bharat Diamond Bourse in Mumbai (1998), a place intended to gather all the activities of the diamond trading community in Mumbai.[34] The Bourse is built on a reclaimed site where rock strata lie only a few meters below the ground. According to the story, early on in the project Doshi received an urgent call from the building contractor calling him to the site. It had been excavated to a depth of ten meters to reveal a rock bed riven with textures and patterns. Almost in the center of the huge flat rock (about eight hectares in size) was a stub, like a beautiful uncut diamond. It appeared to pull the landmass up, rather like the mountain used to churn the sea in the mythological story of Vishnu's avatar, the turtle Kurma or like the last jewel in the remnants of an ancient quarry.[35]

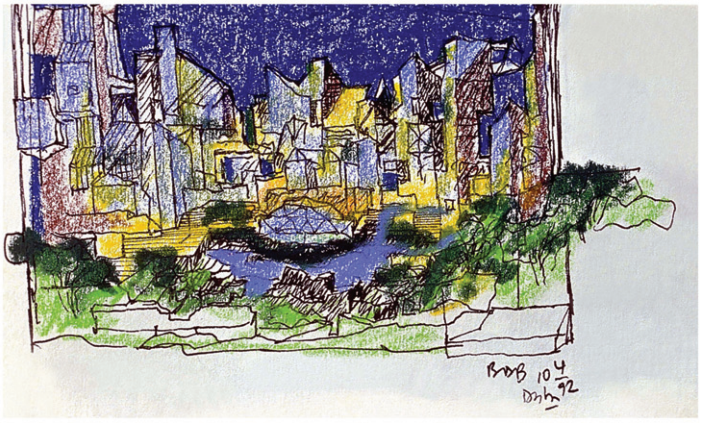

Figure 2
Sketch of the Bharat Diamond Bourse, Mumbai. Courtesy: Vastu-Shilpa Foundation for Studies and Research in Environmental Design, Ahmedabad.

The narrative describes the process of photographing the now-excavated site and overlaying the photographs and the design drawings. It then "became clear to us that this site must be an ancient quarry from where the last *ratna* (jewel) had emerged," goes the story. "We [...] felt that this quarry must have been a major trading centre of precious stones in the ancient past."[36] The project was reworked, drawing after drawing, overlay after overlay, until it seemed almost natural that the various fissures running from the central rock outcrop should have been transformed into channels of water running through the landscaped gardens of the Bourse, bodies of water which are taken up in the festivals held there, as well as being used, pragmatically, for climate control. The Bourse now includes offices, a business center, exhibition space, restaurants, banks, laboratories, medical and dental facilities, its near self-sufficiency complemented by its waste water recycling system. It has shady streets and courtyards framed by slim towers which draw in cool winds along the water channels. *The Legend* is no mere project description, but a beguiling weave of observation, fantasy and documentary which becomes a metonym for the imaginative habitation of the site. The drawings and models of the place, and now the place itself, all seem to substantiate its magical quality, blurring the "as-if" with the real (Figure 2).

Doshi appears in different roles in these stories. He is sometimes author, sometimes narrator, sometimes orchestrator, sometimes the "empirical reader" who borrows myths and tales to invest in them or elaborate from them his own fictions, both stories and built work.[37] The stories show the act of making itself as taking place in the subjunctive mode, in that they do not so much explain or describe something that happens independently from them as enact that happening. Marco Frascari uses the same term to describe the way in which El Lissitzky's axonometric drawings of the Proun Room of 1923 operate – by rejecting perspective, the axonometric projection is not a way of seeing or looking at so much as a way of involving those who engage with its construction; sitting "on the border between direct and indirect perceptual apprehension," El Lissitzky's drawings present "architecture in a subjunctive mode since [their] construction constitutes an activity that cannot be subordinated to another enterprise."[38] They are not merely descriptions of something, they constitute its making. Although very different, Doshi's stories work in a similar way. To listen to them, to become caught up in their multiple vantage points means to become involved in constructing the setting they create. Consisting, among other things, of descriptions of architectural conceptualization and construction processes, of discussions of the aesthetic as well as the technical, they call on a particular kind of reflective judgment which is again one of involvement. The act of imagining that the stories demand means that the spaces they evoke are always embodied constructs, their aesthetic and technical expression sensed as much as conceptually understood.[39]

Figure 3
Life Insurance Corporation Housing, Ahmedabad, (a) before and (b) after transformation by its occupants. Courtesy: Vastu-Shilpa Foundation for Studies and Research in Environmental Design, Ahmedabad.

The As-if

Philosopher Richard Kearney, in his book *On Stories* (2002), describes the way in which stories can change us and take us to new places. In order to engage with them, we have to give ourselves over to them, at least for a moment. "It is precisely this double take of difference and identity – experiencing oneself as another and the other as oneself – that provokes a reversal of our natural attitude towards things and opens us to novel ways of seeing and believing."[40] Stories release us from our existing selves to become "as if" another, in a moment of catharsis, so that we can understand ourselves more fully.

It is this kind of engagement that Doshi hopes to elicit from the "players" in his stories, and his buildings. He advocates an architecture

where an entire community, present and future, participates in making decisions – those who live in and around it, planners, builders, later architects etc., each weaving their own "as-ifs" as they acknowledge both others and their own desires. This, hopes Doshi, will lead to a "heterogeneous homogeneity, in which the collective and the individual both find opportunities for self-expression;" it is an approach that he calls for as an antidote to the contemporary loss of a "sense of wholeness to our built environment."[41] He sees an immense and ongoing richness in something like Ahmedabad's Sarkhej Roza mosque complex, built originally in 1466, which has designated areas and roles for mosque, tomb and other pavilions, but which in its "en-route, unassigned spaces" gives room to a host of spontaneous activities that change with the seasons, specific festivals, the time of day and the intensity and character of the visitors. For Doshi these "ambiguous plural spaces" are places of "unexpected joys" where those who move through them seem drawn towards a quasi-mythological world in which "time and space are internalized," embodied.[42] In their very lack of designation, such places – gaps or pauses – become fully entwined with people's sense of identity, and thus they are passed on as cultural heritage, to be constantly reinterpreted.[43]

It is in the housing projects associated with Doshi's office, and for which he is so well known, that this very real "user participation" is at its clearest. India's Life Insurance Corporation Housing in Ahmedabad is usually dated 1973, but the families who live in its different sized units have been embellishing them ever since. In the original three-storey structure, the largest two-bedroom units were on the ground floor, the medium one-bedroom units on the first floor and the smallest units with one room and a kitchen were on the top floor, reached by a communal external staircase. All 315 units were provided with terraces which could be converted to rooms when needed or when finances allowed, and all have been transformed (Figure 3).[44] Doshi did not dictate when or how this would happen: he simply made spatial provision for families to change their houses according to their own particular and unpredictable desires, while remaining always part of the whole.

At the Aranya Housing Scheme near Indore, Doshi's office set out a range of open spaces from small courtyards to pathways and streets. The "site and service" elements were completed in 1988. The poorest inhabitants could buy simply a lot – or rather, in terms of stories, a plot – with sewerage, electricity and water. Others could buy a room or an entire house. As plots were developed, materials were purchased from a cooperative and paid over time. Training programs to teach the building technique were provided. Incrementally designed house plans, prefabrication and standardization, kit of parts, service core and supporting infrastructure became the critical elements of design.[45] The involvement of inhabitants has built a complex and dynamic place, a town, where people feel a sense of rootedness. Many personal anecdotes

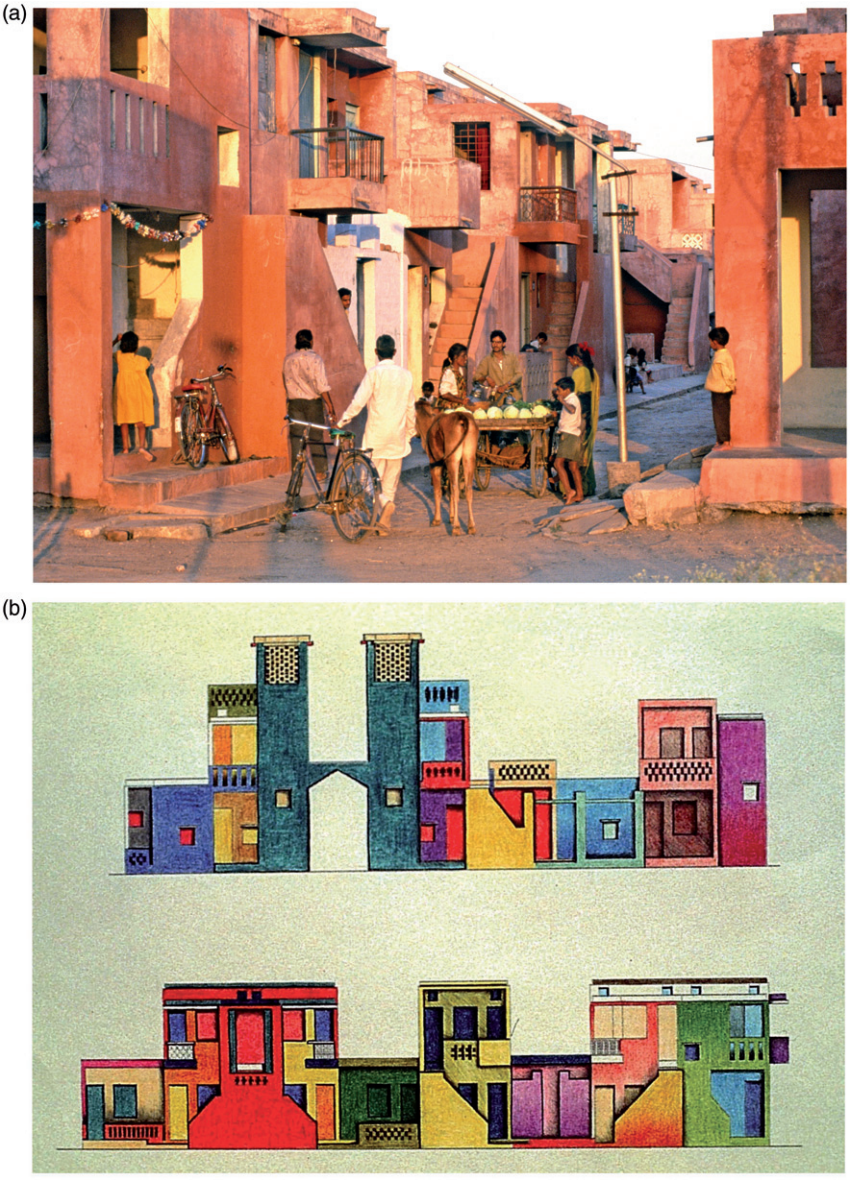

Figure 4
Aranya Housing Scheme, Indore: (a) general view and (b) indicative drawing showing sections of the housing. Courtesy: Vastu-Shilpa Foundation for Studies and Research in Environmental Design, Ahmedabad.

and collective stories depicting the evolution of the neighborhoods and communities are told (Figure 4).

These projects are what Eco might call "works in movement," works that consist of "physically incomplete structural units" to be brought to a completion through an ongoing dialogue between the author's intentions and the performers' choices.[46] "Every performance exploits the composition, but does not exhaust it. Every performance makes the work an actuality, but is itself only complementary to all other performances of the work."[47] For Eco, authorial intent remains important; the work is not merely the conglomeration of random elements but is a

structure to be taken up and reinterpreted. Doshi's projects offer their inhabitants an initiating structure for the making of spaces and activities. The initiating structure enables, responds to and intensifies the places and events that emerge within it, allowing them to recombine, to transform and extend the structure that contains and gives rise to them. Doshi's role is that of a director of theatrics who brings characters together into the play; each character brings a new way of looking at things, creating a kaleidoscope of possibilities. From and with each new perspective, the architectural story changes. Doshi actively involves makers and users of all kinds in the development of the narrative, so that the creation is neither his nor theirs. By participating in the making, what is built becomes meaningful to all. The reciprocity of understanding or interpretation and the way of making leads to a more communicative architecture.[48]

Conclusions

In his *As If: Modern Enchantment and the Literary Pre-history of Virtual Reality* (2012), Michael Saler describes the fantastic virtual worlds of the imagination that emerged in Europe and America in the late nineteenth century. The worlds of writers such as Arthur Conan Doyle, J. R. R. Tolkien or H. P. Lovecraft were intended

> not to replicate the everyday, as was the case for realist fiction, but to complement it – to secure the marvels that a disenchanted modernity seemed to undermine, while remaining true to the tenets intellectuals ascribed to modernity at the time, such as rationality and secularism.[49]

They were to be enjoyed through the double consciousness of the ironic imagination which presented "fantasy realms [...] in a realist mode, cohesively structured, empirically detailed, and logically based, often accompanied by scholarly apparatus such as footnotes, glossaries, appendices, maps, and tables."[50] Along with these authors, idealist philosophers and scientists influenced by them contended that reality itself was imaginary, and illustrated the complex role played by the imagination in the formation of concepts representing the real. Ernst Mach's technique of conducting *Gedankenexperimenten* or "thought experiments," and Albert Einstein's reliance on such thought experiments as well as on philosopher Hans Vaihinger's *The Philosophy of "As If": A System of the Theoretical, Practical and Religious Fictions of Mankind* (1911) provide examples.[51] Saler argues that "ironic imagination re-enchanted the modern world without abjuring modernity's commitment to rational critique."[52] The intertwining of reality and fiction took on the role of magic for the modern mind through the "willing activation of pretense."[53]

Doshi's stories bring in actuality and fiction together in a way that is not so much ironic as generative, creative. When they work to render the "absurd real" and the "real absurd," it is by understanding pragmatism and fantasy to be not antagonistic but fully compatible.[54] The stories act as a critique of architecture viewed as prescriptive, instrumental problem-solver and aesthetic spectacle, viewed from afar, but they do not do so by calling out what they criticize. Instead, they draw people into the thick of architecture as an intense experience that is fully interwoven with their lives, practical, perhaps beautiful, but also poetic, oneiric. Through storytelling, Doshi aims not to explain or to theorize, but to engage the full depth of the situation that architecture both articulates and embodies – a situation that is concerned with the utilitarian, the historical, the sociocultural, the mythological, the personal, the collective. Architecture, as Doshi imagines it, calls for an "oscillating and layered state of mind, simultaneously playful and serious, dynamic and static, pragmatic and spontaneous, fluid and inert, chaotic and ordered […]."[55]

By explicitly bringing in fantasy, adding an "as if" dimension to the technical and the aesthetic, Doshi's architectural storytelling gives all its players a way of sharing in the development of its plot. Given an imaginative means of articulating experience, those involved engage with each other, and also with questions of what it means to make or to build. If the program underlying traditional buildings was based on allusions to their mythical origins, when the "worldly origin of emotions and the limitations of the intellect to master them were taken as the natural order of things,"[56] Doshi's work raises the possibility of a modern version of such a program. It posits an architecture that operates reciprocally between the instrumental and the poetic, to continually re-found culture. Both true and realistically impossible, quintessential and particular, evolved and evolving, Doshi concludes that architecture has the capacity to carry many messages and fulfill many roles, but to do that it must possess the "magic of a story."[57]

Pallavi Swaranjali is a Ph.D. candidate and contract instructor at the Azrieli School of Architecture and Urbanism, Carleton University. She has a B.A. in Architecture from Birla Institute of Technology in Mesra, India, and an M.A. in Industrial Design from the Indian Institute of Science in Bangalore, where she also worked in architectural practice. Her research centers on the relationship between architecture and storytelling, looking at non-conventional modes of architectural representation which combine the normative and the fantastical, and the way in which they transform architectural making and experience.

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Notes

1 In 1947, shortly after India gained independence from the British, Prime Minister Jawaharlal Nehru initiated a drive for modernization throughout the country, hence the invitation to Le Corbusier and Pierre Jeanneret to visit for the first time in 1951. At Chandigarh, "the sole instruction given by Nehru was to be expressive, experimental and to not let themselves be hindered by tradition;" Patrick Seguin, *Le Corbusier–Pierre Jeanneret, Chandigarh, India* (Paris: Editions Galerie Patrick Seguin, 2014). Available online: https://www.patrickseguin.com/en/publications/corbusier-pierre-jeanneret-chandigarh-india/ (accessed February 12, 2018).

2 Balkrishna Doshi, *Paths Uncharted* (Ahmedabad: Vastu-Shilpa Foundation for Studies and Research in Environmental Design, 2015), 369.

3 Ibid.

4 Ibid., 370.

5 The stories are included in James Steele and Balkrishna V. Doshi, *The Complete Architecture of Balkrishna Doshi: Rethinking Modernism for the Developing World* (London: Thames & Hudson, 1998). First published as pamphlets or brochures to accompany their respective projects, the Vastu-Shilpa Foundation intends to reissue them in 2019 as separate publications.

6 Rajeev Kathpalia, "The Joy of Making – Ways of Seeing, Ways of Building," in *Harnessing the Intangible*, ed. Neelkanth Chhaya (New Delhi: The Academic Unit of the Council of Architecture, 2014), 91.

7 Alberto Pérez Gómez, *Attunement: Architectural Meaning after the Crisis of Modern Science* (Cambridge, MA: MIT Press, 2016), 4, 5.

8 Ibid., 5, 127.

9 Dalibor Vesely, *Architecture in the Age of Divided Representation: The Question of Creativity in the Shadow of Production* (Cambridge, MA: MIT Press, 2006), 3.

10 Ibid.

11 Richard Sennett, *Together – The Rituals, Pleasures and Politics of Cooperation* (New Haven, CT and London: Yale University Press, 2014), x–ix, 8.

12 Ibid., 23.

13 David Robey, "Introduction," in Umberto Eco, *The Open Work*, trans. Anna Cancogni (Cambridge, MA: Harvard University Press, 1989), x, xi, 45.

14 The Pritzker Architecture Prize (n.d.). Available online: https://www.pritzkerprize.com/about (accessed May 7, 2018).

15 Doshi, *Paths Uncharted*, 19, 34.

16 H. Kumar Vyas, *Design, the Indian Context: Learning the Historical Rationale of the Indian Design Idiom* (Ahmedabad: National Institute of Design, 2000), 11.

17 Balkrishna Doshi, with Muktirajsinhji Chauhan and Yatin Pandya, *The Acrobat, the Yogi and the Sangathi* (Ahmedabad: Vastu-Shilpa Foundation for Studies and Research in Environmental Design, 2006), 5.

18 Ibid., 6.

19 Balkrishna Doshi, unpublished notes accessed by the author in Doshi's office Sangath in Ahmedabad, September 2015.

20 Doshi *et al.*, *The Acrobat, the Yogi and the Sangathi*, 22.

21 Balkrishna Doshi, interviewed by the author, October 2015, Sangath, Ahmedabad.

22 Steele and Doshi, *The Complete Architecture of Balkrishna Doshi*, 170–171.

23 Doshi, *Paths Uncharted*, 338.

24 Derek Pearsall, "Forging Truth in Medieval England," in *Cultures of*

Forgery: Making Nations, Making Selves, ed. Judith Ryan and Alfred Thomas (London: Routledge, 2003), 11. Pearsall discusses inauthentic documents and texts of the Middle Ages which suggest a somewhat flexible attitude towards truth, fiction and falsehood. The "recognition of the impossibility of deciding or non recognition of the need to decide" should be construed "not as an intellectual defeat but as an achievement, the capacity to hold on to one's lack of certainty."

25 Jerome de Groot, *The Historical Novel* (London: Routledge, 2009), 126; E. H. Carr, *What is History?* (London: Penguin, 1961), 24. See also Peter Bondanella, *Umberto Eco and the Open Text: Semiotics, Fiction, Popular Culture* (Cambridge: Cambridge University Press, 1997), 165.

26 Ynhui Park, "The Function of Fiction," *Philosophy and Phenomenological Research* 42, no. 3 (1982), 424. Park is quoting Paul Ricoeur on the nature of fiction; Paul Ricoeur, *Interpretation Theory: Discourse and the Surplus of Meaning* (Fort Worth: Christian University Press, 1976), 37.

27 Steele and Doshi, *The Complete Architecture of Balkrishna Doshi*, 146–155.

28 Vishnu, the Hindu god of preservation, was said to have descended in the form of ten avatars, or incarnations, to restore cosmic order. Sage Durvasa had given a garland to Indra, the king of the gods, who placed the garland around his elephant, but the animal trampled on it. The insulted Durvasa cursed the gods, declaring that they would lose their immortality and divine powers. Vishnu advised the gods to drink the nectar of immortality to regain their powers. The nectar could be acquired by churning the ocean of milk, a body of water so large they needed Mount Mandara as the churning staff and the serpent Vasuki as the churning rope. Taking the form of the turtle Kurma, Vishnu bore the mountain on his back as they churned the waters.

29 Steele and Doshi, *Complete Architecture of Balkrishna Doshi*, 151.

30 Ibid., 153, 154.

31 Ibid., 153.

32 Ibid. The story of Sheshnaag, Sheshanaga or Śeṣanāga is described in the Puranas, ancient Hindu texts in praise of the deities.

33 Michael T. Saler, *As If: Modern Enchantment and the Literary Pre-history of Virtual Reality* (Oxford: Oxford University Press, 2012), 16. Saler suggests that "J. R. R. Tolkien's epic fantasy *The Lord of the Rings* (1954) owed much of its appeal to its logical rigor and empirical detail. Its maps, glossaries, chronologies, and other scholarly elements fostered an analytic mindset as well as a sense of wonder. Tolkien apparently insisted that 'fantasy is a rational not an irrational activity;' it 'does not either blunt the appetite for, nor obscure the perception of, scientific verity. On the contrary: the keener and the clearer is the reason, the better fantasy will it make.'"

34 Steele and Doshi, *Complete Architecture of Balkrishna Doshi*, 173–174.

35 See note 28.

36 Steele and Doshi, *The Complete Architecture of Balkrishna Doshi*, 182.

37 For Eco, the "empirical reader" is someone who uses the text as a "container for their own passions which may come from outside the text or which the text can arouse;" Umberto Eco, *Six Walks in the Fictional Woods* (Cambridge, MA: Harvard University Press, 1994), 8.

38 Marco Frascari, *Eleven Exercises in the Art of Architectural Drawing: Slow Food for the Architect's Imagination* (London: Routledge, 2011), 168–169.

39 Peg Rawes, "Acts of Imagination and Reflection in Architectural Design," in *From Models to Drawings: Imagination and Representation in Architecture*, eds. Marco Frascari, Jonathan Hale and Bradley Starkey (London: Routledge, 2013), 264–268. Rawes is describing Immanuel Kant's notion of imagination which "enables space and geometry to become embodied, rather than merely being cognitive ideas;" 267.

40 Richard Kearney, *On Stories* (London: Routledge, 2002), 140, quoted in Marc J. Neveu, "On Stories: Architecture and Identity," *Arkitektur N* (March 5, 2008). Available online: http://digitalcommons.calpoly.edu/cgi/viewcontent.cgi?article

=1038&context =arch_fac (accessed July 20, 2016).

41 Balkrishna Doshi, "Social Institutions and a Sense of Place," *Marg* 48, no. 3 (1997): 23–24. In this article, Doshi refers to an earlier piece he wrote with Christopher Alexander on the concept of "main" and "supporting structures" in the design process; Christopher Alexander and Balkrishna Doshi, "Main Structure Concept," *Landscape*, 13, no. 2 (1964): 17–20.

42 Doshi, *Paths Uncharted*, 315; Balkrishna Doshi, "Give Time a Break" in *Sangath: Indian Architecture between Tradition and Modernity*, ed. Bruno Melotto (Santarcangelo di Romagna: Maggioli, 2012), 93.

43 Doshi, *Paths Uncharted*, 315.

44 Ibid., 304–305.

45 Steele and Doshi, *Complete Architecture of Balkrishna Doshi*, 115–129.

46 Eco, *Open Work*, 12.

47 Ibid., 15.

48 Vesely, *Architecture in the Age of Divided Representation*, 6. Vesely's call is for a "communicative architecture" in which "interpretation [...] and the way of making [...] come so close that they become fully reciprocal," rather than an architecture that is either purely instrumental or obscurely personal. "What we know contributes to what we make, and what is already made contributes substantially to what it is possible to know," he continues.

49 Saler, *As If*, 6, 7.

50 Ibid., 25.

51 Hans Vaihinger's *Die Philosophie des Als Ob* (1911) argues that while sensations and feelings are real, human knowledge otherwise is made up of "fictions" that are justified only through pragmatism. Vaihinger draws on Kant and Friedrich Nietzsche to reach these conclusions; Hans Vaihinger, *The Philosophy of "As If:" A System of the Theoretical, Practical and Religious Fictions of Mankind*, translated by C. K. Ogden (London: Kegan Paul, Trench, Trubner, 1924); Saler, *As If*, 104.

52 Saler, *As If*, 104.

53 Ibid., 28.

54 Doshi *et al.*, *The Acrobat, the Yogi and the Sangathi*, 23.

55 Durganand Balsaver, "The Paradox of Doshi's Mythical Realism," in Chhaya, *Harnessing the Intangible*, 81.

56 Pérez Goḿez, *Attunement: Architectural Meaning after the Crisis of Modern Science*, 71.

57 Doshi, "The Nature of Architecture," in Melotto, *Sangath: Indian Architecture between Tradition and Modernity*, 35.

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