

The Subjunctive Pause

The Nature of Architecture and its Representation in the Works of
Indian Architect Balkrishna Doshi

by

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Abstract

This dissertation takes a critical look at architectural storytelling that imparted a polysemic and contronymic nature to architecture and its representation in the works of Indian architect, Balkrishna Doshi (b.1927). It studied three modes of architectural storytelling that Doshi adopted, namely, tectonic (through his buildings), visual (through his miniature painting style illustrations), and literary (through his written stories). His non-conventional ways of storytelling disregarded the notion of architectural creation and representation as a formulaic and precise visual image and explored the possibility of converting them into instruments of imaginative dreaming for making, inhabiting, and conversing in architecture. Doshi's built work and its representation, created a 'pause'—bringing in a reorientation to present the invisible by offering a poetic and syncretic virtual world. This 'pause' solicited engagement. It was a clever contraption to engage in an imaginative understanding, conceptualization, inhabitation, making, and reading of built work and its representation, inculcating novel points of view to engage in a broad and deep architectural discourse. This dissertation argues that the 'pause' was a quality of architectural conceptualization, experience, and representation that imparted to his architecture a subjunctive character that opened a space of translation between the author (architect) and the reader (users and others who are involved in the architectural creation) to foster an imaginative assimilation of architectural activities, in which they viewed architectural creation not only through a positivistic lens, but allowed the imaginative, oneiric, and fantastical to contribute. For Doshi, architectural creation assumed the form of a verb—the act of dreaming collectively a numinous architecture, rather than a substantive—the architecture of production that celebrated the singularity of the architect or the building as a seductive and commercialized image ignoring what he considered the basic tenet of architecture, which is its ability to promote a joyful and virtuous human life. The subjunctive act of dreaming that Doshi demonstrated and induced for others to practice created a contronymic condition through storytelling, by evoking the latent presence of a virtuality, the particularity of which was its ability to make architecture and its representation become analogous, vying for each other's status and qualities.

Keywords:

Storytelling, visual, verbal, tectonic, pause, subjunctive, contronymy, dreaming, numinous, representation, imagination, virtuality.

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The Subjunctive Pause

The Nature of Architecture and its Representation in the Works of Indian Architect Balkrishna Doshi

--Pallavi Swaranjali--

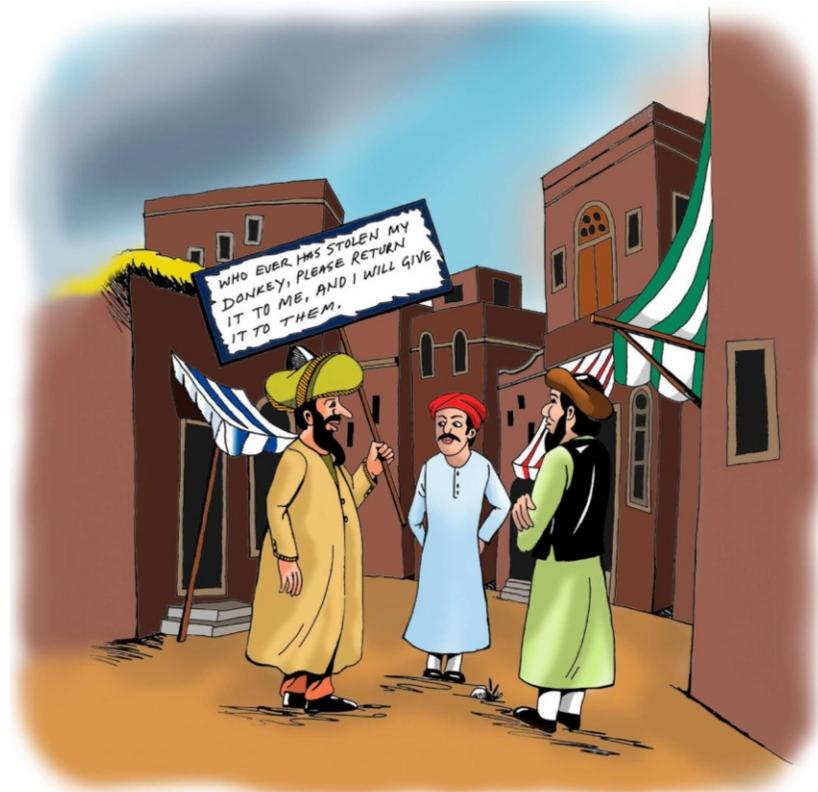


Figure 1: Mullah Nasruddin Illustration 1, 2020 © Pallavi Swaranjali.

“‘Nasruddin!’ exclaimed the townspeople, ‘Why would you put up such a sign?’ ‘There are two great gifts in life,’ replied Nasruddin. ‘One is to find something that you have lost, and the other is to give something that you love away.’”¹

¹ Retold by Chanchal Dey, *Stories of Mullah Nasruddin* (Kolkata: Book Club, 2009), 118-119.

Introduction

“Disciple: Tell me about a person who has a perfect understanding of things?”

Master: It is a great practice.

Disciple: It is unclear to me—do you practice?

Master: I wear clothes and I eat food.

Disciple: Those are standard behaviors. It is still unclear to me—do you practice?”

Master: Tell me this—what do I do every day?”

From the Zen Koans.²

Keywords: storytelling, dreaming, heuristic imagination, jugad, contextual imagination, mythopoeic imagination, latent content, manifest content.

² Rodney Ohebsion, A Collection of Wisdom, Zen Buddhism: Zen Koans, <http://www.rodneyohebsion.com/zen-koans.htm>, Accessed June 20, 2020.

(i) A Storyteller and his Stories

Indian architect and 2018 Pritzker Prize Laureate, Balkrishna Vithaldas Doshi (b.1927), has been recognized on an international platform as an architect who has contributed to the profession in varied ways as a practitioner, thinker, and academician. When I arrived for a residency at his office, Sangath in Ahmedabad, graciously funded by the Mitacs Globalink Research Award in 2015, and spent time with Doshi, I quickly realized that he was a nonpareil storyteller.³ In our conversations, he would narrate stories orally, effortlessly, and impromptu. He suggested I take a look at his three written stories, namely “The Revelation,” “The Sacred Spring,” and “The Legend of the Living Rock.” These are three stories written and published by Doshi and associated with three of his built projects—Husain Doshi Gufa (Ahmedabad, 1992-95), National Institute of Fashion Technology (Delhi, 1997), and Bharat Diamond Bourse (Mumbai, 1998).⁴

A closer read of the stories divulged interesting pointers to the relationship between them, the built, and the architectural process, revealing Doshi’s condensed ruminations on the nature and role of architectural thinking for a joyful life, dissected through the creative

³ Doshi has been defined as the “storyteller of his architectural generation” by architect and theorist, Riyaz Tayyibji in his article, “The Search for ‘Joy’ in the Modern Project,” Neelkanth Chhaya ed., *Harnessing the Intangible* (New Delhi: National Institute of Advanced Studies in Architecture, The Academic Unit of Council of Architecture, 2014), 93.

⁴ The stories are included in James Steele and Balkrishna V. Doshi, *The Complete Architecture of Balkrishna Doshi: Rethinking Modernism for a Developing World* (London: Thames and Hudson, 1998).

lens of stories. These literary works and oral accounts were not the only ways Doshi told stories. His built works were accompanied by tectonic stories—project-specific, bespoke details which assumed the character of improvisational narratives referencing the local past, traditional, and vernacular ways of building, and strategies to tackle contingencies circumscribing the project, along with an imaginative oral narration of those. These tectonic stories were playfully plotted to engage the inhabitants at the fundamental level, connecting people to the cosmic forces, flora, and fauna, while attending to practical considerations, and to socio-cultural sensibilities.

Another original mode of architectural storytelling that Doshi adopted through the use of traditional miniature painting style architectural illustrations for some of his projects operated to the same effect. Three typical ones that this dissertation studied were the miniature style illustrations for Sangath, Doshi’s studio, Ahmedabad (1980), Aranya Low-cost Housing Scheme, Indore (1982), and Vidhyadhar Nagar Developmental Plans, Jaipur (1984). These renditions ingeniously employed conventional architectural drawings—plans, elevations, and axonometric drawings in the same picture plane to bring out different facets of the project at different scales of the individual building and the city.

Doshi wrote in *Spazio e Societa*, “I hope that [my buildings] will tell you about joy.”⁵ This became evident in my conversations about architecture with him, where he came

⁵ “Ideas spread and are developed, Interview with Balkrishna Doshi,” Max Risselada, Dirk Heuvel, *Team 10 in Search of a Utopia of the Present: 1953-1981*, (Rotterdam: NAI, 2005), 326.

across as a happy child talking about a favorite toy. Indeed, Doshi's approach to architecture cannot be described as a problem-solving process that optimized time and efficiency.⁶ In fact it was sometimes found lacking in completing a process quickly, or in providing a standardized and easy solution.⁷ For him, each project was an opportunity to explore extensively the built form as much it was the chance to imaginatively experiment with ways of their conception, experience, representation, and evolution. He told me that each project should be treated as if one was making a temple for God, for which no compromise was acceptable and only the best would suffice.⁸

The study of Doshi's ways of architectural storytelling revealed that he strove to create a "numinous" architecture that encompassed transcendental aspects beyond the pragmatic ones. "Numinous" buildings emphasize a poetic construct of spaces that let one experience space beyond the everyday and mundane concerns, instead inducing "reverie,

⁶ Rajeev Kathpalia, "The Joy of Making-Ways of Seeing, Ways of Building," in Neelkanth Chhaya ed., *Harnessing the Intangible*, 91.

⁷ Doshi himself realizes this but does not regret it. Recorded Interview with Author, September 25, 2015, also see, "My answer to them is that my life has no economic value as such and therefore, my time. What is valuable to me is the joy from a work well done, and that is what I seek." Balkrishna Doshi, *Paths Uncharted* (Ahmedabad: Vastu-Shilpa Foundation for Studies and Research in Environmental Design, 2011), 361.

⁸ Authors interview with Doshi, September 25, 2015, Sangath, Ahmedabad, India. Sponsored by the Mitacs Globalink Research Award, September-December 2015, Grant number: IT05730.

daydreaming, and dreaming.”⁹ Italian architectural theorist, Marco Frascari (1945-2013), described a numinous building as having “sacred dimensions of inhabitation.”¹⁰ He writes,

“A beatific life can be had in numinous rooms. The main role of the art of building is to make our life congenial and satisfying, in other words, a *vita beata*. Numinous architecture increases our ability to invest in psychic energy and thereby fosters a *vita beata*.”¹¹

Doshi’s search for joy was evident and realized in his stories, which dreamt of a numinous world through buildings, drawings, and words. His stories in their varied forms represented a virtuality with a “latent content,” like dreams,¹² and in doing so provided the means to “playfully” engage in a process of “identification” of meaning with unreal images based on yet separated from actuality.¹³ His techniques of conceptualization and

⁹ Marco Frascari, and Federica Goffi, *Marco Frascari's Dream House: A Theory of Imagination* (London, NY: Routledge, Taylor & Francis Group, 2017), 84.

¹⁰ *Ibid*, 74.

¹¹ *Ibid*.

¹² Sigmund Freud explained that the dream had a manifest content, the images we actually see in a dream which when interpreted further gave rise to a latent content which speaks to the repressed wishes of the dreamer. Sigmund Freud, *The Interpretation of Dreams*, “Authorized Translation of Third Edition with Introduction by A. A. BRILL (New York: The Macmillan Company, 1913), digitized by the Internet Archive in 2010 with funding from Open Knowledge Commons and Harvard Medical School <http://www.archive.org/details/interpretationof1913freu>,” Accessed November 14, 2020, 114.

¹³ “An architectural dream is a *vision* of a building that cannot be and yet has within itself all the components of a possible reality. Dreams are not virtual reality; they are real illusions. They are illusions in the true etymological meaning of the Latin expression: *in ludere*, in play. When I am dreaming, I am playing. When the dream ends, I am banned from playing: *de-ludere* [...]. In these illusions, reality is not imitated nor merely copied in a representation. During these dreams, identification takes place.” Marco Frascari, and Federica Goffi, *Marco Frascari's Dream House: A Theory of Imagination*, 41.

representation of buildings, grounded in dreaming gave form to new understandings and associations beyond the material and visible reality of the building.

Canadian academician and architectural theorist, Federica Goffi, explains Frascari's idea of dreaming and its relevance for architects in the introduction to the book titled *Marco Frascari's Dream House, A Theory of Imagination* that proffers architectural "drawings as forms of dreams."¹⁴ She writes,

"...Frascari advocated considering the fact that dreams are real experiences that shape everyday reality, and further affirmed that these are the best suited tool to grasp the nature of architectural representation. According to Frascari, this is essential to a proper conception of architectural drawings towards the attainment of a *Vita Beata*."¹⁵

This dissertation argues that Doshi's architectural stories through his buildings, miniature painting style illustrations, and fictional writings, nurtured dreaming of and in architecture to promote a sense of "joy." In his autobiography, Doshi comments on the power of dreams while ruminating on the "magical experiences" created with the careful plotting of architectural details, leading to dream-like illusions like the ones he had experienced in Venice at the Doge's Palace and the Basilica of St. Mark's. He writes,

"How can one create a dream that one cannot even begin to describe? In a dream we are mostly happy. In a dream, there is nothing to lose."¹⁶

¹⁴ Ibid, 1.

¹⁵ Ibid, 9.

¹⁶ Doshi, *Paths Uncharted*, 92.

Doshi identified dreams as spaces of happiness, where one could be their creative self without inhibitions or limitations. This dissertation argues that Doshi did not “describe” or define his architectural ideas, instead, through storytelling he dreamt them and invited others to dream as well. Doshi’s dreaming through his storytelling to create numinous architecture is the central theme of this dissertation. Through this study, the dissertation highlights the resulting effect of such an activity on the relationship between built form and its representation in Doshi’s work.

As this dissertation contends, joyful making for Doshi seems to have been the creation of numinous buildings that removed the emphasis from the built entelechy to the invisible dream-like dimensions invoked by the built work and its representation in the form of stories. Doshi advocated an open-ended design process in architecture, not bound to a specific methodology. Doshi’s open ended and pluralistic approach to architectural creation fostered his joyful storytelling-dreaming, and at the same time was aided and aptly summarized and represented by stories and dreams.

(ii) A Creative Open-Ended Process

Doshi’s autobiography, titled *Paths Uncharted* is replete with stories which demonstrate his use of storytelling and its importance in his life. He explicitly mentioned his appreciation for storytelling and how it was fostered through his encounters with stories as a child growing up in a traditional, large family where intergenerational living was

practiced and listening to stories from elders was an everyday ritual.¹⁷ To complement the standard architectural methodology and tools, Doshi included in his arsenal these unconventional, imaginative, and representational tools to incite the imagination, conceptualize, and illustrate architectural ideas.

Doshi, the storyteller, used storytelling techniques to *plot* his architecture, weaving fragments from craft, tradition, and profession, reality and fiction, past, present, and future, international influences, and local exigencies. Alternatively, it can be said that storytelling became indispensable for Doshi as it best encapsulated these numerous agencies that influenced his works due to his open-ended process. His storytelling started early in the architectural process. Doshi avidly researched and pre-pondered the site of the project and the site of his imagination. Indian architect and writer, Riyaz Tayyibji, who has studied Indian architecture and Doshi's work, has assigned the Hindi term "*jugad*" to Doshi's approach.¹⁸ He describes it as "an opportunistic circumstantiality,"¹⁹ implying that Doshi used strategies on the go by being attentive to what was available and how it could benefit the architectural activity. Doshi engaged in architectural play, involved the community, and channeled resources without pushing for a pre-planned and teleological agenda.²⁰

¹⁷ Doshi, *Paths Uncharted*, 20.

¹⁸ Riyaz Tayyibji, "The Search for 'Joy' in the Modern Project," Neelkanth Chhaya ed., *Harnessing the Intangible*, 109.

¹⁹ *Ibid.*

²⁰ *Ibid.*

Reflecting on the fact that he had left the Sir J.J. School of Art, Mumbai, midway during his architectural education, and was instead spending 6 hours every day at the RIBA library, he writes,

“Without any guide or any background, I was like a child in a curio shop, constantly exploring. Looking back, I wonder if I would have learnt what I did with conventional tutoring.”²¹

Indeed, this ability to learn by himself is a trait that Doshi carried forth throughout his career. He understood that uncertainty and change were the only constant in life,²² and to be able to embrace them, the abilities to be open to observe and learn life-long seemed to have been fundamental to his evolution as an architectural thinker. For Doshi, architectural thinking should not be a “search” but a journey to “find.” When one searched, one knew what they were searching for, as opposed to Doshi’s quest for finding, where the unexpected and uncertain awaited to enrich creative works.²³ The basis of his architectural efforts appeared not the setting up of a goal and working to achieve it. In fact, the goal did not seem to have been a pre-given end result for Doshi but a search for its definition, the possibilities that the project offered, and the learning inherent therein. Not having a concrete definition, plan, or series of sequential and logical steps to follow to complete the

²¹ Doshi, *Paths Uncharted*, 52.

²² Ibid, 229.

²³ Author’s recorded interview with Doshi, September, 25, 2015, Sangath, Ahmedabad, India. Sponsored by the Mitacs Globalink Research Award, September-December 2015, Grant number: IT05730.

project, imparted a certain porosity to his projects and allowed for spontaneous and unforeseen, yet vibrant inventive interventions, which at times included unplanned participants and techniques in the project.

To me there seemed no way in which these fluid elements could be planned to become a part of the architectural act other than by allowing a certain open-endedness to the process. The openness of Doshi's approach drew unknown and even odd factors to contribute to his works. As the quote from the Zen Koans at the opening of the introduction suggests, understanding and practice go hand in hand, and even the most mastered of activities, which appear ordinary and quotidian, become so by engaging in them. Doshi's process was at once one of "construction and construing,"²⁴ in which interpretation and making happened together. By engaging in an open-ended process, Doshi imagined, identified, evaluated, and included possibilities that presented themselves, so that they became part of the process to realize the project.

Elements in the physical and contextual vicinity of the project—a ritual, a materiality, a dream, spontaneous ideas—all could find a place in the project. Like a dream, Doshi's

²⁴ Frascari uses these words to describe the union of perception and production in Scarpa's work. "In Scarpa's works the relationships between the whole and the parts and the relationships between craftsmanship and draftsmanship allow a direct substantiating in *corpore vili* of the identity of the processes of perception and production, that is, the union of the construction with the construing in the making and use of Details," Marco Frascari, "The Tell-the-Tale Detail," 24, *Semiotics*, 1981, 325-36. Doi: 10.5840/cpsem198115. Republished in Kate Nesbitt, *Theorizing a New Agenda for Architecture: An Anthology of Architectural Theory: 1965-1995* (New York: Princeton Architectural Press, 1996), 498-515.

projects and process had many triggers. A project would sometimes begin by considering a personal memory, or a tale that seemed apt to the site or project, or because a particular building material was available in abundance on site and enabled a certain kind of construction or form. Doshi found inspiration in seemingly unrelated things that later became an intrinsic part of the project such that it was difficult to think of the project without that element. He identified these with a keen eye for details, for what is argued should be understood as a ‘heuristic imagination,’ that saw clever and odd connections and engaged in the “*jugad*.” Heuristics is defined by the Merriam Webster Dictionary as,

“involving or serving as an aid to learning, discovery, or problem-solving by experimental and especially trial-and-error methods.”²⁵

‘Heuristic imagination’ does not give a one-off solution. As one progresses bit by bit, the final image transpires. In the construction, construing emerges. The invisible teleology is revealed slowly over time, like in an “allegorical dream,” which is created one piece at a time to eventually reveal the invisible.²⁶ It is argued that the ‘heuristic imagination’ is what Doshi employed, when adjusting a familiar or old element or plan to a new site, letting chance to intervene. Indian architect and partner at Sangath, Doshi’s son-in-law, Rajeev Kathpalia, explained that Doshi often started a project from something familiar, for

²⁵ Definition of heuristic, <https://www.merriam-webster.com/dictionary/heuristic>, Accessed June 20, 2020.

²⁶ Frascari and Goffi, *Marco Frascari’s Dream House*, 31.

example, elements from a past project.²⁷ Kathpalia worked closely with Doshi and identified the experimental nature of Doshi's approach, where he found inspiration in unexpected sources. Kathpalia points to the time Doshi invested in his projects, not because he was slow, but because he enjoyed the iterations and the joy of creative making.²⁸

Doshi started with ideas from his own home, Kamala House (1959), Ahmedabad, India when he started designing Maneesha House (1999), which is his daughter's home in Baroda, India. The result of his process, explained Kathpalia, created a completely new configuration of the latter home largely due to the presence of three mango trees on the site around which the plan was laid out. The plan was adjusted to the point of completely being reworked to make sure that the trees were not cut and so that half of the site could remain open for a garden.²⁹

Doshi's translation of a former layout onto another site created a totally new result. The rewriting of a previous element necessitated adjustments that changed it to a different whole, making it bespoke to the site and the requirements. The emergence of a new story was inevitable because new determinants in the plot demanded that. In the reworking of previous ideas, he explored the possibilities inherent in the initial idea, while being open

²⁷ Doshi, *Paths Uncharted*, 360-361 and Rajeev Kathpalia, "The Joy of Making: Ways of Seeing, Ways of Building," in Neelkanth Chhaya ed., *Harnessing the Intangible*, 85.

²⁸ Ibid, 89-91.

²⁹ Kathpalia, "The Joy of Making," in Neelkanth Chhaya ed., *Harnessing the Intangible*, 85-87.

to several sources and chance interventions that triggered the imagination. Starting with an old idea did not result in any concerns of repetition of ideas in Doshi's case. The process he followed was bound to change the resulting solution, as a set of forces peculiar and particular to each situation always existed and affected the new solution, each time offering a new story.



Figure 2: Kamala House, Ahmedabad,³⁰ Balkrishna Doshi's home, showing the four columns and staircase. Photo Credit: Vinay Panjwani. © Vastushilpa Foundation, India, used with permission, not to be reused without copyright holder's permission.

³⁰ Kamala House, Ahmedabad, India, Year: 1959, <https://www.sangath.org/projects/kamala-house-ahmedabad/>, accessed November 26, 2020.

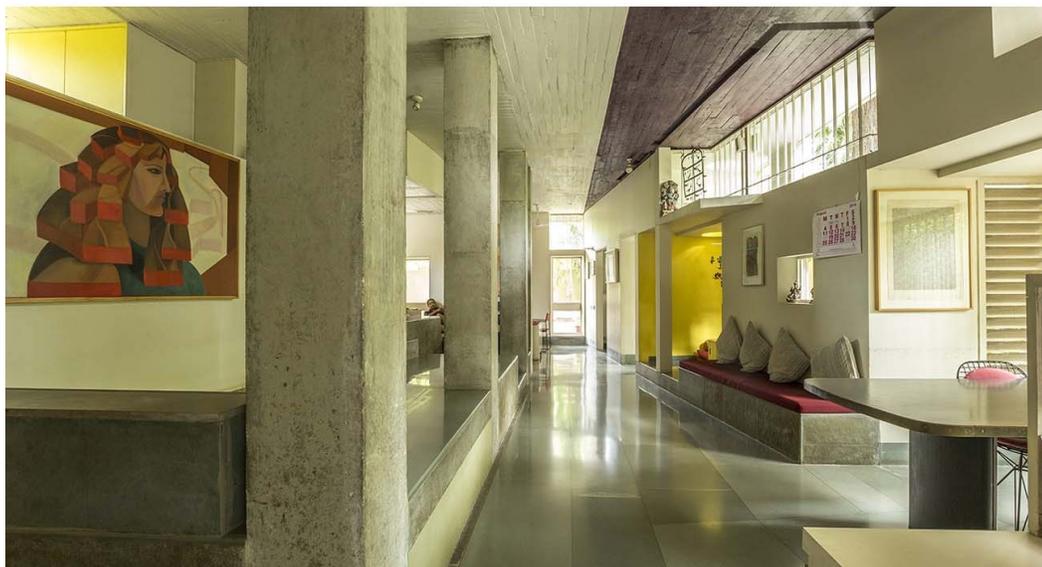


Figure 3: Maneesha House, Baroda,³¹ Balkrishna Doshi. Photo Credit: Vinay Panjwani. © Vastushilpa Foundation, India, used with permission, not to be reused without copyright holder's permission.

The idea of open-endedness also appeared in his work in the inclusion of such spaces as the garden, lobby, and courtyard that facilitated an openness in the way they could be used as deemed appropriate by the user or by the time of the day or year.³² Another way in

³¹ Maneesha House, Baroda, India, Year: 1999,

<https://www.sangath.org/projects/maneesha-house-baroda/>, accessed July 13, 2020.

³² The loose spaces designed in CEPT are used for academic activities and during festivities become vibrant outdoor spaces where *garba*, a traditional form of dance is done. “Unprogrammed spaces, leftover spaces, interstitial spaces, and circulation spaces are all developed architecturally to offer many possibilities of use and inhabitation [...]. It is as if the architect considers the programmed use only one part of the institution's existence, and considers that which cannot be foreseen is an even more vital need for the open institution,” Neelkanth Chhaya, “Doshi: Architecture of the Private and the Public Realms,” in Neelkanth Chhaya Ed., *Harnessing the Intangible*, 43.

Many authors who have written on storytelling, have emphasized on this attribute of storytelling, in which translation or retelling a story never leaves it the same. Even

which he achieved an open-endedness was by following what Indian academician and architect, Neelkanth Chhaya, who also has been a student and friend of Doshi and taught at Centre for Environmental Planning and Technology,³³ Ahmedabad, calls Doshi's "method of accretion."³⁴ This method signified the openness of his works to growth and transformation over time achieved by being incomplete. Chhaya writes,

“Thus, he chooses to let the qualities of open endedness be the strong experiential quality, yet he always sets an understructure of architectural order which is clear and strong, yet is sufficiently roomy and varied enough to encourage unpremeditated forms of inhabitation.”³⁵

While referring to Doshi's physical and built form, Chhaya characterized this openness as the identifiable feature in his work. The openness was not because the tangible built form did not have a structure or framework, but by the manipulation of the underlying structure, such spaces were created that lent themselves to be freely interpreted over time.

translation of literature from one language to another means a rewriting, argues Marc Neveau while quoting Umberto Eco's description of the mode of translation through re-writing. “In translating James Joyce's epic *Finnegan's wake* into another language Joyce had to think of it and conceive it as another due to different 'etymologies distinct rhythms and references',” Marc.J Neveu, *On Stories, Architecture and Identity*, I ARKITEKTUR N 02 2008,

http://digitalcommons.calpoly.edu/cgi/viewcontent.cgi?article=1038&context=arch_fac, accessed July 20, 2016, 4.

³³ Doshi was the founding member for the School of Architecture (1962-72) and School of Planning (1972-79), Centre for Environmental Planning and Technology, Ahmedabad, Doshi, *Paths Uncharted*, cover page.

³⁴ Neelkanth Chhaya, “Doshi: Architecture of the Private and the Public Realms,” in Neelkanth Chhaya ed., *Harnessing the Intangible*, 44.

³⁵ *Ibid.*

A prominent example is Doshi's Life Insurance Corporation (LIC) housing, 1973 in Ahmedabad, India where the three independently occupied floors were provided with room for expansion in the form of varying sizes of terraces that could be converted into rooms when the families residing therein decided. Doshi believed that when he worked with a client, he developed lifelong relationships with them and the buildings.



Figure 4: LIC (Life Insurance Corporation) Housing (1973), Ahmedabad.³⁶ © Vastushilpa Foundation, India, used with permission, not to be reused without copyright holder's permission.

³⁶ Doshi, LIC Housing (1973), Ahmedabad, <https://www.sangath.org/projects/life-insurance-corporation-lic-ahmedabad/>, accessed June 19, 2020.

His architectural sensibilities morphed and expanded as time went by, while his clients got more rooted and attached to the buildings as they explored ways of inhabiting them. This resulted in a perpetual generation of stories of imagining, making, and reimagining.

The openness that Doshi embraced may seem antagonistic to the understanding of design, as an act that aims to define and give concrete shape to an idea after careful considerations of different aspects, requirements, parameters, limitations, and assumptions. London based architect and academician, Yeoryia Manolopoulou in her book *Architectures of Chance* (2013) challenges this notion of a deterministic design process.

“Architectural discourse and practice are dominated by the false dichotomy between design and chance, and governed by the belief that the architect’s role is to defend against the indeterminate.”³⁷

For Manolopoulou, chance is a factor that cannot be overruled as much as the process of design might attempt to do so. Manolopoulou succinctly points that the building even after it is built is not secured against chance, due to:

“the simultaneity of different human activities and the fugitive intervention of the environment, all intertwined with the relative permanence of the building.”³⁸

Doshi’s fluid and indeterminate approach as detailed in the dissertation, necessitated the mode of storytelling-dreaming that became a means to invite rather than evade chance

³⁷ Yeoryia Manolopoulou, *Architectures of Chance* (London: Routledge, 2013), Back cover.

³⁸ *Ibid*, xvii.

and unforeseen possibilities and methods. It was a smart technique to not fight against this inevitable factor that is chance but to be prepared for it and further, utilize and optimize its benefits. It was a way to move away from the shackles of positivism to discover and dream a more salubrious reality that sublimated eyes could otherwise be blinded to. Such an open-ended process of conceptualization of architecture like Doshi's, demanded ways of representation that captured the essence of its conceptualization as well as the resulting architectural experience. His representation techniques using storytelling that accompanied the conventional set of architectural drawings, may in themselves be seen as spaces of imagination, memories, and associations—epistemic and dream constructs that not only represented his buildings and their experience, but which framed their “construction and construing,”³⁹ as a poetic translation.

Representation in the form of storytelling, and the conceptualization and experience of architecture, became inseparable and complementary in Doshi's works. Representation as a set of abstracted and precise projection drawings did not feature in these unconventional representational modes that he adopted, that moved away from projecting a defined visual image that represented precisely the associated buildings. Instead, by *inducing* deliberate ‘errors’ in his visual stories in the form of the miniature painting style illustrations, and by *negating* the visual image totally in his written stories, his representations came closer to a more engaged and imaginative way of representing

³⁹ See footnote 24.

architecture that did not reduce it to dissected projections that only theoretically added up to a built reality. Instead Doshi's representations that remained unobjective, non-mathematical, and much like a dream, brought forth the experiential and invisible dimensions of architectural creation, and presented a richer reality through an imaginative assimilation. Doshi's built and representational works moved away from voyeurism to become one with a revelatory dimension that engaged and titillated the imagination of the participant.

(iii) Doshi's Encounter with an Uncertain Architecture

One cannot help but wonder where the roots of such an open-ended approach that Doshi adopted could be? In his early years in practice, Doshi experienced the uncertainty in the economic and political Indian condition in the wake of independence in 1947, which had an impact on his own architectural ways. These were formative years in Doshi's career. Free and democratic India's first Prime Minister, Pandit Jawaharlal Nehru (1889-1964) launched across the country a drive for modernization. Swiss architect and urban planner, Charles-Édouard Jeanneret, better known as Le Corbusier (1887-1965) and his cousin and architect, Pierre Jeanneret (1896-1967) were invited to visit the country in 1951 for the

design of the city of Chandigarh.⁴⁰ At Chandigarh, “the sole instruction given by Nehru was to be expressive, experimental, and to not let themselves be hindered by tradition.”⁴¹

Many Indian architects, after this drive for modernization, were left trying to bridge the two realms of the *traditional* and the *modern*. Architects had on one side the exposure to modern Eurocentric and Western influences while on the other hand, the hard realities of post-independence India loomed large. British art historian and BBC television presenter, Dan Cruickshank (b. 1949) noted that the unique challenge of a combination of tradition and modernity that this point in time characterized was due to the fact that the society was at once conservative while also progressive and eager to accept the change and progress that modernization in the form of industrialization brought.⁴²

Architecture did not remain unaffected by this wave of change. The new typology of buildings that resulted due to the modernization had no historic design precedents in the subcontinent. The precariousness of the post-independence Indian architectural scenario lay in the possibility of the attempted solution for the new type of architecture deriving on traditional Indian precedents, and turning into its devious doppelganger—the pastiche, a

⁴⁰ Patrick Seguin, *Le Corbusier – Pierre Jeanneret, Chandigarh, India* (Paris: Editions Galerie Patrick Seguin, 2014), see also <https://www.patrickseguin.com/en/publications/corbusier-pierre-jeanneret-chandigarh-india/>, accessed February 12, 2018.

⁴¹ Ibid.

⁴² Dan Cruickshank, Modern Indian architecture is evolving with a wide variety of sources, republished April 28, 2016, <https://www.architectural-review.com/essays/modern-indian-architecture-is-evolving-with-a-wide-variety-of-sources/10005898.article>, accessed June 25, 2018.

meaningless and inelegant copy or imitation of the precedents in a new context.⁴³ Indian architects had no choice but to resort to a study and mimicry of Western examples to avoid what Cruickshank defined as the “absurdity of designing a modern building type like an ancient palace or fort.”⁴⁴ This without a doubt made the building a misfit in the existing Indian fabric.⁴⁵ The search for a culturally nuanced solution for the new architecture was accompanied by the search for economic and environmentally efficient solutions. Optimal use of available building materials and the abundantly existing manual skills were at the forefront in the list of priorities.

Indian architects and thinkers like Satish Gujral (1925-2020), Laurie Baker (1917-2007), and Charles Correa (1930-2015) amongst others, identified the relevance of prevalent and tested details and forms of construction with an aim to achieve culturally appropriate, economical, and simple solutions. During the British rule, Czech American architect, Antonin Raymond (1888-1976), had designed the Golconde residential building (1936-48), Pondicherry, India. The building has been acclaimed as “the finest example of modern functional architecture built in India in the pre-independence period.”⁴⁶ According to Raymond,

⁴³ Ibid.

⁴⁴ Ibid.

⁴⁵ Ibid.

⁴⁶ Ibid.

“We should base our designs directly on the needs and requirements of the clients and deal directly with conditions growing out of the work itself and the location. There should be no empty imagination or abstract speculation involved.”⁴⁷

This seems to have been a pertinent point for the Indian conditions and as mentioned, some architects of the generation paid heed to adopting strategies for the creation of the new architecture in a manner that was derived from and benefited the Indian scenario. In a labor-intensive market like India, consideration of local skills and time-tested techniques were prime. In fact, as Raymond had suggested, each project had to be looked at in its own specific way. Channeling of local resources, skills, and the socio-cultural sensibilities of the place replacing empty and spurious formalist recreation of Western precedents was the need of the hour.

In the traditional and vernacular ways of building, each iteration became a remedy or celebration of the previous construction, slowly generating a more complex whole than any single act of intervention could generate. This extended process geared to balance different agencies affecting its natural growth and transformation. New contours and structures transpired by a self-organizing process incorporating interrelated forces, whether it be the yearning for cultural connectedness to one’s environs or the sociological facet of architecture as extant in a material, a color scheme, an architectural genre, or a spatial language—all very much *not by design* and over an extended time. This form of building

⁴⁷ Ibid.

clearly demonstrated an architecture that had its roots in its context, in the availability of resources and skills that saw the building to fruition, and a connectedness to cultural priorities. It was not based on “abstract speculation” nor did it invest sole control in the hands of an individual and remained deeply concerned with what the project *could* be, rather than what it *should* be.

This principle seems to have become the mandate for Doshi all through his practice, more so in the latter half of his practice (1970 and onwards) where architectural possibilities were not pre-given, standardized, and defined but had to be negotiated and speculated for each project. Doshi’s approach did not only cater to form and function but expanded to include the social, economic, and cultural aspects that helped to strengthen the communities his works served. Doshi was awarded the Pritzker prize for 2018 where his wholesome contribution to architectural practice and academia was applauded. The jury cited,

“By granting him the award this year, the Pritzker Prize jury recognizes his exceptional architecture as reflected in over a hundred buildings he has realized, his commitment and his dedication to his country and the communities he has served, his influence as a teacher, and the outstanding example he has set for professionals and students around the world throughout his long career.”⁴⁸

⁴⁸ Balkrishna Doshi Named 2018 Pritzker Prize Laureate, 09:55 - 7 March, 2018, by AD Editorial Team, <https://www.archdaily.com/890126/balkrishna-doshi-named-2018-pritzker-prize-laureate>, accessed April 27, 2019.

While attending the public lecture following the Pritzker Prize Ceremony in Toronto in 2018,⁴⁹ Richard M. Sommer, who is Dean of the Daniels Faculty of Architecture, Landscape, and Design at the University of Toronto, Canada questioned if Doshi missed working in other countries as all his works were situated in India. Doshi did not hesitate in saying that he was happy to have built only in India, a place which he knew so well. It will not be wrong to argue then, that his approach of not delineating the utmost details for his buildings, and rather improvising during the process of construction was perhaps made possible by his proximity to and knowledge of the site. This helped him indulge in and use storytelling as a vivacious tool for architectural making.

In making no claims to premeditated results, neither conforming to any signature style types, architectural storytelling allowed the coming to being of his architecture only through a direct involvement with the architectural story, its characters, and the site. Doshi's storytelling evaded the processes of theorization, definition, classification, or branding of architectural creation, rather asserting their inadequacy and dispensability. Such an approach as Doshi's, erased tendencies for forceful analytics and categorization, processes which contribute to architectural criticism rather than resolution. The ability to tackle the contingencies that the architectural making entailed in the process became

⁴⁹ I was in personal attendance at the Pritzker Public Lecture, Toronto, 2018. The recording can also be found at <https://www.youtube.com/watch?v=DIQoB90D3lg&t=1522s>, accessed April 27, 2019.

Doshi's architectural approach, where he embraced the uncertainty as an opportunity to initiate and integrate design conceptualization and implementation.

Doshi's initial experience in free India also imbibed the sense of frugality in his projects, in turn, ironically making them rich not because of the use of sophisticated materials or advanced construction techniques and technology, but because the simple, available, and obvious were used to get engaging and unexpected solutions. His built work and its representation assumed an open-endedness, which allowed various spontaneous stories to be told, heard, and interpreted. The tectonic and the representational stories narrated both the situations that the project existed in and those that they invoked. The circumstantiality and intentionality of the projects and the stories mutually governed and guided each other. The architectural representation and experience imbibed the properties of the architectural conceptualization in being open-ended and epistemological tools, which did not dictate meaning but where new realities emerged by engagement and involvement.

Perhaps the close involvement with chance factors in and around the site, resulted in Doshi's tactic of storytelling as a means to have a rhetoric with himself and others to, on one hand, understand the nature of an apt intervention, while on the other hand to communicate such a nature to fellow designers, contractors, clients, and users. By being engaged on the site, Doshi injected himself into the proximal world of the site and the community. Through his stories, he dreamt images that helped him understand, contrive, and communicate the contexts and the latent but relevant priorities considered in his

architectural works. As Frascari notes, referencing Novalis (Georg Friedrich Philipp von Hardenberg, 1772-1801) in “*Allgemeine Brouillon*,”

“[D]reams instruct on the facility of our spirit to penetrate every object and to transform itself into every object.”⁵⁰

Doshi’s storytelling became a dreaming apparatus to fully interpret and immerse in the projects and the context so as to assimilate and communicate meaning. His stories became fabrications—dream-works, that layered and condensed contextual and cultural meanings that presented themselves in the physical, historical, and cultural background of the project,⁵¹ so to avoid becoming predetermined formulations based on whimsical and formal systems of architectural conceptualization.

(iv) *The Nature of Storytelling*

Many authors have stressed the primacy of storytelling in architecture. Frascari in his article, “An Architectural Good-Life can be Built, Explained and Taught only through Storytelling,” elucidates that stories communicate experiences that we can use as a shared

⁵⁰ Frascari and Goffi, *Marco Frascari’s Dream House*, 26.

⁵¹ Architectural creation or buildings encompass or rather should encompass various facets based on the personality of a client and nature of project and site. Doshi’s stories in its consideration of these factors assume the form of dreams, in its ability to condense a latent content. Freud explains that the dreams content condenses meaning that need analysis to be understood. “The first thing which becomes clear to the investigator in the comparison of the dream content with the dream thoughts is that a tremendous work of condensation has taken place. The dream is reserved, paltry, and laconic when compared with the range and copiousness of the dream thoughts. The dream when written down fills half a page; the analysis, in which the dream thoughts are contained, requires six, eight, twelve times as much space,” Freud, *The Interpretation of Dreams*, 261.

learning resource deriving from each other's repository of stories of individual experiences.

Frascari argues that,

“By facilitating both humanistic and scientific thinking, storytelling also nurtures an integrative, systems-oriented view of conceiving architecture; a system that, by focusing on the connections between people, processes, and materials, creates the setting for a ‘cultural making.’”⁵²

Due to the shift from the oppressive requirement of being ever logical and explanatory, stories allow easy sharing between people, bringing into focus cultural, social, and ethical beliefs and factors. Storytelling generates a probability to rely on each other's strengths and brace weaknesses, reflect on, and learn from varied knowledge sources over time. Stories can be entertaining, telic, enlightening, or informative, but seldom are they intimidating. Storytelling, when understood as an act of empathy, makes sense not by dictating meaning but by an assimilation of meaning by participation.⁵³ Each listener derives their own experience when told a story.⁵⁴ This mutability of stories gives to them a multilayered nature, the same story serving a different purpose depending on who is

⁵² Marco Frascari, “An Architectural Good life can be Built, Explained and Taught only through Storytelling,” Adam Sharr ed., *Reading Architecture and Culture-Researching Buildings, Spaces and Documents*, (London, New York: Routledge, 2012), 224.

⁵³ Neveu describes the work of French Philosopher Paul Riceour (1913-2005) and the reading of his philosophy by Irish philosopher, Richard Kearney (1954), and their description of storytelling as an act of empathy, Neveu, *On Stories, Architecture and Identity*, I ARKITEKTUR N 02 2008, http://digitalcommons.calpoly.edu/cgi/viewcontent.cgi?article=1038&context=arch_fac, 3, accessed July 20, 2016.

⁵⁴ Ibid.

listening or where it is being told. In fact, stories can and need to be retold depending on the situation or listener, in order to make sense. Stories also change depending on who is telling the story. In this way, stories celebrate differences and are at once individual and cultural, particular and broad.

Architectural writer and academician Marc Neveu, identified this imaginative recreation as also the case in all architectural endeavors, where the architectural project changed due to the nature of the site, climatic conditions, or the client.⁵⁵ Storytelling becomes a cognitive play, which brackets in itself as “phronesis,” stories of wisdom created by engaging in the particular.⁵⁶ This engagement leads to a repository of stories that contain and disseminate the wisdom not by providing a ready to use solution or theory but by providing food for dreaming and thinking. Doshi’s stories brought in a richer understanding of the project and the context not by abstracting or generalizing it, but by projecting images that delivered a richer and deeper understanding by participation and assimilation.

Chhaya writes,

“Descent into subconscious realms probably allows Doshi embrace fluid manifestations of ideas and a concrete presence, evoking a mythical reality...Beneath the myth, reside primordial archetypal attributes that spur the design process.”⁵⁷

⁵⁵ Ibid.

⁵⁶ Alberto Pérez-Gómez, *The Place of Narrative in Architectural Theory: From Treatise to Story*, 4th Global Conference, STORYTELLING, Tuesday 21st May–Friday 24th May 2013, Prague, Czech Republic, Conference Draft Paper, <http://www.inter-disciplinary.net/probing-the-boundaries/wp-content/uploads/2013/04/gomezspaper.pdf>, accessed July 31, 2016, 7.

⁵⁷ Ibid, 81.

As this dissertation brings forth, stories allowed Doshi to impregnate his architecture with “mythical realities,” through his buildings and the accompanying visual and verbal renditions. Storytelling was adept in enriching reality with an imaginative and mythopoeic flavor. Frascari writes,

“The edifices in our constructed world are fabrics interwoven with dream stuff to form a latent presence. It is believed that architects turn an idea into a sensory phenomena. On the contrary, they actually shape the sensory phenomena into an idea.”⁵⁸

For Doshi, buildings and their representation in the form of stories did not remain separate entities, one prognosticating the other. Through stories in images and words, Doshi portrayed ideas that characterized the conceptualization and experience of his buildings. The representation of architecture was the “construction and construing” of the built entities and the building became the material representation of the stories. The dissertation contends that a new world of understanding and association emerged by dreaming through Doshi’s stories, which recalibrated the definition and role of architectural representation and its relationship to the built work. In Doshi’s case, architectural representation accompanied the built works rather than preceding or succeeding it.

⁵⁸ Frascari and Goffi, *Marco Frascari’s Dream House*, 101.

(v) *On Doshi's Storytelling*

Doshi's stories articulated and represented the different realities that were particular and contextually relevant to each project. Doshi preferred hands-on exploration in his architectural process as opposed to working on the computer, to avoid the very precision that was the hallmark of digital tools. In his opinion, the hands-on approach gave him opportunities to combine architectural intent with experimentation. Doshi expressed his comfort with hand drawings and physical models as opposed to using the computer, which he found to be limiting to his imagination and expression.⁵⁹

For Doshi, the stories did not serve to achieve an immediacy between reality and representation through a complete and accurate representation of the built work. The stories presented his contextual reading and dealing of each project. This contextual reading was an engagement with the vicissitudes of the building site or conditions around the architectural project that identified peculiarities of the site, its history, the architectural players involved, and the kind of inhabitation sought or possible.

His approach steered away from the tendency to create a homogenized and standardized set of architectural solutions that would be mass produced with, or without, modifications, without considering that time and space were variables, dependent on client and context. His stories reminded that it was not enough to concentrate on the material and

⁵⁹ Kathpalia, "The Joy of Making" in Neelkanth Chhaya ed., *Harnessing the Intangible*, 88.

geometrical configurations of buildings, but attention had to be paid to socio-cultural and personal contexts that needed to be addressed and incorporated. In his stories the aim was not the creation of a singular reality, one that could be well defined and precisely articulated for everyone, without the possibility of any interpretation at all. His stories questioned the concept of a universal reality and if it was possible to define such a reality.

Architectural historian and theorist, Dalibor Vesely (1934-2015) has argued that “reality” is not absolute, but it is an act that is participatory and subjective. In his book, *Architecture in the Age of Divided Representation: The Question of Creativity in the Age of Production* (2004), Vesely differentiates between the “instrumental” and “communicative” understanding of architecture. Instrumental understanding is prescriptive—defined and given, while communicative understanding demands an engagement, such that meaning is not given but understood and assimilated. He writes,

“The distance separating the instrumental and the communicative understanding of architecture represents a wide gap in our contemporary culture...what we normally refer as reality, believing it is something fixed and absolute, is always the result of our ability to experience, visualize, and articulate -- in other words, to represent so as to participate in the world.”⁶⁰

The ability to connect in an embodied way to the physical, socio-cultural, and economical contexts, as well as to ineffable poetic contexts, hence inviting understanding through participation defined Doshi’s work as one that did not portray whimsical

⁶⁰ Dalibor Vesely, *Architecture in the Age of Divided Representation: The Question of Creativity in the Shadow of Production* (Cambridge, MA: MIT Press, 2004), 5.

experiments on a screen but catered to an imagination that ethically helped deliver personal and communal satisfaction and fulfillment. Doshi suffused his work with a mythopoeic approach, bringing together generalities and particularities and immersing the user to experience it.

Doshi's storytelling took the emphasis away from the mandate normally seen as most important in the architectural process—to sketch or draft to give form to the objective and geometrical picture of a building and create a complete solution. It instead opened the process of architectural creation beyond the drafting board or computer screen and outside the premises of the architectural office to include unplanned local forces by sending reverberations that awakened and brought together socio-cultural and economical sensibilities to add richness to the architectural creation. Stories seem like a natural way to have done this. Doshi's storytelling evoked, demonstrated, and represented an open-ended architectural process of exploration and discovery through dreaming, to foster what he considered the true essence of architecture as a way to celebrate life.⁶¹

Doshi's architectural endeavors embraced storytelling and conferred on his architectural works the characteristics of the story. Tayyibji writes about Doshi's stories,

“For Doshi, reality is to be understood through the search for its secret intangibles rather than its obvious manifestations, and in this the story is his map. He travels by the map and as he does the map is transformed, he draws it again, and uses this

⁶¹ Doshi, *Paths Uncharted*, 330.

for still further explorations...It is an incisive tool of thought that allows optimism, excitement and wonder without those tense reactionary conclusions or utopias.”⁶²

Considering the nature of storytelling as an inviting and participatory means to engage and elicit conversation on the ever-changing nature of reality, it became clear why it featured naturally as part of Doshi’s process. The significance of storytelling was paramount for Doshi for whom architecture was not an object to be contemplated with generic and universal principles of design but rather by being engaged in the conditions of each project and as a result of the architectural process, where the final product transpired as a result of the engagement.

The final product, in Doshi’s case, was not creating a building alone, but devising ways of imagining and experiencing inhabitation therein, that were based predominantly, amongst other factors on the subjunctive references, that sought to include dreams of cherished memories from the past and wishful future aspirations made richer with cultural and mythopoeic flavors. Doshi’s inclusion of such elements aided the realization of a communal ideal, which transported the individual in a communally shared and celebrated time in history, while inhabiting a building of the present, or thinking of a building for the future.

Chhaya writes about Doshi’s design process as follows,

⁶² Riyaz Tayyibji, “The Search for Joy in the Modern Project,” Neelkanth Chhaya ed., *Harnessing the Intangible*, 93.

“The rationalist mind fears the mythopoeic vision as a conspiracy against reason and efficiencies of technocratic life. In contrast, by intuitively releasing artifacts in history from time, Doshi has excavated ephemeral connections between rootedness and freedom, negating parochial moorings and initiating a broader discourse for the futurity of society.”⁶³

Chhaya talks here of the temporal play in Doshi’s work when he derived a thing from the past but made it extremely relevant for the present and future. Chhaya identified that Doshi freed these artifacts from the clutches of time. Vestiges from the past that were chosen to be “freed” seem to have been identified based on their appeal irrespective of time. They did not remain bound in time because they appealed not at the temporal level but at the fundamental level on a humanistic plane.

For Doshi, a past experience, memory, or a mythological story, at one time, sedimented in a dream prognosticating the future. At other times, a fathomed solution in a strange way resembled an imaginary, past condition, but was manifest in a new project almost substantiating a past or making an imaginary one real. This existence of a complex temporality, so grounded in the specifics of the site and project, contronymically contributed a timelessness and universal appeal to many of his projects as it carefully brought forth aspects that catered not only to the specific sensibilities of people in the place, but also invoked attention because of the imaginative and intriguing images it concocted that subverted rationality. In a dream, we enjoy the irrational play upon distance in time

⁶³ Neelkanth Chhaya, “The Paradox of Doshi’s Mythical Realism,” Neelkanth Chhaya ed., *Harnessing the Intangible*, 82.

and place, relishing the existence of objects that rationality and reality do not let us see in the same frame. So did Doshi's architectural stories subvert rationality, be it in the picture plane of his miniature style illustrations where mythological creatures coexisted with human figures or on the building site where entering a building followed the circumambulatory path to the rear of the building, or when a dream-image transformed into the material reality of a building.

These temporal convolutions and complexities were an essential flavor of Doshi's storytelling-dreaming, where logic and accuracy could be forsaken easily to add an intriguing flavor that appealed to the "emotional-rational."⁶⁴ This subtracted standardization and objectivity, and instead imbibed a rationality reinforced by a 'mythopoeic imagination,' creating a concocted world that derived on the symbolic and the spiritual. Such mythopoeic contexts are otherwise seen as non-scientific, non-objectifiable, and hence unnecessarily time consuming, leading them to be ignored in the architectural process. These however are the essence of dreaming and were potently present in Doshi's works.

In his article, "The Nature of Architecture," Doshi wrote about architecture's strongest characteristic being its capability to provide many qualities—functional, climatic, and structural amongst others, and to convey several messages—personal, cultural, memorial,

⁶⁴ Neuroscience expert, Antonio Damasio highlights that emotions and rationality, commonly not seen together, are both key to stories told in the brain. Frascari, "An Architectural Good life can be Built, Explained and Taught only through Storytelling," Adam Sharr ed., *Reading Architecture and Culture*, 224.

ritualistic, or traditional, to name but a few. Doshi suggested that “[...] |architecture| must possess the “magic of its story.”⁶⁵ Doshi’s call for a need for the story of architecture is necessary because of the intricacies that accompany architectural creation. Architecture cannot be thought of using a single formula but has to embrace the complexity that comes with its relation to the past, present, and future. This imparts a certain and perpetual flux to architectural creation which simultaneously deals with pragmatic concerns while also juggling with personal memories, symbolic, cultural, and social associations from the past and present while forecasting and preparing for the future.

For Chhaya, Doshi’s work can best be described as play. He writes,

“Play involves setting up ‘rules.’ It involves being responsive to unexpected and unpredictable situations as they arise, but always keeping ‘within the rules of the game’. It demands multi-sensorial alertness. Play is open-ended and thus it involves risk-taking. In observing Doshi at work, we see this mindset in operation in the design process.”⁶⁶

Indeed, through the play, Doshi dreamt and created stories, not theories. Theories are produced when claims are made generalizing ideas around the thing under scrutiny. Doshi’s stories narrated the account of singular experiences. His storytelling was not instrumental but open-ended, invoking attention and intrigue in the surrounding and

⁶⁵ Melotto, Bruno ed., Balkrishna Doshi, *Sangath-Indian Architecture between Tradition and Modernity* (Bia del Carpino: Maggioli Editore, 2012), 35.

⁶⁶ Neelkanth Chhaya, “Doshi’s Way: The Classical Method Stretched to the Limit, or The Adventurous Conservative!,” Neelkanth Chhaya ed., *Harnessing the Intangible*, 62.

proximal conditions of each project to make visible the invisible. Doshi's discerning mind saw what lay hidden in plain sight and wove those into poetic stories.

This dissertation argues that Doshi's varied forms of storytelling created a 'pause.'⁶⁷ Doshi defined the "pause" as an "undefined," "in-between space" like the courtyard or a transitional lobby that made one take a break from the more functionally defined spaces that it connected or accompanied. His definition of the "pause" was spatial and tectonic, a kind of space that could be used in several ways that helped give a rest to the functions that the surrounding spaces afforded.⁶⁸ This dissertation argues that this "pause" took several other forms through his stories.⁶⁹ Like a dream, a "manifest content" was encountered at first instance with Doshi's buildings, which when illuminated by the varied forms of the stories, proffered a "latent content."⁷⁰ It did so by creating a 'pause' that assumed tectonic, temporal, conceptual, and associational guises, creating a virtuality, which not only immersed Doshi, himself in the architectural making but also made sure all involved got a

⁶⁷ Doshi's use of the word "pause" to describe the in-between transitional spaces without any defined functions is differentiated from the further elaboration and definition of the 'pause' in this dissertation. When "pause" appears in the spatial way that Doshi used it, double quotation marks are used while the 'pause' in single quotation marks accentuates the dissertation's further elaboration of the 'pause.'

⁶⁸ Doshi, "Give Time a Break," Melotto ed., *Sangath-Indian Architecture between Tradition and Modernity*, 93.

⁶⁹ A similar concept in phenomenology is what Pérez-Gómez called the "delay" necessary for a participative understanding. Alberto Pérez-Gómez and Louise Pelletier, *Architectural Representation and the Perspective Hinge* (Cambridge, MA: MIT Press, 1997), 86-7. The authors describe Italian artist Giovanni Battista Piranesi (1720-1778) and his etchings of fictitious prisons, *Le Carceri d'Invenzione* as an example to create the delay.

⁷⁰ Freud, *The Interpretation of Dreams*, 114.

chance to participate or dream, in the conceptualization, construction, as well as the experience of the built space.

Building for Doshi became an activity, both tangible and cognitive, private and public, prosaic and poetic, real and fictitious, as opposed to the comprehension of building as a structure made of brick and stone. The ‘pause’ was the reorientation that made one engage mindfully in the architectural activity at hand, be it in the act of conceptualization, experience, or reading. This ‘pause’ became a place for sedimentation—an assimilation of different patinas. It was in the ‘pause’ where stories accumulated—the story of the wanderings/wonderings of the mind, the stories that were relevant in and around the site, the story of the work in progress *in situ*. These could otherwise get lost easily if one rushed by in the race to finish off a building. In the conceptual ‘pause’ these were offered for reflection to colleagues, builders, construction workers, or the client because all their stories—interpretation, preferences, and priorities mattered. It was also connected to the associational ‘pause’—where such elements like personal memories, cultural and social connections, and fantasies manifest themselves.

Through the study of the ‘pause’ in his buildings, visual miniature style illustration, and his written stories, this dissertation engages in an in-depth study of Doshi’s storytelling, which did not describe a building or its formal and realistic tangible qualities but acted as an invitation for action in the built work as well as in its representation to heighten the sense of living in and experiencing of the space. This engagement was of both kinds—

indicative which invoked the functional and formal, and subjunctive—which involved the fantastical and participatory.

Through the mode of storytelling, Doshi’s architectural methods demonstrated the idea of architecture as a verb—an act of dreaming collectively a numinous architecture. As this dissertation elaborates, Doshi’s stories that combined facts and fiction, turned architectural thinking into an instrument to create an unreal reality with the creation of a real virtuality. This activity ensued in the ‘pause’ he created—sometimes as an undefined and free for interpretation spatial or tectonic quality that brought in an immersion and realization of the connection that human beings had to the surrounding spaces and further to the site and place or at other times temporally, when he let a moment of uncertainty when faced with a complexity of construction, stretch and stay, so as to let a solution transpire by involving unexpected sources of inspiration.

This dissertation also finds and describes the ‘pause’ as contronymic. A contronym is a single word that has opposing meanings within itself.⁷¹ A common example is sanction which can mean “to permit” as well as “to penalize.” The sense in which the word is used becomes apparent depending on the context in which it is used.⁷² Doshi’s ‘pause’ *broke* or

⁷¹ Karaman, Burcu. (2008). “On Contronymy,” *International Journal of Lexicography - INT J LEXICOGR.* 21. 173-192. 10.1093/ijl/ecn011.

⁷² Stefan DuBois, “The Deceptively Simple Problem of Contronymy,” *Convenit Internacional* 27 mai-ago 2018 Cemoroc-Feusp / IJI - Univ. do Porto <https://www.semanticscholar.org/paper/The-Deceptively-Simple-Problem-of-Contronymy-Dubois/b3aac60a72ce440aa7c094b44ea73f1fff17a87d>, accessed June 20, 2020.

interrupted the flow of thought to seek novel points of view while also acting as an element which *joined* or *fused* disparate approaches. The ‘pause’ broke the monotonous rhythm of thoughtless building and in doing so achieved a harmony in architectural creation overall.

The idea of the ‘pause’ as the tool to create a rhythm was the fundamental notion in Vedic prosody. Vedas were the first literature produced in India.⁷³ The Rig (1500-1200 B.C.E.), Yajuh (1200-800 B.C.E.), Sama (1200-1000 B.C.E.), and Atharva (900 B.C.E.) Vedas gave directives to lead a virtuous, healthy, and happy life on a day to day basis. The knowledge of poetry was the basis for learning the Vedas and a corpus of literature was developed around the science of prosody in Vedic literature as well as classical Sanskrit literature. *Chandas* were the physical form in which the syllables were counted, and Chanda Shastra written by Maharishi Pingala (छन्दःशास्त्र, पिङ्गल) was the Vedanga (supporting text to understand the Vedas) which detailed the Sanskrit prosody.⁷⁴

“Vedic tradition firmly believes that chanting the mantra in the specifically prescribed chandas gives completeness, power and sanctity to worship, after which the worshipper is bestowed with the desired fruit.”⁷⁵

⁷³ “The Vedas existed in oral form and were passed down from master to student for generations until they were committed to writing between c. 1500 - c. 500 BCE (the so-called Vedic Period) in India,” Joshua J. Mark, *The Vedas*, published June 9, 2020, https://www.ancient.eu/The_Vedas/, accessed October 17, 2020.

⁷⁴ Dr. Madhavi R. Narsalay, *Chandas as Vedanga*, T.T.D. Religious Publications Series No. 1373 (Tirupati: Tirumala Tirupati Devasthanams Publications, 2019), iii, 6-10.

⁷⁵ *Ibid*, vii.

The *chandas* had a rhythmic phonetic quality due to the combination of “measured sound” and *avasanas*, the temporary ‘pauses’ between the measured sounds. The *avasana* or ‘pause’ in Vedic metre was called *yati* in classical Sanskrit literature. The rhythm created by controlled sound and the rhythmic breaks created “divine sound,” which served to get God’s blessings for a happy and prosperous life. The ‘pause’ was as important as the utterances. It gave meaning and rhythm to the utterances.⁷⁶

Doshi's *architectural* endeavors incorporated the ‘pause’ as a rhythmic break that gave way to a rhythmic “construction and construing,”⁷⁷ using various tones or layers circumscribing and affecting the project. The ‘pause’ gave Doshi an opportunity for layering different perspectives resulting from varied readings—sometimes from a member of the architect’s team, sometimes from a craftsman or at other times deriving from a memory, folklore, or dream. The layers did not cover each other but together revealed a complementary and holistic fabric of discrete elements. The ‘pause’ brought together these disparate elements together to create a rhythmic creation.

The ‘pause’ also imparted the quality of being at once ‘designed-vernacular’ to Doshi’s work. Doshi designed for the spontaneous and vernacular to participate, and in turn absorbed from the vernacular in his work. The ‘pause’ provided the cradle for the two otherwise seen-as-different categories to co-exist—the prevalent spontaneous vernacular joining the designed intervention.

⁷⁶ Ibid, 10, 16.

⁷⁷ See footnote 24.

The representation of his built work in the form of stories also brought forth contronymy. At times, in these stories, separating the real and the imaginary became hard. In his written stories one encountered ‘imagined-dreams.’ In his miniature style illustration, it was hard to say if Doshi introduced ‘incorrect-corrections’ or ‘correct-errors’ to the prevalent techniques of architectural drawings. At other times a fluctuating definition of which was the presentation and which the representation of architecture manifest while considering his buildings and the accompanying stories. Like in a dream, in Doshi’s buildings and the accompanying stories, the inversion from the built and the represented was twofold. The architectural dream was real and the real seemed like a dream.

The dissertation sought to understand and discuss the contronymic ‘pause’ in greater detail showing how Doshi’s ‘pause’ brought one to the brink—the threshold between the visible-real and the invisible-imaginal. It induced a dream-like state that illuminated the real. Through the dream, one made sense of the imaginal, that imparted a poetic dimension to the built work.⁷⁸

On careful consideration of Doshi’s storytelling guiding the architectural process, and its inclusion of the subjunctive along with the indicative mode, it seems quite probable that they can be perfunctorily undermined by the prevalent rationalist mindset. However, the successful and continued use of it by Doshi in his career shows that it helped to appeal to imagination and to rationality alike. The stories metonymically indicated the site/plot of

⁷⁸ Frascari and Goffi, *Marco Frascari’s Dreamhouse*, 32.

the building subject to imaginative habitation. Doshi's work was a mix of the real and fantastical, and hence appealed to rationalist-dreamers and disenchanted-realists alike. In being so, Doshi's work utilized and employed various kinds of imagination,⁷⁹ which will be brought forth in subsequent chapters.

(vi) Literature Review, Objectives, Methodology, and Chapter Abstracts

The existing literature on Doshi are of three kinds, writings by Doshi, research documents produced by his research foundation named Vastu-Shilpa Foundation for Studies and Research in Environmental Design, Ahmedabad, and the writings on Doshi. The first category includes extensive publications of Doshi's own writings in the form of his autobiography, "Paths Uncharted,"⁸⁰ and various compilations of his talks and articles by the Vastu-Shilpa Foundation. Prominent amongst these is the publication "Talks by Balkrishna V. Doshi," that compiles five talks by Doshi titled "Give Time a Break," "Le Corbusier - The Indian Incarnation," "Le Corbusier and Louis I Kahn, The Acrobat and the Yogi of Architecture," "Universe of an Architect-Planner, Indian Cases," and "Le

⁷⁹ These various kinds of imagination are my additions after studying Doshi's work, to the list that Lisa Landrum provides in her article "Varieties of Architectural Imagination." Lisa Landrum, "Varieties of Architectural Imagination," Alena Rieger and Ally Pereira-Edwards eds., *Warehouse Journal 25*, annual student-edited publication of the Faculty of Architecture (Winnipeg: University of Manitoba, 2016).

⁸⁰ Balkrishna Doshi, *Paths Uncharted* (Ahmedabad: Vastu-Shilpa Foundation for Studies and Research in Environmental Design, 2011).

Corbusier's Work: A Personal Reading."⁸¹ These bring forth his ruminations on his interactions with Le Corbusier and Louis Kahn, and the search for and the nature of his architecture and Indian identity through anecdotal accounts.

Essays by Doshi, with Italian translations were also compiled in an edited volume by Bruno Melotto in 2012 titled "Balkrishna Doshi, Sangath, Indian Architecture Between Tradition and Modernity," containing Doshi's articles titled "My Journey in Search for a Healthy Architecture," "The Nature of Architecture," "Mutation no, Magical Yes: The History of Indian Cities: Case Study of Ahmedabad," "Learning from Old Jaipur," "Between Notion and Reality," "Give Time a Break." In the post-script titled "Modernity and Freedom," Melotto frames these writings and in general Doshi's architectural works as a complex negotiation between traditional Indian values, precedents, and beliefs and Modernist principles, acknowledging the complexity as a freedom that allowed the search for an identity.⁸²

Doshi's biography is an anecdotal narration of his childhood days, his various encounters with Indian and Western thinkers and practitioners, the various and significant episodes that shaped the course of his life, as well as a narration of how his most significant projects came to be. His autobiography derives from his personal diaries, which he

⁸¹ Balkrishna Doshi, *Talks by Balkrishna V. Doshi* (Ahmedabad: Vastu-Shilpa Foundation for Studies and Research in Environmental Design, 2012).

⁸² Melotto, Bruno ed., Balkrishna Doshi, *Sangath-Indian Architecture between Tradition and Modernity* (Bia del Carpino: Maggioli Editore, 2012).

maintained since his time at Corbusier's office. Various sketches from these diaries are also reproduced in the autobiography. In his own words his autobiography,

“focuses more on the path my life has taken over the years, my personal circumstances, experiences, people I have met, places I have been to and the lessons I have learnt [...]. The references to my own projects here are incidental to circumstances, my concerns then, the choices I was making and lessons I was learning [...] here they are then, the scribbles from my inner sanctuary.”⁸³

His autobiography is in the form of a story of his life, with a complex intertwining of the above-mentioned elements. Each time one reads the autobiography, new thoughts are induced by the collage of anecdotes describing events and reflections. It is a great demonstration of Doshi's storytelling abilities, and is at once a light as well as dense read, with profound thoughts told as enjoyable stories.

The autobiography also serves as a source to understand the interaction and encounters that Doshi had with eastern and western personalities along with an account of the places and events that Doshi visited. In these the prominent interactions described are with Le Corbusier in his Parisian office as well as in Chandigarh and Ahmedabad and with Louis Kahn in the United States of America and Ahmedabad. The autobiography describes the fellowship that Doshi received from the Graham Foundation for Advanced Studies in Arts after his meeting with Swiss historian and critic Dr. Sigfried Giedion (1888-1968) in Corbusier's office. In 1957, upon Giedion's recommendation, Professor Josep Lluís Sert (1902-1983) invited Doshi to apply for the fellowship. Doshi on obtaining the fellowship

⁸³ Doshi, *Paths Uncharted*, 11.

travelled to the United States of America in 1958.⁸⁴ During this time (1958-1966) Doshi found himself interacting with influential figures like Dr. Buckminster Fuller, Ernesto Rogers, Milan, Alfred Roth, Zurich, Pier Luigi Nervi, Rome, Lucio Costa, Brazil, German Samper, Maxwell Fry, Jane Drew, Pierre Jeannerette,⁸⁵ and Team 10 members, specially Aldo Van Eyck and Giancarlo De Carlo who invited him to the meeting of Team 10 in Urbino in 1966.⁸⁶

The trip to Chicago in 1958, gave him the opportunity to meet Mies van der Rohe, Charles Eames, Fredrick Kriesler, Eduardo Chillida, Jose Gerero, Fumihiko Maki, Wilfredo Lam, Eero Saarinen, Philip Jonson, Paul Rudolf, Frank Gehry, Aldo Van Eyck, Herman Hertzberger, Jacob Bakema, and James Stirling. After this visit, Doshi also travelled to Japan and met members of the Metabolism Group like Fumihiko Maki, Kenzo Tange, Yoshikatsu, Shegeru Aoki, Kionori Kikutake, and Sor Yanagi. The visit to Japan, and the work of these influential personalities that combined Western influences with traditional precedents, strengthened Doshi's realization of the importance of defining an Indian architectural Modern.⁸⁷

Prominent Indian associations from varied fields also influenced Doshi. He partnered with architects Joseph Allen Stein and J.R. Bhalla, collaborated with textile millowners

⁸⁴ Doshi, *Paths Uncharted*, 153.

⁸⁵ Ibid, 153-155.

⁸⁶ Melotto, Bruno ed., Balkrishna Doshi, *Sangath-Indian Architecture between Tradition and Modernity* (Bia del Carpino: Maggioli Editore, 2012), 108

⁸⁷ Doshi, *Paths Uncharted*, 155-56.

like Surrottam Hutheesing, Kasturbhai Lalbhai, and Vikram Sarabhai, learnt from classical Indian music experts like Gita Sarabhai and classical dancers like Mrinalini Sarabhai and Kumudini Lakhia, interacted with contemporary Indian musicians like Kesarbhai Kerkar, Bhimsen Joshi, Kumar Gandharv, Sharafat Hussain, Amjad Ali, and Gujarati theatre and literature personalities such as Jaishankar Sundari, Jashwant Thakkar, Dinaben Pathak, and eminent artists like M.F.Husain, N.S. Bendre, Shankho Chaudhari, Piraji Sagara, and Jeram Patel.

From a trans-disciplinary and trans-geographical exposure stemmed Doshi's layered architectural sensibility. An obvious question that is likely to be posed in the context of Doshi's negotiations between tradition and modernity is the possibility of reading his works as a post-colonial political project. Working with Corbusier in Chandigarh, had taught Doshi many lessons in the play of forms, geometry, proportions, light and shadow, and strategies to conceive spaces. Doshi admitted that while formally, Le Corbusier's works in India were successful in formal terms, they were not practical and did not facilitate the activities and lifestyles they were intended for.⁸⁸ Doshi did not counter or reject modernist ways but instead adapted them to the Indian way of life, to obtain a contextually suited Modern and a temporally relevant traditional.

⁸⁸ Balkrishna Doshi, "Le Corbusier: Acrobat of Architecture – B. V. Doshi interviewed by Carmen Kagal," in *Vistāra - The Architecture of India*, Catalogue of the Exhibition, edited by Carmen Kagal, 204-214. The Festival of India, 1986, <https://architexturez.net/doc/az-cf-166223>, accessed January 10, 2021.

Doshi's Vastu-Shilpa Foundation also published numerous research documents and studies. These included case studies of traditional architecture like "Vohra Houses in Gujarat, 1982," "Temple cave design (1996)," "Jethabhai-ni-pol (1997)," Housing studies like "Low-cost Housing: An Analytical Study of Current Practices and Techniques (1983)," "Low Cost Housing, Indore (1984)," "How the Other Half Builds (1990)" to name a few, and other documents relating to research in urban design and planning.⁸⁹ These publications documented the research in local and traditional case studies and built projects as well as directives for planning and design thus compiled. Some of these studies were compiled and published in three books by Vastu Shilpa Foundation—"Concepts of Space in Traditional Indian Architecture" that combined text, photographs, architectural drawings, and miniature painting style illustrations to describe selected traditional Indian case-studies,⁹⁰ "Elements of Spacemaking," that looked into elements like columns, walls, stairs, and other elements of architecture to understand their use for different purposes and settings,⁹¹ and "Ahmedabad Chronicle," which provided a historical biography of the city of Ahmedabad.⁹²

⁸⁹ Ibid, 368-371.

⁹⁰ Yatin Pandya, *Concepts of Space in Traditional Indian Architecture* (Ahmedabad: Vastu-Shilpa Foundation for Studies and Research in Environmental Design, Mapin Publishing, 2005).

⁹¹ Yatin Pandya, *Elements of Spacemaking* (Ahmedabad: Mapin Publishing, 2007).

⁹² Yatin Pandya and Trupti Rawal, *The Ahmedabad Chronicle: Imprints of a Millennium* (Ahmedabad: Vastu Shilpa Foundation for Studies and Research in Environmental Design, 2002)

Writings on Balkrishna Doshi have been many in the form of monographs and articles. Two early and significant compendiums of his work are James Steele and Balkrishna V. Doshi's "The Complete Architecture of Balkrishna Doshi: Rethinking Modernism for a Developing,"⁹³ and William J. R. Curtis's "Balkrishna Doshi: An Architecture for India."⁹⁴ Steele's book presents his architectural works until 1998 and also includes his three written and fictional stories with a description of the associated buildings. The biographical description of Doshi's built work is accompanied by an introduction that describes Indian precedents and by a conclusion that discusses the modernist influence of Corbusier and Kahn and the inherent characteristics of Doshi's work. Curtis in his book gives an overview of twenty of Doshi's projects until 1990, with philosophical excerpts from Doshi's diaries and with a post-script discussing the future of Indian architecture as a negotiation between the local and the modern.

The publication titled "Harnessing the Intangible" edited by Neelkanth Chhaya is a prominent compilation of essays by Doshi's close friends and students like Dinesh Mehta, Meera Mehta, Durganand Balsavar, Rajeev Kathpalia, and Riyaz Tayyibji. While other essays in this compilation describe the exploration of the public and private realms, the exploration of the home and city in Doshi's work, his work in the context of Indian history, or his intuitive process using drawings and models, the essay titled "The Search for Joy in

⁹³ James Steele and Balkrishna V. Doshi, *The Complete Architecture of Balkrishna Doshi: Rethinking Modernism for a Developing World* (London: Thames and Hudson, 1998).

⁹⁴ William J. R. Curtis, *Balkrishna Doshi: An Architecture for India* (New York: Rizzoli, 1988).

the Modern Project” by Riyaz Tayyibji brings forth Doshi’s storytelling abilities as a critical and forceful element of his architectural persona.

Tayyibji in this article titled “The Search for Joy in the Modern Project” begins with the section the “the Story and the Storyteller.”⁹⁵ Tayyibji ascribes the reason for Doshi’s stories to the constant exploration and open-endedness that Doshi’s approach signified, in which he drew from unimagined and unplanned sources of inspiration. Hence the story, argues Tayyibji became a potent tool in summarizing these diverse, and sometimes contradictory sources. Tayyibji suggests that Doshi tells stories in many ways “verbal, visual, and most potently through his buildings,”⁹⁶ talking about the immersion of the user in the buildings with its liveliness combining the inside and outside and by bringing together disparate elements of form and materiality, deriving from tradition and modernity. Tayyibji suggests that stories became a way to articulate the Indian modernity that Doshi encountered, combining the past, present, and future, as well as references from his western encounters, trysts with traditional precedents and philosophy.⁹⁷

Recent literature on Doshi grew extensively, especially since his reception of the 2018 Pritzker Prize and the major 2019 travelling exhibition and catalogue, *Architecture for the People*, Vitra Design Museum, Germany from March 30, 2019 to September 8, 2019.⁹⁸

⁹⁵ Riyaz Tayyibji “The Search for ‘Joy’ in the Modern Project,” Neelkanth Chhaya ed., *Harnessing the Intangible* (New Delhi: National Institute of Advanced Studies in Architecture, The Academic Unit of Council of Architecture, 2014), 92-113.

⁹⁶ Ibid, 93

⁹⁷ Ibid, 98-101.

⁹⁸ Exhibition Schedule: Exhibition schedule:

Apart from many online articles, webinars, and interviews of Doshi, two books have been published since. These are Mateo Kries, Khushnu Panthaki Hoof, Jolanthe Kugler eds., *Balkrishna Doshi, Architecture for the People*,⁹⁹ and Vera Simone Bader ed. *Balkrishna Doshi: Writings on Architecture & Identity*.¹⁰⁰ *Balkrishna Doshi, Architecture for the People*, presents Doshi's selected projects from 1958-2014, along with four portfolios consisting of two photo essays, one compilation of sketches from Doshi's notebooks, and a compilation of photographs of doors and door handles from his various projects. The archive section has a chronology and catalogue of his works along with a bibliography and index. The compilation has an introduction by Khushnu Panthaki-Hoof, Doshi's granddaughter, partner, and curator of the retrospective exhibitions. Hoof refers to the stories and epics that Doshi grew up with leading him to appreciate mythical realities in architecture as a means to evoke and touch our inner chords.¹⁰¹ Some of the other articles in the compilation includes Samanth Subramanian' essay "A Modernism for India,"

Vitra Design Museum, Weil, Germany: March 30–September 8, 2019;
 Architekturmuseum, Pinakothek der Moderne, Munich, Germany: October 17, 2019 –
 January 19, 2020, Architekturzentrum Vienna, Austria: May 29, 2020–June 29, 2020
 Wrightwood 659, Chicago, USA: September 9, 2020–December 12, 2020
 Balkrishna Doshi: Architecture for the People, Exhibition Concept, Vitra Design Museum,
https://www.design-museum.de/fileadmin/user_upload/Bilder/Ausstellungen/A78_Doshi/BalkrishnaDoshi_ExhibitionConcept.pdf, accessed July 3, 2020.

⁹⁹ Mateo Kries, Khushnu Panthaki Hoof, Jolanthe Kugler eds., *Balkrishna Doshi, Architecture for the People* (Germany: Vitra Design Museum and Wüstenrot Foundation in cooperation with VastuShilpa Foundation, 2019).

¹⁰⁰ Balkrishna V. Doshi and Editor Vera Simone Bader, *Balkrishna Doshi: Writings on Architecture & Identity* (Munich: ArchiTangle GmbH, 2019).

¹⁰¹ Kries et.al. eds., *Balkrishna Doshi, Architecture for the People*, 9.

Martha Thorne's piece titled "Opening Doors," which talks about Doshi's leadership in architectural education, Juhani Pallasmaa's "Three Master Mediators" talking about Doshi's relationship with Le Corbusier and Kahn, Vera Simone Bader's essay titled "The Vernacular," detailing the local case studies done by Doshi's office, and Kenneth Frampton's piece "Doshi's Pritzker" which talks about the much overdue Pritzker Prize. "Balkrishna Doshi: Writings on Architecture & Identity" presents a curated selection of Balkrishna Doshi's writings since 1950. It is a collection of fifteen lectures, articles, and essays illustrated with over fifty of Doshi's personal hand-drawn sketches.

The aforementioned works acknowledge Doshi's fascination with stories and myths in his architectural sensibility. Following the reception of my article, "Architectural Storytelling- A Subjunctive Mode of Architectural Conceptualization and Experience in the works of Balkrishna Doshi,"¹⁰² the Wrightwood 659, Chicago which hosted the moving retrospective exhibition of Doshi in Chicago in 2020 invited me to the international webinar to discuss the mythological aspect Amdavad ni Gufa, Ahmedabad for which Doshi

¹⁰² Pallavi Swaranjali, "Architectural Storytelling- A Subjunctive Mode of Architectural Conceptualization and Experience in the works of Balkrishna Doshi," in *Architecture and Culture*, Taylor and Francis Online, 6:2, 289-306, DOI: 10.1080/20507828.2018.1490880, December 11, 2018.
<https://doi.org/10.1080/20507828.2018.1490880>

wrote the fictional story.¹⁰³ The three written stories were republished in the exhibition catalogue and the website.¹⁰⁴

The storytelling inherent in Doshi's work as identified by authors mentioned above, was amply demonstrated in Doshi's own writings and my interactions with him. My interactions with Doshi were in English and Hindi. Doshi was also familiar with Gujarati and Marathi. There are many languages that are spoken in various places in India, but English is a common language widely used. All Doshi's writings are in English, which makes his works accessible to both an Indian as well as an international audience.

Through a reading of these sources, and by the analysis of my own interaction with Doshi, the questions that further echoed in my mind were: Why is his architecture joyful? How does he tell stories? What role does storytelling play in the architectural consciousness?

By identifying and problematizing storytelling and the 'pause' it induced, this dissertation sought to probe deeper into the ways in which stories were told in his buildings, miniature painting style illustrations, and through written accounts. The 'pause' appeared symptomatic of his storytelling. Doshi defined the "pause" as an "undefined," "in-between space" that made one take a break from the more functionally defined spaces that it

¹⁰³ Jugalbandi, M.F.Husain and Balkrishna Doshi's Amdavad ni Gufa, An International Panel Discussion, November 21, 2020, <https://wrightwood659.org/programs/jugalbandi-the-interplay-between-b-v-doshi-and-m-f-husain/>, accessed January 10, 2021.

¹⁰⁴ Reading Room: Doshi's Origin Stories, <https://wrightwood659.org/doshis-stories/>, Accessed January 10, 2021.

connected or accompanied. The dissertation expanded this spatial definition of ‘pause’ to identify its temporal, conceptual, and associational nature in his storytelling that created a virtuality, which not only immersed Doshi, himself in the architectural making but also made sure all involved got a chance to participate or dream, in the conceptualization, construction, and experience of the built space and its representation.

Doshi’s architectural storytelling and the ‘pause’ was manifest and intertwined throughout all his tectonic, visual, and literary works, i.e. through his buildings, illustrations, and written/spoken stories. The exploration of all these modes of storytelling afforded the discussion of other inherent questions embedded in his work. What is the role of the architect and what is architectural authorship? What is the nature of his architectural imagination that aims to create “joy” through his architectural work and assumes at once a real and fictional, designed and vernacular, modern and traditional nature? The dissertation positioned Doshi’s manifold modes of architectural storytelling in a broader theorizing of architectural imagination. The thesis argued for Doshi’s “mythopoetic,” “heuristic,” “hallucinatory,” “peripatetic,” “serendipitous,” “anagogical,” and “prophetic” imagination, and for the interplay of fiction, history, and reality in his work, adding a subjunctive character to his storytelling. The dissertation argued that this subjunctive character made architectural conceptualization and experience joyful.

This dissertation examined the architectural storytelling of Doshi through analysis of select works in built, drawn, and verbal form. These three modes of architectural storytelling, called tectonic, visual, and literary, provide the organizational structure to the thesis. These

three sections are preceded by an introduction and a biographical-contextual chapter, entitled 'The Architect,' covering the architect's own frame story, including aspects of Le Corbusier's influence on Doshi. The thesis ends with a conclusion and four appendices of the author's own photographs. The objectives of the dissertation included:

- The detailed examination of different modes of architectural storytelling adopted by Balkrishna Doshi in his works.
- The exploration of the nature, role, and effect of storytelling in architectural conceptualization, representation, and experience.

Before embarking on the study of the three modes, the chapter titled "The Architect," describes the archival study of Le Corbusier's unbuilt Villa Chimambhai in Ahmedabad to set the stage for the study of Doshi's open-ended and multi-layered approach as compared to the ways in which architects tend to and are trained to function as the author in sole control of an architectural work. The three chapters on Doshi's modes of storytelling are followed by the concluding chapter that brings forth a critical investigation of how the perception and assimilation of the built and the represented are affected by storytelling.

These chapters are titled as follows and proceed in this order:

1. The Architect.
2. The Architect Inside-Out: Doshi's Tectonic Stories.
3. The Architect and the Idiot: Doshi's Visual Stories.
4. The Architect of his Word: Doshi's Written Stories.
5. The Subjunctive Pause.

The first chapter titled *The Architect* gives an account of Doshi's background and his initial years in architecture. To bring forth the volatile post-independence Indian scenario, this chapter is a means to set the stage for the study of Doshi's work. It describes the unbuilt Villa Chimambhai, designed by Le Corbusier during 1951-54. Young Doshi worked on this project in Le Corbusier's atelier in Paris, and it is symptomatic of the existing Indian scenario in the formative years of his career. The archival study of the drawings, correspondence, and model of this project at the Canadian Centre for Architecture,¹⁰⁵ Montreal, as well as a firsthand study done with the Chimambhai family in Ahmedabad¹⁰⁶ revealed the negotiations between Le Corbusier and the *Ahmedabadi* patron.

The end of the British rule and the effects of industrialization were changing the agrarian lifestyle in India. Villa Chimambhai had many reasons for not being built. This chapter studies the Villa and the negotiations between the architect and the client. It sheds light on the client's expectations from the house and the architect's perception of his expectations. The resulting gap between the client's expectations and the architect's understanding of those expectations highlights their individual priorities. The architectural

¹⁰⁵ CCA Collection Research Grant, June-September 2015 which made possible a three-month residency at Canadian Centre for Architecture, Montreal to study the archives of the project Villa Chimambhai.

¹⁰⁶ Mitacs Globalink Research Award, September-December 2015, Grant number: IT05730.

process and the representational tools that were used for the negotiation between the architect's office and the client are perused through the archival study.

The chapter also brings forth the nature of associated traditional spaces and their import into the modern Villa. Le Corbusier's formal recreation of traditional space types in the Villa's proposed design without considering their socio-cultural facets, resulted in those types to undergo complete metamorphosis losing the characteristics of their traditional counterparts. Doshi found himself many times as a mediator between Le Corbusier and the Indian clients and users, for whom the modern architecture was unfamiliar, at times even strange.¹⁰⁷ Doshi admits having resorted to storytelling as a means to derive meaning for these modern works in the Indian scenario by concocting absurd stories. Later, Doshi sought to create an architectural consciousness of his own that was sensitive to the Indian condition.¹⁰⁸

The first chapter provided the premise on which the dissertation sets up its framework to look further at Doshi's work. The formalist approach in the unbuilt project stood in austere contrast to the subjunctive mode in Doshi's work that the dissertation elaborated. The chapter quickly moved from being a study of Doshi's initial years in architecture to providing a nascent and contrasting ground against which Doshi's own design approach derived relevance. The chapter is titled *The Architect*. It talks about both Le Corbusier as well as Doshi, but more so projects the typical figure of most contemporary architects,

¹⁰⁷ Doshi, *Paths Uncharted*, 369.

¹⁰⁸ *Ibid*, 156.

trained to precisely and meticulously define every element as they deem appropriate for the realization of a building. Their *modus operandi* precludes the subjunctive mode of operation in the attempt to be mathematically precise in their endeavors. The nature of contemporary architectural projects and representational techniques are summed up by the study of the unbuilt Villa in a stark contrast to the nature of architecture and its representation in Doshi's way of architectural storytelling.

The second, third, and fourth chapters deal with Doshi's subjunctive storytelling and its different modes: *Tectonic Stories*, *Visual Stories*, and *Written Stories* respectively. The arrangement of chapters two, three, and four in that order speaks volumes about Doshi's design process because his is not a typical one that begins on the drafting table/computer to work towards a building. Instead, it starts on site in the thick of the contextual understanding of the project and then involves the visual and written media.

The second chapter named *Architect Inside-Out* looks at Doshi's tectonic stories by looking at details in a project that he himself identifies as his most mature work—Sangath, his studio in Ahmedabad built in 1980.¹⁰⁹ This chapter describes how Doshi created the 'pause' in Sangath's architectural experience—when a breach from the corporeal occurred giving way to an unexpected and immeasurable dream-like quality. This chapter is named "Architect Inside-Out" as it delineates Doshi's attitude of moving 'in' and 'out' of the two modes of the indicative and subjunctive and the quality that such an approach imparted to

¹⁰⁹ Ibid, 166.

Sangath, in its redefined definition of the outside and inside with respect to the horizontal and vertical. It also derives from Plato's "Allegory of the Cave," where going out or coming back into the cave contemplated the nature of reality.

The third chapter titled *The Architect and the Idiot* looks at the visual storytelling embedded in Doshi's illustrations inspired by 15-17th century Indian miniature paintings. Three miniature style illustrations were chosen for analysis. These were illustrations for Sangath, Ahmedabad, Aranya Housing Scheme, Indore, and Vidhyadhar Nagar Master Plan, Jaipur. The three were chosen because they were amongst the initial ones done and because each represented a different facet. The illustration for Sangath represented a single building and its relationship to its surroundings and context. Aranya was a housing complex that was developed over time by its inhabitants. It represented the building and its relationship to the community at large. Finally, Vidhyadhar Nagar illustration represented a project that gave developmental guidelines for the planning of Vidhyadhar Nagar as requested by the Jaipur Development Authority, India. This was different from the other two, which represented built projects. The understanding of the visual stories and their use for different kinds of projects in different stages of completion was thus sought in the selection of these three examples.

The study gave an understanding of what Doshi called thinking like an idiot, a free mindset that is without inhibitions that conventions imposes upon us. Hence the title of the chapter is *The Architect and the Idiot*. The study of visual stories and its use as a tool for conceptualization, imagination, and representation is uncovered and emphasized through

this study. These visual stories were composed of architectural drawings—plans, sections, axonometric drawings combined in the illustration, breaking rules and operating at different scales. The private house and the urban street were represented together, static architectural configurations infused by various intriguing rituals and activities. Instead of being passive, programmatic descriptions, these stories created the ‘pause’ that intensified engagement and intrigue in the representation of space.

The fourth chapter, titled *Architect of his Word*, looks at Doshi’s three written and published stories, bringing out a discussion of their coming to being, and the role and effect of these stories on the architectural creation. The discussion of the stories makes one consider the relevance of the absence thereof of the distinction between reality and fiction, the tangible and the effervescent, author and reader, and the indicative and subjunctive. The title of the chapter brings out the fact that it discusses written stories—an architect’s play with words, which employs a linguistic imagination. Additionally, it also refers to *an architect of his word*—one who employs an ethical imagination to dedicate himself to the strife to incorporate an inclusive and wholesome approach in his architectural endeavors to create a joyful world.

The concluding chapter titled, *The Subjunctive Pause*, describes the polysemic effect that storytelling has on Doshi’s architecture. The study of storytelling also translated in an investigation of architectural representation, by understanding the idea of representation through phenomenologist Edmund Husserl’s definition of presentation, representation, and

phantasy in *Phantasy, Image Consciousness, and Memory* (1898–1925).¹¹⁰ This framework was adopted due to Doshi's emphasis on architectural thinking fostering experiential more than formalist values, where architecture and its representation were not seen as buildings and documents but as apparatuses for experiencing and celebrating the joys of life.

At once 'designed-vernacular,' 'fictionally-real,' and 'realistically-fictional,' the dissertation argued that the subjunctive in the storytelling imparted contronymy as the essential quality to Doshi's architectural works and its representation. The chapter brings out Doshi's subjunctive mode of architectural imagination that created a more than real world and gave to his projects an imagined context where mythological and spiritual overlays created a poetic virtual world. This realistically unreal world allowed the simple joy of going beyond the mundane, existing, and defined world to a magical and mystic world. In this virtual world, Doshi indulged in and demanded a real play in an unreal setting. The peculiarity of this virtuality lay in its potency to blur the boundary between the perceived and the dreamed in architecture.

In contrast to the prevalent commodified view of happiness, this dissertation presented an alternative through the critical study of architectural storytelling in the works of a practising architect, probing the potency of an open-ended process, which layered

¹¹⁰ Edmund Husserl and John Barnett Brough, *Phantasy, Image Consciousness, and Memory*, 1898-1925 (Dordrecht: Kluwer Academic, 2005).

“varieties of architectural imagination” as a way to include others in the making and dreaming of architecture, not so much concerned with authorship and control but more with an intent to create joyful architectural work, at once individual and cultural, designed and vernacular, modern and traditional.

The employment of diverse methodological approaches combining the archival study, interviews, observation, and direct participation in Doshi’s process of storytelling, epistemic and interpretive drawings, site visits, and the interpretive readings of selected Doshi texts, drawings and buildings in the dissertation approximated Doshi’s storied style. The presentation of the dissertation as a mix of rigorous scholarship and personal narrations with a deliberate deployment of the first-person, along with a variety of drawings, resulted in it becoming the first of a kind of study, theorization, as well as a demonstration of Doshi’s storytelling method. The dissertation furthered the idea of storytelling as a method for architectural experience, conceptualization, and representation to suggest storytelling as a method of research and theorization.

While the collage of methodologies was appropriately mimetic of Doshi’s trans-media storytelling and of the polysemic-contronymic mode of architectural imagination examined and promoted through the thesis, the epistemic object in the form of varied forms of drawings employed in the dissertation helped not only understand, investigate, and articulate the visual storytelling of Doshi, but also became a tool that was employed to understand and demonstrate other ideas in the dissertation. The amusing Mullah Nassrudin quotes and illustrations at the start of each section poetically reinforced ethical themes and

offered a demonstrative ‘pause’ in the text. Measured drawings of details of Sangath were done for a closer in-depth observation of details therein. The *pol* house study was also accompanied by the development of an exploded axonometric drawing, through which emerged an understanding of the layout of the house similar to the understanding of the Villa Chimanbhai as gathered through the openable wooden study model. The miniature painting style illustration titled “Walking the architectural dream” was done to understand the strategic methods to tell the story of an imagined dream. Through these enactments, the methods and challenges of attempts at storytelling were serendipitously encountered, identified, acknowledged, and articulated.

Using this diverse methodology and through the study of relevant traditional Indian philosophies and precedents, Doshi’s built work, and its representation including his recent moving exhibitions, the dissertation aimed to provide an up to date narration of his architectural works and the storytelling therein.

(vii) Relevant Conference Presentations, Publications, and Grants

During the course of this research on Doshi’s storytelling, I participated in relevant conferences to solicit feedback and publish parts of my work. I have derived constructive feedback from these activities which contributed to the development of my work immensely. In this process parts of my dissertation were presented at various conferences and published as an article and a book chapter. My study has also benefited greatly from two grants. A brief of these are given below.



Figure 5: With Doshi and his wife, Kamala Ben, at Kamala House (Doshi's Residence), Ahmedabad, 2015.
© Pallavi Swaranjali, 2015.

This journey was supported by the CCA Collection Research Grant, June-September 2015, which made possible a three-month residency at the Canadian Centre for Architecture, Montreal, where Le Corbusier's Villa Chimambhai Archive was studied. This sparked my interest to visit India for studying the Villa built later by another architect on the same site. Graciously funded by the Mitacs Globalink Research Award, Canada, [grant number IT05730] a travel to India from September to December 2015 was undertaken. This grant helped with the residency at Doshi's office and visits to his projects in

Ahmedabad, Indore, and Jabalpur, India. The visit substantially gave direction to the dissertation, following which extracts from the dissertation were presented at various conferences.

The paper titled, “Architectural Storytelling-A Subjunctive Mode of Architectural Conceptualization and Experience,” was presented at the 14th AHRA PhD Student Symposium, University of Edinburgh, Scotland, April 6-7, 2017. The paper got an Honorable mention for Best Paper Award.¹¹¹ The editors of the associated peer-reviewed journal also invited me to publish the paper as an article. It was published as “Architectural Storytelling- A Subjunctive Mode of Architectural Conceptualization and Experience in the works of Balkrishna Doshi,” in *Architecture and Culture*, AHRA Journal, Taylor and Francis Online, Volume 6, Issue 2, on December 11, 2018.¹¹² This publication dealt with the written stories that Doshi published and forms a part of the chapter on written stories, named “Architect of his Word” in this dissertation.

The paper titled “Art for Architecture, or Architecture for Art,” talked about the architectural project of Ahmedabad ni Gufa, that was presented in and included in the conference proceedings of AR(t)CHITECTURE, An International Conference at the

¹¹¹ 14th AHRA Research Student Symposium, Awards, <https://ahrapostgrad2017.weebly.com/awards.html>, accessed June 20, 2020.

¹¹² Pallavi Swaranjali, “Architectural Storytelling- A Subjunctive Mode of Architectural Conceptualization and Experience in the works of Balkrishna Doshi,” in *Architecture and Culture*, Taylor and Francis Online, 6:2, 289-306, DOI: 10.1080/20507828.2018.1490880, December 11, 2018. <https://doi.org/10.1080/20507828.2018.1490880>

Technion—Israel Institute of Technology Faculty of Architecture and Town Planning, April 19-21, 2016.

Another conference paper called “The Architect Inside-out: Study of a new relationship between inside and outside in the ceiling of Sangath- Ar. Balkrishna Doshi’s office, Ahmedabad, India,” was presented at the Frascari Symposium III, Virginia Polytechnic Institute and State University, April 21-22, 2017. This led to the publication of parts of the dissertation chapter dealing with Doshi’s tectonic stories, in a chapter titled “Architect Inside-out,” in the edited volume—*Ceilings and Dreams-The Architecture of Levity*, edited by Paul Emmons, Federica Goffi, Jodi La Coe, Routledge in 2019. The accompanying exhibition also featured my exploration with Doshi’s miniature painting style illustration technique. Architectural Drawing (33”X33”) titled “Walking the Architectural Dream,” which was selected by blind peer review and exhibited at the Frascari Symposium III, Washington Alexandria Architecture Center of the Virginia Polytechnic Institute and State University, Alexandria, old Town, April 21-22, 2017.

My meeting with Doshi in India, 2015 was also featured in the architectural magazine *Canadian Architect* in an article titled “Learning from Balkrishna Doshi,” issued on April 12, 2018.¹¹³ Finally the paper titled “Forging Architecture- The Contronymic Nature of

¹¹³ Pallavi Swaranjali, “Learning from Balkrishna Doshi,” *Canadian Architect*, April 2018 Issue, <https://www.canadianarchitect.com/learning-balkrishna-doshi/>, accessed June 20, 2020.

Architectural Creation in the work of Indian Ar. B.V. Doshi,” was presented at *Atmosphere 10*, Annual Symposium Faculty of Architecture, University of Manitoba, February 1-3, 2018.

Chapter 1: The Architect



Figure 6: Mullah Nasruddin Illustration 2 © Pallavi Swaranjali

*“Mullah, why are you sitting back to front on your donkey?”
Mullah Nasruddin replied, ‘I know where I am going, I want to see where I have
been.’”¹¹⁴*

¹¹⁴ Retold by Chanchal Dey, *Stories of Mullah Nasruddin* (Kolkata: Book Club, 2009), 116-117.

(i) The Architect as Author

The basic premise of this first chapter that sets the stage for the dissertation was strangely the investigation of an unbuilt architectural project. This was deliberately so. The unbuilt project extended the possibility to look at the reasons for it not being built, as opposed to being engaged with the aesthetics, politics, merits, or inadequacies of a built work. The chapter delineated how the architectural agendas of the architect and client did not converge in the particular case study, raising questions about authorship and control in architecture. The representational tools used in the project appeared as a mere means to instrumentalize agendas, raising the question of the role of representation in architecture and how means of architectural conceptualization and representation affect the social and cultural aspects of buildings.

The archival research (June-September 2015) studying the Villa Chimanbhai (1951-54) at the Canadian Centre for Architecture, Montreal,¹¹⁵ kindled the need to substantiate and further investigate why this Villa meticulously designed by Swiss architect and urban planner, Charles-Édouard Jeanneret, better known as Le Corbusier (1887-1965),¹¹⁶ for

¹¹⁵ CCA Collection Research Grant, Canadian Centre for Architecture, Montreal June-September 2015.

¹¹⁶ Le Corbusier | Swiss architect, <https://www.britannica.com/biography/Le-Corbusier>, Accessed May 18, 2020.

Chinubhai Chimanlal (1909-1993), the first Mayor of Ahmedabad (1950-62),¹¹⁷ was never built. The initial consideration that led me to the archival research was the fact that the dissertation's protagonist, Doshi had worked as a draughtsperson,¹¹⁸ on this project amongst others in his tenure at Le Corbusier's Parisian office from 1951-1954. It seemed important to study the project in a quest to learn how and what Doshi was involved in during his early years in architecture.

Born in Pune, India in 1927, Balkrishna Vithaldas Doshi lived in his ancestral home in Pune with a large joint family with 15-17 members and joining his grandfather's established furniture business may have seemed a likely career choice for him.¹¹⁹ After completing high school, Doshi joined the Institute of Modern Art run by Venkatesh Patil in Pune. This gave him the opportunity to get familiar with the ruralscape where he sketched extensively the people, flora, fauna, houses, and places of worship for the next two years.¹²⁰

The turning point for him came when he joined Architecture at Sir J.J. School of Art in Mumbai in 1947. Developments after this period were fast, unexpected, and life-

¹¹⁷ Ravi Kalia, *Gandhinagar: Building National Identity in Postcolonial India* (Columbia: University of South Carolina Press, 2004), 57.

¹¹⁸ The drawings in the Villa Chimanbhai archive in the Canadian Centre for Architecture, Montreal indicate the name of the draughtsman as Doshi on all the prints, <https://www.cca.qc.ca/en/search/details/collection/object/349329>, Archival Research, Canadian Centre for Architecture, Montreal, CCA Collection Research Grant, June-September 2015.

¹¹⁹ Balkrishna Doshi, *Paths Uncharted*, 67.

¹²⁰ *Ibid*, 75.

changing for Doshi who went to London in 1950 to study and become an Associate of the Royal Institute of British Architects (RIBA).¹²¹ While attending the Eighth Conference of the International Congress of Modern Architecture (CIAM) held in Hoddesdon in 1951, Doshi met Le Corbusier and saw the opportunity to work in his office.¹²² He worked for Le Corbusier in Paris from 1951 to 1954.¹²³ During this time, the office was planning the new city of Chandigarh and five buildings in Ahmedabad, India. These five buildings were Shodhan House (1951-56), Sarabhai House (1951-55), Villa Chimambhai (unbuilt-1951-54), Sanskar Kendra Museum (1951-54), and Millowners' Association Building (1951-55). These buildings have since become landmarks in Ahmedabad. The Mayor was instrumental in inviting Le Corbusier to Ahmedabad and hence Villa Chimambhai surely and dominantly stands out because it was the only project amongst these that remained unbuilt.

¹²¹ Ibid, 16.

¹²² Ibid, 55.

¹²³ Ibid, Back Cover.



Figure 7: From Left to right: Le Corbusier's Villa Shodhan, Ahmedabad, Photo: Christian Staub, © FLC / SOCAN (2020), Le Corbusier's Sarabhai House, Ahmedabad, © FLC / SOCAN (2020), Le Corbusier's Millowners' Association Building, Ahmedabad, © FLC / SOCAN (2020), Le Corbusier's Sanskar Kendra Museum, Ahmedabad, © FLC / SOCAN (2020), PC and © FLC / SOCAN (2020), used with permission, not to be reused without the copyright owner's permission.¹²⁴

However, the study of this project did not stay limited to understanding Doshi's initial architectural experience. In fact, it started to take the shape of a preface that set up the stage for an in-depth analysis of Doshi's approach to architecture in later years of his career. Le

¹²⁴ Foundation Le Corbusier, http://www.fondationlecorbusier.fr/corbuweb/morpheus.aspx?sysName=thumbnail&sysLanguage=en-en&sysParentName=Home&sysParentId=11&itemId=7443&itemPos=1&itemCount=22&itemSort=en-en_sort_string1, accessed October 11, 2020.

Corbusier had claimed that he had checked off all the boxes in the list of priorities as set in the program for the Villa developed with the client. The study raised various questions regarding priorities and expectations of the clients as opposed to the whims of the architect and their perception of client expectations. It also brought forth questions of how architecture derived from traditional and tested precedents and the demands resulting from the futurity of a building in new socio-political conditions. Additionally, the study of the Villa perused the role and limitations of conventional and instrumental forms of architectural representation. The Villa provided the premise to ask such questions that later Doshi's own search for architecture raised. The Villa as a case study defined albeit indirectly the concerns that Doshi's approach tried to address through his storytelling in later years.

The study alluded to the state of affairs of the Indian society at the time when the Villa was under planning in Le Corbusier's Parisian atelier (1951-54). The archival letters, photographs, drawings, study model, and the cut-outs as explained in detail in the chapter provide a reading of how Le Corbusier was operating in the Indian milieu. It is hard to ignore the fact that these archival elements suggested a forceful and distant means to lead the Villa to fruition. Doshi was amongst the first generation of architects who after India's independence found themselves in a position where now that the country was free of domination, questions of approach and identity were looming large on the architectural horizon. As discussed earlier, the situation begged for an exploration of the determinants for Modern Indian architecture at a time when resources were scarce and industrialization

and modernization were the mandates that Pandit Jawaharlal Nehru, the first Prime Minister of free India, was propagating in order to uplift the Indian economy.¹²⁵

The study of the unbuilt Villa Chimanbhai suggested the change that was taking over on the domestic front in India, and especially in Gujarat, due to various reformist actions to build an industrial modernist center there. It exemplified the ways in which traditional and modern architecture were interacting. The gaps that resulted from this interaction indicated that new approaches were needed to narrow the gap and work towards an architecture that was not garnering formal and aesthetic results. Instead, working towards achieving an architectural experience that did not as much want to be categorized as traditional or modern, but which could lead to embodied experiences that connected one to the physical and natural surroundings and to personal associations, social, and cultural contexts while fulfilling functional constraints, seemed important.

To my surprise, not much documentation or literature was available regarding Villa Chimanbhai,¹²⁶ which saw the bringing together of an architect of the stature of Le

¹²⁵ Patrick Seguin, *Le Corbusier – Pierre Jeanneret, Chandigarh, India* (Paris: Editions Galerie Patrick Seguin, 2014), <https://www.patrickseguin.com/en/publications/corbusier-pierre-jeanneret-chandigarh-india/>, accessed February 12, 2018.

¹²⁶ Brief commentary is available in Marcelo Gardinetti, *Le Corbusier inconcluso, Villa Chimanbhai*, on <https://tecnne.com/arquitectura/le-corbusier-inconcluso-villa-chimanbhai/>, published 29 April, 2013, and Maria Candela Suarez, *La Villa Chimanbhai de Le Corbusier*, “The Villa Chimanbhai of Le Corbusier.” In: *Le Corbusier plans 1951-1953: de l’ŒidŽe au projet*. Vol. 13. Paris, Echelle-1, Le Corbusier Foundation, without page. ISBN 10: 3764374551 -ISBN 13: 9783764374556. Indexed to Clio classic (Columbia University), 2011, https://www.researchgate.net/publication/270760152_La_villa_Chimanbhai_de_Le_Corbusier, accessed June 20, 2020.

Corbusier, the opulent client of repute, and an unrealized Villa for the Indian context. A study of traditional homes in Ahmedabad was also done on my visit to Ahmedabad. These were avenues that Doshi studied in-depth later and which influenced his ideas and work significantly. This visit to India following the archival research helped connect the dots between Le Corbusier's solution, the directives given by the Mayor and his wife, and the configuration of traditional homes (*haveli* and *pol* houses) found in Ahmedabad. Through the archival research, the meeting with the Mayor's family, as well as the literature study of the *haveli* and *pol* houses, the concept of the "house within a house" was identified to be a common theme in Le Corbusier's proposal for the Villa Chimanbhai, the client's request for "three groups of apartments,"¹²⁷ for the unbuilt Villa, and in the traditional houses.

Le Corbusier followed the client's instruction to build the house with directives derived from traditional ways of living. The appropriation of these traditional types however gave them a distinctly different flavor from their traditional counterparts. It reminded of the "abstract speculation" that Raymond had warned against, as discussed in the introductory chapter. It appeared that Le Corbusier extracted the traditional space types from the complex web of interrelated spaces that they formed part of and instead considered

¹²⁷ Letters from Le Corbusier to Mr. Chimanbhai, and a letter from Balkrishna V. Doshi to Anand Sarabhai, December 3, 1953, April 26, 1954, and 10 April 1989 DR 1990:0022:023-026, DR 1990:0022:025-DR1990:0022:026, DE 15. 8.01, accessed through CCA Collection Research Grant, June-September 2015, Canadian Centre for Architecture, Montreal.

them in isolation as neutral geometrical entities. They were freed from their connections and roles in the systemic configurations as seen in traditional buildings.

In the tryst between the traditional and the modern after India's independence, questions around socially and culturally attuned spaces became prominent and visible. Over seven decades later these questions still linger persistently and pertinently in the profession's state of affairs in contemporary India. The title of this chapter, "The Architect," brings out the general and conventional way in which architects are trained to operate as professionals. It highlights certain aspects of the profession that are accepted and seemingly effective yet questionable, when one considers aspects of authorship in architecture and the ethics of the sole control that the professional aims to achieve over the design process. In questioning Le Corbusier's attempt to impose a certain grand lifestyle suited for the Mayor through the Villa, these concerns surface and become the basis for an appreciation and further interrogation of Doshi's inclusive and open-ended process of architectural storytelling. Although the archival research was done before the visit to India, the visit to Ahmedabad and the study done there is described first as it provides a background against which the archival study is understood better.

(ii) *The Visit to Ahmedabad*

The archival research inspired the trip to India to further investigate the site of the unbuilt Villa and also to meet Doshi. The visit to Ahmedabad in September 2015,¹²⁸ unfolded its rich cultural setting and architectural heritage—both Hindu and Islamic in origin. Ahmedabad showcased a vitality due to the existence and celebration of differences. The co-existence of modern, technological, and futuristic thinking along with the preservation of traditions, rituals, festivities, and socio-cultural aspects of living provided a rich and fertile ground for the imagination. For Doshi, who made Ahmedabad home, there was no dearth of people and places to learn from. The complexity and multiplicity of the different sources of architectural inspiration offered by Ahmedabad perhaps made it impossible for him to copy or recreate them without understanding and absorbing the essence that they conveyed.

Doshi's office, Sangath in Ahmedabad provided a list of places to visit in the city (Figure 8). On one hand it suggested the heritage walk through the old part located in the core of the city which housed *darwazas* (ornate gateways), myriad traditional *pols* (housing precincts from the medieval times), tombs of Islamic rulers like the Jami Mosque (1424), and Jain temples like the Hatheesingh Jain Temple (1848). Further from the city centre, prominent places included the Sarkhej Roza—mosque and tomb complex (1457), Adalaj

¹²⁸ Mitacs Globalink Research Award, September-December 2015, Grant number: IT05730.

Vav or stepwells (1499) and Dada Hari ni *vav* (1499), Asarwa. In the many fine examples of architecture that Doshi's list of places provided, one could experience thoughts nurtured with pragmatic concerns of climate, energy efficiency, local requirements, and habits while being set in a rich history and tradition that offered intellectual and artistic examples seeped in social and cultural beliefs.

The list showed clearly that the architecture of Ahmedabad was a palimpsest of various influences—Islamic, Hindu, Jain, Colonial, Vernacular, and Modern. Ahmedabad was established at a time when it was under Islamic rule in 1411.¹²⁹ Hence its planning was governed by Islamic city planning directives. The effect of the previous Hindu dynasties existed in the city prominently, both as religious and secular architecture.¹³⁰ The numerous *vavs* (step wells) alluded to the fact that water was scarce due to the geography and climate of Gujarat. Often more than 5 storeys deep, these were ingenious mechanisms created underground to reach the varying water levels in different seasons through a series of steps. These underground structures were heavily ornamented on the inside and celebrated the journey to reach the scarce and precious water source.¹³¹

¹²⁹ I.P. Gautam, *Discovering Ahmedabad: Annals of Reinvention* (Ahmedabad: Ahmedabad Municipal Corporation, 2009), 2.

¹³⁰ *Ibid*, 30.

¹³¹ Balkrishna Doshi, *Give Time a Break* (Ahmedabad: Vastu Shilpa Foundation for Studies and Research in Environmental Design, 2012), 10.

Places of Architectural Interest in Ahmedabad

HISTORICAL - ISLAMIC ARCHITECTURE

1. Sarkhej no rojjo 1457*** (Sarkhej no rojjo, Sarkhej gaon)
A mosque and tomb complex 8 kms from Ahmedabad, built in 1457, the mausoleum of Azam, Mahmud Shah, queen Raja Bai and muslim saint/poet. Also included in complex are artificially created rectangular water tank with steps and summer pavilion for king and queen.
2. Jami Mosque 1424** (Near Teen Darwaja)
Situated in the centre of the city, a large mosque was built in 1424 by the Ahmed Shah. 260 column is support the roof with its 15 cupolas.
3. Tomb of Rani Sipri 1514** (Near Astodia gate)
A small mosque situated to the south-east of the town centre, also known as Masjid-e-Nagina (Jewel of a mosque) due to its exquisitely carved balconies and screen walls. The mosque is said to have been built in 1514 by wife of Sultan Mahmood Begra.
4. Raja-Rani no Hajiro 1446* (Near Manek Chowk)
Tomb of Ahmed Shah, stands just outside the east gate of Jami mosque. These tomb of kings and queens (Raja-Rani ka Hajira) were completed in the reign of Ahmad Shah's son and successor Muhammad in 1446.
5. Sidd Saiyed's Mosque 1452* (Near Rupai Cinema, Lal Dewaja)
Built in 1452 the mosque is well known for its intricate carved stone jalis (window screen) in non-geometric, tree like pattern

HISTORICAL - HINDU / JAIN ARCHITECTURE

6. Adalaj Ni Vav (Step well of Adalaj) -1499*** (Adalaj Village, A'bad-Gandhinagar Highway)
19 kms North of Ahmedabad. It was built by Queen Rudaba, wife of the Vaghela chief Virsinh in 1499. Unique in its kind the stepwell consists of five storeyed tribarred subterranean structure stone, with a flight of steps and platforms to fetch water. The most spectacular structure is noted for the quality of its sculptural ornamentation and stone rendering ranging from floral relief panel to stone for the various deities.
7. Dada Hari ni Vav -1499*** (Near Asarva railway bridge, Asarva Village)
Step well built in 1499, situated on the North-eastern part of the Ahmedabad.
8. Hathwasingh Jain Temple -1848*** (Closed in the afternoon) (Opposite Dehli Darwaja)
Built in 1848, it is dedicated to Dharamanath, the 15th Jain tirthankar. Located just outside the Dehli Gate, to the north of the old city, this Jain temple is made of white marble and sand stone. Its intricately carved stone elements replicating their counter parts in wood in domestic architecture from the region make the temple unique in its expression.

COLONIAL ARCHITECTURE

9. Gujarat College -1887 (Near Gandhinagar Railway station)
The first ever college in Gujarat built in 1887, is a typical representation of colonial classical architecture in stone walls, three point arches and wooden truss roof.
10. L.P. Mission High School & Bahalaloomi training college - 1906 (Near Khamsa Gate)
Built in 1886, typical colonial architecture in India the buildings are fine examples of architecture in wooden structure.

VERNAICULAR ARCHITECTURE

11. Pol Areas***, Lalabhai ni pol, Dev ni sheri, Haribhakti ni Haveli, Saikadi sheri, Jethubhai ni pol, Lakha Patel ni pol (Old city area)
Typical urban centres of Gujarat, Poles are the residential precincts. The urban form of Ahmedabad within the fortified medieval camp is created by over 360 poles. It is a socially identifiable unit a homogenous group of inhabitants. The built form which is characterized by a densely packed clusters of contiguous rows of houses, flanked around meandering streets of the houses with interior court have intricate wood carved facade with column, brackets and zaroka (balcony projection) animating streets.

MODERN ARCHITECTURE

12. Sarabhai House - 1955*** (Only by appointment: Mr. Anand Sarabhai, Tel: 7866877) (Calico museum compound, Near Shahibaugh railway under bridge)
House designed by Le Corbusier in 1955 for Manoranben Sarabhai is essentially a cradle-vault of flat tiles set in plaster without formwork, coupled with a row bricks cast roughly in cement
13. Shodhan House - 1959*** (Private residence-not accessible) (Near Kagan Hospital, Gandhinagar railway station)
House designed by Le Corbusier in 1959 for Shyam Shodhan is a living sculpture in concrete, with slant brick wall, facade, terraces and parasol over void. A ramp leads to the entrance, the ramp leads to the mezzanine and to the main level.
14. Sanskar Kendra - 1954** (Near Tagore hall, Paldi)
Designed by Le Corbusier in 1954, the museum is on plots through which the building is entered in to an open court from which a ramp, similarly opened to the sky, leads to the exhibition level
15. Mir owners Association Building - 1954*** (Ashram Road)
Designed by Le Corbusier in 1954, the structure is strongly diaphanous. The east west facade are of sunbrakers and fin wall in concrete. A long ramp is a characteristic feature composing facade along with maze of stair on various terraces.
16. Indian Institute of Management -1962*** (Vastrapur)
Designed in 1962 by Louis I. Kahn. The institutional campus consists of academic, residential and other facility buildings. The campus is an epitome of brick construction and site planning with monumental scale and spaces.

CONTEMPORARY ARCHITECTURE

17. Sangath - 1981** (On appointment 8:00-9:30 am & 6:00-6:30 pm) (Opp. Door-larshan tower, Drive In Road)
Designed by Balkrishna Doshi as architects own studio in 1981, the campus is an oasis in a hot dry climate of Ahmedabad. Partly buried with vaulted roof structure, steps and platforms, craft paved pathways, diffused daylight, water cascade and layered spaces, the campus evokes an experience similar to those in traditional Indian towns. The building is a blend of traditional & contemporary idoms of Indian architecture.
18. Gandhi Labour Institute - 1984** (Near Manav Kundri, Drive In Road)
Designed by Balkrishna Doshi in 1984. The institute promotes research and training in labour welfare. also conducts short term courses and seminars. The complex with vaulted roof in white brick mosaic and aggregate stone plaster has two storeyed academic block with seminar rooms, library, offices and lecture halls, around contained court as in traditional haveli.
19. School of Architecture - 1962** (Opp. Gujarat University)
Built in 1962 the campus for architectural education is one of the early explorations of exposed brick construction and north light overlooking studio spaces.
20. L.D. Institute of Indology -1961** (Opp. Gujarat University)
The first institutional building designed by Balkrishna Doshi in 1961 is meticulously built and craftily proportioned architecture in concrete
21. Premabhai Hall - 1956 (Near Teen Darwaja, Bhadra)
Performing arts hall in exposed concrete designed by Balkrishna Doshi in 1956.
22. Ahmedabad ni Gulla - 1993*** (3:00 pm-7:00 pm- Monday closed) (Opp. Gujarat University)
A mysterious exploration of space, form and light through collaborative efforts of Architect (Balkrishna Doshi) and Artist (M.F. Hussain), with undulating curved planes and shells in ferroconcrete cave like underground gallery for a noted artist M.F. Hussain.
23. Gandhi Ashram - 1964*** (Near R.T.O.)
Designed by Charles Correa in 1964, a museum complex sensitively added on the original campus of Gandhi ashram fits most convincingly with courtyards, exposed bricks and pyramidal roof with using on its contemporaneity or dignity.
24. St. Xavier's Primary School - Loysia Hall* (Near Kamraj Mahadev, Gandhinagar Road)
Humane educational campus with checkered board like arrangement of classes and animated courts created by Architect Hasmuth Patel
25. Entrepreneurship Development Institute - 1992* (Near Bhau Village, Sabarnat-Gandhinagar Highway)
Designed by Binai Patel, an institutional campus in an exposed brick and concrete with landscaped courtyards creates contained spaces while extending vistas.
26. Centre for Environmental Education - 1992 (Vastrapur, behind Sardar Patel Institute of Economics)
Designed by Mandalar, in 1992, the institutional campus sensitively handles the site slopes and existing trees to create humane, contiguous and interactive open spaces.
27. National Institute of Design - 1964 (Near Tagore hall, Paldi)
Designed by Goolam and Gira Sarabhai, the campus for design education creates protected spaces with covered circulation and large span street reinforced brick shell roof.
28. Vishala*** (Near Sarkhej, Ahmedabad-Baroda Highway)
A village like ambience in an outdoor restaurant with ethnic (Gujarati) food and decor.
29. Calico - Museum of Textiles*** (10:30 am to 6:30 pm - Wednesday closed) (Near Shahibaugh railway underbridge)
A rich collection of Indian textiles with variety of their weaves, style and applications.

Figure 8: Places of Architectural Interest in Ahmedabad, Courtesy: Vastu- Shilpa Foundation for Studies and Research in Environmental Design, Ahmedabad, 2015. © Vastushilpa Foundation, India, used with permission, not to be reused without the copyright owner's permission.



Figure 9: Jami Masjid (left and right), Ahmedabad (Old part of city), 1424. It was built during the reign of Ahmad Shah I. © Pallavi Swaranjali, 2015.



Figure 10: Adalaj Stepwells (left and right), Ahmedabad, built in 1498 in the memory of Rana Veer Singh, by his wife Queen Rudadevi. © Pallavi Swaranjali, 2015.

On the other hand, the list included many buildings designed and executed by Le Corbusier in Ahmedabad—The Sarabhai House (1955), The Shodhan House (1956),

Textile Millowners' Association Building (1954), and the Sanskar Kendra Museum (1954). This coexistence of the traditional and the modern was a characteristic of not only Ahmedabad's architecture but also of the attitude of people there. The main economic activity had been textiles, and the textile millowners were the wealthy and prominent families since the time Britishers arrived in 1817.¹³² The dominant and affluent families of textile millowners played a critical role in the scientific, intellectual, artistic, architectural, cultural, social, and economic prosperity of the city. The owner families were on one hand great patrons of progress, art, architecture, technology, and science while on the other hand they valued their tradition, heritage, community, and culture. The most prominent millowner families were the Lalbhai family, the Sarabhai family, and the Hutheesing family who had close familial ties.¹³³

Chinubhai Chimanlal of the Lalbhai family became the youngest president of Ahmedabad Municipality in 1949, and the first mayor of the Municipal Corporation from 1950-62.¹³⁴ During his tenure, the city prospered with widened city roads, bridges, open air theatres, boat houses, lecture grounds, maternity homes, schools, higher education institutions, libraries, playgrounds, and gardens.¹³⁵ Mayor Chimanlal and his cousin Surrotam Hutheesing, the President of the Millowners' Association, commissioned Le

¹³² I.P. Gautam, *Discovering Ahmedabad*, 32.

¹³³ Kalia, *Gandhinagar: Building National Identity in Postcolonial India*, 57.

¹³⁴ *Ibid.*

¹³⁵ Yatin Pandya and Trupti Rawal, *The Ahmedabad Chronicle: Imprints of a Millennium* (Ahmedabad: Vastu Shilpa Foundation for Studies and Research in Environmental Design, 2002), 67.

Corbusier with various projects in Ahmedabad—Mayor’s private residence, Sanskar Kendra Museum, Millowners' Association Building (ATMA House), the Shodhan House (formerly commissioned by Surrotum Hutheesingh but later sold to millowner Shyamubhai Shodhan), and Sarabhai House.¹³⁶

Mayor Chimanlal’s proposed house in Ahmedabad was situated in an undeveloped area near the famous Calico Museum set up by the millowner family of the Sarabhai’s in Shahibaug Area, North East of River Sabarmati. Chimanlal married Prabhavatiben in 1950 and had a daughter and a son, Urvashi and Rajiv Lalbhai, respectively.¹³⁷ On visiting the site in 2015, it became obvious how developed, busy, and populated the neighbourhood had become since. Mayor Chimanlal’s son, Rajiv Lalbhai and his family now lived in the house on the same site, but in a house later designed by a Mumbai based architect. The house as it is now, is built off a busy road next to the Shahibaug flyover, with a printmaking and block printing workshop in the outhouse run by Rajiv Lalbhai’s wife.

¹³⁶ Kalia, *Gandhinagar: Building National Identity in Postcolonial India*, 57.

¹³⁷ ચીનુભાઈ ચીમનલાલ, Chinubhai Chimanlal, https://sureshbhani.wordpress.com/2006/12/26/chinubhai_chimanlal/, accessed March 21, 2020.



Figure 11: Exterior View, Built Villa Chimanbhai where Rajiv Lalbhai now resides, Shahibaug in Ahmedabad. © Pallavi Swaranjali, 2015.



Figure 12: Living room with photograph of Mayor Chinubhai Chimanlal and his wife Prabhavatiben (right), Built Villa Chimanbhai where Rajiv Lalbhai now resides, Shahibaug in Ahmedabad. © Pallavi Swaranjali, 2015.

(iii) Mayor's Ancestral Home

February 19, 1951, was the historic date when Le Corbusier landed in India.¹³⁸ His visit to India was an extraordinary experience for him, and he communicated this to his wife in a letter addressed to her from Chandigarh dated February 26, 1951,

“Von, I will tell you that I am going to do the work of my life here, among the Indians, who are extremely civilized.”¹³⁹

It was a fascinating experience for Le Corbusier in India, a country that offered a rich legacy in the form of historical monuments, miniature paintings, traditional as well as colonial architecture. Le Corbusier was fascinated by Indian architecture, art, and the way of life of the Indians—the “cows, big black crows, women, commonly used furniture, animals, trees and even the shape of cooling towers at the thermal plant station at Ahmedabad.”¹⁴⁰ India has been a country where spiritual life has been upheld as sacrosanct, with emphasis on individual aspirant's gnosis, through the path of yoga for a rapture with the divine, followed by external ritual and traditions in the framework of organized religion on the one hand, and traces of cosmic symbolism as mythologies over time on the other hand.

¹³⁸ Manisha Shodhan-Basu and Frederiksen Jens, *Le Corbusier's Villa Shodhan: A Personal Look at His Final Work of Residential Architecture* (Copenhagen: Royal Danish Academy of Fine Arts School of Architecture Publishers, 2008), 22.

¹³⁹ *Ibid.*

¹⁴⁰ *Ibid.*, 22-23.

Mayor Chimanlal at that time resided in his ancestral house within the heart of the old city of Ahmedabad, in the area called *Pankore Naka*.¹⁴¹ Rajiv and Urvashi Lalbhai, the son and daughter of the Mayor in Ahmedabad, provided the sketch of the plan of the ancestral home or *Haveli*, where the Mayor resided. This provided valuable clues to the layout of the ancestral home where Le Corbusier visited and met the Mayor for the conversations regarding the proposed Villa. The plan of the home (Figures 13 and 14), suggested the family structure and social norms of the time.

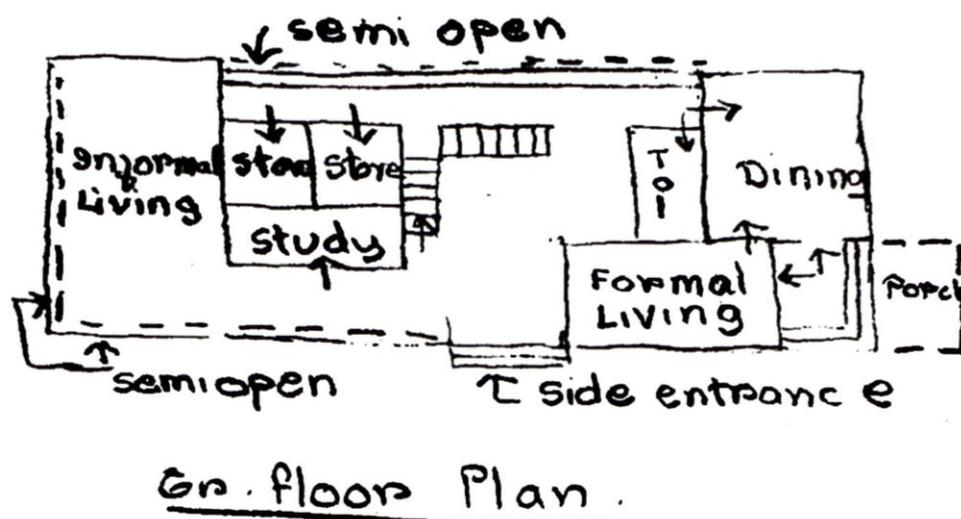
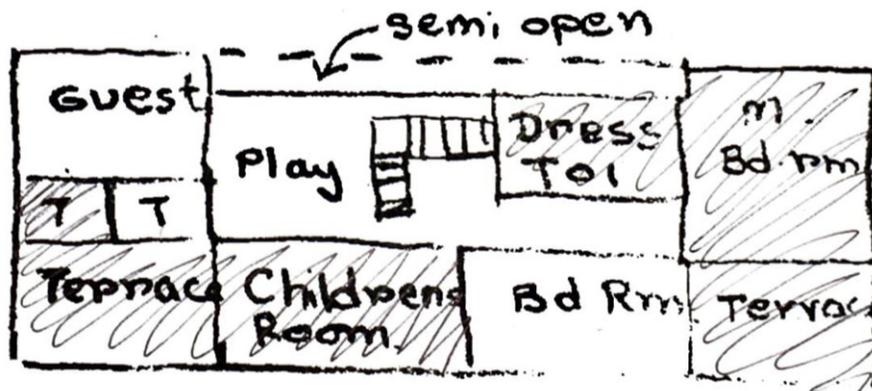


Figure 13: Ground Floor of the ancestral home of Mayor Chimanlal in Pankore Naka, Ahmedabad as drawn by his daughter Urvashi. © Pallavi Swaranjali, 2015.¹⁴²

¹⁴¹ The address of the demolished house is mentioned in Le Corbusier's letters to Mayor Chimanlal, Letters from Le Corbusier to Mr. Chimanbhai, and a letter from Balkrishna V.Doshi to Anand Sarabhai, December 3, 1953, 26 April 26, 1954, and April 10, 1989 (DR 1990:0022:023-026)1.DR 1990:0022:025-DR1990:0022:026, DE 15. 8.01.

¹⁴² From sketches obtained from Rajiv Lalbhai and over virtual correspondence with his sister Urvashi and Paulomi Lalbhai, December 20, 2015.



First floor Plan.

Figure 14: First Floor of the ancestral home of Mayor Chimanlal in Pankore Naka, Ahmedabad as drawn by his daughter Urvashi. © Pallavi Swaranjali, 2015.¹⁴³

The plan showed common areas on the ground floor of the home (Figure 13) which could be used by all members of the family. The kitchen did not appear to be part of the main building. The kitchen was located in an ancillary service building.¹⁴⁴ Typical homes for the affluent often had an additional ancillary unit serving as servant quarters. The kitchen was isolated from the main house and often had a separate entry, still connected to the main building through covered/uncovered passages. This could have been for several reasons. At the time cooking was done over fire using fuel like wood, coal, and dried cow dung discs. Having the kitchen situated away from the main dwelling unit may have facilitated cleanliness of the main house. The fumes due to burning of the fuel could be

¹⁴³ Ibid.

¹⁴⁴ *Xam idea Complete Course Social Science Class 8*, NCERT Board, Compiled by the NCERT Editorial Board, VK Global Publications Pvt Ltd, 73.

directed away from the house. Fuel could be delivered and stored in these ancillary buildings for ease of usage. Many times, for the more affluent families like the textile millowners', there were domestic helpers available in abundant numbers to take care of various chores around the house. The kitchen and other ancillary functions as a detached unit facilitated the way in which these domestic helpers entered and exited using a separate entry into the work zones of kitchen, washing, preparation, and storage areas without having to go through the main house.¹⁴⁵

At that time the idea of joint families was common in the prevalent agrarian economy of India. The family unit was large and consisted of parents, brothers with their immediate families, and unmarried siblings all residing together.¹⁴⁶ Due to the family structure and size, houses were built to accommodate the requirements of the joint family and as stated the houses for the well-off often had attached or adjacent kitchens and servant quarters.¹⁴⁷ The terraces were an important feature of the houses that were used for miscellaneous

¹⁴⁵ Ibid.

¹⁴⁶ David G Mandelbaum, "The Family in India," *Southwestern Journal of Anthropology*, 4, no. 2 (1948): 123-39. Accessed May 18, 2020. www.jstor.org/stable/3628707.

Chandrasekhar, S. "The Hindu Joint Family," *Social Forces* 21, no. 3 (1943): 327-33. Accessed May 18, 2020. doi:10.2307/2570671.

Schlesinger, Ben. "The Changing Patterns in the Hindu Joint Family System of India," *Marriage and Family Living* 23, no. 2 (1961): 170-75. Accessed May 18, 2020. doi:10.2307/347733.

¹⁴⁷ Kaiwan Mehta, *Colonial Bhuleshwar, Marg, A magazine for the Arts*, vol 56 no 4, 32 Qayum, Seemin and Raka Ray. "Grappling with Modernity: India's Respectable Classes and the Culture of Domestic Servitude," *Ethnography* 4, no. 4 (2003): 520-55. Accessed May 18, 2020, www.jstor.org/stable/24047932.

activities like enjoying the summer breeze, sleeping at night, drying clothes, drying grains and pickles, for festivities, or simply connecting with the streetscape.

The configuration of the upper floor of the mayor's ancestral home (Figure 14) revealed that the ancestral home housed the more private areas for the sets of immediate families that lived together on the upper floor. These sets of families for example could be the grandparents, or the sons and their wives and children, single siblings, and so on. The staircase and the central common space contronymically helped to connect as well as segregate these family units within the joint family.

The common areas like the kitchen, living, and dining areas on the lower ground floor level provided spatial opportunities for the larger family to interact. Reading the upper floor plan showed that the bedrooms were grouped with washrooms and dressing rooms. Terraces were shared between rooms. These three-piece 'aggregates,'¹⁴⁸ comprising a group of bedroom-bathroom-dressing combined with shared terraces seemed to form individual units in themselves for the immediate families to call their own within the larger joint family house. It allowed the joint family to live under the same roof, cook together in the same kitchen, and yet have private lives. The 'aggregates' facilitated private areas

¹⁴⁸ 'Aggregate' is a term that I have chosen to use because of the fact that these were spaces that were connected to each other and often private from the rest of the house. It comes from the "late Middle English: from Latin *aggregat-* "herded together," "flock." <https://www.etymonline.com/word/aggregate>, <https://www.lexico.com/definition/aggregate>, accessed July 11, 2020.

within the house that sets of families could call their own, creating various “houses within a house.”¹⁴⁹

(iv) *Traditional Pol Houses of Ahmedabad*

A visit to and a study of the typical drawings of traditional *pol* houses in Ahmedabad revealed a similar arrangement of private and public areas within homes. *Pols* were residential precincts, found commonly in various towns of Gujarat during the Medieval period.¹⁵⁰ Etymologically its origin can be traced back to the Sanskrit word “*pratoli*” and the Prakrit word “*poli*,” meaning a “gateway specially to a fortress or a fortified city.”¹⁵¹ It could have also been derived from the Sanskrit *Pāla* (पाल), meaning one who guards or protects.¹⁵² A *pol* typically housed several *khadkis* (a term used to signify a collection of people of the same social status) staying together in an enclosed area with a single grand entrance.¹⁵³ The name *pol* implied a commune based creative economy where the interdependence of residents gave rise to thriving communities housed within.

In 1879 an Ahmedabad Gazetteer noted,

¹⁴⁹ Manisha Shodhan-Basu briefly points to this feature in Shodhan House that was built based on Villa Chimambhai house plans, Shodhan-Basu and Jens, *Le Corbusier's Villa Shodhan*, 14.

¹⁵⁰ Gautam, *Discovering Ahmedabad*, 56.

¹⁵¹ Vogel, J. Ph. "The Sanskrit Pratoli and Its New-Indian Derivatives." *Journal of the Royal Asiatic Society of Great Britain and Ireland*, 1906, 539-51. Accessed April 27, 2020. www.jstor.org/stable/25210294, 540.

¹⁵² Pala, Palā, Pāla: 25 definitions, [Rāmāyaṇa] 1, 42, 15 Gorr, Wisdom Library, <https://www.wisdomlib.org/definition/pala#kavya>, accessed October 11, 2020.

¹⁵³ Gautam, *Discovering Ahmedabad*, 56.

“formerly no man could sell or mortgage a house to an outsider without first offering it to the people of the *pol*. Again, on wedding and other great family occasions, each household is expected to feast the whole *pol*, and in some cases all the men of the *pol* are expected to attend any funeral that may take place. If the *pol* rules are slighted, the offender is fined.”¹⁵⁴

The *pol* operated at various scales. The feel of community living was strong in *pols* where a sense of belonging resulted due to the closely packed houses and streets within a gated precinct housing people of the same social group. A dynamic streetscape emerged with the house facades punctuated by solids and voids in the form of balconies, *otlas* (extended platform near the entrance of the *pol* houses), fenestrations, and ornate details.¹⁵⁵ The spatial layouts of the *pol* houses were ingeniously planned, following the climatic characteristics of Gujarat and the socio-economic life of the inhabitants.

An analysis of the typical plan of the *pol* house (Figures 17 and 18) provided interesting observations. The house plans were narrow and long with shared walls and did not have open space around them.¹⁵⁶ This meant that the houses opened upon the streets and because the structure of the society was intimate, *chowks* or crossings became great spaces for social interaction and festivities. These houses projected a seamless flow between the inside and outside, between domestic and commercial, and between private

¹⁵⁴ Ibid.

¹⁵⁵ Ibid.

¹⁵⁶ Mādhavī Desāī, Miki Desai, and Jon Lang, *The Bungalow in Twentieth-Century India: The Cultural Expression of Changing Ways of Life and Aspirations in the Domestic Architecture of Colonial and Post-colonial Society*, (Surrey, England: Ashgate Publishers, 2012), 30.

and public spaces. These categories were not seen as being disconnected or mutually exclusive of each other.

The architectural features of the houses were designed keeping in mind the pragmatic aspects like water conservation and climatic control as well as the social activities, family, and community life. Between the street and the front entrance of the house was a transition space in the form of an external platform called the *Otila*, which further led into the entry room separating the more private areas of the house from the public street.



Figure 15: *Pol* Houses, Ahmedabad with their rich facade facing the labyrinthian street. © Pallavi Swaranjali, 2015.



Figure 16: *Pol* Houses, Ahmedabad showing gated entry to the *pol*. © Pallavi Swaranjali, 2015.

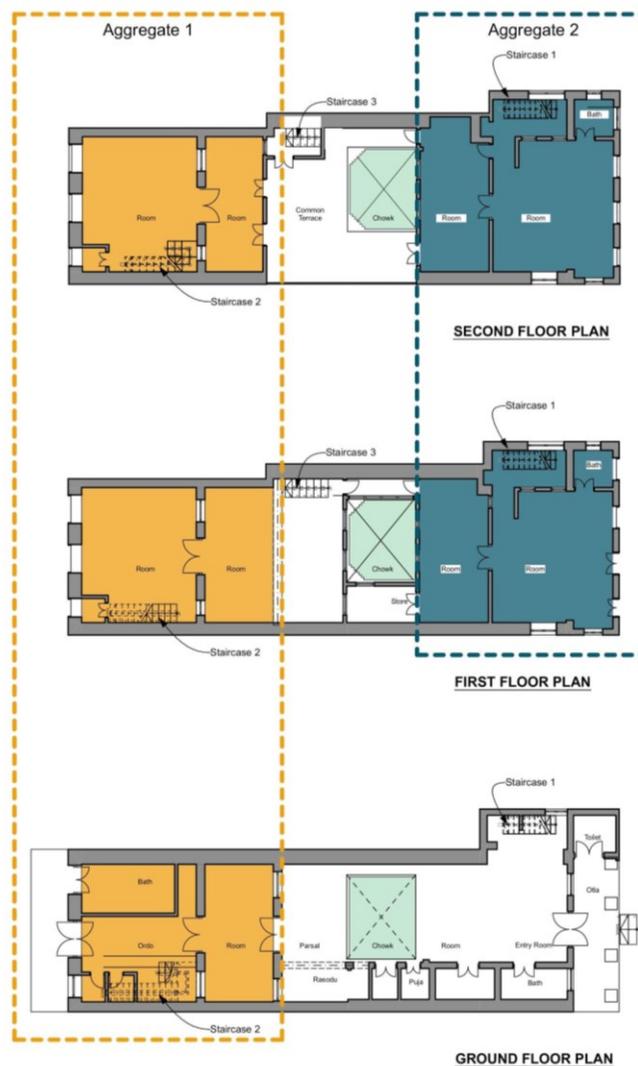


Figure 17: *Pol* House: Plans showing the segregation of the layout using different colours to achieve “houses within the house” or aggregates along with the common and typical spaces. Redrawn by Pallavi Swaranjali, 2020 using ArchiCad 22 based on drawings included in the book, *The Ahmedabad Chronicle*.¹⁵⁷

¹⁵⁷ Pandya and Rawal, *The Ahmedabad Chronicle: Imprints of a Millennium*, (Ahmedabad: Vastu Shilpa Foundation for Studies and Research in Environmental Design, 2002), 87.

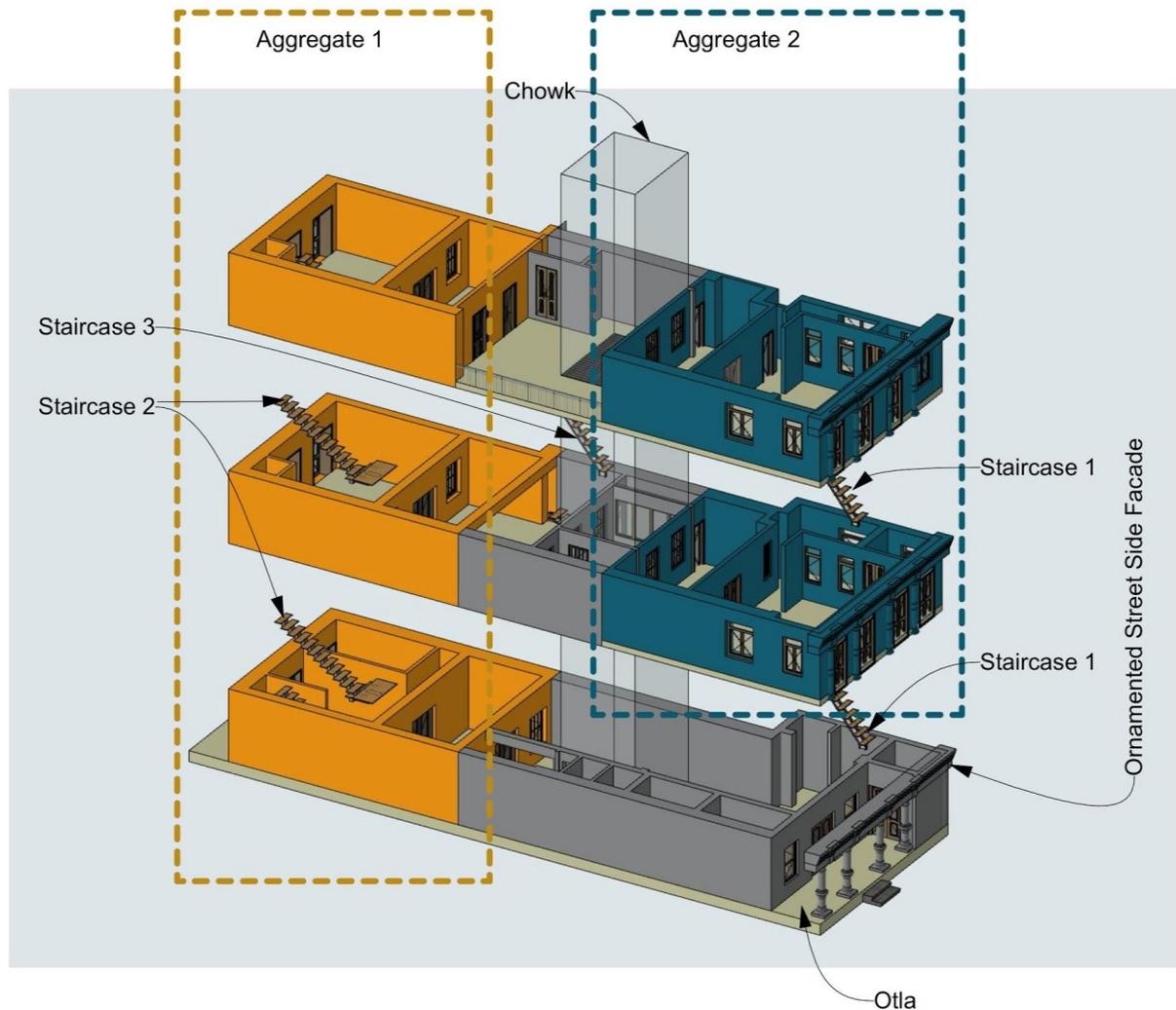


Figure 18: *Pol House*: Exploded axonometric view showing the segregation of the layout using different colors to achieve “houses within the house” along with the common and typical spaces. The exploded axonometric is developed based on the plans drawn (previous figure) using Archicad22 by Pallavi Swaranjali, 2020.

Since the *pols* were so close knit with a group of people of the same kind of occupation and interests, the *otla* proved very valuable as a place where one could sit and socialize with the neighbors or if need be, use it for small scale commercial activities. The exterior

of the house, near the *otla* had a toilet which could be used without going into the private areas of the house by guests or customers in case a commercial activity happened there.

The core of the long, narrow plan of the house was the *chowk* or the internal courtyard of the house. It was an ingenious apparatus for micro climatic control. Not only did these draw in light and ventilation in the long and enclosed house plan, they also allowed rain water to enter through and be collected in the “*tankas*”(underground tanks) below their lowered floor.¹⁵⁸ For allowing the rain water to enter, these were often open to the sky or covered by perforated screens or “*jalis*” or by “tarps.”¹⁵⁹ As water was a valued resource in Gujarat, the *pols* effectively harvested rain water in the monsoon season for consumption for the whole year.¹⁶⁰

The *chowk* was flanked by the *parsal*, an informal living space adjacent to which was the *rasodu* (kitchen). The *chowk* and *parsal* could become spill-out spaces for tedious kitchen activities or for informal interactions within family members or close friends.¹⁶¹ Beyond the *chowk* away from the main entrance the areas become progressively more private and also cooler as these were enclosed by shared walls. The water under the floor of the *chowk* must have also contributed to the cooling effect. These simple and effective ways would have served as a respite from the hot and oppressive climate of Ahmedabad.

¹⁵⁸ Gautam, *Discovering Ahmedabad*, 26.

¹⁵⁹ Desāi, Desai, and Lang, *The Bungalow in Twentieth-Century India*, 31.

¹⁶⁰ Gautam, *Discovering Ahmedabad*, 26.

¹⁶¹ Desāi, Desai, and Lang, *The Bungalow in Twentieth-Century India*, 30-31.

At the far end of the plan, farthest from the entry was the private space called the *ordo*, perfect for storing household items because of its low temperature and low light conditions as it was at the back end of the densely packed house units. For the same reasons and because it was on the ground floor, it became useful as a bedroom for the older members of the family.¹⁶² The rooms provided pleasant and cool sleeping areas while eliminating the need to go up and down stairs.

This study of the typical *pol* house became an important one for this dissertation. One important realization with this study was the fact that these spaces worked not only because they served specific functions as described above but what came forth as more remarkable was that these were at a scale that fostered the activities that the spaces were intended for while also extending the flexibility to incorporate multiple functions. For example, the scale of the *chowk*, *parsal*, and the *otla* were not extravagant. These were in-between spaces—places of circulation as well as for activities. Their location and scale gave them the flexibility to be used for different functions as the families residing therein chose or at different times—differently in different seasons, or at different events—for marriages, births, deaths, or during visits from extended family or friends. The spaces were spaces in-between important nodal spaces like the entrance or the bedrooms. They indicated a frugality due to their size and also because they catered to multiple uses and situations.

¹⁶² Ibid, 31.

Frugality was also shown in ornamentation. Personal spaces were not extravagant in size or ornamentation. Interestingly, only those parts of the *pol* house had decorative elements that symbolized a social use of space. Hence the street facade (Figure 15) had ornate beams, brackets, and columns,¹⁶³ and the *chowk* and the *parsal* were also decorated profusely, especially for the richer family houses. These were transition spaces—public spaces that could be used for social purposes—marriages, festivities, or for a neighborly chat. This selective ornamentation was probably a cost-cutting measure, but it definitely also celebrated these spaces and perhaps extended an invitation to act as a focal point to attract and promote family and community interaction. The scale and looseness of the definition of the in-between spaces coupled by the fact that one had to go through these on a daily basis, them being circulation spaces, made these spaces potent in creating a sense of belonging, homeliness, and family life while also promoting social camaraderie and commune networking.

The *pol* houses presented themselves as efficient solutions incorporating climatic conditions, social habits, and as well for the intergenerational family living that these fostered. The kind and arrangement of these spaces were to facilitate experiences and activities rather than to exclusively create picture-like visual images. It was not that spatial aesthetics was not given heed. The ornamentation or embellishments were present where

¹⁶³ Ibid, 32.

their need was justified so as to pronounce and add to the experiences and activities that the spaces fostered.

The interior layout of the *pol* house revealed its suitability for the then prevalent joint family system.¹⁶⁴ Upon analysis of the typical plan of a *pol* house the use of staircase blocks and their strategic locations were significant factors in creating the concept of a “house within a house,” as explained earlier. The drawing of a typical *pol* house showed multiple staircase blocks (Figure 18) —two to three within the whole house. It is interesting to note their location and how they may have modulated the circulation that happened within the house. Out of the three staircases in the typical plan shown (Figure 17), two started on the ground floor. The first staircase was located in the entrance chamber near the *otla*.

The second staircase was located inside the *ordo* (bedroom and bathroom unit on the ground floor towards the far end away from the main entrance). These two staircases led to a set of bedrooms with bathrooms on the second and third floor, that provided private ‘aggregates’ for the immediate families. These two staircases, one in the entrance hallway on the ground floor and the other privately located in the *ordo*, separated the upper floors or storeys vertically into two units connected by a shared terrace on the top floor. The terrace allowed desired interaction amongst the privacy of individual setups. A third set of stairs led to the terrace on the top floor from the second floor.

¹⁶⁴ Ibid, 15.

Although multiple staircases were found in the typical *pol* plans, it was simple to move between floors using these staircases. They were located to facilitate movement for different immediate family units and could be used to move within floors without disturbing private areas of other family units in the same house. The vertical connection between the floors was also maintained by the *chowk* that ran through the floors up to the rooftop terrace that was shared by the ‘aggregates.’ The terrace served as an outdoor sleeping area for everyone during the summer.¹⁶⁵ The rooftop terrace common to all residents and open to the sky was used to hang clothes, dry grains and other food materials, and also for festivities. These terraces assumed the character of an in-between space and catered to many uses and to everyone in the family. The chapter will further discuss the use of similar spaces in Le Corbusier’s Villa Chimanbhai, in an effort to see Le Corbusier’s conception of such spaces for the Villa and what they contributed to the Villa’s scheme and feel.

In the traditional *pol* house and the Chimanlal’s ancestral *haveli*, the idea of a ‘house within a house’ was a noticeable occurrence. It is not surprising then to read the letter that Le Corbusier sent to Mayor Chimanlal,¹⁶⁶ dated April 26, 1954, which stated that Le Corbusier was also asked to design such ‘aggregates’ for the proposed Villa Chimanbhai.

¹⁶⁵ Ibid, 32.

¹⁶⁶ Letter dated April 26, 1954 from Le Corbusier, Paris to Mr. Chimanbhai, Ahmedabad, “Technique and media: Typescript, unidentified copying process, carbon copy, black ink, and blue ink, Dimensions: sheets (range): 25.4 to 29.2 x 20.8 to 23.1 cm, DR 1990:0022:025-DR1990:0022:026, DE 15. 8.01,” Ahmedabad, accessed through archival research during the CCA Collection Research Grant, June-September 2015,

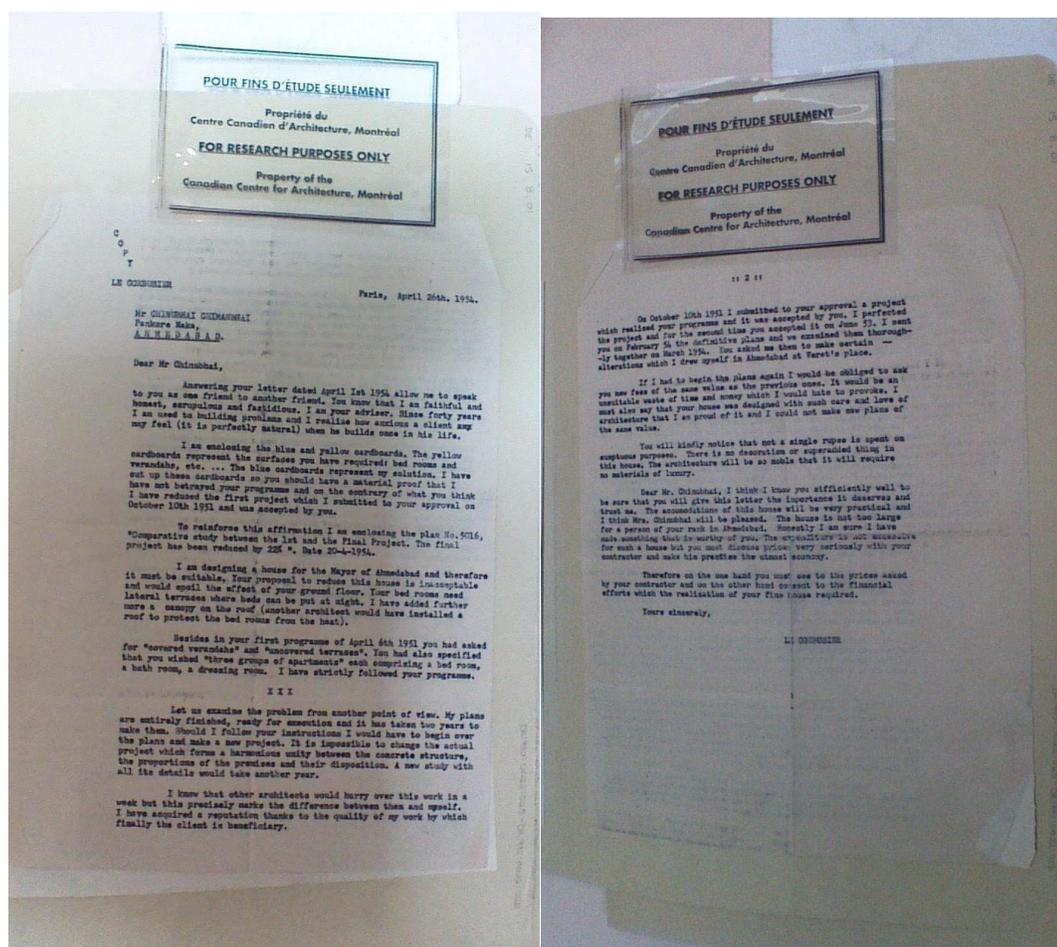


Figure 19: Letter from Le Corbusier, Paris to Mayor Chimmanlal, Ahmedabad, dated April 26, 1954, “Technique and media: Typescript, unidentified copying process, carbon copy, black ink, and blue ink, Dimensions: sheets (range): 25.4 to 29.2 x 20.8 to 23.1 cm,” PC: Pallavi Swaranjali, 2015, accessed at Canadian Centre for Architecture, Montreal. © FLC / SOCAN (2020), used with permission, not to be reused without the copyright owner’s permission.¹⁶⁷

<https://www.cca.qc.ca/en/search/details/collection/object/350429>, Canadian Centre for Architecture, Montreal.

¹⁶⁷ Letter dated April 26, 1954 from Le Corbusier, Paris to Mr. Chimmanbhai, Ahmedabad, “Technique and media: Typescript, unidentified copying process, carbon copy, black ink, and blue ink, Dimensions: sheets (range): 25.4 to 29.2 x 20.8 to 23.1 cm, DR 1990:0022:025-DR1990:0022:026, DE 15. 8.01,” Ahmedabad, Accessed through archival research during the CCA Collection Research Grant, June-September 2015,

In the letter to Mayor Chimanlal, dated April 26, 1954, Le Corbusier wrote,

“I am designing a house for the Mayor of Ahmedabad and therefore it must be suitable. [...] Your bedrooms need lateral terraces where beds can be put at night. I have added furthermore a canopy on the roof (another architect would have installed a roof to protect the bed rooms from the heat). Besides in your first programme of April 6th, 1951 you had asked for “covered verandahs” and “uncovered terraces.” You had also specified that you wished “three groups of apartments” each comprising a bed room, a bathroom, a dressing room. I have strictly followed your programme.”¹⁶⁸

The Shodhan house which was built based on similar plans as Villa Chimanbhai showed that the “houses’ three double height bedrooms are like independent houses within the large house.”¹⁶⁹ These “groups of apartments” as requested by the Mayor, later became a feature in the Shodhan House, Ahmedabad but probably derived from the Mayor’s ancestral *haveli*. Hence the proposal for Villa Chimanbhai that Le Corbusier had presented, and as elaborated in further sections of the chapter, used spatial techniques to achieve these “three groups of apartments” or the ‘aggregates.’

The use of terraces was also a common theme that Le Corbusier employed. Le Corbusier had noted the parasol-created terraces in traditional Indian miniature paintings. He was fascinated by these terraces that acted as shaded areas for both day and night time

<https://www.cca.qc.ca/en/search/details/collection/object/350429>, Canadian Centre for Architecture, Montreal.

¹⁶⁸ Ibid.

¹⁶⁹ Shodhan-Basu and Jens, *Le Corbusier's Villa Shodhan*, 14.

activities.¹⁷⁰ Doshi pointed out that Le Corbusier in his early notes often mentioned the silhouettes of the domes and the *chhatras*, which “related the building to the sky.”¹⁷¹ Le Corbusier incorporated rooftop terraces with parasol roofs in the Shodhan Villa, built between 1951 and 1956, in Ahmedabad, and in the drawings of the unbuilt Villa Chimanbhai.¹⁷² Doshi described the Shodhan Villa as the “reincarnation of Villa Savoye turned upside down” as “the thin rectangular columns holding the parasol appear to reverse [Le Corbusier’s] theory of city houses on pilotis.”¹⁷³ This reversal facilitated the incorporation of covered rooftop terraces in these modern houses. Before moving on to the study of the archival material for this Villa, it is important to underline the fact that the in-between spaces and ‘aggregates’ in traditional houses were born out of necessity due to familial and social setups and reasons validated over time. It becomes interesting then to study how similar spaces were interpreted by Le Corbusier for this Indian project for the Mayor.

¹⁷⁰ Balkrishna Doshi, *Le Corbusier: The Indian Incarnation* (Ahmedabad: Vastu-Shilpa Foundation for Studies and Research in Environmental Design, 2012), 16.

¹⁷¹ Balkrishna Doshi, *Le Corbusier’s Work: A Personal Reading* (Ahmedabad: Vāstu-Shilpa Foundation for Studies & Research in Environmental Design, 2012), 9.

¹⁷² Doshi worked on the drawings of Villa Chimanbhai in Le Corbusier’s office in 1951-54. The archives for this unbuilt project designed for the Mayor of Ahmedabad are at the Canadian Centre for Architecture, Montreal.

¹⁷³ Doshi, *Le Corbusier: The Indian Incarnation*, 16.

(v) *Archival Study of the Unbuilt Villa Chimambhai: Letters and Cut-outs*

The Canadian Centre for Architecture (CCA), Montreal, Canada acquired the drawings and correspondence related to Le Corbusier's proposal for Villa Chimambhai from the family of Mayor Chimanalal in 1990. The archival materials depicted the design development process (1953-54) of the project after Mayor Chimanalal and his wife Prabhavatiben expressed dissatisfaction over the design. The archive includes three series of prints for the iterations for the design of the Villa showing annotated changes, a study model and its photographs, cut-outs demonstrating a comparison of size and plan of individual rooms as per the design and as per the client's request, and three correspondence letters, all between 1951-54, related to the project. The CCA has accessioned the works in the groups that they were received in.¹⁷⁴

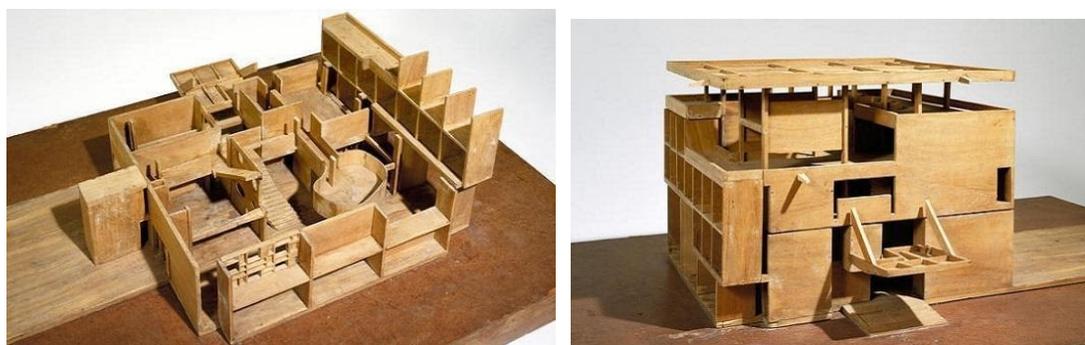


Figure 20: Stacked, openable, wooden study model for Villa Chimambhai, Le Corbusier, “Technique and media: Wood with plastic inset and later balsa wood additions, joined with finishing nails and adhesive, Dimensions: model: 28.3 x 72 x 44.9 cm, base: 8 x 94.5 x 61.1 cm,” 1953, accessed at Canadian Centre for

¹⁷⁴https://www.cca.qc.ca/en/search?query=villa%20chimanbhai&filters=%7B%22forms_collection_library_bookstore%22%3A%5B%22drawings%22%5D%7D, Accessed April 27, 2020.

Architecture, Montreal. © FLC / SOCAN (2020), used with permission, not to be reused without the copyright owner's permission.¹⁷⁵

The letter that Le Corbusier wrote to Mayor Chimanlal on April 26, 1954 clearly showed his displeasure about the fact that the Mayor and his family were not accepting the initial plans he had suggested.

“I am designing a house for the Mayor of Ahmedabad and therefore it must be suitable. Your proposal to reduce this house is unacceptable and would spoil the effect of your ground floor,” wrote Le Corbusier.¹⁷⁶

He reminded the Mayor that he had taken into consideration all programmatic considerations suggested by the Mayor. Le Corbusier expressed his exasperation and stated that his plans were well developed and “ready for execution” following two years of meticulous work.

“Should I follow your instructions I would have to begin over the plans and make a new project. It is impossible to change the actual project which forms a harmonious unity between the concrete structure, the proportions of the premises and their disposition. A new study with all its details would take another year,” complained Le Corbusier.¹⁷⁷

¹⁷⁵ Villa Chimanbhai: Model for a house at Ahmedabad, India, “Stage and Purpose: Study model (1953-54), Reference number: DR1990:0018, Physical characteristics and technical requirements: The top part of the model can be removed to reveal the interior layout. <https://www.cca.qc.ca/en/search/details/collection/object/349274>,” Archival Research, Canadian Centre for Architecture, Montreal through the CCA Collection Research Grant, June-September 2015, Canadian Centre for Architecture, Montreal.

¹⁷⁶ Letter dated April 26, 1954 from Le Corbusier, Paris to Mr. Chimanbhai, Ahmedabad, archival research, June-September 2015, Canadian Centre for Architecture, Montreal.

¹⁷⁷ Ibid.

The project had been under work for a long time in the course of which Le Corbusier was in constant communication with the Mayor and his wife and had improvised the project over time as is evident from the letter in which Le Corbusier reminds,

“On October 10th 1951 I submitted to your approval a project which realised your programme and it was accepted by you. I perfected the project and for the second time you accepted it on June 53. I sent you on February 54 the definitive plans and we examined them thoroughly together in March 1954. You asked me to make certain-alterations which I drew myself in Ahmedabad at Veret’s place.”¹⁷⁸

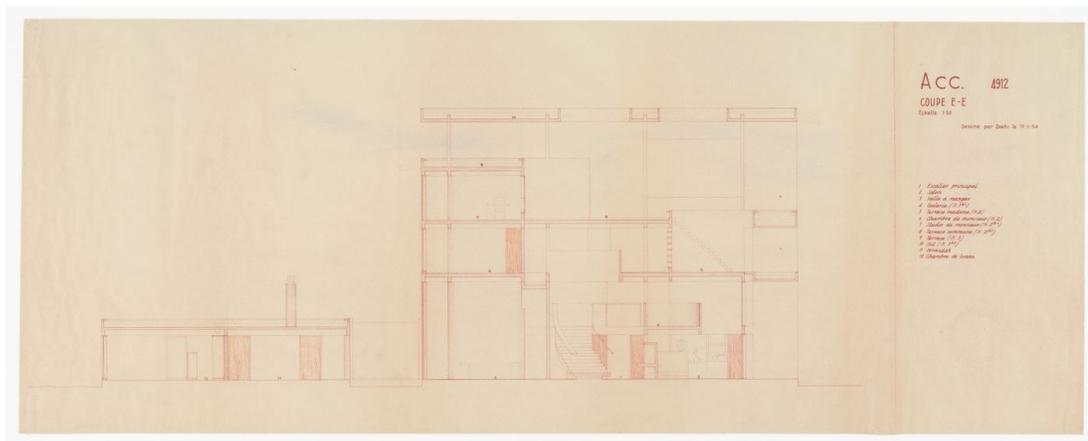


Figure 21: Section Through Villa Chimambhai, 17-1-1954, Technique and media: Diazotype with graphite, Dimensions: sheet: 41.91 × 107.32 cm (16 1/2 × 42 1/4 in.), Accessed at Canadian Centre for Architecture, Montreal. © FLC / SOCAN (2020), used with permission, not to be reused without the copyright owner’s permission.¹⁷⁹

¹⁷⁸ Ibid.

¹⁷⁹ Developmental drawings of Villa Chimambhai, DR1990:0019:011, <https://www.cca.qc.ca/en/search/details/collection/object/319944>, accessed June 20, 2020, Canadian Centre for Architecture, Montreal.

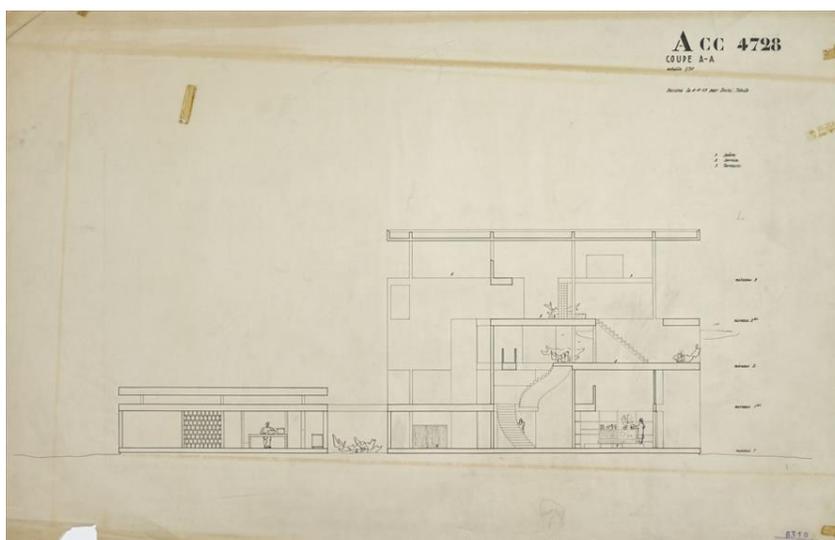


Figure 22: Section through proposed Villa Chimambhai, Le Corbusier, showing the five storey main building and the single-storeyed ancillary building, from the archives of Fondation Le Corbusier, Paris. © FLC / SOCAN (2020), used with permission, not to be reused without the copyright owner's permission.¹⁸⁰

It appeared that the modifications Le Corbusier incorporated did not satisfy the client. Speculations have been made that because the house was not designed in the traditional way, the Mayor and his wife did not go ahead with the construction.¹⁸¹ It does not appear so in light of the archival study and analysis. The proposed size of the project seemed to have been a major concern for the Mayor and his wife. In order to convince them, Le Corbusier sent a set of cardboard cut-outs that compared the size as requested by the client

¹⁸⁰ Villa Chimambhai archives, Fondation Le Corbusier, http://www.fondationlecorbusier.fr/corbuweb/morpheus.aspx?sysId=13&IrisObjectId=7337&sysLanguage=en-en&itemPos=198&itemSort=en-en_sort_string1%20&itemCount=215&sysParentName=&sysParentId=, Accessed April 27, 2020, PC and © Fondation Le Corbusier.

¹⁸¹ <https://tecnne.com/arquitectura/le-corbusier-inconcluso-villa-chimambhai/>, Accessed April 30, 2020.

and as provided by Le Corbusier in the final project (Figures 24-30).¹⁸² Through these cardboard cut-outs Le Corbusier attempted to make the client see clearly that sizes of the spaces he had proposed were in accordance with what had been asked for. Le Corbusier explains,

“I am enclosing the blue and yellow cardboards. The yellow cardboards represent the surfaces you have required: bed rooms and verandahs, etc...The blue cardboards represent my solution. I have cut up these cardboards so you should have a material proof that I have not betrayed your programme and on the contrary of what you think I have reduced the first project which I submitted to your approval on October 10th, 1951 and was accepted by you.”¹⁸³

Earlier on December 23, 1953, Le Corbusier had sent four photographs of the wooden model to the Mayor as well. The model was based on the modified plans, referred to as “definitive plans” by Le Corbusier.¹⁸⁴ The blue and yellow cardboard cut-outs had the

¹⁸² “Villa Chimanbhai: Cut-outs of floor plan showing changes in room sizes, Objects DR1990:0022:005 - DR1990:0022:015 are single cut-outs, some of which may have been paired with adhesive tape, while DR1990:0022:0016 - DR1990:0022:022 are pairs, one blue cut-out stapled to one yellow cut-out. Most cut-outs are rectangular in shape, but some are irregular. The cut-outs, along with the other items of DR1990:0022:001 - DR1990:0022:026 were received in a brown envelope dated 29/12/53 and addressed to Mr. Chimanbhai,” DR1990:0022:005-DR1990:0022:022 DE 15.8.01, Date: before 26 April 1954, <https://www.cca.qc.ca/en/search/details/collection/object/350418>, Accessed during archival research, through the CCA Collection Research Grant, Canadian Centre for Architecture, Montreal, June-September 2015. PC: Pallavi Swaranjali, Canadian Centre for Architecture, Montreal.

¹⁸³ Letter dated April 26, 1954 from Le Corbusier, Paris to Mr. Chimanbhai, Ahmedabad, archival research, June-September 2015, Canadian Centre for Architecture, Montreal.

¹⁸⁴ Letter dated December 23, 1953, from Le Corbusier, Paris to Mr. Chimanbhai, Ahmedabad, “Technique and media: Typescript, unidentified copying process, carbon

calculated and precise areas written on them as well so that the size comparison became absolutely clear to the onlooker both visually and mathematically. It was meticulously done for each room. The archival documents also identified that the handwriting on these was of Balkrishna Doshi who was involved with the project. He is also seen in some of the photographs in the archive, where he is seen holding the wooden study model that was made for the project.¹⁸⁵

On reading the cut-outs closely one realizes that the size comparison done is for the bedrooms, dining room, verandah, office, and salon. On looking at the plans of the Villa, one cannot negate the large sized terraces that accompany most bedrooms. These terraces are found at various levels, some single-height others double, and covered by the parasol

copy, black ink, and blue ink, Dimensions: sheets (range): 25.4 to 29.2 x 20.8 to 23.1 cm, DR 1990:0022:025-DR1990:0022:026, DE 15. 8.01,” Accessed through archival research during the CCA Collection Research Grant, June-September 2015, <https://www.cca.qc.ca/en/search/details/collection/object/350429>, Accessed at Canadian Centre for Architecture, Montreal.

¹⁸⁵ “Photographs of the model, 4 photograph(s), Stage and Purpose: design development model, Technique and media: Gelatin silver prints, Dimensions: comps. (range): 11,6 to 17.8 x 11.3 to 23.4 cm sheets (range): 11.6 to 17.8 x 11.3 to 23.4 cm Reference number: DR1990:0022:001-004, Point of View: aerial view, exterior views, worm's-eye views,” <https://www.cca.qc.ca/en/search/details/collection/object/349363>, DR1990:0022:001-004, Montreal. <https://www.cca.qc.ca/en/search/details/collection/object/349363>, and “Title: Photographs of maquette for Villa Chimambhai, Date:1951-1954, Form: Photographs Quantity / Object type: 91 photograph(s), Dimensions: sheets (range): 4,9 to 24,9 x 4,9 to 24,6 cm, Reference number: DR1995:0064:001-091, Title: Photographs of maquette for Villa Chimambhai, Date: 1951-1954, Form: photographs, Quantity / Object type: 91 photograph(s), Dimensions: sheets (range): 4,9 to 24,9 x 4,9 to 24,6 cm, Reference number: DR1995:0064:001-091, Lucien Hervé (photographer),” Archival Research , CCA Collection Research Grant, June-September 2015, Accessed at Canadian Centre for Architecture, Montreal.

roof at the highest level. Although these terraces did not technically add to the calculated area for the footprint for the house, these definitely made the house voluminous in reality.

The comparison of the scale and location of these terraces, which Le Corbusier borrowed from the study of the traditional terraces,¹⁸⁶ shows that these increased in size and changed their nature from in-between, frugal, and shared spaces to a more dominant one—they came to define the space rather than being the subtle transitional spaces as in the traditional homes. For Le Corbusier, the terraces became the tools to play volumetrically with solids and voids in the cube-like form that was Villa Chimanbhai. The terraces were many as opposed to the common terrace that the traditional houses had. The social function of the terrace receded in Le Corbusier's solution, to assume a more private function and these terraces became part of his 'aggregate' comprising bedrooms, toilet, dressing, and terraces, very different from the 'aggregate' the Mayor's wife had asked for—"three groups of apartments each comprising a bedroom, a bathroom, a dressing room."¹⁸⁷

These terraces were found at varying levels, some common and some private. These terraces ceased to be in-between spaces as previously seen in the traditional houses, instead

¹⁸⁶ Letter dated April 26, 1954 from Le Corbusier, Paris to Mr. Chimanbhai, Ahmedabad, archival research, June-September 2015, Canadian Centre for Architecture, Montreal. Doshi also mentions this fascination in Doshi, *Paths Uncharted*, 177.

¹⁸⁷ Letter dated April 26, 1954 from Le Corbusier, Paris to Mr. Chimanbhai, Ahmedabad, archival research, June-September 2015, Canadian Centre for Architecture, Montreal.

circulation devices were planned to reach them. The scale of these terraces changed from the earlier intimate social spaces to extravagant private terraces. These significantly added to the size and complexity of the project and the overall size of the Villa became a cause of concern for the Mayor and his wife.

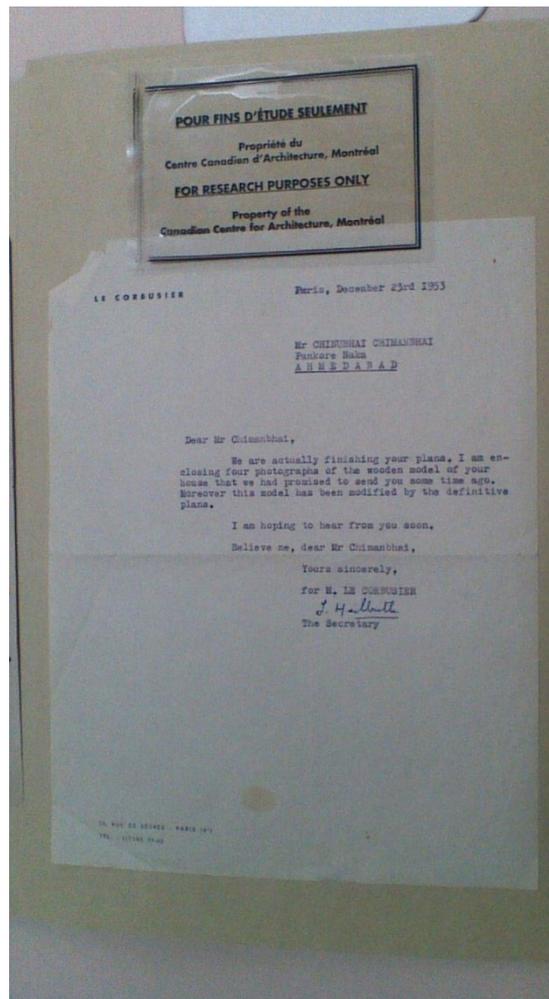


Figure 23: Letter from Le Corbusier, Paris to Mayor Chimanlal, Ahmedabad, dated December 23, 1953, “Technique and media: Typescript, unidentified copying process, carbon copy, black ink, and blue ink,

Dimensions: sheets (range): 25.4 to 29.2 x 20.8 to 23.1 cm,” PC: Pallavi Swaranjali, 2015, Accessed at Canadian Centre for Architecture, Montreal. © FLC / SOCAN (2020), used with permission, not to be reused without the copyright owner’s permission.¹⁸⁸

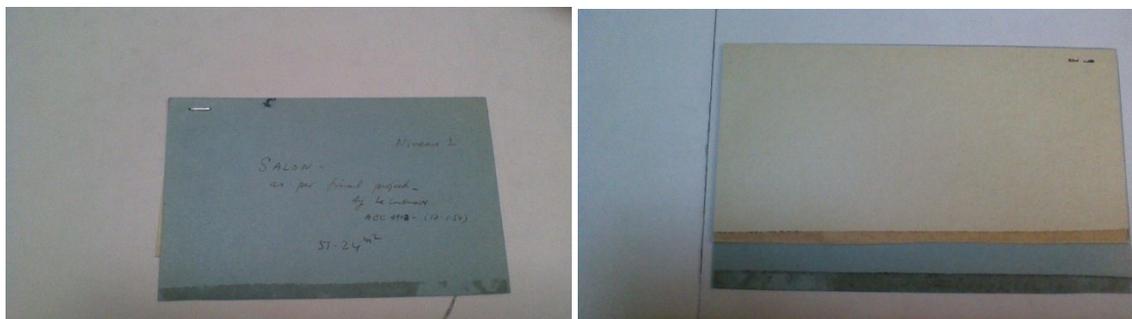


Figure 24: Salon, Villa Chimambhai: “Cut-outs of floor plan showing changes in room sizes, sent from Le Corbusier, Paris to Mayor Chimanal, Ahmedabad, Blue and yellow card board and adhesive tape, 1953-54, Technique and media: Pen and brown ink, Dimensions: sheets (range [largest]): 5.7 to 18.1 x 11.4 to 23.8 cm,” PC: Pallavi Swaranjali, 2015, Accessed at Canadian Centre for Architecture, Montreal. © FLC / SOCAN (2020), used with permission, not to be reused without the copyright owner’s permission.¹⁸⁹

¹⁸⁸ Letter dated December 23, 1953, from Le Corbusier, Paris to Mr. Chimambhai, Ahmedabad, “Technique and media: Typescript, unidentified copying process, carbon copy, black ink, and blue ink, Dimensions: sheets (range): 25.4 to 29.2 x 20.8 to 23.1 cm, DR 1990:0022:025-DR1990:0022:026, DE 15. 8.01, Ahmedabad,” Accessed through archival research during the CCA Collection Research Grant, June-September 2015, <https://www.cca.qc.ca/en/search/details/collection/object/350429>, Canadian Centre for Architecture, Montreal, PC: Pallavi Swaranjali, 2015, Canadian Centre for Architecture, Montreal.

¹⁸⁹ “Villa Chimambhai: Cut-outs of floor plan showing changes in room sizes, Objects DR1990:0022:005 - DR1990:0022:015 are single cut-outs, some of which may have been paired with adhesive tape, while DR1990:0022:0016 - DR1990:0022:022 are pairs, one blue cut-out stapled to one yellow cut-out. Most cut-outs are rectangular in shape, but some are irregular. The cut-outs, along with the other items of DR1990:0022:001 - DR1990:0022:026 were received in a brown envelope dated 29/12/53 and addressed to Mr. Chimambhai,” DR1990:0022:005-DR1990:0022:022 DE 15.8.01, Date: before 26 April 1954, <https://www.cca.qc.ca/en/search/details/collection/object/350418>, accessed during archival research, through the CCA Collection Research Grant, Canadian Centre for Architecture, Montreal, June-September 2015. PC: Pallavi Swaranjali.

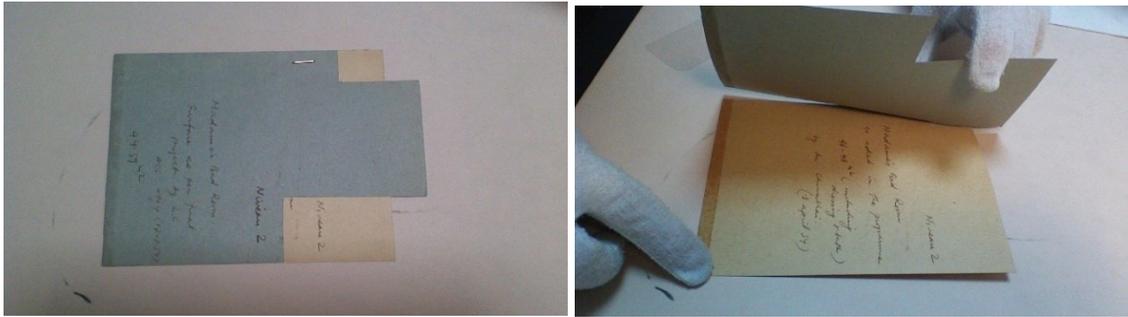


Figure 25: Madame's Bedroom, Villa Chimantbai: "Cut-outs of floor plan showing changes in room sizes, sent from Le Corbusier, Paris to Mayor Chimantlai, Ahmedabad, Blue and yellow card board and adhesive tape, 1953-54, Technique and media: Pen and brown ink, Dimensions: sheets (range [largest]): 5.7 to 18.1 x 11.4 to 23.8 cm," PC: Pallavi Swaranjali, 2015, Accessed at Canadian Centre for Architecture, Montreal. © FLC / SOCAN (2020), used with permission, not to be reused without the copyright owner's permission.¹⁹⁰

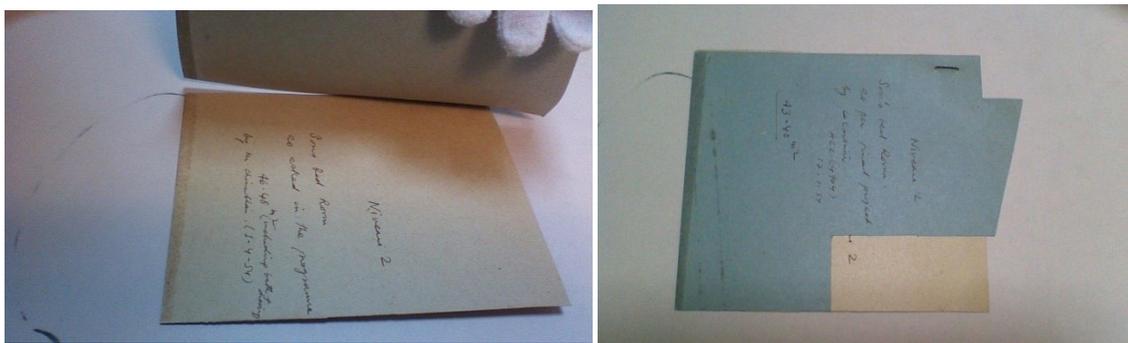


Figure 26: Son's bed room, Villa Chimantbai: "Cut-outs of floor plan showing changes in room sizes, sent from Le Corbusier, Paris to Mayor Chimantlai, Ahmedabad, Blue and yellow card board and adhesive tape, 1953-54, Technique and media: Pen and brown ink, Dimensions: sheets (range [largest]): 5.7 to 18.1 x 11.4 to 23.8 cm," PC: Pallavi Swaranjali, 2015, Accessed at Canadian Centre for Architecture, Montreal. © FLC / SOCAN (2020), used with permission, not to be reused without the copyright owner's permission.¹⁹¹

¹⁹⁰ Ibid.

¹⁹¹ Ibid.

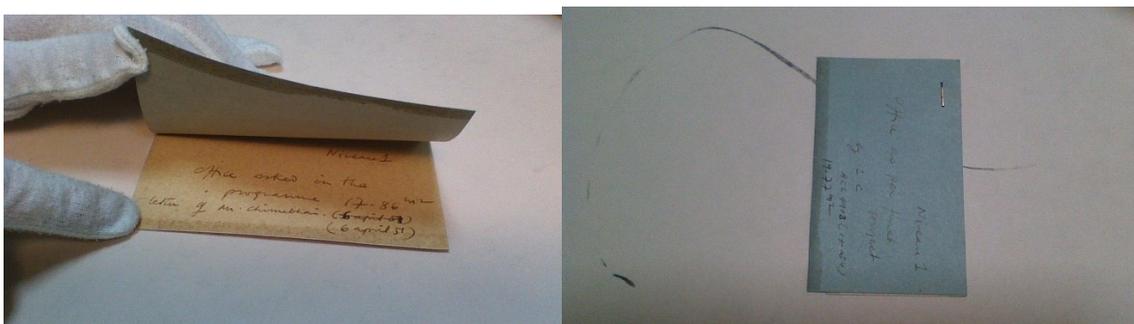


Figure 27: Office, Villa Chimambhai: “Cut-outs of floor plan showing changes in room sizes, sent from Le Corbusier, Paris to Mayor Chimanlal, Ahmedabad, Blue and yellow card board and adhesive tape, 1953-54, Technique and media: Pen and brown ink, Dimensions: sheets (range [largest]): 5.7 to 18.1 x 11.4 to 23.8 cm,” PC: Pallavi Swaranjali, 2015, Accessed at Canadian Centre for Architecture, Montreal. © FLC / SOCAN (2020), used with permission, not to be reused without the copyright owner’s permission.¹⁹²

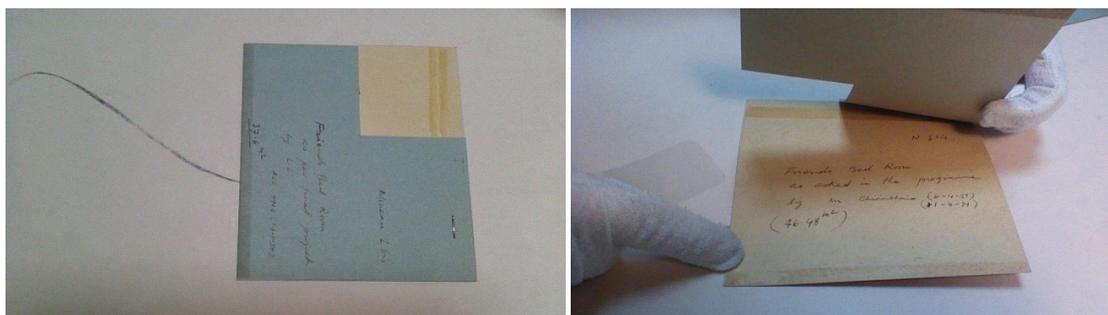


Figure 28: Friend’s Bedroom, Villa Chimambhai: “Cut-outs of floor plan showing changes in room sizes, sent from Le Corbusier, Paris to Mayor Chimanlal, Ahmedabad, Blue and yellow card board and adhesive tape, 1953-54, Technique and media: Pen and brown ink, Dimensions: sheets (range [largest]): 5.7 to 18.1 x 11.4 to 23.8 cm,” PC: Pallavi Swaranjali, 2015, Accessed at Canadian Centre for Architecture, Montreal. © FLC / SOCAN (2020), used with permission, not to be reused without the copyright owner’s permission.¹⁹³

¹⁹² Ibid.

¹⁹³ Ibid.



Figure 29: Dining Room and Verandah, Villa Chimantbai: “Cut-outs of floor plan showing changes in room sizes, sent from Le Corbusier, Paris to Mayor Chimantlai, Ahmedabad, Blue and yellow card board and adhesive tape, 1953-54, Technique and media: Pen and brown ink, Dimensions: sheets (range [largest]): 5.7 to 18.1 x 11.4 to 23.8 cm,” PC: Pallavi Swaranjali, 2015, Accessed at Canadian Centre for Architecture, Montreal. © FLC / SOCAN (2020), used with permission, not to be reused without the copyright owner’s permission.¹⁹⁴



Figure 30: Master Bedroom, Villa Chimantbai: “Cut-outs of floor plan showing changes in room sizes, sent from Le Corbusier, Paris to Mayor Chimantlai, Ahmedabad, Blue and yellow card board and adhesive tape, 1953-54, Technique and media: Pen and brown ink, Dimensions: sheets (range [largest]): 5.7 to 18.1 x 11.4 to 23.8 cm,” PC: Pallavi Swaranjali, 2015, Accessed at Canadian Centre for Architecture, Montreal. © FLC / SOCAN (2020), used with permission, not to be reused without the copyright owner’s permission.¹⁹⁵

¹⁹⁴ Ibid.

¹⁹⁵ Ibid.

The cut-outs that Le Corbusier sent to the Mayor were to represent the shapes and sizes of the rooms for comparison. One is left to wonder what the purpose of these cut-outs were, especially when Le Corbusier also included “the plan No. 5016, “Comparative study between the 1st and the Final Project,” dated 20-4-1954.¹⁹⁶ According to this Plan, the overall area of the project is shown as reduced from 421 square meters to 326.8 square meters (a reduction of 22%). The elevation on this 1954 drawing, showed the five storeys with the parasol roof shown as a flat slab upheld by 4 rows of columns (in total a grid of 16 columns). The five storeyed Villa was accompanied by a one-storey service building, reminiscent of the older traditional *havelis* as described earlier, with the detached kitchen and servants’ quarters.

Definitely, Le Corbusier was not happy with the adjustments the client demanded. A plan similar to the first plan on the sheet showing the comparative study between the initial and revised plans, was the one Le Corbusier wanted to convince the clients to move forward with. Though this never happened, a similar plan was developed and executed for Villa Shodhan later. The existence of the cut-outs and the comparative drawing depicted the conviction with which Le Corbusier wanted to assert his idea of what the nature of the Villa should be to match the mayor’s status and lifestyle. Important to remember here is that

¹⁹⁶ Villa Chimanbhai: “Design development prints and comparative study of first and final projects, Blueprints or diazotypes, some with colored pencil and graphite, Dimensions: sheet (smallest; irreg.): 30 x 42.4 cm sheet (largest; irreg.): 71.8 x 91.2 cm, Reference number:DR1990:0021:001-005,”

<https://www.cca.qc.ca/en/search/details/collection/object/349352>, accessed during archival research through the CCA Collection Research Grant, June-September 2015

frugality was an intrinsic quality that Indians and specially Gujaratis exhibited. This was also because Mahatma Gandhi (1869-1948) based his campaign in Ahmedabad. He advocated frugality through his day to day living—in the house that he lived in, in the clothes that he wore, and such.¹⁹⁷ A leader of such repute instilled a sense of frugality and modesty in the general public and personified the humility that came with leadership. In contrast, Le Corbusier appeared to be trying to define what lifestyle was worthy for the Mayor and his family. The gap between the elitist approach of Le Corbusier and the grounded propensities of the Mayor surfaced strongly. The lifestyle Le Corbusier proposed was extravagant and the hesitation of the Mayor is not surprising.

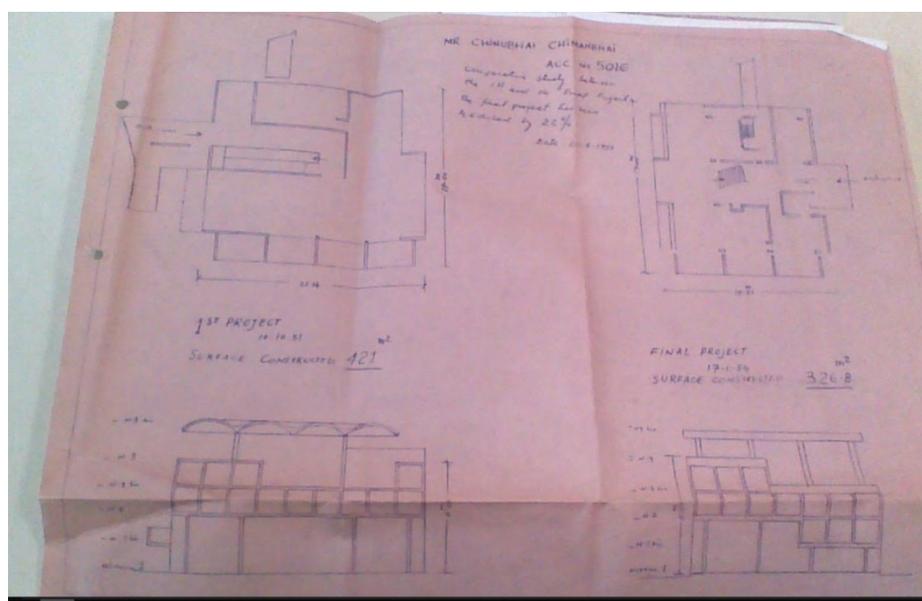


Figure 31: Comparative drawing between the first plan (1951) and the last plan (1954), Proposed by Le Corbusier for Villa Chimantbai, 1954, “Blueprints or diazotypes, some with coloured pencil and graphite, Dimensions: sheet (smallest; irreg.): 30 x 42.4 cm sheet (largest; irreg.): 71.8 x 91.2 cm,” PC: Pallavi

¹⁹⁷ Desāi, Desai, and Lang, *The Bungalow in Twentieth-Century India*, 139-140.

Swaranjali, 2015. Accessed at Canadian Centre for Architecture, Montreal. © FLC / SOCAN (2020), used with permission, not to be reused without the copyright owner's permission.¹⁹⁸

(vi) Archival Study of the Unbuilt Villa Chimanbhai: Drawings and Model

A closer read of the drawings in the archives accompanied the reading of the letter and cut-outs. The CCA's archival record shows, "16 reprographic copy(ies)" categorizing them as design development drawings. The technique and media specified by the CCA was "diazotypes with additions in graphite and coloured pencil." The dimensions of the sheet were listed between 30.2 x 85.6 cm to 77 x 72 cm. The drawings dated 17-1-54 were drafted by Doshi and represented the revised plans for the Villa. The revisions to the drawings were done in Ahmedabad in March, 1954.

The ground floor of the main building of the proposed Villa as seen in the 1954 drawing,¹⁹⁹ featured the entry hall with a waiting room, washrooms, an office for the

¹⁹⁸ Villa Chimanbhai: "Design development prints and comparative study of first and final projects, Blueprints or diazotypes, some with coloured pencil and graphite, Dimensions: sheet (smallest; irreg.): 30 x 42.4 cm sheet (largest; irreg.): 71.8 x 91.2 cm, Reference number:DR1990:0021:001-005,"

<https://www.cca.qc.ca/en/search/details/collection/object/349352>, Accessed during archival research through the CCA Collection Research Grant, June-September 2015, PC: Pallavi Swaranjali, Accessed at Canadian Centre for Architecture, Montreal.

¹⁹⁹ "Villa Chimanbhai: Design development prints, before 17 and 18 January 1954, Technique and media: Diazotypes with additions in graphite and colored pencil, Dimensions: sheet (smallest): 30.2 x 85.6 cm sheet (largest): 77 x 72 cm, Reference number:DR1990:0019:001-016,"

<https://www.cca.qc.ca/en/search/details/collection/object/349329>, accessed archival research during the CCA Collection Research Grant, June-September 2015.

Mayor, toilet, a living room (salon), dining area, and a kitchenette. It had a curved central staircase. The drawing indicated that thought was given to the movement between the main building and the ancillary building. The service stair located in the main building is seen crossed out on the diazotype indicating that the location of the service stair was under reconsideration and circulation from the service block to upper floors being re-evaluated. The single storey service block was functionally linked to the 5 storeyed main block by means of a passage at ground level. The service staircase was relocated to the passage joining the main building to the service building. The one storeyed service unit had storage rooms, the main kitchen, and also a bedroom referred to as the friend's room in the drawings. The new placement of the service staircase block reduced the movement of the attendants in the main building to the minimum required.

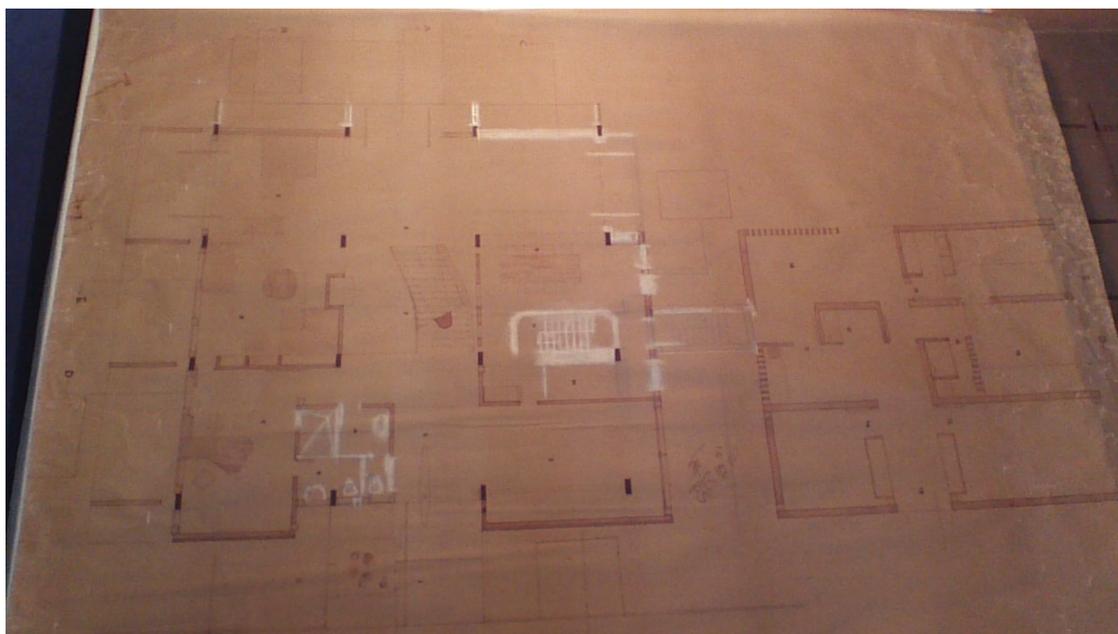


Figure 32: Plan of Level 1, Villa Chimambhai, Le Corbusier, 17-1-54, “Design development prints, between February 1953 and March 1954, Technique and media: Diazotype with graphite,” PC: Pallavi Swaranjali. Accessed at Canadian Centre for Architecture, Montreal. © FLC / SOCAN (2020), used with permission, not to be reused without the copyright owner’s permission.²⁰⁰

The main entrance to the Villa was to the South East. Upon entering into the hall, the staircase invited towards the back of the entry hall from where one could climb up the

²⁰⁰ “Villa Chimambhai: Design development prints, between February 1953 and March 1954, 17 reprographic copies, Technique and media: Diazotype with graphite, Reference number: DR1990:0023:001-017, dated - by an undetermined hand, on most of the drawings: January 1954 [prints not fully examined due to poor condition]; and on some of the drawings: "February 1953"; or "18 January 1954" [prints not fully examined due to poor condition] inscribed - by a contemporary hand, possibly the draughtsman, in graphite, on diazotypes nos. 4902 and 4903, u.r.: Revised in A'bad / -3-54 J.L.U.,” <https://www.cca.qc.ca/en/search/details/collection/object/349374>, Accessed during archival research through the CCA Collection Research Grant, June-September 2015, PC: Pallavi Swaranjali.

stairs. The ground floor had single and double height spaces—a spatial strategy that Le Corbusier adopted throughout the building to achieve the “house within the house” concept. As one went up the staircase starting on the main level (called Level 1 on the drawings), on to Level 1b, and turned towards the right, Le Corbusier created the guest bedroom, with a toilet and dressing room, along with a roughly elliptical balcony overlooking the double height living room and staircase hall on Level 1. On the left side of the staircase there was a narrow one-person staircase that led up to level 2.

The staircase from Level 1 ended on Level 1b. The narrow staircase, adjacent to this main staircase that started on Level 1b led up to Level 2 and ended there. The Level 2 plan contained on its three corners the rooms for the Mayor, his son, and his wife. Each of these bedrooms had dressing rooms and bathrooms attached to them. The Mayor and the son’s rooms also had stairs from within the rooms leading to their private studios above on level 2b. There existed a common terrace on level 2b. The Mayor’s wife’s room had an adjacent private terrace on the same level (Level 2) which had a staircase leading to the upper floor terrace on Level 2b. The fourth corner of this level accommodated the double height of the guestroom from the lower level.

The arrangement of the terraces and staircases indicated a circuitous way of movement from one part of the house to the other and between floors. The incorporation of such non-linear networks within orthogonal cubist linear volumes, remind of the circuitous way of movement deliberately employed in exhibition spaces where movement is designed strategically so that the visitor circulates around the exhibits. Le Corbusier’s circuitous path

facilitated his architecture on display while compromising on ease and comfort of the inhabitant.

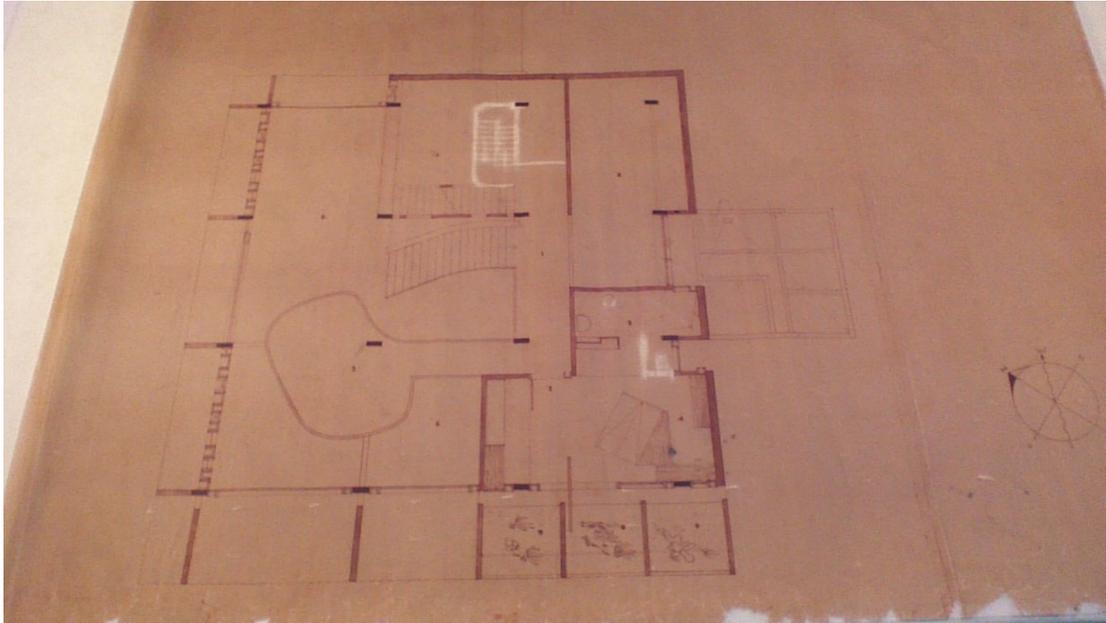


Figure 33: Plan of Level 1b, Villa Chimambhai, Le Corbusier, 17-1-54, “Design development prints, between February 1953 and March 1954, Technique and media: Diazotype with graphite,” PC: Pallavi Swaranjali, Accessed at Canadian Centre for Architecture, Montreal. © FLC / SOCAN (2020), used with permission, not to be reused without the copyright owner’s permission.

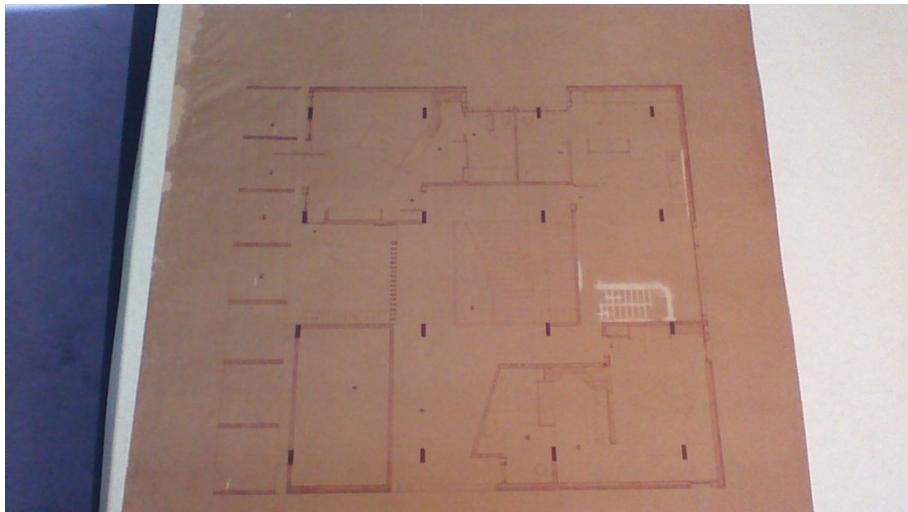


Figure 34: Plan of Level 2, Villa Chimantbai, Le Corbusier, 17-1-54, "Design development prints, between February 1953 and March 1954, Technique and media: Diazotype with graphite," PC: Pallavi Swaranjali, 2015. Accessed at Canadian Centre for Architecture, Montreal. © FLC / SOCAN (2020), used with permission, not to be reused without the copyright owner's permission.²⁰¹

The Mayor's bedroom with dressing room and washroom on level 2 were coupled with a studio on level 2b connected by the internal staircase in the bedroom. A similar configuration presented itself with the son's bedroom. The wife's bedroom was double height with the adjoining terrace on Level 2 from which a staircase led to level 2b onto a common terrace. A three-dimensional play of single and double height terraces happened within levels 2b and 3. Level 3b represented the parasol roof with the oval punctures.

The play of double and single height spaces in the Villa brought the third dimension of height into play adding interest to the whole schema. Significantly, it also contributed to creating private *aggregates* within public spaces, akin to the *pol* houses, but by volumetric manipulation using varying heights. Corbusian polyphonic orchestration of

²⁰¹ "Villa Chimantbai: Design development prints, between February 1953 and March 1954, 17 reprographic copies, Technique and media: Diazotype with graphite, Reference number: DR1990:0023:001-017, dated - by an undetermined hand, on most of the drawings: "January 1954" [prints not fully examined due to poor condition]; and on some of the drawings: "February 1953"; or "18 January 1954" [prints not fully examined due to poor condition] inscribed - by a contemporary hand, possibly the draughtsman, in graphite, on diazotypes nos. 4902 and 4903, u.r.: Revised in A'bad / -3-54 J.L.U.," <https://www.cca.qc.ca/en/search/details/collection/object/349374>, accessed during archival research through the CCA Collection Research Grant, June-September 2015, PC: Pallavi Swaranjali.

space in this scheme for the Villa revealed itself in its bold geometry and grid, a strong interpenetration and interweaving of vertical and horizontal planes, voids and solids in the form of double heights, *brise soleil*, and terraces. The *brise soleil*, while connecting the interior to the outside, was a means to protect from the summer sun while inviting the winter sun in. Le Corbusier used the *brise soleil* to open up the facade of the Villa in the direction of the prominent South West wind. The facade on the upper levels opened up with the positioning of roof terraces.

A wooden “study model” was built to convince Mayor Chimanlal of the effectiveness of Le Corbusier’s scheme.²⁰² Shodhan-Basu explains that the experience in Chandigarh of using crude and cheap wooden shuttering with concrete had given a new impetus to Le Corbusier. The shuttering and the pattern it left on the concrete was something Le Corbusier used in all his projects in Ahmedabad. Along with the wooden shutterings, the carpenters made rough models on site to help during construction— “a model that excited Le Corbusier because it had the crude precision that he sought in the finished house.”²⁰³

These models were different from the model Le Corbusier made to convince the Mayor. They were used as a means to conceive and construct buildings. The crudeness of

²⁰² Villa Chimanbhai: Model for a house at Ahmedabad, India, “Stage and Purpose: Study model (1953-54), Reference number: DR1990:0018, Physical characteristics and technical requirements: The top part of the model can be removed to reveal the interior layout. <https://www.cca.qc.ca/en/search/details/collection/object/349274>,” Archival Research at Canadian Centre for Architecture, Montreal through the CCA Collection Research Grant, June-September 2015.

²⁰³ Shodhan-Basu, and Jens, *Le Corbusier's Villa Shodhan*, 13-14.

the rough models was acceptable because their function was not aesthetic approval but to be an aid to the visualization and building process. Ironically, Le Corbusier appreciated their crude nature as an aesthetic quality that he wanted to achieve in his buildings.

Le Corbusier's model of the proposed Villa Chimantbai, now archived at the CCA was built in 1953. Le Corbusier in the letter to the Mayor in December 1953, referred to the model as one based on the "definitive plans."²⁰⁴ Le Corbusier's model made at this stage was no more than a three-dimensional representation and proof of the results of the design development and an effort of justification of the fact that the design served well and had all the spaces conforming to the clients' requirements. The model could be disassembled, and each floor could be seen separately as well as in unison with the whole assembly. It seemed important to build such a model for the client given the complicated volumetric manipulation of space within, which the model could help in understanding better.

²⁰⁴ Letter dated December 23, 1953, from Le Corbusier, Paris to Mr. Chimantbai, Ahmedabad, "Technique and media: Typescript, unidentified copying process, carbon copy, black ink, and blue ink, Dimensions: sheets (range): 25.4 to 29.2 x 20.8 to 23.1 cm, DR 1990:0022:025-DR1990:0022:026, DE 15. 8.01," Ahmedabad, Accessed through archival research during the CCA Collection Research Grant, June-September 2015, <https://www.cca.qc.ca/en/search/details/collection/object/350429>, Canadian Centre for Architecture, Montreal, PC: Pallavi Swaranjali, 2015, Accessed at Canadian Centre for Architecture, Montreal.

The photographs of the model also archived, showed the model of the Villa in an interior setting, outside on the ground near water, and held up against the sky.²⁰⁵ It is definitely strange to see these varied surroundings, giving the model the status of an object—one that could be viewed against different backgrounds and settings quite unlike the way buildings are seen in connection to their context. The emphasis was on the building and its floors, seen as stand-alone elements. In the book, *Le Corbusier: Architecture and Form*, Peter Blake describes Le Corbusier’s method in which,

“he would hollow out parts of the cube to create outdoor space within his buildings, and, at the same time, enclose part of the outdoors to create clearly defined ‘rooms’ ~outside his buildings; moreover, he would make his buildings not only objects to be seen in a horizontal plane, but objects in the round, meant to be seen from underneath and from above, from all sides and from inside and let each view suggest all the other views.”²⁰⁶

²⁰⁵ “Photographs of maquette for Villa Chimanbhai, Date:1951-1954, Form: Photographs Quantity / Object type: 91 photograph(s), Dimensions: sheets (range): 4,9 to 24,9 x 4,9 to 24,6 cm, Reference number: DR1995:0064:001-091, Title: Photographs of maquette for Villa Chimanbhai, Date: 1951-1954, Form: photographs, Quantity / Object type: 91 photograph(s), Dimensions: sheets (range): 4,9 to 24,9 x 4,9 to 24,6 cm, Reference number:DR1995:0064:001-091, Lucien Hervé (photographer), Also see Photographs of the model, 4 photograph(s), Stage and Purpose: design development model, Technique and media: Gelatin silver prints, Dimensions: comps. (range): 11,6 to 17.8 x 11.3 to 23.4 cm sheets (range): 11.6 to 17.8 x 11.3 to 23.4 cm Reference number: DR1990:0022:001-004, Point of View: aerial view, exterior views, worm's-eye views,” <https://www.cca.qc.ca/en/search/details/collection/object/349363,DR1990:0022:001-004, Montreal.https://www.cca.qc.ca/en/search/details/collection/object/349363,> Archival Research , CCA Collection Research Grant, June-September 2015, Accessed at Canadian Centre for Architecture, Montreal.

²⁰⁶ Peter Blake, *Le Corbusier: Architecture and Form* (Baltimore: Penguin Books, 1964), 31.

The Villa's model demonstrated Le Corbusier's architectural promenade. The model for the proposed Villa helped bring to life the spectacle that Le Corbusier's architecture sought to create. Indeed, each spatial element was an object on display and the model as well as the imagined movement through the building all orchestrated and facilitated the exhibition of these objects on display.

Through the Villa, Le Corbusier, sought to “formalize the idea of houses with a monumental presence with the clear purpose of ennobling domestic housing.”²⁰⁷ However in the process of creating a majestic structure, subtleties of the spaces that Le Corbusier had borrowed from the traditional house disappeared. These subtleties may seem minor, but they defined the character and function of the various parts of the homes. Negating these subtleties transformed the feel of the space. Le Corbusier used elements like the ones used in traditional homes—terraces and aggregates, but without a doubt he turned them around completely from aggregated spaces as in the traditional counterparts, to desegregated and formal ones in the Villa. It seemed unlikely to make connections with Le Corbusier's Villa and the traditional homes, despite the similar types used in both. It can be safely said that Le Corbusier used these space types as muted objects divorced from their role and importance in the stories of familial and social life in India, where interaction and communication were valued as much as privacy and segregation.

²⁰⁷ Le Corbusier inconcluso, Villa Chimanbhai, Published, April 29, 2013, <https://tecnne.com/arquitectura/le-corbusier-inconcluso-villa-chimanbhai/>, accessed April 26 2020.

They also did not facilitate the original functional uses that they served. For example, in Le Corbusier's proposal the oval punctures on the parasol opened the roof on the central axis of the cubical building recalling the idea of the central courtyard in the *pol* houses. The parasol roof did not cover a courtyard that cut through the entire height of the house as was the case of the central open-to sky courtyard in the *pol* houses that were micro climate control devices running through the entire height of the home. They brought in light and ventilation to the core of the homes while collecting rainwater. Whether Le Corbusier's central open section was meant to function in a similar way is questionable, but for sure it added to the volumetric play and to the idea of architecture for display through the sightlines that these created.

The use of multiple staircases at different positions on the plan that Le Corbusier proposed assumed a different character than their traditional counterparts. In Le Corbusier's proposal the locations of staircases were discontinuous between floors. To traverse floors, one had to follow a disconnected staircase located at different locations on each floor. In the *pol* houses, although multiple stairs were provided, their ease of usage was not compromised to create volumetric effects as was the case in Le Corbusier's plan.

In Le Corbusier's proposed Villa there were numerous terraces—some common while others private, all covered by the parasol roof on the highest level. Le Corbusier claimed that this would enable them to be used at night and in different weather conditions.²⁰⁸ This

²⁰⁸ Letter dated April 26, 1954 from Le Corbusier, Paris to Mr. Chimanbhai, Ahmedabad, archival research, June-September 2015, Canadian Centre for Architecture, Montreal.

concrete canopy at the fifth storey level seemed floating and detached from the walls held up by a supporting series of sixteen columns. The parasol roof was to act as a shade for the terrace while keeping the roof of other areas on lower floors shaded from the hot summer sun.²⁰⁹

Here a gap appeared between the client's requirements and Le Corbusier's execution. Le Corbusier may have claimed that he included the terraces and verandahs the client had asked for. On careful re-reading, it appeared that the client had requested "covered verandahs" and "uncovered terraces."²¹⁰ Open to sky terraces were common in India where multiple activities and festivities found place.²¹¹ It seems Le Corbusier's use of a covered rooftop terrace did not consider the social and cultural importance of the uncovered terraces which were heavily pronounced in the Indian homes. By considering the spatial characteristics of the terrace and not paying attention to the activities and lifestyle it fostered, Le Corbusier changed the terrace to be covered by the parasol roof, losing the original character of the uncovered and accessible rooftop terraces that served as a connection to the city around and the sky above.²¹²

²⁰⁹ Ibid.

²¹⁰ Ibid.

²¹¹ For e.g. festivities like *Uttarayan*, *Makarsnkrant* are typically celebrated in January. Kite flying competitions are a tradition at this time in Gujarat for which the terraces prove useful.

²¹² Kite flying or *Uttarayan* in Ahmedabad, 14 January 2013, 5100 x 3400 px | 43.2 x 28.8 cm | 17 x 11.3 inches | 300dpi, PC: Marcia Chambers, <https://www.alamy.com/stock-photo-kite-festival-or-uttarayan-in-ahmedabad-gujarat-india-54340808.html>, accessed June 21, 2020.

One can argue that Le Corbusier's proposal contained the same elements as seen in the traditional houses. However, the character of these morphed drastically, in turn modifying their multifaceted roles, limiting and reducing them to strong aesthetic and formal qualities. The *enroute*, in-between, and social spaces in the traditional homes were replaced by the dominance of the private realm in Le Corbusier's case. It will not be inappropriate to argue then that these typical spaces were displaced from the contextual framework that defined them in the traditional homes to a new configuration that completely disregarded the connections and meaning these spaces had. Instead, these elements were considered for formal and programmatic functions. While on the program all items on the client's list had been met, in reality expectations were altered and hence remained unfulfilled.

The spaces may have had the same nomenclature, but their subtleties and experiential aspects were unidentifiable and altered because these typologies could not be viewed without their interconnectedness and specific functions in the whole building and further in the neighborhood. The traditional components were not objects in the literal sense of the term, but parts of a whole. The relationship between the parts dictated the meaning they exuded, and the objects as stand-alone elements became neutral geometric entities. In this light, the disagreement between the Mayor and Le Corbusier seems valid due to the

Aerial View of Doshi's Aranya Low cost Housing scheme showing terraces and activities on them, PC and © Iwan Baan 2018, <https://www.e-flux.com/announcements/334804/balkrishna-doshi-architecture-for-the-people/>, accessed June 21, 2020.

difference in priorities of Le Corbusier and the Mayor and due to the gap in the expectation of the client and Le Corbusier's mis-perception of these expectations resulting from his visual judgement of the traditional space types.

In fact, the self-referentiality of the elements that Corbusier proposed, disconnected them from the activities and purposes that they were meant for and the cultural, and communal life that they represented. In being context free, they lost the connection to those immeasurable qualities that the traditional elements had, which helped in creating different immeasurable worlds—familial, religious, spiritual, communal, cultural, and imaginal, within the tangible one.

(vii) The Built Villa Chimambhai

The model, cut-outs, letters, and the drawings show the considerable effort Le Corbusier had invested in pushing for his agenda and indeed his frustration over the Villa not seeing fruition is understandable. Le Corbusier's tone in the letter written to the Mayor in 1954 was angry as well as persuasive, almost pleading at the same time,

“I know that other architects would hurry over this work in a week but this precisely marks the difference between them and myself. I have acquired a reputation thanks to the quality of my work by which finally the client is beneficiary.”²¹³

²¹³ Letter dated April 26, 1954 from Le Corbusier, Paris to Mr. Chimambhai, Ahmedabad, archival research, June-September 2015, Canadian Centre for Architecture, Montreal.

Trying to convince the Mayor to abide by his recommendations, Le Corbusier warned him that he might have to charge an additional fee, the same in value as the previous ones, if he conceded to the Mayor's request and redesigned the Villa. He expressed that designing another Villa of the same worth as the one he had proposed, would be difficult for him as he had designed the house "with such care and love of architecture," pointing out that no extravagance was made for any decoration or "sumptuous purposes" as the quality of architecture in itself compensated for any luxurious additions in the form of materials or decoration. In the closing lines Le Corbusier made a final but forceful appeal,

"Dear Mr. Chinubhai, I think I know you sufficiently well to be sure that you will give this letter the importance it deserves and trust me. The accommodation of this house will be very practical and I think Mrs. Chinubhai will be pleased. The house is not too large for a person of your rank in Ahmedabad. Honestly, I am sure I have made something that is worthy of you. The expenditure is not excessive for such a house but you must discuss prices very seriously with your contractor and make him practice the utmost economy."²¹⁴

The above statement suggested that practicality, size of the home, and the cost of construction seemed to be causes for concern to the Mayor and his wife. To reduce the cost of the house, the Mayor sought a reduction of 33 percent in the area of the house. He asked to eliminate the entrance hall, mezzanine, second floor, and covered terraces, along with the garden terraces, as the site of the house already had a large garden. The Mayor

²¹⁴ Ibid.

suggested that the solar shading in the form of *brise soleil* be altered, and the service block be reconsidered. He also requested the garage block be contained within the service block so to be internally connected.²¹⁵ In April, 1954, Le Corbusier underlined the 22% reduction in the overall surface area in the comparative drawing as explained earlier. Upon further negotiations with the client,²¹⁶ Le Corbusier agreed to eliminate the *gallery* of the mezzanine and the parasol roof in September of 1954. However, the Mayor was still not satisfied. In May of 1955, he declared Le Corbusier as "not prepared to agree to my suggestions to make minor alterations in the original plans."²¹⁷

On visiting the existing Villa Chimanbhai in Ahmedabad in 2015,²¹⁸ the difference in scale was obvious. The built Villa Chimanbhai showed greater horizontality with only two levels. The main floor housed the living, dining areas, and the kitchen within the same block. The living room led out into the garden and further into the outhouse used as a printmaking workshop.

²¹⁵ March 23, 1954(FLC P3-6-230) and April 1, 1954(FLC P3-5-509 / 510), Foundation Le Corbusier archives, Maria Candela Suarez, La Villa Chimanbhai de Le Corbusier.

²¹⁶ In response to a new request from the mayor of 5 May (FLC P3-5-369), Le Corbusier accepted in September 1954 (FLC P3-5-371 / 372), Ibid.

²¹⁷ (FLC P3-5-378), Foundation Le Corbusier, "Chimanbhai demanded, in exchange for liquidating the fees of the architect (who had to be acquitted for a long time), several constructive details, in case he wanted to build the Villa without resorting to Le Corbusier (FLC P3-5-379). Seeing that the mayor had no intention of build the Villa, Le Corbusier refused to build them, considering that the money owed did not compensate for the time that he would have to invest in this task, and that many of these details would normally be resolved on the site itself (FLC P3-6-206)." Ibid.

²¹⁸ Mitacs Globalink Research Award, September-December 2015, Grant number: IT05730.

Upon conversation with Mayor Chimanlal's son Rajiv Lalbhai and his wife Paulomi Lalbhai, it appeared that the Mayor's wife was the one who was much opposed to the proposal of Le Corbusier on account of various reasons. She had felt that a big house seemed unnecessary since only the Mayor and his immediate family would be living in the house. A big house like what Le Corbusier was proposing would be hard to maintain and clean. The *brise-soleil* seemed to be a huge concern for the Mayor's wife because of the many birds that would make their nests therein.²¹⁹ According to Rajiv and Paulomi Lalbhai, security concerns as well were in the forefront as the site for the new home was not in the densely packed areas of old Ahmedabad and too many open areas like terraces and verandah became a concern. The house needed to be compact and with the reduced family size and less helpers, the kitchen could be incorporated within the same building.

It is important to note that due to industrialization and its effects, the agrarian Indian economy and its socio-cultural manifestations rapidly started to evaporate. The customary joint families began to dissolve being replaced by the nuclear family.²²⁰ All in all, the changing socio-economic factors in the newly independent India demanded a shift from old ways of living. Such were the times in free India where architectural methods were being reworked, keeping in mind limited resources and skill. Unprecedented and undefined

²¹⁹ Interviews with Rajiv and Paulomi Lalbhai, October 2015, Ahmedabad, Mitacs Globalink Research Award, September-December 2015, Grant number: IT05730.

²²⁰ Bina Gupta, "Modernity and the Hindu Joint Family System: A Problematic Interaction," *International Journal on World Peace* 11, no. 4 (1994): 37-60. accessed May 18, 2020. www.jstor.org/stable/20751999.

architectural spaces sprung up which led to the meaning of tradition, customs, and rituals to be interspersed with interpretations of industrialization and modernity. Old typologies were time-tested and efficient but new forms and typologies had to be refigured with the surge of a new way of living brought in by modernization. New social dynamics and economic activities redefined family life and community negotiations.



Figure 35: Entrance to site, exterior of the Villa, Built Villa Chimanbhai where Rajiv Lalbhai and his family now reside, Shahibaug in Ahmedabad. © Pallavi Swaranjali, 2015.



Figure 36: Front Entrance, Built Villa Chimmanbhai where Rajiv Lalbhai and his family now reside, Shahibaug in Ahmedabad. © Pallavi Swaranjali, 2015.



Figure 37: Entrance hall and staircase, Built Villa Chimmanbhai where Rajiv Lalbhai and his family now reside, Shahibaug in Ahmedabad. © Pallavi Swaranjali, 2015.



Figure 38: Living Room leading to garden, Built Villa Chimanbhai where Rajiv Lalbhai and his family now reside, Shahibaug in Ahmedabad. © Pallavi Swaranjali, 2015.



Figure 39: Dining Room with ornate table designed by Mayor Chimanlal, Built Villa Chimanbhai where Rajiv Lalbhai and his family now reside, Shahibaug in Ahmedabad. © Pallavi Swaranjali, 2015.



Figure 40: Door from living to garden, Built Villa Chimantbhai where Rajiv Lalbhai and his family now reside, Shahibaug in Ahmedabad. © Pallavi Swaranjali, 2015.



Figure 41: Garden and lawn with the printmaking workshop at the back, Built Villa Chimantbhai where Rajiv Lalbhai and his family now reside, Shahibaug in Ahmedabad. © Pallavi Swaranjali, 2015.



Figure 42: Printmaking workshop, Built Villa Chimanbhai where Rajiv Lalbhai and his family now reside, Shahibaug in Ahmedabad. © Pallavi Swaranjali, 2015.



Figure 43: Attached kitchen and elevator with open to sky courtyard. Built Villa Chimanbhai where Rajiv Lalbhai and his family now reside, Shahibaug in Ahmedabad. © Pallavi Swaranjali, 2015.



Figure 44: Brise Soleil, Ahmedabad Textile Mills' Association (ATMA), Ahmedabad, Le Corbusier, 1954.
© Pallavi Swaranjali, 2015.

(viii) Questions the Study Raised

On visiting the Sarabhai House, Ahmedabad in 2015, one of the five projects that Le Corbusier built in Ahmedabad, the magnificent architectural forms and materials presented themselves and did not fail to impress. The realization dawned that the home was not being used as a private residence anymore. Instead, it functioned as an artist's residency. Various art works were displayed there along with the furnishings of the house. Indeed, the house lent itself well to artists and to the exhibition of their work.²²¹

²²¹ *Le Corbusier: Sarabhai House, Ahmedabad India 1951-55*, edited and photographed by Yukio Futagawa, Studio Inspiration: Sarabhai House, posted on June 18, 2015 by Emily, Au Retour, <https://www.auretour.com/blogs/news/34380485-studio-inspiration-sarabhai-house>, accessed June 20, 2020.

Not surprisingly, Le Corbusier's Ahmedabad Textile Millowners' Association (ATMA) Building (1954), Ahmedabad designed as the headquarters for the activities of the millowners was used for an exhibition of designer furniture in 2018.²²² In the photographs of the exhibition, Le Corbusier's architecture itself looked like an exhibit. The use of these buildings as retreats and exhibition spaces talked volumes of their strong aesthetic appeal. Similarly, the proposal for Villa Chimanbhai was exemplary for its visual appeal and grandeur, but whether it considered a house as a set of spaces that provided physical comfort, efficiency, and beauty, while considering the lifestyle, priorities, and habits of inhabitants is arguable.

²²² This architectural site serves as a gallery for BV Doshi's furniture design, "One of the first Ahmedabad buildings BV Doshi worked on, Le Corbusier's Mill Owners' Association Building makes a gallery-like setting for the latest in design, as well as the little-known furniture designed by the Pritzker Prize winner himself," AD Staff, Published: July 20, 2018 | 08:00:53 IST, Samir Wadekar, Neville Sukhia, <https://www.architecturaldigest.in/content/bv-doshi-furniture-mill-owners-association/>, accessed July 14, 2020.



Figure 45: Ahmedabad Textile Mills' Association (ATMA) and the furniture exhibition within. © Photo courtesy by Neivelle Shukla and AD India Conde Nast Ltd, used with permission, not to be reused without the copyright owner's permission.



Figure 46: Ahmedabad Textile Mills' Association (ATMA) and the furniture exhibition within. © Photo courtesy by Neivelle Shukla and AD India Conde Nast Ltd, used with permission, not to be reused without the copyright owner's permission.

It feels correct to call Le Corbusier's drawings, model, and the cut-outs, architectural representation of the indicative kind—those that gave objective facts and figures with utmost precision. These conveyed the physical, structural, and visual quality of the Villa accurately. These were architectural representations suggesting the shape and form of the building as opposed to a representation that helped imagine the lived and embodied experience of the space. They also pointed to the supremacy of form in the conception.

Architecture as an object presented itself forcefully through the representations as did Le Corbusier's efforts to push his ideas to convince the client.

The study begged for a reconsideration of the role of representation in architecture as predominantly a way to express solidified ideas, to include more expansive interpretation of their roles other than the prevalent ocularcentric ones. Should more emphasis not be put towards thinking about these so that they played a greater role in understanding and conceiving architecture through embodied ways rather than just being limited to providing accurate visual information? How could the use of these representational media be extended to include innovative ways to think about, interpret, experience, and reimagine architecture?

The study of Villa Chimanbhai pointed to an appropriation of the traditional built form partly because of the primacy of creating visually appealing images rather than an image that favored mental images and associations that amplified the nature of architecture as a setting for events and activities as well as different worlds of memories and associations.

After his apprenticeship in Paris, Doshi moved first for a brief period to Chandigarh. Later, he went to Ahmedabad where he helped to supervise the construction of the Mill Owners' Association Building by Le Corbusier. He was involved with other projects of Le Corbusier being constructed in Ahmedabad, such as the Sarabhai House.²²³ Looking back,

²²³ William JR Curtis, Pritzker Prize 2018: for Balkrishna Doshi, architecture, urbanism and landscape are inseparable, Originally published May 9, 2016, *Architectural Review*, <https://www.architectural-review.com/today/pritzker-prize-2018-for-balkrishna-doshi->

Doshi divulged the hardships he faced on his return to India, when he was seen as the proponent and representative of the modern architecture that Le Corbusier's work introduced in the country. During the inauguration of Le Corbusier's Ahmedabad Textile Mills' Association (ATMA) in Ahmedabad the chief guest and Chief Minister of Gujarat, Morarji Desai, was surprised to see the configurations therein, especially the stand-alone toilet and the imposing staircase block. He asked, "[...] is this what modern architecture is all about? With inside organs exposed?"²²⁴



Figure 47: Exterior View, Ahmedabad Textile Mills' Association (ATMA), Ahmedabad, Le Corbusier, 1954, PC. © Photo by Pallavi Swaranjali, 2015.

architecture-urbanism-and-landscape-are-inseparable/10005827.article, Accessed April 30 2020.

²²⁴ Doshi, *Paths Uncharted*, 369.



Figure 48: Interior View, Ahmedabad Textile Mills' Association (ATMA), Ahmedabad, Le Corbusier, 1954, PC. © Photo by Pallavi Swaranjali, 2015.

Doshi had to resort to concocted “bizarre stories” to explain Le Corbusier’s monumental and extravagant use of space. Logic and rationale were not adept in answering the questions that he was faced with.²²⁵ In a witty story, concocted on the go, Doshi wove a mental image quite different from what Le Corbusier would have imagined for the project. Doshi fabricated the story providing the explanation that the building was such because the Municipal Corporation had commissioned the project of designing a milk dairy to Le Corbusier. The ramp served the movement of the buffaloes to the main floor, while the mezzanine floor served as the storage for the animal feed and the square punctures in the ceiling facilitated the distribution of the feed to the animals on the lower floor.²²⁶ He writes,

²²⁵ Ibid, 369.

²²⁶ Parts of this paragraph published by author in Architectural Storytelling- A Subjunctive Mode of Architectural Conceptualization and Experience in the works of Balkrishna Doshi, in Architecture and Culture, AHRA Journal, Taylor and Francis Online, Volume 6, Issue 2, on December 11, 2018.

“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.”²²⁷

Although these stories were to save from criticism, the emphasis was clearly on how to find and convey meaning. The story did not talk about spatial elements, but the focus was shifted by talking about the probable activities and moods that these fostered. In fact, the bizarre activity that Doshi described was one that many Indians were familiar with and could relate to. The statement did not ridicule Le Corbusier’s work. It was a way to foster a sense of engagement and attachment between the building and its inhabitants. Doshi’s unintended humour can be taken as a critique of modern architecture and the punctum that it created in the continuity of Indian traditions and customs as well as a technique to acclimatize Modern Architecture in the Indian milieu. The storytelling created the ‘pause.’ It used words to create an image in the minds of the people different from the one that the eye witnessed in Le Corbusier’s building. It incited a living imagination that prompted a plurality of meaning and the pleasure in an imaginative consciousness of architecture, substituting a conclusive and objective narrative.

Narrative is an established term in conversations of architecture. The study of the unbuilt Villa Chimambhai amongst other things showed how Le Corbusier argued that he had met all the functional and programmatic requirements requested by the client. The

²²⁷ Ibid, 370.

drawings, cut-outs, model, and correspondence together represented the narrative for the proposal—its form, detail, materiality, logic, and inspiration. Narrative in architecture explains why and how architecture is made, experienced, read, and understood. A visual narrative in diagrams, drawings, models, and renderings or written narrative in the form of concept statements, specifications, project reports to name a few, delineate its inspiration and various facets of structure, form, function, materials, colour, style, and such to reveal meaning of the built work. The narrative rearranges the parts of an architectural making in a comprehensible and understandable whole.

Architectural narratives, more often than not, tend to be a realistic and sequential description of the architectural endeavour and its intentions. They give a concrete interpretation of the architectural creation usually from the architect's point of view.²²⁸ Doshi's stories differed from a narrative in that they did not portray the entirety of an architecture project in a precise way but evoked an imaginative consciousness of the built environment, by creating images in the mind of the reader. According to Frascari,

“The tectonic presence is established by an awareness of building as a passive solid stuff on the verge of becoming active dream stuff in the mind of the user or visitor of the constructed place.”²²⁹

²²⁸ In literary studies, narrative is the structuring of events by the author to make sense of the story.

²²⁹ Marco Frascari, Plenary session 1: Tectonics in Theory, Three Aspects of Tectonic Imagination, *Conference proceedings*, 3-7, 1996 ACSA European Conferences, Copenhagen, 7.

Doshi's "bizarre stories" around Le Corbusier's building in Ahmedabad created the images in the mind replacing narratives in the form of photographs, precise drawings, and photorealistic renderings. His story viewed in the scientific and cartesian frame of contemporary architectural thinking did seem *bizarre*. Interestingly, Frascari points out the antagonism for stories since the time of Plato, who identified "poets and storytellers as deceitful people who put defective knowledge in children's heads."²³⁰ The idea of a story, may be true or fictional, often a play of words or pictures, where the interpretation is open. This facet definitely puts storytelling at odds in situations where a positivistic attitude persists and a universal and precise narrative that is the same for everyone is desired. The quote from the Zen Koans at the beginning of this chapter is intentionally put there to bring out this aspect of the story and how the answer to the question "who is Buddha" depends on "who is asking." The story can be re-composed into a number of narratives by different agencies.²³¹

Frascari, in his essay, "An Architectural Good-Life can be Built, Explained and Taught only through Storytelling," clarifies the relevance of stories in making sense of the world. Drawing from Antonio Damasio (b.1944), Professor of Neuroscience and Director of Brain and Creativity Institute at the University of Southern California, he explains that

²³⁰ Marco Frascari, "An architectural good-life can be built, explained and taught only through storytelling," in Sharr ed., *Reading Architecture and Culture*, 225.

²³¹ Walter Benjamin's essay describes the story as an exchange of experience, one which is reinterpreted every time someone listens to it, Nelson Goodman's world making and Marco Frascari's idea that storytelling is a remaking of the world already at hand.

“knowing” happens through the “stories” told in the brain. Damasio explained that the human brain registers events as “brain maps”—an understanding of a situation as a story. Important to note here is that Damasio highlights that emotions and rationality, commonly not seen together, are both key to these stories.²³² By appealing to the emotional-rational, stories prove to be effective in documenting a wholesome and memorable experience. The fundamental characteristic of the story is that it makes connection with the emotional-rational faculty of the brain.

Doshi’s story, though bizarre, demonstrated the ability to make an emotional-rational connection with the building. Tayyibji describes that after realizing that Indian architectural modernity differed from European modernity in that it desired to re-establish links to the past, Doshi realized that he had to change his way of engaging with architecture.

“...Doshi realized that the problem lay in his unquestioned appropriation of the ‘singular image’ process, one that he had inadvertently borrowed from his contemporary affiliations with the west.

He realized that his own leanings were rooted in the culture that nurtured him, where the ‘inner image’ is a complex pulse of diverse images moving in and out on the retina of the imagination. In the story, Doshi had found a tool to structure the kaleidoscope of inner images.”²³³

In his stories about Le Corbusier’s building Doshi tried filling in the gaps between the architecture and its reception by the audience. With time, Doshi incorporated storytelling

²³² Frascari, “An architectural good-life can be built, explained and taught only through storytelling,” in Adam Sharr ed., *Reading Architecture and Culture*, 224.

²³³ Riyaz Tayyibji, “Search for Joy in the Modern Project,” Neelkanth Chhaya ed., *Harnessing the Intangible*, 98-99.

that started early on in projects and continued long after the construction of the building. Having been exposed to both the rich traditional and cultural legacy of Gujarat, as well as to the waves of modernization in Ahmedabad, Doshi realized that *Indianness* was something he had to explore and define for himself.²³⁴ He established his own practice called the Vastu-Shilpa Consultants in Ahmedabad in 1956.²³⁵

(ix) Doshi Begins his Story

Doshi's earliest buildings reflected Le Corbusier's influence. In 1962, American architect Louis Kahn (1901-1974), was invited by Indian physicist and astronomer, Vikram Sarabhai (1919-1971) of the Sarabhai family—one of the most influential textile mill owners in Ahmedabad, on the advice of Doshi to design the Indian Institute of Management, Ahmedabad. Le Corbusier and Kahn were strong architectural figures with highly developed architectural vocabulary and language. In his article, “Le Corbusier and Louis Kahn, The Acrobat and Yogi of Architecture,” Doshi compares their very different approaches to architecture. He described Kahn's approach as *yogic* (ascetic) as it was “austere,” “precise,” and “consistent,” striving for “simplification,” whereas Le Corbusier's approach as acrobatic due to the experimentation and perpetual search for new

²³⁴ Doshi, *Paths Uncharted*, 212.

²³⁵ *Ibid*, cover page.

possibilities.²³⁶ Doshi's autobiography explains how Le Corbusier and Kahn were both storytellers. He writes,

Kahn loved spending time with students and loved to tell them stories including those from the Arabian Nights. He was a great teacher. I remember being at one of his classes where I saw him studying a rather bad project by a student. To everyone's surprise, Kahn focussed on the area of the staircase there; slowly he expounded the virtues of this staircase, the movement, the journey of an old parent with his grandchild, vistas, railings, a seat on the landing and the formal destination. No sooner was his eloquent exploration over all those present credited the student with having done a great job."²³⁷

He describes various episodes with Le Corbusier, when to explain something to Doshi, Le Corbusier resorted to metaphorical stories. With exposure to these profoundly deep thinkers, Doshi searched for an identity that combined stories from his mentors with those from his own culture and traditions. It was hard to not simply copy his mentors, but Doshi made a conscious decision to build upon these influences to create an architecture that was distinctly his own.²³⁸ He studied extensively traditional, local, and vernacular architecture in India along with Vedic and other ancient scriptures. Amongst these studies the study of the *pol* houses featured prominently. Looking at the formative years of Doshi's career one begins to understand how he came to perceive and question architecture through his initial encounters with modern masters set against his traditional, religious, and Indian upbringing and outlook. Through the 1950s and 60's Doshi enthusiastically participated as an

²³⁶ Doshi, *Le Corbusier and Louis I. Kahn*, 35.

²³⁷ Doshi, *Paths Uncharted*, 189.

²³⁸ *Ibid*, 212.

architect, institution builder, and educator. The families of the textile mill owners also became key in the advancement of Doshi's career.²³⁹

In his earlier projects, Doshi dealt foremost with economical and efficient ways of achieving optimal spaces and structures at low costs. ATIRA Peon Housing and Guest House, Ahmedabad (1958) and Township for Gujarat State Fertilizers Corporation Limited, Baroda (1968) are some examples.²⁴⁰ In his institutional buildings like the School of Architecture, Centre for Environmental Planning and Technology (CEPT), Ahmedabad (1966-68) these climatic controls along with energy and resource optimization efforts were accompanied with the traditional ways of interspersing indoor and outdoor spaces for promoting different kinds of activities.

The intriguing goal that Doshi set for himself in his Indian Institute of Management (1977-1983) was to make the architecture disappear and let the in-between spaces dominate.²⁴¹ The idea of the incapability to define space as one specific category fascinated Doshi. He set about designing Sangath (1980), his studio in Ahmedabad so that it did not look like an office.

²³⁹ William Jr Curtis, 'For Balkrishna Doshi, architecture, urbanism and landscape are inseparable' 9 May, 2016, <https://www.architectural-review.com/today/for-balkrishna-doshi-architecture-urbanism-and-landscape-are-inseparable/10005827.article>, accessed April 20, 2020.

²⁴⁰ Vikram Bhatt, Balkrishna Doshi's Aranya Vikram Bhatt on a township built by its inhabitants, <https://www.cca.qc.ca/en/articles/issues/12/what-you-can-do-with-the-city/58317/balkrishna-doshis-aranya>, accessed April 20, 2020.

²⁴¹ Doshi, *Paths Uncharted*, 264.

Aranya Community Housing (1983), Indore, India won the Aga Khan Award for the 1993-95 cycle. Located in Indore, Aranya sites and services scheme, empowered the economically weaker section to buy a lot with sewer, electricity, and water and work towards creating their own homes over time. The involvement of users built a dynamic and lively architectural scape where people felt a sense of rootedness due to their involvement.²⁴²

In 1976, Doshi set up the Vastu-Shilpa Foundation for Studies and Research in Environmental Design (henceforth referred to as VSF). It focused on Indian Habitat conditions to develop best practices for the Indian scenario.²⁴³ Doshi had been a member of the committee that prepared the document for the reconsideration of the then current practices for the Habitat Bill of Rights submitted at the United Nations' Habitat Conference in 1976 in Vancouver, along with Josep Lluís Sert (1902-1983), Moshe Safdie (b.1938), Nadar Ardalan(b.1939), and George Candillis (1913-1995). This led to the publication by VSF in 1990 called "Towards a Humane Habitat- Directions for a Code of Planning and Design Practices."²⁴⁴ It covered the human habitat at three scales: the settlement, the community/neighborhood, and the dwelling unit. The first scale focused on issues such as the proper size of communities for economic development and good quality of life,

²⁴² Doshi, *Paths Uncharted*, 304-307.

²⁴³ *Ibid*, 49.

²⁴⁴ Research documents, *Aranya- An Approach to Settlement Design, Towards a Humane Habitat- Directions for a Code of Planning and Design Practices* (Ahmedabad: Vastu-Shilpa Foundation for Studies and Research in Environmental Design, 1990), Preface v.

studying activities and patterns within the settlement, which covered informal and formal activities, zoning and segregation, urban greens, and hierarchy of activity centers. At the community level socio-spatial identity of a community and its institutions, form and structure, facilities, and design of public spaces were stressed upon. At the level of the dwelling unit, size, form, and spaces, linkages and spatial organization, economics for appropriate selection, and strategies for materials and structures along with utilities were discussed.²⁴⁵ This tripartite division between settlement, community, and the dwelling unit was a prominent feature in Doshi's work. It did not serve to segregate at the three scales but led to more cohesive connections between them.

The functional, structural, and economical solutions that Doshi sought in the early years of his career, were complemented by the dominant consideration of architecture's role as a social, participatory, and experiential tool in the 1970s and thereafter. Doshi contemplated the ethical role of an architect deeply, thinking about how architecture could become an "extension of life."²⁴⁶ He had grown up in a joint family of 15-17 members with several generations living together. Doshi often recalled his childhood home in Juni Bhaji Lane where standing on the balcony he could converse with his cousins, or relatives across

²⁴⁵ Ibid, Contents.

²⁴⁶ Balkrishna Doshi Interview: The Symphony of Architecture, Copyright: Louisiana Channel, Louisiana Museum of Modern Art, 2019, and "Architecture is an Extension of Life": An Interview with Balkrishna Doshi, *Arch Daily*, Produced and directed by Vastu Shilpa Foundation, Copyright: Vastu Shilpa Foundation 2018, Edited by Klaus Elmer, Produced by Marc-Christoph Wagner, <https://www.archdaily.com/928927/architecture-is-an-extension-of-life-an-interview-with-balkrishna-doshi>, video accessed April 29, 2020.

the street. At the street level, most of the houses had some form of commercial activity, like selling incense sticks, perfumes, and household items. The community fostered socio-cultural and economic activities within the precincts of a residential neighbourhood.²⁴⁷ Doshi identified the notion of an architecture that was “alive,”²⁴⁸ by revisiting these memories of his childhood home, where festivals, gatherings, streets, bazaars, and rituals had a strong presence. Flux and uncertainty seemed the only constants in the home that was perpetually changing due to births, deaths, marriages, and other activities in the big family. This contributed to his notion of architecture not as a static building but one that is like a living organism constantly changing over time. Be it this childhood home of Doshi or the previously described Villa Chimanbhai, the idea of flux and change over time emerged as critical to Doshi’s architectural thinking.

As his career evolved, the notion of timelessness in architecture gained more importance for Doshi. He explored these strategies of adding the fourth dimension of time in his projects, for example in the Aranya Township, Indore. To achieve timelessness, Doshi contemplated that architecture needed to be open ended and multi-use—one that involved the community and allowed adaptation over time. Timelessness in architecture was not a quality for him, but a perpetual process of adaptation, difficult to be achieved in a singular attempt. For him architecture had to be like an open theatre—one in which

²⁴⁷ “Architecture is an Extension of Life”: An Interview with Balkrishna Doshi, <https://www.archdaily.com/928927/architecture-is-an-extension-of-life-an-interview-with-balkrishna-doshi>, video accessed April 29 2020.

²⁴⁸ Ibid.

everyone could participate over prolonged periods of time. This participation, he reflected, empowered and rooted people.²⁴⁹

With this evolution in his thinking, buildings, and their representation became artefacts that told stories of their determinants and the settings where they were built and how they were used over time. His stories were not metaphorically referring to buildings, but included architectural works as settings, characters, protagonists, or perpetrators of the story.

Doshi's astute observations of traditional, cultural, habitual, and ritualistic characteristics of people in a place formed the essence of his storytelling which added a rich flavor to his architectural works. Doshi's buildings absorbed time-tested contextual references to create an architecture with poetic dimensions. Doshi's built work morphed with time and users. Doshi's architectural stories were a way to engage without defining and imposing. Through them Doshi sought participation from all involved or those who could be involved in the architectural process. The building transpired thereafter, poetically engaging the percipients in spaces suggesting the traditional, sacred, rational, nostalgic, and other contextually relevant stories, leaving meaning to be found in different ways by the inhabitants, without explicitly stating or explaining it to them.

In his autobiography, *Paths Uncharted*, Doshi writes about his uncle in law, whom he called Motabhai, a scholar well versed in Indian philosophy and religion,

²⁴⁹ Ibid.

“Motabhai made me aware of the significance of my exposure in childhood as part of a deeply religious extended family. He explained to me the virtues I had unknowingly imbibed such as sharing, reverence, forgiveness and tolerance simply by being around and sometimes participating in various religious rituals and ceremonies, not to forget the stories from epics told by elders every evening.”²⁵⁰

These epics, particularly the Ramayana and Mahabharata, argued Indian academician and designer, H. Kumar Vyas (b.1929), often named as “mythologies” were called “*itihisas*” (which translates as histories) in India. Vyas highlights that myth in India was not perceived as an imaginary element but as “inextricably interwoven with history.”²⁵¹ He notes that,

“the historical format of the two epics is deliberately employed to make people use it as a point of reference to continuously evolve and influence the living patterns and attitudes of human societies of the past, present and future.”²⁵²

The value of such storytelling lay in the natural connection it had with the readers affecting the way people aligned their lives to the explicit and implicit directives in these mythologies. It did not seem encumbering to enmesh or incorporate these in one’s own lives because of the various channels that allowed it to be thus. In my own reading of the Ramayana, this was made possible amongst other strategies by the human avatars of the Hindu Gods, who were faced by similar and typical situations as any other human being.

²⁵⁰ Ibid, 20

²⁵¹ H. Kumar Vyas, *Design, the Indian Context: Learning the Historical Rationale of the Indian Design Idiom* (Ahmedabad: National Institute of Design, 2000), 11.

²⁵² Ibid.

Amongst various other messages, they demonstrated how to rise beyond human weaknesses towards nobler and kinder ways of living while shunning the evil. These epics allowed places of entry—a point where mortals could insert themselves and their situations within the story’s plot and seek wisdom. It was a ‘pause,’²⁵³ that removed one from the context of the story to put emphasis on self-reflection and assimilation to understand the significance of the story in one’s life and further interpret or imbibe aspects of it. The mythologies combined the divine within the human, transcendental within the pragmatic.

Doshi’s strongest memories included attending the enactment of stories from these epics and recitation of sacred hymns in and around his childhood home in Pune, India. In an interview, Doshi pointed to the stories of Mullah Nasrrudin as a fascinating source of inspiration.²⁵⁴ After the conversation, I reread these stories with which I was familiar since childhood. Mullah was believed to have lived-in present-day Turkey in the 13th Century and the themes of his tales have become part of folklore in many cultures. Mullah was depicted in a small village like setting and appeared ostensibly naive and idiotic, but his stories always carried a profound essence of life and timeless concepts discovered when

²⁵³ ‘Pause’ is defined as that instance when a reorientation happens. This reorientation can be in various ways as we will see in the dissertation, which expands Doshi’s use of the word while describing the character of transitional spaces in the traditional architectural examples from ancient India. Doshi, “Give Time a Break,” Melotto, Bruno ed., Balkrishna Doshi, *Sangath-Indian Architecture between Tradition and Modernity*, 91. I expand this spatial attribute that Doshi identifies to include it in the description of Doshi’s work and in his three modes of storytelling.

²⁵⁴ Author’s recorded interview with Doshi, September 29, 2015, Sangath, Ahmedabad, India. Sponsored by the Mitacs Globalink Research Award, September-December 2015, Grant number: IT05730.

probed deeper. These stories were often in the form of questions to which Mullah provided the answer. The answers were customarily questions, or many times seemingly unrelated answers much like the Zen Koans' ones.

One needed to apply themselves to discover the answers. On deeper thinking, one could recall several incidents or experiences in their own life that unraveled the deeper meaning hidden in these stories. When seen in this way, these stories seemed to hold profound wisdom. They did not state singular facts or conclusions. To have a meaningful experience one had to be absorbed in it and understand that there was not a singular reality in them. Each person found their own way of engaging with the story. It made one stop, to 'pause' to re-imagine and reflect.

“The moon is more useful than the sun,” said Mullah and his friend asked, ‘Why, Mullah?’ Mullah replied, “We need the light more during the night than during the day.”²⁵⁵

The first reaction to the story is of confusion and humour due to the stark opposition of a day-to-day event or experience and its unusual narration. One could laugh it off by calling Mullah an “idiot.” It dawned upon me that maybe this is the kind of idiot that Doshi had referred to earlier, when he had said that one must think like an “idiot.” In the above example, things seemed unsaid, undefined, and even convoluted. The connection between

²⁵⁵ Retold by Dey, *Stories of Mullah Nasruddin*, 109.

sun and moon and between day and night seemed to be under scrutiny. One could not help but wonder the following—is not the moon getting reflected light from the sun? If the sun were present there at night, would it be night at all? Would we even see the moon then? The moon is there because it is night and is not more or less useful than the sun. Is it even right to compare which is better when all are part of a system? This pondering could go on. Mullah brought out the intermeshing and intricacies of things and situations by shedding a different light on it, creating a ‘pause’—inducing a new way of looking at old things.

The ‘pause’ helped break from the shackles of conventional and normative ways of thinking with objectivity. Everyday objects and concepts were so mixed by Mullah, that one was left to untangle and figure things out anew for themselves, in turn figuring out prejudices or discovering otherwise overlooked connections. These might seem confusing in the beginning, but the enjoyment lay in the contemplation. The stories in themselves could be passed off as light ones, but definitely for one who dwelled on them, a vast world of imagination and reflection opened up.

“The Zen stories are amazing. They unfold slowly. They stop you from experiencing the expected. When agitated, they slowly take you through a path in which you unfold what you really wanted to see,”²⁵⁶ writes Doshi.

Like the Zen stories or Mullah’s anecdotes, Doshi’s architectural stories were not ones that projected a single discernible theory but offered multiple interpretations and

²⁵⁶ Doshi, *Paths Uncharted*, 398.

reflections, while questioning the *status quo*. These stories were like dreams, where an inversion happened between the real and the fictional. The latent content of these stories was not encountered at first instance, but gradually uncovered, through an immersion.

During one of the interviews, Doshi talked about the architectural process and said, “One should design like a child [...] more so like an idiot.”²⁵⁷ He continued to say that even children had baggage as soon as they were taught to do things in prescribed ways. He seemed concerned about how to break free from shackles of predetermined ways of thinking. He explained that one should not be closed to learning and trying new things so to find different sources of inspiration. He suggested that his fictional stories would be of interest for me. I found the stories in his library along with some unpublished papers,²⁵⁸ that he allowed me to print. The stories were written later but had begun when the projects started. I also saw his miniature painting style illustration in his office. These seemed to be unconventional with respect to the multiple architectural and construction drawings, and models displayed in his office. The idea of representing architecture that was “alive” probably needed new means of representation.²⁵⁹

The architectural sensibility of Doshi as evident in his storytelling, derived from his religious background and from his Indian sensibilities. It lent not an indicative but a

²⁵⁷ Author’s recorded interview with Doshi, September 29, 2015, Sangath, Ahmedabad, India. Sponsored by the Mitacs Globalink Research Award, September-December 2015, Grant number: IT05730.

²⁵⁸ Ibid.

²⁵⁹ “Architecture is an Extension of Life”: An Interview with Balkrishna Doshi, Video Accessed April 29, 2020.

subjunctive mode to his thinking—one that allowed factual information to be overlaid with the unpredicted, imagined, and the unconventional, imbuing it with the possibility of interpretation at different levels. Through various strategies like the miniature painting style illustrations, oral, and written stories, Doshi provided the gates that evoked the imagination and helped enter a new world by the onlooker injecting themselves into a world of imaginative possibilities. The stories proposed getting lost in them to find meaning. A multilayered understanding emerged with the story.

The following chapters study Doshi's tectonic, visual, and written stories to see how these stories infused meaning as his projects were planned, built, inhabited, and interpreted hampering the ocularcentric approaches in different ways, through such strategies as inducing 'deliberate errors' or by weaving the real with the imaginary—ways in which the visual lost its precision and dominance, hence shifting the focus to other faculties of imagination. With the loss of a fixed and defined image, his buildings and its representation did not remain mediated readings that gave a predetermined meaning but facilitated the possibility of an immersive encounter through the creation of oneiric and semiotic images that facilitated imaginal inhabitation and thinking in architectural works.

Chapter 2: The Architect Inside-Out – Doshi's Tectonic Stories

*Disciple: “‘Who is Buddha?’, Master: ‘Who is asking?’”
From the Zen Koans²⁶⁰*

Keywords: tectonic imagination, allegorical imagination, material imagination, ethical imagination, analogical imagination, anagogical imagination.²⁶¹

²⁶⁰ A Collection of Wisdom, Zen Buddhism, Koans, <http://www.rodneyohebsion.com/zen-koans.htm>, Accessed July 14, 2020.

²⁶¹ Parts of this chapter, especially from the section ‘Pausing at Sangath’ were presented at Frascari Symposium iii and published as a book chapter titled “The Architect Inside-Out” in Paul Emmons, Federica Goffi, Jodi La Coe ed., *Ceilings and Dreams, The Architecture of Levity* (London, NY: Routledge, 2019), 222-233.

(i) Tectonic Stories

This chapter looks at Doshi's tectonic stories that relied on his tangible works. It studies Sangath, his studio in Ahmedabad, along with the full-scale installation of parts of his buildings in his recent moving retrospective exhibitions (2014-2020). Tectonic stories resulted from the meticulous planning that went behind these material realities. These built works created the 'pause'—the moment when imaginative dreaming exceeded the material presence of the built work replacing it with a "nothingness." The chapter defines the "nothingness" through the study of relevant and traditional examples from Indian architecture that Doshi referenced, followed by the study of Sangath where tectonic storytelling is identified as an act of inversion, subversion, and obversion leading to dream-like imaginative habitation of space. The full-scale installation in the retrospective exhibitions showed a similar characteristic and brought the onlooker on a threshold between the real and the unreal. The placement of these at the end of the chapter on tectonic stories and at the beginning of the next chapter on visual stories, emphasize their in-between character, as a hybrid between tectonic and visual stories. These installations were material realities in themselves which represented the built works of Doshi.

During my residence in Sangath, I was taken around the office by a *Sangathi*, or an employee of the office, who told me numerous micro stories about how and why the spaces and details at Sangath came to be. I found out this storytelling walk was a tradition in the office, which was often visited by professionals and students. Each time visitors arrived a different employee would take the turn to do the storytelling tour. This seemed like a

wonderful way to train employees in the art of architectural storytelling. Near the entrance to the site of Sangath, the story of the mosaics on the floor revealed itself. My 'Sangathi-storyteller' explained to me that the artisans who did the mosaics using waste material from a local chinaware business, were given the freedom to create the mosaics using their own imagination after an initial briefing by Doshi. Doshi explained to them that using the broken china mosaic pieces they could portray themes of their choice. Various stories emerged in the floor mosaics on the pathway that led to the entrance into the building at the back of the site. One story portrayed a well-known movie actor, others revealed material culture in different forms like pottery and patterns. Doshi contributed the story of the mosaic of the tree that revealed that at that location on the site there had been a mango tree which had dried up.

When I had first arrived at Sangath and entered the gate from the busy road that it was situated on, I had encountered a wall with a truncated pyramidal opening. When I peered in through that small opening, in an effort to understand where I could enter the building from, I was stared back at by a statue of what looked like an ancient warrior, situated in a small courtyard beyond which windows were visible. My curiosity was invoked and after realizing that I could not possibly get into the building there, I turned left to continue my search for the entrance while reading the mosaic stories as I traversed the path that took me into the garden space where water tanks, trees, lawn, and instrumental music greeted me. This place seemed cool and refreshing, even on that hot day and I sat there a few minutes before I saw the steps that led to the barrel vaults. I walked on to the platform that the barrel

vaults sat on and peered into the underground spaces visible through the glazing on the semicircular faces that closed the barrel vaults. There was no one inside the buildings as I was there earlier than the time the office started.

Later, when I asked Doshi why he had designed the circuitous path leading to the entry at the back of the site, Doshi answered by narrating a witty story. He described that he had created that circuitous route so that if any client or contractor unhappy with his work came to visit him, the journey through the garden would calm and refresh them, in turn making them forget their displeasure. On a different instance, one of the administrative staff members asked me if I had seen the magical and secret windows in the studio space. When I said I was unaware, they enthusiastically took me to the long and narrow studio space to show me the windows through which light filtered in. I had to crane my neck to look at those. I realized these windows projected out on the platform over ground next to the barrel vaults and were placed at the corner of the studio on its ceiling.



Figure 49: Entry Court at Balkrishna Doshi's Sangath, Ahmedabad. © Pallavi Swaranjali, 2015.



Figure 50: Truncated opening and statue in the entry court at Balkrishna Doshi's Sangath, Ahmedabad. © Pallavi Swaranjali, 2015.



Figure 51: Floor Mosaics in the entry court at Balkrishna Doshi's Sangath, Ahmedabad. © Pallavi Swaranjali, 2015.



Figure 52: Floor Mosaic of the dried Mango tree at Balkrishna Doshi's Sangath, Ahmedabad. © Pallavi Swaranjali, 2015.



Figure 53: Entry to the site at Sangath and floor mosaics. © Pallavi Swaranjali, 2015.



Figure 54: The invisible ‘magical’ windows in Balkrishna Doshi’s Sangath, Ahmedabad. © Pallavi Swaranjali, 2015.



Figure 55: The projection over the ground of the invisible ‘magical’ windows in Balkrishna Doshi’s Sangath, Ahmedabad. © Pallavi Swaranjali, 2015.

I also learnt about the story of the typical staircase and four column combination I had seen in Sangath, and on my visit to Doshi's home, The Kamala House.

While designing for his home Doshi found himself resorting to the way Corbusier had designed the houses in Ahmedabad. He found himself returning to those images as an inspiration for his own house.

“Often, when we have no springboard or when we don't look for simpler solutions, we can never get away from what we have learnt.”²⁶²

Doshi had visited a brick kiln during the course of one of his projects. There he had witnessed a construction worker descending an unfinished staircase with four columns around and with thin shafts of sunlight shining down over it from the top. The experience and the mental image that its memory left on Doshi made him recreate it in several of his projects. In the Kamala House (1959) the four columns in the foyer welcome one while framing the entrance, with the staircase located to the right of the four columns. Modifications to the column and staircase combination happened in various other of Doshi's projects due to the project specific requirements. The staircase within the four columns in Sangath projected an incomplete and open inviting look that created a fascinating play of sightlines. In Maneesha House (1999), the rectilinear placement of the four columns became linear to fit the linear plan accommodating the tree on site.

²⁶² Doshi, *Paths Uncharted*, 233.



Figure 56: Kamala House, Doshi's home, Ahmedabad,²⁶³ showing the four columns and staircase. Photo Credit: Vinay Panjwani. ©Vastushilpa Foundation, India, used with permission, not to be reused without the copyright owner's permission.

²⁶³ Kamala House, Ahmedabad, India, Year: 1959, <https://www.sangath.org/projects/kamala-house-ahmedabad/>, accessed July 14, 2020.



Figure 57: Maneesha House, Baroda,²⁶⁴ showing the four linear columns and staircase, Balkrishna Doshi. Photo Credit: Vinay Panjwani. ©Vastushilpa Foundation, India, used with permission, not to be reused without the copyright owner's permission.



²⁶⁴ Maneesha House, Baroda, India, Year: 1999, <https://www.sangath.org/projects/maneesha-house-baroda/>, accessed July 13, 2020.

Figure 58: Maneesha House, Baroda,²⁶⁵ showing the four linear columns and staircase, Balkrishna Doshi. Photo Credit: Vinay Panjwani. ©Vastushilpa Foundation, India. used with permission, not to be reused without the copyright owner's permission.

These different tectonic stories resulted from a single memory or association that Doshi had in the brick kiln, an unexpected source of inspiration that helped Doshi break away from the images of Le Corbusier's work to derive a new solution for his home. These highlight Doshi's eye for such details that trigger mental images and experiences that obliterate the traces of mundanity of daily routine. Doshi identified and elevated such unnoticed but embodied experiences of the everyday that were evocative and which served the imagination well. The repetition of similar configurations or details like the staircase and column, like in recurring dreams, represented a series of stories.

These marked the deliberation upon an idea over an extended period of time. Through their repetition, the inherent idea was refined over many iterations, suggesting that creativity did not always mean coming up with novel ideas never thought of before, but as a dwelling upon ideas so as to nurture and continuously refine them. As Frascari points out,

“In the surreal nature of dreaming, we must discover not the power of the extraordinary, but rather what Georges Perec (1936-1982) called the “infraordinary.” In architecture, the infraordinary is the source of detailing; it is the principal locus of meaningful events in architectural artifacts [...]. Architectural dreams are recurring dreams, which allow a slow construction of construed reality.”²⁶⁶

²⁶⁵ Maneesha House, Baroda, India, Year: 1999, <https://www.sangath.org/projects/maneesha-house-baroda/>, Accessed July 13, 2020.

²⁶⁶ Frascari and Goffi, *Marco Frascari's Dream House*, 48.



Figure 59: The 4 column and staircase in interiors of Doshi's home called Kamala House, Ahmedabad, PC.
© Pallavi Swaranjali, 2015.



Figure 60: The 4 column and staircase on the terrace of Doshi's home called Kamala House, Ahmedabad, PC. © Pallavi Swaranjali, 2015.

Creativity for Doshi was not unearthing a novel idea every time but was re-dreaming tangible dreams of objects that lay in plain sight. He elevated these to serve “liturgical functions,” with the “infraordinary transformed into the extraordinary.”²⁶⁷ The subtle meanings that these configurations had become iconic and magical due to the recurrence of the configuration in the reality of various constructions. These magical icons gave to Doshi's work a dream-like aura.

²⁶⁷ “[...] the liturgical function of the technology of the construction of magical icons| is to produce things and thoughts by joining hard reality with subtle meanings...Liturgy is a technology of the infraordinary transformed into the extraordinary. It is a discipline based on iconic thinking that plays a major role in architectural dreaming,” Frascari and Goffi, *Marco Frascari's Dream House*, 52-3.



Figure 61: The staircase and columns at the entry to the office at Balkrishna Doshi's Sangath, Ahmedabad.
© Photo by Pallavi Swaranjali, 2015.

These tectonic stories revolving around the built spaces at Sangath captivated my interest sparking a vivid imagination and enjoyment of the space. These were remarkably differentiated from the story of the Villa Chimanbhai, where the formalist and self-referential nature of architecture was prominent. The conversations harboured around what the building had to offer, the client's program and Le Corbusier's solution. Tectonic stories like the ones narrated at Sangath seemed absent. Sangath's tectonic stories did not talk about styles, forms, facades, sizes, or composition but construed the stories of how they came into being. They also tempered the imagination while inhabiting and experiencing

the constructed world. The stories delineated the details, devices, and strategies used, which were specific and intrinsic to the project, and the experiences resulting thereof. Such accounts in architecture often recede behind an objective description of the edifice. The details in the buildings provided opportunities that brought forth these stories of making, discovering, and imagining. Alternately, perhaps the stories brought forth the details.

Doshi's tectonic stories started from the encounter with the building but did not stop there. The tectonic reality that these *Sangathi* stories presented were best experienced by the mental images that they provoked bringing forth the imaginal aspects associated with the constructed world. A convoluted situation presented itself as these mental images accentuated the importance of those details in the schema while at the same time diminished their formal or visual existence. The tectonic stories and its plot of details, building, site, and surrounding were such that they immersed the user into a world where an embodied consciousness emerged which was quasi-tectonic and quasi-imaginal. The imaginative user became a co-creator. Such stories also manifested in other projects of Doshi's narrating the coming to being of the project, attuned to the sites and conditions surrounding the project and resulting from it.

These tectonic stories did not try to impose a visual composition of parts on the onlooker, or a universal vocabulary and language to panegyricize the edifice but offered concrete and specific details of tectonic resolution coupled with imaginative reasoning all along. These dreamt and imagined stories attached to specific details of the built environment did not talk about the spatial and formal aspects of the details. On hearing the

stories, one could engage in the world of its “construction and construing.”²⁶⁸ These worlds layered over the tangible world a conceptual and imaginal overlay that described their being and associations. It ushered the listener to a world of dreams, connected to the constructed world but beyond it.

Tectonic stories made perception richer by narrating both the making of the buildings and the imaginative re-making by the inhabitants. This re-making was not limited to the spatial reuse but nurtured a kind of *dreaming* state for the user of the space. This enhanced perception drew from the present tangibility as well as the accompanying conceptual construct. These tectonic stories seemed appurtenant to Doshi’s architectural thinking. Tectonic stories resulted from the negotiation of the site, the building, and the participants or contributors in the building process as much as it did with the addition of imaginal characters and stories.

Doshi’s built works exhibited a spatial fecundity that produced yet more stories by the users who could make alterations and additions to the buildings after the architect had completed his story. To let the tectonic stories, continue even after the building was made and handed over to the users, meant questioning and redefining architectural authorship and intent. In an article written together with architect and theorist Christopher Alexander (b.1936),²⁶⁹ Doshi advocated that architects should not decide everything right down to the

²⁶⁸ See Footnote 24.

²⁶⁹ 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

smallest detail but let the community and later generations of architects and planners participate in decisions about the substructures. Doshi felt this alone could lead to the immense richness that the region's traditional solution embodied.

In some of Doshi's built work he introduced a degree of incompleteness and openness that allowed users to add to and embellish its base condition. Users were given a chance to make their own stories, and hence felt a sense of ownership and attachment to the built. It is in the housing projects associated with Doshi's office, and for which he is so well known, where he attempted to induce user participation. 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. Doshi did not dictate when or how this would happen but 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.²⁷⁰

Alexander and Balkrishna Doshi, "Main Structure Concept," *Landscape*, 13, no. 2 (1964): 17–20.

²⁷⁰ Parts of this paragraph published by author in *Architectural Storytelling- A Subjunctive Mode of Architectural Conceptualization and Experience in the works of Balkrishna Doshi*, in *Architecture and Culture*, AHRA Journal, Taylor and Francis Online, Volume 6, Issue 2, on December 11, 2018.

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 for over time. Training programs to teach the building technique were provided. Incrementally designed house plans, prefabrication, standardization, kit of parts, service core, and supporting infrastructure became the critical elements of design. The involvement of inhabitants has built a complex and dynamic place, a town, where people feel a sense of rootedness. Many personal anecdotes and collective stories depicting the evolution of the neighborhoods and communities are told.²⁷¹ Once the inhabitants occupied the building, they changed and modified space irrespective of the architect's intent. This ability to morph and evolve was embedded and in-built in Doshi's projects like Aranya and the LIC housing schemes. The architectural program was built so to provide impetus to such change to unfold with time.

These projects were what Italian philosopher and semiotician Umberto Eco (1932-2016) might call "works in movement—that consisted of "physically incomplete structural units" to be brought to a completion through an ongoing dialogue between the author's intentions and the performers' choices.²⁷²

²⁷¹ Ibid.

²⁷² Ibid.

“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.”²⁷³

For Eco, authorial intent remains important; the work was not merely the conglomeration of random elements but was a structure to be taken up and reinterpreted. Doshi’s projects offered their inhabitants an initiating structure for the making of spaces and activities. The initiating structure enabled, responded to, and intensified the events that emerged within it, allowing the users to recombine, transform, and extend the initiating structure that gave rise to them.²⁷⁴

Doshi’s role was that of a director of theatrics who brought characters together into the play with each character bringing a new way of looking at things and creating a kaleidoscope of possibilities. With each new perspective, the architectural story changed. Doshi actively involved makers and users of all kinds in the development of the narrative, so that the creation was neither completely his nor theirs. The spaces were alive. With time, like living beings, they evolved, grew, and told stories themselves long after the architect

²⁷³ Umberto Eco, *The Open Work*, trans. Anna Cancogni (Cambridge, MA: Harvard University Press, 1989), 12.

²⁷⁴ Parts of this paragraph published by author in *Architectural Storytelling- A Subjunctive Mode of Architectural Conceptualization and Experience in the works of Balkrishna Doshi*, in *Architecture and Culture*, AHRA Journal, Taylor and Francis Online, Volume 6, Issue 2, on December 11, 2018.

had left, lending an extravagance that offered unlimited interpretation for use in a time when perpetual programmatic obsolescence tended to be the lived architectural reality.²⁷⁵

By participating in the making, what was built became meaningful to all. The reciprocity of understanding or interpretation and the way of making led to a more communicative architecture.²⁷⁶ A complex relationship transpired here. Who was the author or storyteller—Doshi, the space he created, or the user? An ambiguity existed in defining the storyteller, the story, and the reader/listener of the story. These built works had the capability to talk about their own making on one hand but also allowed each and every user (term used generally for anyone in the space) to be able to create their own specific story in the built space as different from an overarching, explanatory, and generic narrative.

It was this kind of engagement that Doshi hoped to elicit from the “players” in his stories and his buildings. He advocated an architecture where an entire community, present and future, participated in making decisions—those who lived in and around it, planners, builders, later architects etc., each weaving their own *as-ifs* as they acknowledged both others and their own desires. This, hoped Doshi, would lead to a “heterogeneous homogeneity, in which the collective and the individual both found opportunities for self-expression.”²⁷⁷ It was an approach that he called for as an antidote for such commercialized

²⁷⁵ Ibid.

²⁷⁶ Ibid.

²⁷⁷ 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

contemporary projects that demonstrated the loss of a “sense of wholeness to our built environment.”²⁷⁸ The tectonic stories seemed to offer a germane opportunity for seeking relevance and appropriateness to mend the situation of architecture’s status as a “scientific prose,”²⁷⁹ in such examples that did not take into consideration the building and its relation to the site, to nature, and to its socio-cultural context. This scientific prose dictated singular meaning without the possibility of engagement and making of meaning by different partakers. Doshi’s approach seemed to explore how architectural stories could have a pliable equivocation so as to create not a passive listener but an active contributor to the story.

The tectonic stories of Sangath brought forth the various active contributors to the story, the craftsmen making the mosaic, the employee taking visitors around, the visitor immersed in the experience, along with the architect orchestrating these contributions, such that tectonic stories appeared with potency of suggestiveness, memories, and imaginative consciousness percolating the materiality and structure of the built work. This is the nature

on the concept of “main” and “supporting structures” in the design process; Christopher Alexander and Balkrishna Doshi, “Main Structure Concept,” *Landscape*, 13, 2 (1964): 17–20. Parts of this paragraph published by author in *Architectural Storytelling- A Subjunctive Mode of Architectural Conceptualization and Experience in the works of Balkrishna Doshi*, in *Architecture and Culture*, AHRA Journal, Taylor and Francis Online, Volume 6, Issue 2, on December 11, 2018.

²⁷⁸ Ibid. Parts of this paragraph published by author in *Architectural Storytelling- A Subjunctive Mode of Architectural Conceptualization and Experience in the works of Balkrishna Doshi*, in *Architecture and Culture*, AHRA Journal, Taylor and Francis Online, Volume 6, Issue 2, on December 11, 2018.

²⁷⁹ Alberto Pérez-Gómez, *Attunement: Architectural Meaning after the Crisis of Modern Science* (Cambridge, Massachusetts, London, England: MIT Press, 2016), 127.

of what I call tectonic stories—the appearance of stories that helped make buildings and later stories that emerged out of buildings through co-creating. The built work did not give form to the imagined world of the architect alone but combined several worlds together.

Such tectonic stories worked in several ways. They realigned attention creating an opportunity to notice details in the built work that otherwise remained in the background, but which brought in a poetic dimension with them. Tectonic stories also came into being in spaces and details that helped create a punctum in the routine of the everyday to create embodied experiences disconnecting from the materialistic and mundane world, while connecting to the transcendental—the natural, the divine, and the cosmic.

Typically, the word tectonics brings to mind a procedure of composition, detailing, materiality, and construction—the tangibility of materials and the details therein. It is an interaction with the physical and material realities on site, and concerns with the tangible facets of making, negotiations with artisans, craftsmen, and builders, the constraints and freedom resulting from location and availability, and the perception of the built. Tectonic stories made visible the mental images and activities that lay behind the tectonics, so that one did not see them as walls, windows, doors, foundation, or ceiling or through dubious lenses that commercialized architecture but in ways that helped “constructively dream” of and in architecture.

Instead of describing the “architectural promenade” at Sangath from the entry to the site to the entry to the building situated on the rear end of the site, Doshi described how he could narrate the intent behind that to any visitors through a story. He would tell them that

an angry client who had come to meet him, came in looking for the entrance, and got lost in the garden. Doshi had to go out and direct him into the studio. After the client drank the tea that Doshi offered to him, he forgot about his complaints and returned home happy with the experience.²⁸⁰ The description of the “magical hidden windows,” at Sangath which also featured iconically in other projects of Doshi, did not remain a meticulous description of this strategic device to get diffused light into the studio while cutting out the heat, but became an object that raised curiosity being a “magical” window. The tectonics that catered to the senses were redefined and raised to a level where an “imaginative perception” accompanied the sensorial one.²⁸¹ It brought forth how buildings could cater to the functional aspects while also giving a break from the functions that one performed within so that one could rejuvenate and connect to imaginal realms.

These stories led to a construing of architecture through constructive images, combining the sensorial and the associational perception to guide the conceptualization and the consciousness of architecture.²⁸² Tectonic imagination, dealing with the tangible and

²⁸⁰ Author’s recorded interview with Doshi, September 25, 2015, Sangath, Ahmedabad, India. Sponsored by the Mitacs Globalink Research Award, September-December 2015, Grant number: IT05730.

²⁸¹ Marco Frascari writes, “The eminent Islamic scholar Henry Corbin (1983:57) defines the mundus imaginalis as an intermondo, a space where visual imagination establishes true and real thoughts: imaginative perceptions and imaginative knowledge, that is an imaginative consciousness. This is the realm of the constructive imagination not to be confounded with the realm of the imaginary, the fanciful imaginativeness. The world is ontologically above the world of the senses, and below the pure intelligible world,” Frascari, “Tectonics in Theory, Three Aspects of Tectonic Imagination,” 3.

²⁸² Ibid.

the material aspects of construction, is described by Lisa Landrum, architectural theorist and academician at University of Manitoba, who brings forth the “concreteness” or tectonics as the cause of the participative pleasure that accompanies it. She writes,

“Such technical concreteness needn’t imply any loss of evocative power and depth. As Alain Robbe-Grillet once explained (commenting on “the absolute reality of the things” in fictional stories of Kafka), “The hallucinatory effect derives from their extraordinary clarity and not from mystery or mist. Nothing is more fantastic, ultimately, than precision.” Thus, it remains a challenge to build suggestiveness through concreteness, to devise well-made works fostering qualitative participation with a world in formation. Archi-tectonic imagination pursues internal tectonic resolution as well as openness and connection to the world. This is a kind of indefiniteness or receptive ambivalence that fosters cultural involvement.”²⁸³

Landrum emphasizes on the coupling of the meticulous resolution that characterizes the tectonic process with an open-endedness that invites the imaginative involvement of the inhabitant. The tangible reality in the tectonics achieved more depth by the vivid imagination through mental images orchestrated by Doshi’s stories. The real became more real and more known, even more rational, as its perception went beyond its retinal appearance, to the perception of its making and to the associations it afforded. Tectonic stories were characterized by conversations about the tectonic resolution, materiality, and their sensorial perceptions while concurrently adding imaginative and mental images to the perception of the built. The tectonic stories helped move away from a definitive, single

²⁸³ Lisa Landrum, “Varieties of Architectural Imagination,” *Warehouse Journal* 25 (an annual student-edited publication of the Faculty of Architecture), Alena Rieger and Ally Pereira-Edwards ed., (Winnipeg: University of Manitoba, 2016), 78.

image that gave architecture a geometrical identity to kaleidoscopic mental images that celebrated the subtler meanings associated with the built that engendered the emotional-rational aspects of architectural experience. Tectonic stories involved readers in refiguring their own tangible story as well in imaginatively inhabiting spaces.

(ii) *The “Nothingness” celebrated in Indian Art and Architecture*

Doshi’s tectonic stories often derived inspiration from traditional Indian architecture and cultural philosophy. Doshi’s description of his visit to the 12-13th century, Meenakshi Temple, Madurai, India revealed the indelible impression it left on him. Doshi described how the visitor in the temple was engaged from the entrance to the innermost sanctum (*garbhagriha* in Sanskrit). *Grabha-griha* translated as womb-chamber in English, was the innermost and dark space where the revered deity’s idol resided and where a new realization or experience was born. One had to transition through various spaces and make a journey to finally get to the *garbhagriha*. The spaces in between were the ones that engaged the inhabitant by the depiction of various mythological stories in the form of sculptures and embellishments on the walls and columns. The whole journey was like a prelude to the final destination of the idol of the deity in the *Garbhagriha*—exalting the experience of the climax by the story on the way. Upon arrival in the *garbhagriha*, enclosures increased, plinths rose, the space was “squeezed,” and darkness enveloped

rendering one acutely aware of sounds and smells.²⁸⁴ Doshi noted that in the temple, sound was coupled with darkness, while in the church silence collaborated with light via the immense heights. In the temple one went in the womb of the earth whereas in the Church into the sky—in both a withdrawal from the corporeal to the immeasurable.²⁸⁵

“I could understand the purpose of layers that surrounded me. It was universal energy seeping through the dynamic relationship among solids and voids, built and unbuilt. After praying at the image of Goddess Meenakshi in the inner sanctum when I came out in the open, I felt like there was nothing there except what I had experienced,” describes Doshi.²⁸⁶

The idea of this “nothingness” pointed to an architecture that was absent as a geometrical entity but present as a facilitator of an experience. The experience of architecture as something derived from its tangible and yet connected to a symbolic and experiential element as seen in Doshi’s experience of Meenakshi Temple was echoed in his article “The Nature of Architecture.” Doshi used two terms that articulated the two facets that defined the nature of architecture—*sthula* (gross) and *sukshma* (subtle). He writes:

“the gross (*Sthula*) is the physical, the sensual, the touchable, the edible. But the subtle, (*Sukshma*) can only be understood through feelings, because it is hidden

²⁸⁴ Balkrishna Doshi, Muktirajsinhji Chauhan and Yatin Pandya, *The Acrobat, the Yogi and the Sangathi* (Ahmedabad: Vastu-Shilpa Foundation for Studies and Research in Environmental Design, 2006), 26.

²⁸⁵ Ibid.

²⁸⁶ Doshi, *Paths Uncharted*, 282.

between the layers or between the particles that bind the stones or the bricks together.”²⁸⁷

Doshi described the act of peeling an onion, a perhaps non-evident connection but at the same time apt in describing the nature of architecture for him. The layers that the onion was made of when peeled revealed nothing inside. It was the layering that gave the onion its form. For Doshi architectural spirit was akin to this—one that layered a tangible reality with various opportunities of connecting with the emotional. Understanding and implementing this seems fundamental yet difficult in architectural creation. It is easier to think of how and where the walls, windows, ceiling, and roof exist and what their nature are as opposed to how these could evoke the imagination.

The “nothingness” in architecture stood in stark opposition to the idea that was discussed in the previous chapter describing Villa Chimambhai—of an object-like architecture to be viewed as a spectacle from all sides. The “nothingness” refocused attention on the experiential aspect where the tangible and tectonic did not vanish but had an enhanced perception beyond its visual and aesthetic qualities. By not being the focus, the visual image receded into “nothingness.” For example, in the Meenakshi Temple, the spaces enroute to the *Garbhagriha* had on their columns, embellishments that told mythological stories, which were at a scale and height at which the human viewers could

²⁸⁷ Doshi, “The Nature of Architecture,” Melotto, Bruno ed., *Sangath-Indian Architecture between Tradition and Modernity*, 31.

be engaged.²⁸⁸ These techniques involved the viewer in an imaginative recollection or a fabrication of mental images that were triggered by the built forms. It was the built forms that they engaged with, but the engagement went beyond their material existence to other aspects creating imaginal or associational experiences. The shift of emphasis from visually looking at architectural forms to getting immersed and experiencing it, marked the moment of the ‘pause.’ In this way a new imaginal world emerged within the constructed world, a world within a world.

Doshi directs attention to the 15th century Sarkhej Roza, an Islamic complex, 7 kms south west of Ahmedabad, which was a combination of a summer palace, mosque, and tombs built along a water tank, with Persian, Hindu, and Jain influences.²⁸⁹ On my visit to the complex on a Thursday evening in October of 2015, the central court was filled with local people and visitors as *Kawalli*, a form of musical performance was being played by local artists. The complex had become alive with the sound of music which reverberated in different parts of the complex. I learnt that the musical performance was a custom every Thursday evening.

The complex had a main gated entrance, with different kinds of buildings interconnected by open or cloistered courtyards. There were three kinds of buildings there—the religious (mosque and mausoleum), the public (the pavilions, steps, and courtyards

²⁸⁸ Doshi, *Paths Uncharted*, 278.

²⁸⁹ Sarkhej Roza, Ahmedabad, https://www.sarkhejroza.org/historical_importance.html, accessed June 20, 2020.

—initially meant for the royal members) and the royal (palaces).²⁹⁰ The accompanying water tank was not centrally located. It formed a later addition and was flanked on one of its sides by the previously built tombs and mosques. The other three sides were primarily the series of steps or *ghats* that led down to the water and summer pavilions for the royalty. Architect and writer, Yatin Pandya, in his book titled “Concepts of Space in Traditional Indian Architecture” published by Doshi’s Vastu Shilpa Foundation, described the transitional spaces in the complex and how they linked these worlds of the public, religious, and the royal. He described them as “worlds within the world,” each with an identity but also in complete harmony with each other.²⁹¹ My own perception of the complex did acknowledge the relationship within these three worlds but also noted that the complex was significantly cut off from the neighboring surroundings. It was indeed a whole world segregated from the surrounding world, with the three worlds of the religious, royal, and public inside—worlds within a world within the world.

²⁹⁰ Yatin Pandya, *Concepts of Space in Traditional Indian Architecture* (Ahmedabad: Vastu-Shilpa Foundation for Studies and Research in Environmental Design, Mapin Publishing, 2005), 122.

²⁹¹ *Ibid*, 14.



Figure 62: Open to sky Courtyard, Sarkhej Roza complex, 1458, Ahmedabad. © Pallavi Swaranjali, 2015.



Figure 63: Sarkhej Roza complex, 1458, Ahmedabad. © Pallavi Swaranjali, 2015.

Upon perusal, it appeared that in the complex the detachment from the surroundings happened due to various factors. One of the factors was that entrance doorways led to the open transitional courtyard first, which further led to the entrance to the individual buildings in the complex. The idea of entering into a common and central courtyard which was open to the sky, presented and emphasized the buildings surrounding the centre. The experience of being enveloped by the buildings of the complex was strongly created upon entry. Thereafter, sight and movement were directed to the sub-centres in the complex in the form of transitional spaces like cloistered courtyards or colonnaded halls within the three realms. Finally, one's attention went to the periphery of the complex into the constituent buildings.

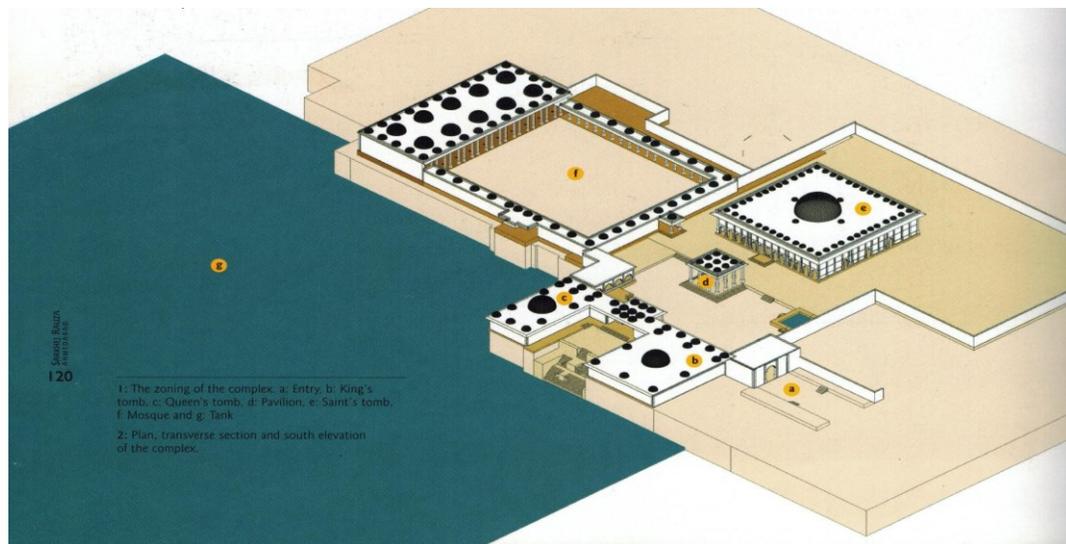


Figure 64: Sarkhej Roza complex, 1458, Ahmedabad PC: Pallavi Swaranjali, 2015, Sketches from Yatin Pandya's *Concepts and Space in Traditional Indian Architecture*, 120.²⁹² © Vastu Shilpa Foundation, India, used with permission, not to be reused without the copyright owner's permission.

As Pandya pointed out, there were axes that connected the courtyards and the surrounding buildings of the complex. Definitely, these sightlines connected and monitored the movement of the sight and the body in the royal, public, and religious realms. I further felt that the configuration of the complex restricted sight and did not let it connect to portions beyond the complex. It was predominantly due to the size of the complex but also due to the arrangement of its parts, such that the skyscrapers visible in the far background, evaded perception and faded away. Most often, the sight was guided within the complex. On looking out of the mosque one could look into the water tank which was flanked on the other side by the summer pavilions, or from the windows of the tombs one could see the mosque or water tank. When looking out of the enclosed and overhanging balconies or *jharokhas*, on the south wall flanking the mosque and courtyard, one was physically surrounded by the *jharokha*, looking through which the tombs on the left were visible. In this way sight remained within the complex. These three worlds of the public, the royal, and the religious were accentuated further by closing off the sightlines to parts that did not seem relevant and outside to the world of the complex. This oriented the body to the parts of the complex and on a horizontal level looking out appeared to be looking within the complex.

²⁹² Ibid, 120.

The surreal world within the complex, distanced from the everyday mundane world around, celebrated the penetration of the core of the complex with the cosmic elements—the sun, the prevailing wind, the night sky, rain, birds, and trees through the vertical axes emphasized through the open to sky courtyards. The vertical axis manifested itself strongly due to the limited horizontal sightline that kept bringing the sight back within the complex. The water tank flanking the complex played an important role in rainwater harvesting while manipulating the microclimate of the building. In being closed in certain directions the complex also avoided heat gain in the summers.²⁹³ The arrangement of the parts of the complex beautifully merged the climate control techniques with the manipulation of sight and movement to become a world separated from the surroundings with further “world within this world” in the form of the royal, religious, and public buildings. The tectonics of the complex immediately led to an experience of the cosmic forces while conjuring mental images of the history of the religious and royal life that once existed within.

For Doshi, this complex was one which was dynamic—changing as the seasons changed, or when festivities happened, and large crowds came in. Doshi identified that this became possible as the complex had “in-between” places which helped “recover our sensibilities.”²⁹⁴ Doshi writes about such in-between spaces,

“In architecture, this gap or pause is the unassigned loosely superimposed space, the corner or corridor or irregular courtyard accidentally discovered. In these spaces

²⁹³ Ibid, 124.

²⁹⁴ Doshi, Give time a break, Melotto, Bruno ed., *Sangath-Indian Architecture between Tradition and Modernity*, 93.

use is undefined and choice is unlimited. The spaces may not have tangible, measurable, or material value, but they have a permanent experiential and immeasurable value because they contain the possibility of spontaneity.”²⁹⁵

The “pause” at Sarkhej Roza prohibited looking at the distance upon an outside world, refocusing the emphasis on experiencing the connections to the activities and moods within the complex and connections to the natural and the cosmic in its connection to the sky and the surrounding water and landscape. The “in-between spaces” without functional definitions helped each participant create an experiential world within the physical world. It was not that these “in-between spaces” did not have a function, but these were not controlling mechanisms that demanded a particular way to be in the world. It led one to be connected to the sky, to feel the fresh air, the water, fellow beings around, and rejoice in simple and oft forgotten elements in the built material world. These spaces allowed one to wander in or wonder off/dream in the world of one’s choice.

Pandya explained how the Indian concept of existence was characterised at two levels: namely the *Atman* and the *Brahman*. *Atman*, is “the infinitesimal building block of the human spirit,” and *Brahman*, the “overall schema of the universe.”²⁹⁶ Indian spirituality often revealed the reciprocity between the two—the *atman* existing in the *brahman* and the *brahman* dwelling in each *atman*. This was depicted in various Indian art forms, rituals and food, where the inter-relationship of the parts and the whole was both ways—“the part

²⁹⁵ Ibid.

²⁹⁶ Pandya, *Concepts of Space in Traditional Indian Architecture*, 14.

as a whole and the whole as a part.”²⁹⁷ The two—the part and the whole were seen as mutually existing, one within the other—as a “world within a world.”²⁹⁸ Pandya gave the example of a miniature style painting titled the *Ras-lila* to illustrate the concept. In this mythological dance, the Hindu God Krishna is seen surrounded by *Gopis*, Krishna’s female devotees. Although multiple *gopis* exist, each *gopi* pictures themselves in unison with Krishna- in their own “world within the world.”

The painting is structured such that all the *gopis* are in a circle surrounding Krishna and his beloved Radha in the center. Each *gopi* is shown paired with their own Krishna in the painting. The multiple appearance of Krishna with each *gopi* shows the fantastical construct each *gopi* conjures of themselves immersed in Krishna’s love. Hence it is called *ras-lila* or the “Dance of Divine love,” or the “Dance of Delight,” a dance form in adoration of Lord Krishna, wherein each *Gopi* or devotee of the Lord is mesmerised and illusional, dreaming that they are the one dancing with Krishna, oblivious to the rest of the world but still part of it.²⁹⁹ The concentric circles in the painting diagrammatically signify the worlds. The creation of such a mental image by each *gopi* in unison with her own Krishna denoted that this world within the world was a mental construct within the existing tangible reality of the world.

²⁹⁷ Ibid.

²⁹⁸ Ibid.

²⁹⁹ Ibid.



Figure 65: Krishna's Dance of Delight (Rasa Lila), "Los Angeles County Museum of Art, Public domain, via Wikimedia Commons."³⁰⁰

³⁰⁰ "Los Angeles County Museum of Art, Public domain, via Wikimedia Commons. This file is in the public domain because it has been released by the Los Angeles County Museum of Art www.lacma.org with its "Public Domain High Resolution Image

The concept of a world within a world had been a constant in the Indian sensibility. The Indian Pahari miniature painting titled Krishna Reaching for the Moon, (c. 1820 India, Guler school),³⁰¹ showed Yasoda, Hindu God Krishna's foster mother preparing to bathe Krishna, who is gesturing toward and asking for the moon. Yasoda points toward the reflection of the moon in the water, while the child Krishna gazes and points towards the sky.³⁰² All mortals in the painting look towards the earth, while the divine Krishna looks up at the moon in the sky. The reflection of the moon in the water signifies the moon brought down symbolically on earth. The reflection is of another world in the materiality of the present world. Again, a world within a world.

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³⁰¹ Krishna reaching for the Moon, .c. 1820, India, Pahari Hills, Guler school, 19th century, Ink and color on paper, Image: 24 x 16 cm (9 7/16 x 6 5/16 in.); Overall: 26.5 x 18.7 cm (10 7/16 x 7 3/8 in.), Andrew R. and Martha Holden Jennings Fund 1971.80. <https://www.clevelandart.org/art/1971.80>, Accessed August 18, 2020.

³⁰² Linda York Leach. The Cleveland Museum of Art Catalogue of Oriental Art. Cleveland (OH: Cleveland Museum of Art in Cooperation with Indiana University Press, 1986), 288.

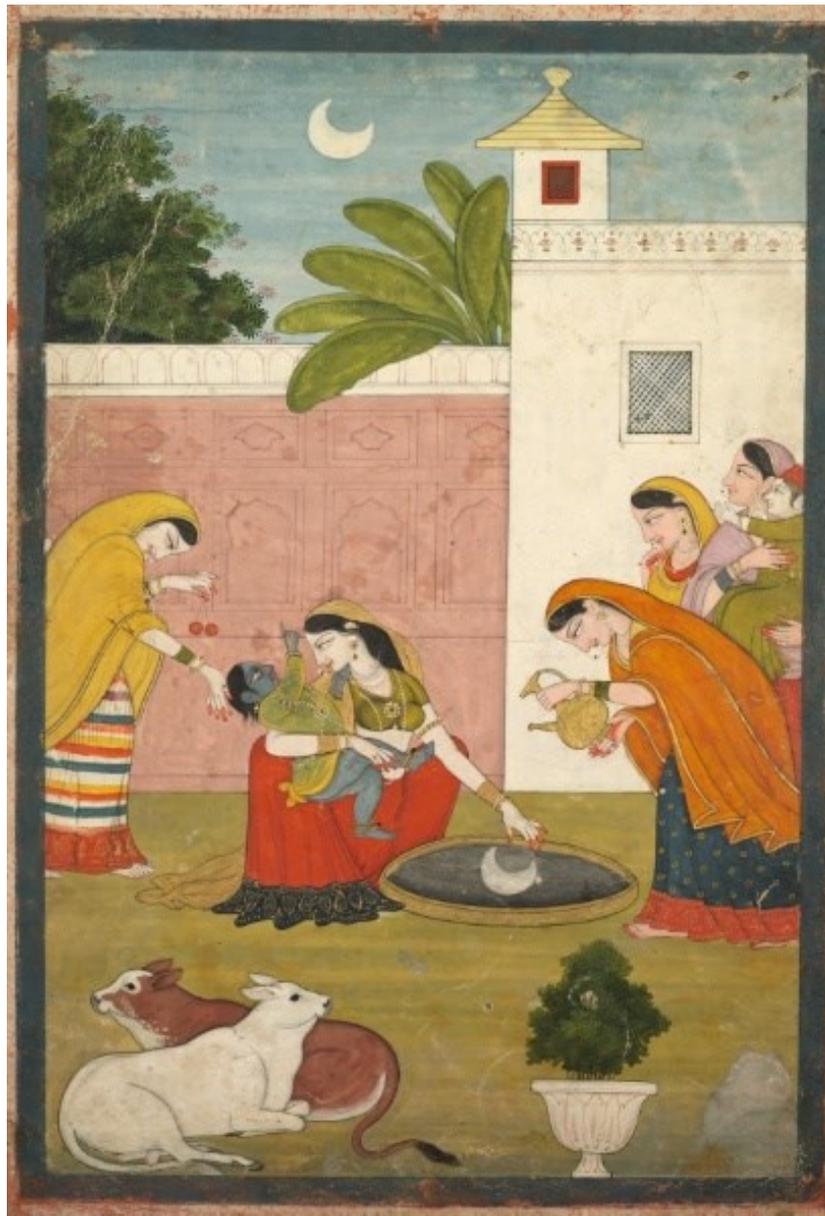


Figure 66: Krishna reaching for the Moon, .c. 1820, India, Pahari Hills, Guler school, 19th century, Ink and color on paper, Image: 24 x 16 cm (9 7/16 x 6 5/16 in.); Overall: 26.5 x 18.7 cm (10 7/16 x 7 3/8 in.), Andrew R. and Martha Holden Jennings Fund 1971.80, The Cleveland Museum of Art, Public Domain.³⁰³

³⁰³ The Cleveland Museum of Art. *Handbook of the Cleveland Museum of Art/1978*. Cleveland, OH: The Cleveland Museum of Art, 1978. Reproduced: 310 archive.org, {{cite

Like these art pieces, the traditional architecture of the Meenakshi temple or the Sarkhej Roza, made associations with the mythological, historical, and the cosmic and created tectonic stories that while garnering attention to the “perception” of the building as a world in itself also provided inspiration to be involved in a world of “dreaming” through the creation of mental images via the bodily engagement with the built.³⁰⁴ The “nothingness” described appeared not a lack but an abundance of experience that centered itself in the participant deriving yet distanced from the sensorial effects of the material architectural elements. The “nothingness” was the ability of architecture to not force itself as an object on display but invoke a sense of being through the dreaming.

As we saw in the previous chapter the Villa presented itself as an object on display, where the importance and grandeur of the space was prime. The aim was to have the inhabitant in awe watching the spectacle, as an object separate from self. Contrary to this, the “nothingness” of the building transferred the experience to *within* the inhabitant. The

web|title=Krishna Reaching for the Moon|url=https://clevelandart.org/art/1971.80|year=c. 1820|access-date=04 November 2020|publisher=Cleveland Museum of Art}
 India, Pahari Hills, Guler school, 19th century, Ink and color on paper, Image: 24 x 16 cm (9 7/16 x 6 5/16 in.); Overall: 26.5 x 18.7 cm (10 7/16 x 7 3/8 in.), Andrew R. and Martha Holden Jennings Fund 1971.80. Pc and ©The Cleveland Museum of Art, Public Domain. Creative Commons Zero (CC0).

³⁰⁴ Jodi La Coe citing Henri Bergson’s lecture entitled *The Dream*, Henri Bergson, *The World of Dreams*, translated by Wade Baskin (New York: Philosophical Library, [1901]1958), 44-51, writes Bergson’s description between the waking state and dream, “In the relaxed state of the dreamer, these mnemonic associations are loosened, allowing for multiple and varied meaning that would otherwise fall away in the mental vigilance of a walking state.” Jodi La Coe, “Dreaming the Fourth Dimension,” in Paul Emmons, Federica Goffi, Jodi La Coe ed., *Ceilings and Dreams, The Architecture of Levity* (London, NY: Routledge, 2019), 177.

built world had to be engaged with and perused and yet the inhabitant moved beyond its material reality to more symbolic and spiritual ones for finding and divulging meaning and associations. The Meenakshi temple and the Sarkhej Roza were grand in size, but the spaces were meant to invite the human inhabitant to experience the built space by engagement through such strategies as the connection to the cosmic, mythological, and the immeasurable, going beyond merely the senses to include the oneiric. The building immersed the inhabitant, but subsequently the building existed in the inhabitants' mental construct of it, transcending spatial and temporal frameworks to move from knowing to feeling, perceiving to dreaming, and from the real to the imaginal.

(iii) *The 'Pause'*

Doshi's study of the traditional Indian architecture ushered for him the concept of "pause, the gap, the unassigned space [...]."³⁰⁵

"These [ambiguous plural in between] spaces activate human psyche and induce it to gravitate towards the centre; the mythical world of man's primordial being. Time and space are then internalized and a deep-rooted personal identity with the built form is established.... These experiences are then passed onto the next generation as cultural heritage."³⁰⁶

In his academic and cultural complexes and the townships that he has experimented and designed, Doshi celebrated the use of elements whose function was,

³⁰⁵ Doshi, "Give Time a Break," Melotto ed., *Sangath-Indian Architecture between Tradition and Modernity*, 93.

³⁰⁶ Doshi, *Paths Uncharted*, 315.

“to break the circle of time, to allow opportunity to pause, meander, just go astray. Because time can stop. And when time is still, we can discover the joys of getting lost in space, in time, or in place.”³⁰⁷

In the Indian Institute of Management in Bangalore, Doshi’s aim was to create an invisible architecture. The various passages along the spine of the Institute displayed modulation of light and shade, and the play of scales in the in-between landscaped spaces covered by pergolas.³⁰⁸ These in between spaces encouraged the academicians and learners to absorb, interact, and realize their existence in the space. The “pause” was not the leftover space. It was carefully designed and strategic for Doshi.

The various ideas discussed so far—nothingness, in-between space, and world within the world, had one thing in common. All created a reorientation—a moment of a ‘pause’ and contemplation so one could break away from the forcefully present material world to enter into the world of dreams freed from nomenclature, categorization, definition, classification, philosophical and theoretical investigation, and objectification. These spaces of the “pause” were programmatically undefined, but powerful nonetheless much like Mullah’s triggers. The inhabitant was forced to break away from a neutral execution of defined activities within the built space, instead realizing strongly a connection between the body, the built, and the immeasurable experiences, leading them to be embedded in the mind as stories to be told and retold. In such spaces, the passive terms like user or inhabitant

³⁰⁷ Doshi, *Give Time a Break*, 13.

³⁰⁸ *Ibid*, 14.

became incapable of encapsulating the roles of the percipient-dreamer, who now became a co-creator.

I argue that the spatial quality of the “pause” that Doshi identified in his in-between space, could be extended further to include its temporal, conceptual, and associational nature that affected various stages of the architectural activity. The “pause” could assume the form of a noun when Doshi talked of the “pause” as the “in-between, unassigned” space, while in numerous instances the ‘pause’ was a verb, as when Doshi ‘paused’ to prolong the project so to allow the gathering of ideas pregnant with contextually relevant factors. The ‘pause’ became a confounding rendezvous with temporality when Doshi juxtaposed different times and places in a single project or mixed the real and the imaginary, obscuring conventional and physical contexts and presenting novel and imaginary ones. The ‘pause’ gave the triggers to experience the tectonic stories, taking the form of a conceptual space of imagination, where a reorientation and provocation to disconnect from the ordinary or conditioned ways of thinking resulted when engaging with the *sthula*, resulting in invoking the *sukshma*. The ‘pause’ had the properties of the conundrum in Mullah’s story where to contemplate it one had to enter in and get lost first.

Subversions, inversions, and obversions were characteristic of Doshi’s approach and dominantly present in Sangath, where the ‘pause’ was evocative of the temporal suspension of the tangible world at hand to create a new world expanding the current world of perception. This new world within the world was devoid of external projected meaning. Instead through the deceleration of the speed and rush of everyday life the ‘pause’

inculcated a mindfulness of one's self and priorities.

In creating buildings that catered to traditional and local sensibilities, Doshi negated a formal manipulation. He concocted an associational 'pause,' that evoked albeit invisibly, the previous inherent experience in traditional buildings into a fresh interpretation without resorting to a muted formal replication of a past reality. The way Doshi retold these stories, helped to see the existing world afresh, with new eyes sans formal images. The 'pause' became a trope of his storytelling, where the climactic moment was reached at the moment of reorientation, when one realized that the moment of "nothingness" was the moment of joyful discovery. With this background, the next section is the reading of a project that Doshi considered his most mature work—Sangath, his studio in Ahmedabad.³⁰⁹

(iv) Pausing at Sangath

A study of Sangath through a measured drawing and a residency in 2015, presented an opportunity to understand the idea of the 'pause' in Sangath. Not only did the 'pause' present itself to the author in the spatio-temporal and associational forms but also the interaction with Doshi presented 'pause' in the conceptual form. The study of Sangath strongly reconnoitered the understanding of the inside and outside with respect to the horizontal and vertical axes.

The 'pause' in Sangath demonstrated Doshi's unique play with opposing qualities. Architectural thinking often coins opposing features, which are the two sides of the same

³⁰⁹ Doshi, *Paths Uncharted*, 166.

coin, for e.g. inside-outside, ceiling-floor, back-front, above-below, up-down, and left-right. It appeared that Doshi in the effort to create Sangath as a space that defied categorization,³¹⁰ used strategies of inversion, obversion, and subversion to creatively manipulate, not pairs but sets of opposites. In Sangath's case the set of opposites were inside-outside and the up-down. Much like Mullah, Doshi reimagined these typical attributes in architecture in unconventional and involute ways.

Doshi's imagination derived from several traditional elements like terraces, underground structures like stepwells or *vavs*, courtyards, and contemporary examples. Doshi's re-articulation of these prohibited them to be formal duplication of the precedents. This reimagination at Sangath, which drew from various precedents, seems to have been guided by the body's relation to the cosmic forces—the sun, moon, sky, earth, flora, fauna while in an architectural setting, such that it extricated from the normal routine and perception and brought one to the 'pause.' The inhabitants were reoriented and rejuvenated after this 'pause' in the routine of everyday life. Doshi was determined to create Sangath such that it was:

“no[t] a house, nor a home nor an office nor a studio but just a place, a space; splendidous, yet conversing in quiet tones. A bag full of small anecdotes woven in an unending story as if ongoing.”³¹¹

³¹⁰ Doshi, *Paths Uncharted*, 213.

³¹¹ *Ibid*, 213.

In a search for a “nothingness” or the lack of categorization in the form of architectural types, Doshi’s creations have come to be seen as based on “no style, no period, pure experience.”³¹² Sangath acted as a container not only to the activities of Doshi’s office but festivities and marriages of his family members, various workshops, lectures, and celebrations all of which seem to have found a place in Sangath. These various possibilities derived from the spatial “pauses” at Sangath and its negation of the need for categorization as a particular typology of space. Doshi’s *modus operandi* revolved around how spaces could be so defined that they brought happiness to people, both individually and culturally. Rather than emphasizing the geometric properties, Doshi valued articulation of lived and experiential qualities in conversations during the conceptualization process.

During my residency at Sangath, Doshi was designing the Health Centre within the larger project of Nalanda University Campus (2018), Rajgir led by Rajeev Kathpalia. Doshi had asked me to sit in on a meeting with the employees who were working on the project. Doshi was in the initial stages of the project. At this time, I had read his fictional stories and I decided to try and write a story as his for the project at hand. When I told him that I had written the story, he called the employee to his office where I read out the story I had written. He perhaps wanted the team to be part of this storytelling so that all could “dream” collectively.

³¹² Chhaya ed., *Harnessing the Intangible*, Timeline, “If you are in tune with your project and the purpose for which it is being built then you drop your ego and ask yourself what it really is that you must do. Then the building emerges. No style, no period, pure experience.” BVD, 2005.

My story described how the ancient University of Nalanda was in ruins due to the curse the Gods had inflicted on the dishonest community. Buried in the ruins, however lay the ancient secrets of the *sthapatis* or architects who had scripted and buried the directives for re-building the university for the future generation of architects so that the community could prosper with good health and wealth. An ethical *sthapati* or architect of earnest would dream of the way to unlock the location of the scriptures. Once the excavation to reach the buried scriptures would start it would find the place where to dig the foundation for the future building. The building would then be built as per the guidelines from the unearthed scriptures so that health and happiness would return. Thus, went the story.

The story had details of ways in which the building would contribute to health and wealth of the community. It suggested a mathematical logic to determine the heights of spaces in the complex. Upon hearing the story, Doshi at once set out to sketch (Figure 67). He said he knew what this building wanted to be. He handed the rough sketch to the employees, telling them that the Health Center would not be a place where one came if one was unwell, but by coming to the place one would feel a wellbeing due to its connection to nature.³¹³ Doshi further expressed that my story was provocative but as soon as I started defining the mathematical logic that governed the height of the spaces, I had slid into

³¹³ Author's recorded interaction with Doshi, September 29, 2015, Sangath, Ahmedabad, India. Sponsored by the Mitacs Globalink Research Award, September-December 2015, Grant number: IT05730.

Doshi ultimately did not finish this project due to other engagements (as told by partner and granddaughter Khushnu Hoof who designed it later), July 3, 2020.

what architects usually do—think geometrically. Doshi, instead encouraged thinking of the experiential and intangible aspects that the heights of the spaces would invoke.³¹⁴

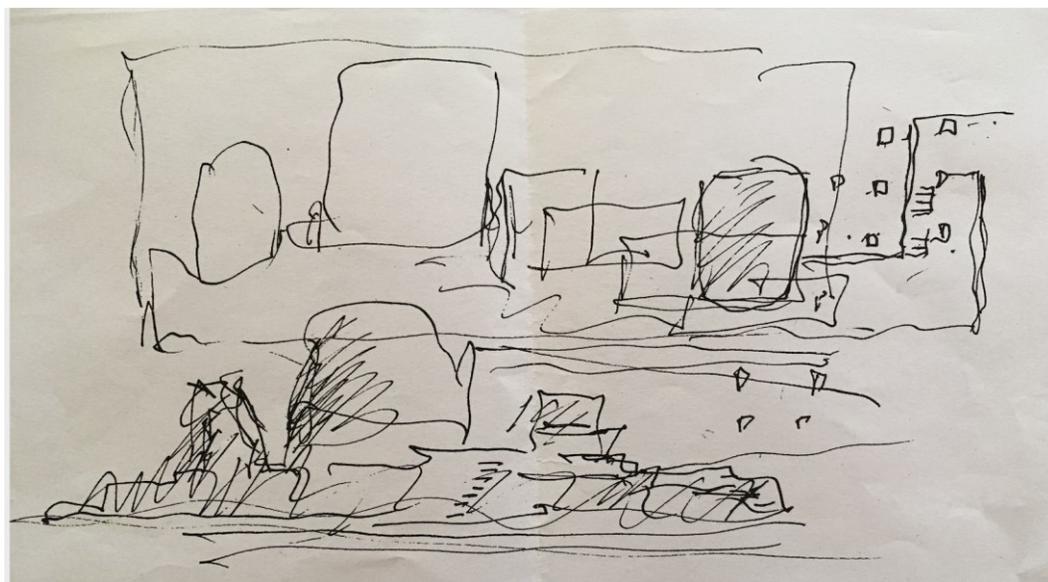


Figure 67: Sketch in pen on 8.5" X 11" paper, done by Doshi after I finished reading my story, September, 29, 2015,³¹⁵ PC: Pallavi Swaranjali, © Vastushilpa Foundation, India, used with permission, not to be reused without the copyright owner's permission.

Doshi bemoaned the contemporary condition where “the relationship of man to built form [had] become transitory,”³¹⁶ resulting in structured and efficient spaces that felt isotropic, banal, and mechanized as they seemed to cater to the effective performance of a

³¹⁴ Author's recorded interview with Doshi, September 29, 2015, Sangath, Ahmedabad, India. Sponsored by the Mitacs Globalink Research Award, September-December 2015, Grant number: IT05730.

³¹⁵ Author's own recorded interaction with Doshi, this is the sketch he drew after the story was narrated, September, 29, 2015.

³¹⁶ Balkrishna Doshi, *Give Time a Break*, 12.

standardised human body. According to Doshi, mechanized contemporary spaces do not trigger a “sense of being alive.”³¹⁷ In such spaces, he noted, one had to find ways to “compel inhabitants to notice the changes in the seasons, the phases of the moon and their link to the rise and flow of tides, or the rising and setting of the sun.”³¹⁸

At Sangath, the tectonic resolution of the ceiling served the purpose of offering a ‘pause’ by inviting people to look up towards the sky from below the ground level, creating a disconnect from the routine of everyday life, as will be explained further in this section. Deriving from the study of the traditional Indian built and art forms, Doshi’s own work aimed to connect to the “primordial timeless self” by obliterating the “traces of a linear stressful life by registering the changing nuances of shadows and rhythms in space, the quality of light, color, texture, the sound of falling rain, or the smell of flowers.”³¹⁹

The study of Sangath probed the ways in which Doshi’s architectural creation operated in and out of the indicative and subjunctive modes to achieve such a sentience. In English grammar, the subjunctive mode of the verb is used to form sentences that do not describe known objective facts, rather describing something that is hoped for, hypothetical, or

³¹⁷ Amy Fearson, “India’s young architects must be taught to appreciate their design heritage,” says Balkrishna Doshi, July 12, 2017, <https://www.dezeen.com/2017/07/12/balkrishna-doshi-interview-india-architects-must-appreciate-architecture-design-heritage/>, July 12, 2017), accessed February 20, 2018.

³¹⁸ Doshi, *Give Time a Break*, 11–12. Parts of this paragraph were presented at Frascari Symposium iii and published as a book chapter titled “The Architect Inside-Out” in Paul Emmons, Federica Goffi, Jodi La Coe ed., *Ceilings and Dreams, The Architecture of Levity* (London, NY: Routledge, 2019), 222-233.

³¹⁹ *Ibid*, 13.

suggested as opposed to the indicative mode which makes factual statements.³²⁰ Doshi's creation invited consideration of unlikely events and possibilities, myths and fiction, the bygone, unreal, and non-prescribed ways of looking at the world. The 'pause' manifests in various forms in his architectural creations, in Sangath, among other elements, strongly through the ceiling.

Sangath was an attempt to create a place where one could "take the time to watch the world around, the trees, the plants, the pebbles, the lotus, a bird, or us."³²¹ An examination of Sangath suggests that Doshi created the 'pause' by resorting to inversions (interchanging horizontal to vertical axes), subversions (mimicking fifteenth— to eighteenth—century miniatures in his representations) and obversions (playing with opposites like front/back, present/absent). At Sangath, the espousal of the subjunctive mode—of the unexpected and reimagined—brought forth a complement to the normative, formal, and technological dictates for architectural creation and experience. Doshi remarked that he often found himself in an in-between state of dream and wakefulness where the past and the present, his experiences in the ancient Indian temples, even his encounters with Le Corbusier or Louis Kahn, all seemed to flash in front of his eyes at once.³²² Doshi writes,

³²⁰ "When to Use the Subjunctive," <https://en.oxforddictionaries.com/grammar/when-to-use-the-subjunctive>, accessed February 22, 2018.

³²¹ Doshi, *Paths Uncharted*, 288.

³²² Parts of this paragraph were presented at Frascari Symposium iii and published as a book chapter titled "The Architect Inside-Out" in Paul Emmons, Federica Goffi, Jodi La Coe ed., *Ceilings and Dreams, The Architecture of Levity* (London, NY: Routledge, 2019), 222-233.

“Sometimes I feel that I am not overtly conscious of matters around me. Occasionally I seem to blank out, and feel I am somewhere else. Strangely I think this has helped me often.”³²³

Doshi advocated that one should hallucinate to allow past experiences, memories, and fantasies to aid the architectural imagination.³²⁴ In psychoanalysis, hallucination is a “false perception” which the perceiver is not able to distinguish from a true perception.³²⁵ Doshi’s use of the term is not psychoanalytical. For Doshi, hallucinatory imagination meant a mental levitation characterized by the co-existence and inseparability of reality with a figment of the imagination, as if one is daydreaming leading to an enhanced perception of the world.

Doshi described how when he visited Ernesto Roger’s office in Milan, he was introduced to two other guests in the office, Brian Richards from London and another architect from the USA (Doshi did not remember his name). The three of them decided to tour the city together. Doshi reminds that at that time the world was not so connected and tourists were not present in as large numbers as we see today. Doshi described the unusual occurrence that happened while they were on their tour,

“As we moved around the city, at one point, the three of us happened to be in this magnificent but modest church appreciating its interiors. Suddenly four old women

³²³ Ibid, 223.

³²⁴ Author’s recorded interview with Doshi, September 29, 2015, Sangath, Ahmedabad, India. Sponsored by the Mitacs Globalink Research Award, September-December 2015, Grant number: IT05730.

³²⁵ James J. Gibson, On the Relation between Hallucination and Perception, *Leonardo*, Vol. 3, No. 4 (Oct., 1970), 425-427, The MIT Press, 425.

dressed in black came close to all three of us. First, one lady touched me, then the other touched Brian and the third one touched Louis and pulled at his thick, curly hair as if to check all of us were for real! Then they started to talk to one another excitedly pointing fingers at us now and then.

When eventually we did understand what all the excitement was about, it was a real surprise. Together we were an unusual bunch. Brian was a white man, the USA architect was an African American and me, a brown man from India. Somehow, in that church space we reminded those women of the Magi, three wise men, who appeared at the time of Christ's birth!"³²⁶

The encounter struck Doshi in the way in which associations and memories altered the perception of reality for the ladies. Doshi started to ponder what joined the real and the imaginary together.³²⁷ He realized that for architecture to have meaning and validity, it had to create new myths so that imaginal contexts could be established along with the understanding of physical contexts.³²⁸ For Doshi,

“The real world seen mythically does shape the creative world.”³²⁹

The hallucinatory imagination aimed for a tangible architecture with a mythical context. Sangath demonstrated and nurtured the ability of negotiating in-between the states of dream and wakefulness, bringing back to awareness the immeasurable through lucid embodied consciousness that had receded, so as to be able to be transposed to another world, while remaining in this world.

³²⁶ Doshi, *Paths Uncharted*, 86- 87.

³²⁷ *Ibid*, 89.

³²⁸ *Ibid*, 73.

³²⁹ *Ibid*, 233.

Sangath was constructed in Ahmedabad between 1978 and 1980. An ensemble of barrel-vaulted spaces, sheathed in china mosaic and arranged around a stepped amphitheater, Sangath invited the construction of various theories behind its origin. In his compendium on Doshi's creations, James Steele described that some posited Sangath as a positive manifestation of the negative vault found in the Maisons Jaoul by Le Corbusier. Others related it to *chaitya* (Buddhist prayer halls) or *stupa* (relic shrines) in the Karli caves, Lonavala, while some recall the Wissa Wassef Museum in Harraniya, Egypt, or the concrete vault of Louis Kahn's Kimbell Museum "translated into the earth."³³⁰

Doshi described the origin of the major design element, the barrel-vaulted roof, as a "happy accident." When Doshi started thinking of constructing on the site for Sangath, he had available curved and corrugated roofing sheets which a friend and building contractor offered to him. In these, Doshi's creative mind saw the striking possibility of the ceiling form, developing it into the ensemble of barrel-vaults in Sangath.³³¹ Sangath drew from Le Corbusier's studio in the entire wall at the front end of the studio as a blackboard and as well in its scale and proportions.³³² Doshi derived the pool at Sangath from his visit to Frank Lloyd Wright's studio in Taliesin West. Its horizontality, and the heavy base

³³⁰ Steele and Doshi, *The Complete Architecture of Balkrishna Doshi*, 87 and 90. Parts of this paragraph were presented at Frascari Symposium iii and published as a book chapter titled "The Architect Inside-Out" in Paul Emmons, Federica Goffi, Jodi La Coe ed., *Ceilings and Dreams, The Architecture of Levity* (London, NY: Routledge, 2019), 222-233.

³³¹ Ibid, 90.

³³² Doshi, *Paths Uncharted*, 378.

reminded Doshi of the Hindu temples and lent to Sangath its enigmatic underground spaces. The concept of Sangath also came from the studio of sculptor Wissa Wassef, near the pyramid of Giza in Egypt. Doshi was fascinated by the way light entered the studio, which was dry, all sand and where the artist's buffaloes lived together in a space where children learnt carpet making.³³³ Doshi writes,

“[It had the] fabled Nubian vaults, centenary vaults and under all this, there was a celebration going on, celebration of light and life.”³³⁴

One can see the import of each of these inspiration sources at Sangath, yet nothing is duplicated. Doshi's perception of the aforementioned sources led him to dream of Sangath. In turn, Sangath became the place of enhanced perception and dreaming.

The cross-section of the barrel-vaulted roof of Sangath was strongly reminiscent of the Buddhist *stupa* (Sanskrit: *m*, स्तूप heap), which may have been derived from the Sanskrit root *stu* meaning “to worship.”³³⁵ Stupas were mounds of earth that were created in commemoration of and enclosing the relics of great kings and sages. In the second century BCE, the *stupa* consisted of two basic parts—a square or circular base made of baked bricks, called *medhi*, upon which the hemispherical part called *anda* was erected. The *anda*

³³³ Parts of this paragraph were presented at Frascari Symposium iii and published as a book chapter titled “The Architect Inside-Out” in Paul Emmons, Federica Goffi, Jodi La Coe ed., *Ceilings and Dreams, The Architecture of Levity* (London, NY: Routledge, 2019), 222-233.

³³⁴ *Ibid*, 382.

³³⁵ Sushila Pant, *The Origin and Development of Stupa Architecture in India* (Varanasi: Bharata Manisha, 1976), 5.

had a shorter diameter than that of the *medhi* in most instances. Due to the difference in diameters, there was room around the *anda* for a raised circumambulatory path for processions called *pradakshina—patha*. A wooden mast ran from the bottom of the stupa and out of the top of the hemispherical *anda*. The dome of the *anda* was regarded as the vault of the firmament and piercing it was the *Yasti*—the world axis—together bearing the ancient royal emblem of the umbrella, or *chhatra*.³³⁶

The different parts of the stupa denoted different worlds: the portion dug into the ground was sacred to the world of the departed; the portion above the subterranean part, up to a rope girdle, was sacred to the world of men; and the portion above the girdle up to the top ring was sacred to the world of gods.³³⁷ The early *stupas* were built on low *medhis* and had low hemispherical domes in which the height was less than the diameter. Ambulation around the temple on the *pradakshina-patha*, represented “perambulation of the entire universe itself,” producing the “pause,” which allowed for a “bodily engagement within a gigantic three-dimensional mandala or sacred diagram of the cosmos which slowly and systematically transported from the mundane world into the spiritual one.”³³⁸ The mound,

³³⁶ Andreas Volwahren, *Living Architecture: Indian* (New York: Grosset and Dunlap, 1969), 89–90. Parts of this paragraph were presented at Frascari Symposium iii and published as a book chapter titled “The Architect Inside-Out” in Paul Emmons, Federica Goffi, Jodi La Coe ed., *Ceilings and Dreams, The Architecture of Levity* (London, NY: Routledge, 2019), 222-233.

³³⁷ Pant, *Origin and Development of Stupa*, 59.

³³⁸ Trimurti V. Sairam, *Indian Temple: Forms and Foundations* (Delhi: Agam Kala Prakashan, 1982), 57.

the basic form of the *stupa*, was like the *chhatra*, in that it marked the existence of the relic underneath, through a ceiling without walls.³³⁹

In many of the Indian miniature painting traditions, the recurring element was the *chhatra*, the royal umbrella. The monarchs of ancient India, considered representatives of God on earth, were called *Chhatrapati* – one entitled to a *chhatra*. The *chhatra* symbolized divine blessings, “the expression of God’s protective shadow on his head.”³⁴⁰ *Chhatra* resembles the Hindi word *chhat* meaning both roof and ceiling, an intermediate plane between the earth and the sky. The long handle of the *chhatra* could be fixed to a throne or carried by an attendant close to the king, visible to everyone from far and near,³⁴¹ by raising it above the horizon.³⁴²

Architectural manifestations of the *chhatra* in the miniature paintings were the parasol roof in the *jharokhas* (balconies) and verandahs. They seemed to signify that the space underneath was distinct from its surroundings, where the ceiling-canopy defined the space. Walls were either absent or reduced as the *chhatra* took on the task of differentiating the

³³⁹ Parts of this paragraph were presented at Frascari Symposium iii and published as a book chapter titled “The Architect Inside-Out” in Paul Emmons, Federica Goffi, Jodi La Coe ed., *Ceilings and Dreams, The Architecture of Levity* (London, NY: Routledge, 2019), 222-233.

³⁴⁰ Som Prakash Verma, *Art and Material Culture in the Paintings of Akbar’s Court* (New Delhi: Vikas Publishing House, 1978), 76.

³⁴¹ *Ibid.*, 76–77.

³⁴² *Ibid.* Parts of this paragraph were presented at Frascari Symposium iii and published as a book chapter titled “The Architect Inside-Out” in Paul Emmons, Federica Goffi, Jodi La Coe ed., *Ceilings and Dreams, The Architecture of Levity* (London, NY: Routledge, 2019), 222-233.

realms of the private within the public space, the sacred within the secular, the royal realm within the common; indeed, several worlds within the world were thus differentiated through the parasol roof, creating a demarcation between the inside and outside, not through separating walls, but through the roof or ceiling.³⁴³

As described earlier, upon arrival at Sangath, the precinct was entered via a gate and a forecourt where one was confronted by a thick wall with a cut out and the *chhatra*-like barrel vault crowning it. Looking through a truncated pyramidal puncture in the thick wall, one realized that the wall was not joined to the barrel vault. Behind this free-standing wall was the little courtyard with the statue of a warrior, beyond which the studio space, supporting the barrel-vault was visible. The freestanding thick wall was built because of the presence of a row of tall eucalyptus trees nearby and served as a safeguard in case the trees ever fell.³⁴⁴ To find the entry, one moved to the left onto a narrow path, leading to the garden and amphitheater. Here, one saw the mosaic of the mango tree on the ground. It is from this vantage point that the view of the office opened on the right as an assemblage of four barrel-vaults.³⁴⁵

³⁴³ Parts of this paragraph were presented at Frascari Symposium iii and published as a book chapter titled “The Architect Inside-Out” in Paul Emmons, Federica Goffi, Jodi La Coe ed., *Ceilings and Dreams, The Architecture of Levity* (London, NY: Routledge, 2019), 222-233.

³⁴⁴ Doshi, *Paths Uncharted*, 288.

³⁴⁵ Parts of this paragraph were presented at Frascari Symposium iii and published as a book chapter titled “The Architect Inside-Out” in Paul Emmons, Federica Goffi, Jodi La Coe ed., *Ceilings and Dreams, The Architecture of Levity* (London, NY: Routledge, 2019), 222-233.

Sangath was set back from the two roads abutting the property and offered a low profile, “devoid of emphasis.”³⁴⁶ The rectangular forms housing the studio were dug into the earth to counteract the severe summer heat. Doshi’s celebration of this penetration in the ground, with the low profile of the vaulted roofs coated in broken fragments of white porcelain, was reminiscent of the *stupa*. The choice of the barrel vault showed a duality. It worked climatologically but also served well to create a non-imposing yet powerful architecture that marked the space of imagination beneath.³⁴⁷

A well-orchestrated *promenade architecturale* through the amphitheater on the left led to the back of the site, where the entrance into the building was approached by moving down steps. The building attained an impression of unity through the establishment of the topographical narrative, perceived by a viewer moving along the course of the promenade. The normative architectural megalith was fragmented into tacit pieces over a terrain, like ruins,³⁴⁸ which were experienced not by a face-to-face confrontation but by the evanescent ramblings of a mobile viewer.³⁴⁹

The vaults rose higher towards the back of the site where the first barrel-vault formed the entrance to the office and was at double height covering a courtyard flanked on one

³⁴⁶ Doshi, *Paths Uncharted*, 286.

³⁴⁷ Parts of this paragraph were presented at Frascari Symposium iii and published as a book chapter titled “The Architect Inside-Out” in Paul Emmons, Federica Goffi, Jodi La Coe ed., *Ceilings and Dreams, The Architecture of Levity* (London, NY: Routledge, 2019), 222-233.

³⁴⁸ Suchetana Banerjee, Oral History: In Conversation with B.V. Doshi, December 3, 2015, <https://www.youtube.com/watch?v=yNAioHqwwKw&t=18s>, accessed April 20, 2018.

³⁴⁹ Doshi, *Paths Uncharted*

side by a punctured wall. Here one descended to enter the office as if into an underground cave. The vaults were made of sandwiched layers of ferrocement and ceramic “fuses,” or strands of clay, which were pressed together to become the formwork for a concrete shell applied by hand on top of it.³⁵⁰ The barrel vaults crowned the entrance to the building, where they were higher, and the underground studio spaces, where they were close to the ground. Like the *chhatras*, the barrel-vaulted ceilings were emphasized by reducing or making invisible the wall— one a punctured wall raising the barrel-vaulted roof over the entrance and the other sunken below ground in the studio.³⁵¹

Entering the office, one found a dark lobby with a staircase leading to the upper level. On the right was an obscured reception desk, beyond which one returned in the direction of the underground studio space, surmounted by the barrel vault seen from the entrance gate. On the exterior, the plinth, over which the studio barrel vaults rested, facilitated a promenade akin to the perambulation in the *stupa*. This promenade allowed walking along the side of the building and also on top of it like the terraces which were used traditionally and locally for leisure, sleeping, and other activities. Doshi catered not only to the functional and climatic requirements at Sangath but also allowed the established ways of life, pertinent to the place, to be refined in the modern time. Although this reimaged

³⁵⁰ Steele and Doshi, *The Complete Architecture of Balkrishna Doshi*, 87.

³⁵¹ Parts of this paragraph were presented at Frascari Symposium iii and published as a book chapter titled “The Architect Inside-Out” in Paul Emmons, Federica Goffi, Jodi La Coe ed., *Ceilings and Dreams, The Architecture of Levity* (London, NY: Routledge, 2019), 222-233.

terrace as a platform over the ground was different in its form and location when compared to the roof-top terrace, it still facilitated the activities of being in the open, being walkable, and connected to the sky above and the world of Sangath around. These were re-configured to become a seamless part of the whole schema and contributed towards both pragmatic and symbolic functions. Here the particularity and temporality of the project met the universal and timeless of the traditional precedents.

On the outside, the height of the barrel vault above the plinth was 8'-4.728" (255 cm). The height of the studio was such that, if the circular section of the vault were to be completed, it would touch the floor. When one looked down through the vertical glazed semicircular faces of the barrel-vault, the underground studio was visible. When this condition was reversed and one was inside the studio, one had to look up to look out.³⁵²

Another traditional built form that Doshi studied extensively was the step well, or *vav*, specifically the one at Adalaj (1498), Gujarat. These narrow, long, and often more than five floors deep underground wells facilitated access to water in a hot, dry climate in which the water levels changed drastically over the monsoon and summer seasons. Recorded on the architectural elements, the seasonal variation of the water level brought forth a heightened awareness of the passage of time as did the lattice of beams and columns which

³⁵² Parts of this paragraph were presented at Frascari Symposium iii and published as a book chapter titled "The Architect Inside-Out" in Paul Emmons, Federica Goffi, Jodi La Coe ed., *Ceilings and Dreams, The Architecture of Levity* (London, NY: Routledge, 2019), 222-233.

created a fascinating play of light and shade with the passage of the sun.³⁵³ When one descended into these wells, as if penetrating the ground, the only connection one had to the outside was through the openings in the ceiling. Above the ground level, a plinth and roof were all that were visible.³⁵⁴ Although Sangath derived inspiration from various sources, an associational ‘pause’ manifest, that did identify connections that exhibited the sensibilities similar to the precedents but could not be placed side by side with them for visual comparison.

Sangath’s studio similarly penetrated the underground and remained connected to the outside through openings located above eye level. The longer walls in the studio had no openings below eye level and they strongly emphasized the condition of being underground. In the sunken studio space, there was no sense of separation from the outside lateral/horizontal world, as one was unaware of that world. The windows placed above, where the ground and sky seemed to meet on the outside, promoted looking up as though into another, separate world, rather than looking out horizontally towards the surrounding world. A new interaction between the inside and the outside manifest in the vertical axis. Stepping down, one was connected up, rather than connected out.³⁵⁵

³⁵³ Doshi, *Give Time a Break*, 10.

³⁵⁴ Parts of this paragraph were presented at Frascari Symposium iii and published as a book chapter titled “The Architect Inside-Out” in Paul Emmons, Federica Goffi, Jodi La Coe ed., *Ceilings and Dreams, The Architecture of Levity* (London, NY: Routledge, 2019), 222-233.

³⁵⁵ Parts of this paragraph were presented at Frascari Symposium iii and published as a book chapter titled “The Architect Inside-Out” in Paul Emmons, Federica Goffi, Jodi La

At the back of the studio, the short wall had windows that overlooked the courtyard and the free-standing wall that one encountered upon entry to the site. The enclosing walls of the courtyard prevented looking out and instead directed the eyes upwards to the metallic grille atop the courtyard. The openings in the courtyard walls were narrow and pyramidal, which did not facilitate looking out. Hence, the eye was directed upwards, and not outside. In the narrow corridor, on the east side of the main studio, reminiscent of the corridor in Le Corbusier's atelier at *35 rue de Sèvres*, light entered obliquely through the *magical* windows created in vertical extensions or projected masses on the plinth above ground. They also did not provide views. Through these windows, visible from the outside but not from the inside, light illuminated the interior during the day and was radiated outwards at night.³⁵⁶

(v) Obverting, Inverting, and Subverting

Doshi described that the approach from the entrance, along an ambiguous route through the amphitheater and the building form at Sangath, was meant to:

“unsettle the visitor’s perception of what an office building should be ... Time and space change as if this is another world, unknown in many ways but felt psychically as a quiet, timeless and vast world within.”³⁵⁷

Coe ed., *Ceilings and Dreams, The Architecture of Levity* (London, NY: Routledge, 2019), 222-233.

³⁵⁶ Ibid.

³⁵⁷ Doshi, *Paths Uncharted*, 286.

Doshi's creation rethought the ordinary. The absence of an entry on the front of the building and its transference to the back entailed a reversal and rereading of normative roles of architectural elements. The path to the entrance door at the back of the site went through the garden and amphitheater, which occupied almost half of the site. As one found the way to the rather covert entry, one encountered and noticed the garden, the water ponds with lotuses, birds, and other creatures along with the music that played in the garden. Doshi compelled one to "recognize the connections between the manmade and the cosmic" and "acquire a glimpse of the [...] immeasurable."³⁵⁸

As described earlier, the mosaic of the mango tree that was once located on the site was marked at its original location by means of the floor mosaic, which seemed to rise on the sides. The mosaic was not intended as a memorial for the loss of the tree that dried up but represented a wishful longing and optimism for its return.³⁵⁹ This obversion could be described both as an absent presence or a present absence. The tour of the office guided by a *Sangathi*, an employee of the office, who assumed the role of a storyteller narrated the fascinating stories, describing the mosaic of the mango tree or the statue staring at you through the truncated pyramidal puncture in the front free-standing wall. These heuristic fictions waned the formal image of his architecture. The space acted as a cradle to engender

³⁵⁸ Doshi, *Give Time a Break*, 15. Parts of this paragraph were presented at Frascari Symposium iii and published as a book chapter titled "The Architect Inside-Out" in Paul Emmons, Federica Goffi, Jodi La Coe ed., *Ceilings and Dreams, The Architecture of Levity* (London, NY: Routledge, 2019), 222-233.

³⁵⁹ Suchetana Banerjee, Oral History.

various stories. Instead of being passive, programmatic descriptions, the stories intensified engagement and intrigue in the experience of space.³⁶⁰

The inversion of the horizontal to the vertical axis, evident at Sangath in the barrel vaults of the studio, converted it essentially to an inward-and-upward-looking world connected to the sky, the changing lights and shadows, and the changing seasons. Interestingly, in a similar vertical alignment, the artists of miniatures of Emperor Akbar's Court (1542– 1605), influenced by the Persian tradition, represented objects following a “continuously rising viewpoint” without any consideration given to the perspective rule of vanishing distance.³⁶¹ Different objects were drawn from varying viewpoints and depicted in an ascending sequence in a vertical plane, signifying an increase in the distance, to represent concurrently different events taking place using the principle of simultaneity of vision.³⁶²

[The] “overlay of plan with elevations, flipping of side views, and the inclusion of background and foreground details even though perspectively inaccurate” added layers of some “immeasurable dimension.”³⁶³

³⁶⁰ Parts of this paragraph were presented at Frascari Symposium iii and published as a book chapter titled “The Architect Inside-Out” in Paul Emmons, Federica Goffi, Jodi La Coe ed., *Ceilings and Dreams, The Architecture of Levity* (London, NY: Routledge, 2019), 222-233.

³⁶¹ Verma, *Art and Material Culture*, 1.

³⁶² *Ibid*, 10–11.

³⁶³ Pandya, *Concepts of Space*, 138.

Doshi's use of miniature painting style illustrations for Sangath and other projects (which are the center of discussion in the next chapter) similarly combining plans, elevations, and axonometric views all in a single frame subverted the notions of conventional architectural representation in order to emphasize different spatial and temporal aspects of the building. The horizon is defined as the line where the earth's surface and the sky appear to meet, delineating the limit to which we can see from a vantage point. Phenomenologically understood as located perspectival knowing, Doshi explored the horizon of architectural thinking for its fecundity by moving in and out of two modes of thinking—customarily like an architect, and without presumed rules and disclosed reason like mullah or the idiot, to enable the dreaming of alternative perspectives and meaning, disconnecting from the conventional.³⁶⁴

Doshi created the subjunctive 'pause' in the ceiling of Sangath, which became the fulcrum of movement below and above the ground. It was the determinant, which reinforced the conditions of being above ground—outside and below ground—within the building. The spaces under the barrel vaults, oriented in the vertical axis between the earth and the sky, were disconnected from the horizontal surrounding world. In this way, moving away from the architectural profession's obsession with prescription and instrumentality, Doshi immersed the user in the world of his creation, oscillating between the tangible

³⁶⁴ Parts of this paragraph were presented at Frascari Symposium iii and published as a book chapter titled "The Architect Inside-Out" in Paul Emmons, Federica Goffi, Jodi La Coe ed., *Ceilings and Dreams, The Architecture of Levity* (London, NY: Routledge, 2019), 222-233.

building experience and dream-like elements featured in the *Sangathi* stories and miniature illustrations (discussed in the next chapter), to create a renewed world of understanding and experience.³⁶⁵ In this way Doshi subdued the architectural retinal image, and brought out what Alberto Pérez-Gómez calls the “heteropoietic” character of architecture,

“capable of harmoniously complementing the metabolic processes of human consciousness, to provide for prereflective purposeful action and a reflective understanding of our place in the natural and cultural world.”³⁶⁶

Doshi’s tectonic stories dissolved the temporal notion of periods and styles in architecture in the re-dreaming of iconic precedents but suited to the contextual parameters of Sangath. By disconnecting from the confines within the building, opening up the building to the sky and to the garden around, and coercing people to notice these, a disconnect from the repetitive and mundane aspects of work was broken so that people’s attitude did not get stultified and those present could be rejuvenated to think with fresh minds. In Sangath, Doshi effectively created the “pause,” where the experience of space preceded analysis and freed architecture of its self-referentiality, inducing a rich and immeasurable “nothingness” in it.

While in conversation with Doshi’s granddaughter, architect and curator, Khushnu Panthaki-Hoof, the mention of the exhibition that the office was preparing to launch in The

³⁶⁵ Ibid.

³⁶⁶ Alberto Pérez-Gómez, *Attunement: Architectural Meaning after the Crisis of Modern Science*, 225.

Power Station of Art in Shanghai, “Celebrating Habitat: The Real, The Virtual & The Imaginary,” China July 29, 2017 - October 29, 2017 and later in the Vitra Design Museum, Germany from March 30, 2019 to September 8, 2019,³⁶⁷ led to various deliberations. If the induction of “nothingness” was the hallmark of Doshi's architecture, how did it lend itself to be exhibited? In these exclusive exhibitions of Doshi's work featured in China and Germany, the office had decided to use a combination of photographs, drawings, miniature style illustration, scaled models, and most prominently full-scale installations or mockups of fragments of Doshi's projects to be assembled in the gallery space.

This reminded me of my own visit to Sangath in 2015, when the sight of a full-scale model of one of the domes of Doshi's project Amdavad ni Gufa (1992) had caught my attention. These were made for the “Retrospective Exhibition on B.V. Doshi” at the National Gallery of Modern Art, Delhi from October 9, 2014 - December 7, 2014.³⁶⁸ The title of the exhibition at Shanghai was “Celebrating Habitat -- The Real, the Virtual and the Imaginary.”³⁶⁹ Architect and Doshi's grand-daughter Khushnu Panthaki-Hoof, who

³⁶⁷ Balkrishna Doshi: Architecture for the People, Exhibition Concept, Vitra Design Museum, https://www.design-museum.de/fileadmin/user_upload/Bilder/Ausstellungen/A78_Doshi/BalkrishnaDoshi_ExhibitionConcept.pdf, accessed July 3, 2020.

³⁶⁸ Retrospective exhibition on Doshi, titled Celebrating Habitat: The Real, The Virtual and The Imaginary, National Gallery of Modern Art, New Delhi, <http://ngmaindia.gov.in/virtual-gallery-bv-doshi.asp>, Accessed July 3, 2020.

³⁶⁹ Balkrishna Doshi: Celebrating Habitat - The Real, the Virtual & the Imaginary, Shanghai's Power Station of Art, <http://www.powerstationofart.com/en/exhibition/Balkrishna-Doshiin.html>, accessed July 3, 2020.

curated the exhibition, felt that the full-scale models in particular would help create the illusion of the spaces.

“The full-scale models create a new way for visitors to experience reality and illusion, like a theatre of memories and ideas,” says Panthaki-Hoof.³⁷⁰

Selected portions of his most prominent works were recreated at full scale and then juxtaposed one after another to create a new world of experience of his works. In this exhibition space Doshi’s work was put up for people to experience and not just see. The exhibition did not display his work but enacted the way in which his buildings worked. These full-scale installations, although representations of parts of Doshi’s buildings told their own stories of the relationship between architecture and its representation.

In addition to the full-scale installations of elements of his projects, there existed scaled models as well. Of these the atypical scaled model of Doshi’s Aranya Housing Scheme at Indore stood out. The epistemic representation in the form of a model made of a “kit of parts” similar to the actual project was intriguing. People could interact with the model’s kit of parts, like the kit of parts provided to the residents at Aranya. This kit of part exhibition model seemed effective as a tool to understand the concept at Aranya, which prompted the building of homes over time by the inhabitants using certain defined

³⁷⁰ Durganand Balsavar, I Realize that Life is Intangible, says Eminent Architect B.V.Doshi, JUL 22, 2017, <https://www.sangath.org/news/i-realise-that-life-is-intangible/>, <http://www.thehindu.com/society/i-realise-that-life-is-intangible/article19325850.ece>, Accessed July 14, 2020.

architectural elements. How else does one represent such a “work in movement” as is Aranya, but by creating a model in the exhibition that morphs as the guests in the exhibition toy with it. The full-scale models or the kit of parts model made the objective autonomy of architectural representation recede. Although called representations of the buildings, these become works in themselves, being epistemological, revelatory, and divulging meaning by engagement.

The tectonic stories that the full-scale reconstructions created were materially-virtual. The choice of spaces for which the full-scale installations were done were the spaces that created the “pause,” where the imaginative engagement of the inhabitant was pronounced.

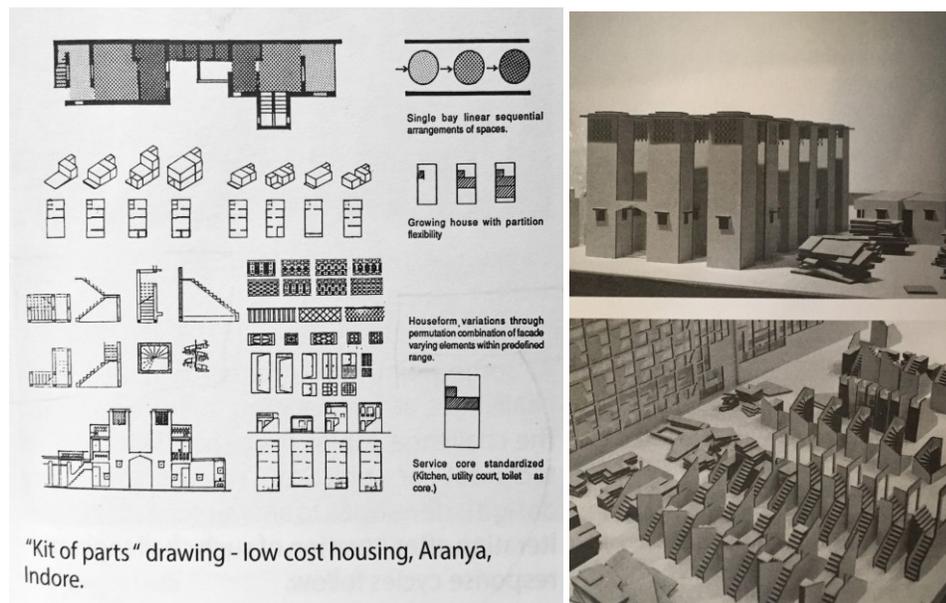


Figure 68: Aranya Housing scheme, Indore (1982), Kit of Parts.³⁷¹ © Vastushilpa Foundation, India, used with permission, not to be reused without the copyright owner's permission.



Figure 69: Aranya's playful model, "Celebrating Habitat – The Real, the Virtual & the Imaginary" exhibition at Power Station of Art, Shanghai, 2017, Installation view, "Celebrating Habitat – The Real, the Virtual & the Imaginary" exhibition at Power Station of Art, Shanghai, 2017.

Curated by Khushnu Panthaki Hoof, Installation Conceptualized and designed by Khushnu Panthaki Hoof.

³⁷¹ Chhaya Neelkanth ed., *Harnessing the Intangible*, 61, 80.

Note: All installations in the exhibition are conceptualized and designed by Khushnu Panthaki Hoof from original buildings of Balkrishna Doshi including the interactive model for Aranya low cost housing.

Photo Credit: Khushnu Panthaki Hoof. © Vastushilpa Foundation, India. used with permission, not to be reused without the copyright owner's permission.



Figure 70: Aranya's playful model, "Celebrating Habitat – The Real, the Virtual & the Imaginary" exhibition at Power Station of Art, Shanghai, 2017, Installation view, "Celebrating Habitat – The Real, the Virtual & the Imaginary" exhibition at Power Station of Art, Shanghai, 2017.

Curated by Khushnu Panthaki Hoof, Installation Conceptualized and designed by Khushnu Panthaki Hoof.

Note: All installations in the exhibition are conceptualized and designed by Khushnu Panthaki Hoof from original buildings of Balkrishna Doshi including the interactive model for Aranya low cost housing. Used with permission

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Figure 71: Installation view, “Celebrating Habitat – The Real, the Virtual & the Imaginary” exhibition at Power Station of Art, Shanghai, 2017, Curated by Khushnu Panthaki Hoof, Installation Conceptualized and designed by Khushnu Panthaki Hoof.

Note: All installations in the exhibition are conceptualized and designed by Khushnu Panthaki Hoof from original buildings of Balkrishna Doshi including the interactive model for Aranya low cost housing.

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In the part of the gallery space shown above (Figure 71), the emptiness of the exhibition space strikes first. One realizes that the staircase did not belong to the gallery

but was a virtual recreation of the stairs for Doshi's project for the Architecture Building in his Centre for Environmental Planning and Technology campus in Ahmedabad. The subtlety of the exhibit of the stair may cause it to be missed by the visitor altogether if it were not for the text on the wall accompanying and elucidating it. Similarly, the mosaic on the floor is not the one in the gallery, but the recreation of the mosaic of the mango tree at Sangath. Parts of the gallery space assumed these virtual guises and appeared to be empty of exhibits as they themselves turned into exhibits.

This particularity of the exhibition space becoming an exhibit itself recalled the project Doshi did together with Maqbool Fida Husain (1915–2011), Indian artist of international acclaim. The two masters got together to see how they could challenge each other, and how art and architecture could derive from, question, contribute, and interpret each other. Husain wanted to build a gallery for his works and when he met Doshi he expressed a desire to do so along with his fascination for underground spaces.³⁷² The resulting underground art gallery built between 1990-95 with its roof consisting of multiple connected domes and the interior tree-like columns was called *Amdavad ni Gufa* (Caves of Ahmedabad) due to its form akin to subterranean caves.³⁷³

³⁷² Balkrishna Doshi, *Amdavad-ni-Gufa, 1990-95* (Ahmedabad: Vastu-Shilpa Foundation for Studies and Research in Environmental Design, 2008), 1.

³⁷³ Parts of this paragraph published by author in *Architectural Storytelling- A Subjunctive Mode of Architectural Conceptualization and Experience in the works of Balkrishna Doshi*, in *Architecture and Culture*, AHRA Journal, Taylor and Francis Online, Volume 6, Issue 2, on December 11, 2018.



Figure 72: Full-scale installation, Vitra Design Museum's exhibition, "Balkrishna Doshi: Architecture for the People," Germany, 2019. Curated by Khushnu Panthaki Hoof for Vitra Design Museum, Installation Conceptualised and designed by Khushnu Panthaki Hoof.

Note: All installations in the exhibition are conceptualised and designed by Khushnu Panthaki Hoof from original buildings of Balkrishna Doshi including the interactive model for Aranya low cost housing.

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In the Gufa, the architect through the built form challenged the artist to revisit his own procedures. Husain could not hang any paintings on the curvilinear walls of the gallery. He had to pick up his brushes and paints and use the walls and ceilings as his canvas. He made bespoke metal sculptures of human figures for the Gufa. The paintings and sculpture, like the architecture, educated the idea of an ancient cave with wall paintings. Similar to Doshi's own exhibition where the full-scale models created a virtual space of experience of parts of his buildings, commingling the exhibited with the exhibition space, the Gufa with the

coalesced interrelationship between art and architecture raised the chiral question of whether architecture was meant for art or was the art meant for the architecture.

In his book, *Monsters of Architecture: Anthropomorphism in Architectural Theory*, Frascari asserts that "architecture cannot be shown in museums" because drawings or models may "connote" architecture but are unable to "denote architectural qualities and properties."³⁷⁴ Museums and their inability to denote architecture is metonymically explained by Frascari as a labyrinth placed inside a labyrinth, where one does not know "when they are leaving the meanders of the container-labyrinth for the maze of the contained-labyrinth."³⁷⁵

The detailing of the full-scale models at Doshi's retrospective exhibition become interesting in this light. With their effective use of lighting, prints, furniture, and three-dimensional recreations, these installations appear to initiate the reversal of a building as an exhibit as in the case of Le Corbusier's Villa Chimambhai model to an exhibition transformed so that it felt like the built space itself. The exhibition did not separate the "labyrinths" of the gallery space and the exhibited space but further confounded by commingling the two. The exhibition enveloped and consisted of the real space of the gallery—modulating its walls, lighting, and architectural elements to virtually present the facets of Doshi's buildings. The location of full-scale models within the actual gallery were

³⁷⁴ Marco Frascari, *Monsters of Architecture: Anthropomorphism in Architectural Theory* (Maryland: Rowman & Littlefield, 1991), 77.

³⁷⁵ Ibid.

meticulously plotted so that the tangible architectural elements of the gallery space came together to support and absorb the spatial depiction of Doshi's projects. The full-scale depiction had both two- and three-dimensional elements. The full-scale print of the picture of the living room of Doshi's home, the Kamala house, was put on the gallery wall.

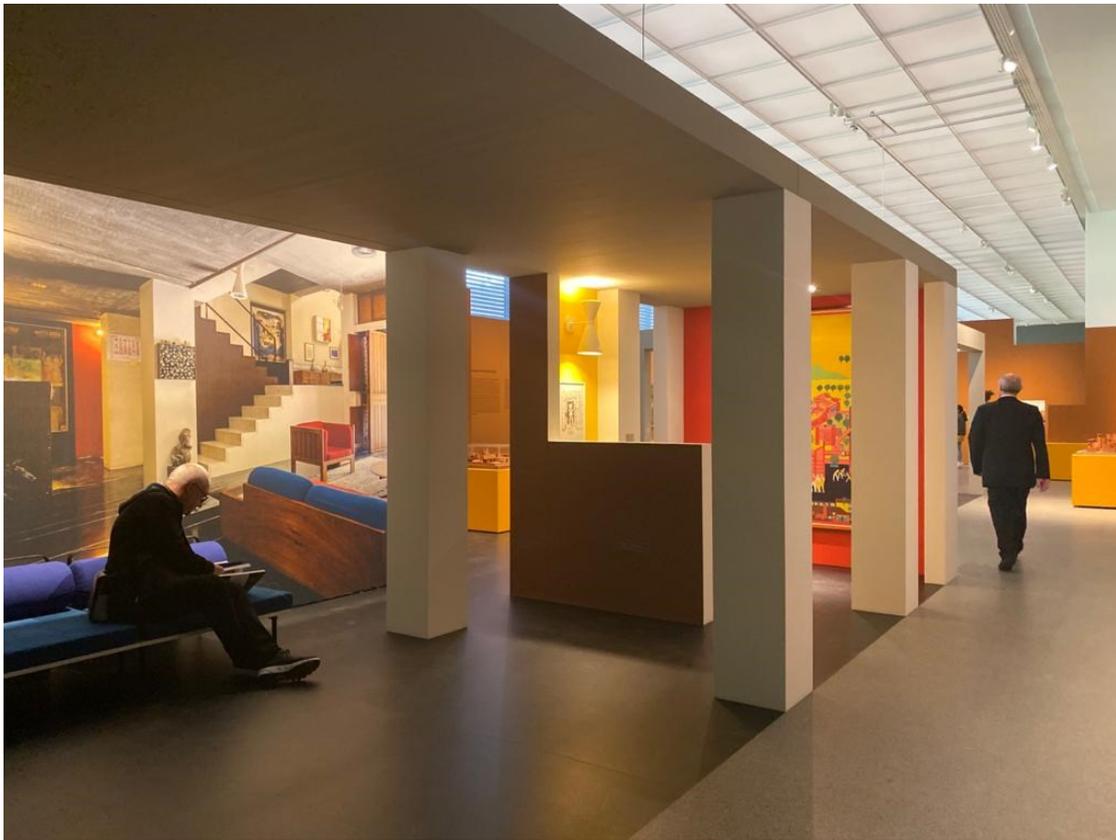


Figure 73: Installation view of Kamala House, B.V. Doshi, Ahmedabad, 1959, Full-scale installation, Vitra Design Museum's exhibition, "Balkrishna Doshi: Architecture for the People," Germany, 2019, Curated by Khushnu Panthaki Hoof for Vitra Design Museum, Installation Conceptualized and designed by Khushnu Panthaki Hoof.

Note: All installations in the exhibition are conceptualized and designed by Khushnu Panthaki Hoof from original buildings of Balkrishna Doshi including the interactive model for Aranya low cost housing. Photo Credit: Khushnu Panthaki Hoof. © Vastushilpa Foundation, India, used with permission, not to be reused without the copyright owner's permission.

The continuum of the print was extended into the gallery space through several means. One of these strategies was the imparting of a similar color scheme as the house to the gallery walls. The single piece of furniture that resembled the one in the print and rested against the wall upon which the print was mounted created the threshold between the virtual picture and the actual gallery space. It felt like the furniture piece dissolved the edge of the flat wall with the three-dimensional gallery space. It was a crafty way to conceal the transition from the wall on which the photographic print of the house was depicted to the floor of the actual gallery space, suggesting a virtual continuum. The actual columns in the gallery space came together to further enhance the effect.

Across from this setting, the four-column configuration suggested the configuration at Sangath's entrance with a similar display of Doshi's work in the form of drawings and models as in the actual office. The storytelling oscillated between the suggestive and illusionistic full-scale installation that merged with the gallery space and the information that complemented it in the form of drawings, texts, photographs, and scaled models.

The depiction of Sangath's barrel vaults also presented crafty techniques to bring forth excerpts from its tectonic stories sparking an inclination to visit the building to read the whole story. The barrel-vaulted studio space was presented as if seen in cross section. This at once presented the opportunity to experience the interior of the underground studio with no windows along its length while simultaneously looking at the exterior garden space at Sangath in the full-scale print of the photograph in which the sectional full-scale

installation was inserted. A sectional view of this sort may not be something that one may encounter in reality in most buildings, at once offering a moment of ‘pause’ that reminded of the installation's material virtuality.

At Sangath, Doshi's play with the section of the building as explained in preceding sections defined the experience of being inside-out—of experiencing the outside by looking up while being underground. Although not the intention of the curatorial team, the full-scale installation of the barrel vault embedded in the full-scale print of Sangath's garden, represented well the conditions of being inside-underground and outside-above ground.

Along with the sectional installation, the tree mosaic was laid flat on the floor in front of it. This installation brought together various orthographic projections -- the section of the barrel vaults, the elevation of the exterior in the print, and the plan in the mosaic. This conceptual ‘pause’ in the exhibition saw the coming together of orthographic drawings in the fantastical constructs of the installations in the exhibition as a gentle reminder of the limitations of these projection drawings to individually represent the tectonic stories of the buildings.

For me, this happened to be an interesting turn in the way Doshi and his team perceived architecture and its representation seen in comparison with my previous study of Le Corbusier's Villa Chimambhai. The model made for Villa Chimambhai was a strategic tool for showcasing the grandiose in Le Corbusier's proposal for the Villa. It represented the awe-inspiring spatial configurations, further accentuated by being an openable model,

bringing forth the play of voids and solid, light, form, and the modulation of the heights of spaces such that double and single height spaces penetrated between floors. The openable model itself, as a representation of the building was no less an exhibition. To exhibit from Latin “*exhibere*” means to “hold out.”³⁷⁶ The model was definitely an attempt to project the formal qualities of the building. In fact, the model and subsequently the building aimed to be an object of architecture that was provocative—an exhibition of sorts in itself.

A reversal happened in Doshi’s exhibitions. On a reading of elements that were on display at these exhibitions, it became clear that in contrast to Le Corbusier’s approach of turning a building into an exhibit, the curatorial team circumvented the idea of an exhibition—replacing the idea of “holding out” ideas by creating the ‘pause’—the idea of involving the guests to themselves perceive and dream parts of Doshi’s buildings. Although aimed to be created for an exhibition, the full-scale installation of parts of his buildings became backdrops that allowed for people to experience the spaces. This approach seemed crucial to exhibit the inherent and dominant “nothingness” that Doshi aimed to achieve. Parts of the exhibition also exhibited this “nothingness,” where the full-scale models turned the gallery space into a virtual space on display where the conventional ‘objects on display’ at an exhibition were less pronounced. In this way Doshi’s approach was to create “architecture for the people,” (also the title of his Vitra Exhibition), even in the

³⁷⁶ Etymology of exhibition, <https://www.etymonline.com/word/exhibition>, accessed July 3, 2020.

representation of his work where people imaginatively experienced the tectonic configurations and stories that replaced the primacy of autonomous visual representation.

Chapter 3: The Architect and the Idiot – Doshi's Visual Stories

“Disciple: How about if I aim to be Buddha?”

Master: What an immense waste of energy!

Disciple: How about if I am not wasting my energy?

Master: In that case, you are Buddha!”

From the Zen Koans³⁷⁷

Keywords: serendipitous imagination, mythopoeic imagination, peripatetic imagination, anagogical imagination, amputated imagination, paraparetic imagination.

³⁷⁷ Zen Koans, <http://www.rodneyohebsion.com/zen-koans.htm>, accessed July 14, 2020.

(i) *From Full-Scale Installations to Miniature Style Illustrations*

The array of the representations of projects in Doshi's oeuvre appeared to be on a sliding scale—from the more recent full-scale installation of certain fragments of his projects in his exhibitions to the miniature painting style illustrations for some projects done between 1984-1989. It seemed Doshi's work was as much tectonic as it was a search for various modes of architectural representation that invoked the essence of his work. This chapter studies the miniature painting style illustrations done for Sangath, Ahmedabad (1980), Vidhyadhar Nagar Developmental Plan, Jaipur (1984), and Aranya Low-Cost Housing Scheme, Indore (1982). It studies the objectives for making the illustrations, along with the techniques and strategies used in these illustrations that converted them from visual images to visual stories that brought out the embodied consciousness and intent of the projects that they were associated with.

The chapter also presents the drawings that I did to understand Doshi's techniques of the miniature painting style illustrations. Further, the chapter shows a set of drawings done to *correct* the apparent *error* in Doshi's illustrations when viewed against the prevalent conventions of architectural drawings. The presence of this set of *corrected* drawings only emphasized and underlined the cogent role of the *supposed errors* in Doshi's illustrations.

The study of the intriguing full-scale installations in the exhibition space and the miniature-style illustrations, revealed the similarities and schisms between these two ends of the sliding scale of representation. One may be called a putative example of a tectonic representation while the other can be categorized as a visual representation. Both in the picture plane of the miniature painting style illustrations (1984-89) and in the full-scale installations of the exhibition (2014-2020), the onlooker experienced elements in two as well as three dimensions. In the miniature painting style illustrations, there existed a combination of drawings in plan, elevation, and axonometry and in the exhibition installations the photographic prints combined with full scale models or furniture items.



Figure 74: Gandhi Labour Institute, Ahmedabad, Miniature painting style illustration (1984-86). Serigraph, Manual screen printing, Imperial size paper. © Vastushilpa Foundation, India, used with permission, not to be reused without the copyright owner's permission.

The schism between the two became obvious when one considered the content of these two modes of representation of the built work. There happened to be an inverse relationship between the representation and the content. The miniature style illustrations were depictive of whole projects while the full-scale installation represented fragments of the project. The full-scale installations detailed smaller but significant parts of the project while the miniature style illustrations represented whole buildings and their relationship to the site or surroundings. Despite the scale of their content, both showed a congruence in being tools defining relationships between architectural elements not in isolation but in a complex set of relations.

The relationship between the sentient observer and their experience of space in the full-scale installations manifest strongly. In the exhibition, one encountered the ‘pause’ in the experience of the full-scale installations and realized that they were parts of the projects and not the gallery space. The miniature style illustration allowed the ‘pause’ to engage the onlooker in a “peripatetic” reimagination in the picture plane.³⁷⁸ Due to the inclusion of the orthographic and axonometric drawings, the experience of a visual inspection of the illustration was ‘paused’ and instead an embodied reading of the illustration happened. It seemed one was walking through the lanes, climbing stairs, confronting a wall, or looking down from a rooftop terrace all in a single illustration. This in turn, allowed the discovery

³⁷⁸ Randy Lee Cutler, “On Speculative Walking: From the Peripatetic to the Peristaltic,” <https://cmagazine.com/issues/121/on-speculative-walking-from-the-peripatetic-to-the-peristaltic>, accessed June 10, 2020.

of the relationship between the built and the unbuilt spaces, or the building and the streetscape, to bring out the sense of the communal and social fabric, while walking virtually through the drawing.

Architect Girish Doshi, now based in Pune, India and architect, caricaturist, and animator, Ajit Rao, who is now based in Lonavala, India were the two associates who worked with Doshi and first developed the miniature painting style illustrations between 1984-1986. In an email interview with Rao, who worked at Sangath from December 1983 to January 1988, I found out that he had worked on the illustrations for the Gandhi Labour Institute, an educational institute in Ahmedabad (1982), and Vidyadhar Nagar Project that dealt with the planning and development guidelines for a satellite town for the city of Jaipur (1984). Girish Doshi worked on the illustration for Sangath. The Gandhi Labour Institute and Sangath drawings were done just after the completion of the project. However, the Vidhyadhar Nagar drawings were done for the conceptual drawings for the township. Doshi had set up another studio, parallel to Sangath, to work exclusively on the designing of Vidhyadhar Nagar township. That is when Rao and Girish Doshi started working on the conceptualization of the miniature style illustration under the guidance of Doshi.

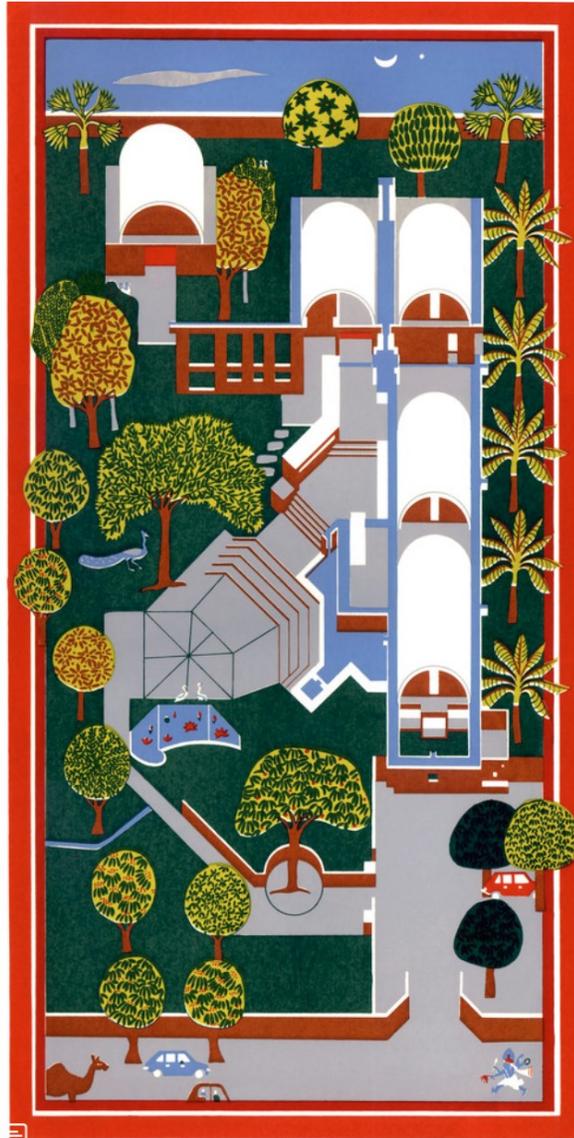


Figure 75: Sangath, Ahmedabad, Miniature painting style illustration (1984-86), Serigraph, Manual screen printing, Imperial size paper. © Photo Credit Vastushilpa Foundation, India, used with permission, not to be reused without the copyright owner's permission.

Rao explained that Doshi's initial objective to make these illustrations were twofold. At that time author William Curtis was writing the book, titled *Balkrishna V. Doshi: An*

Architecture for India, which published these drawings for the first time in 1988. At the same time, Doshi had been invited abroad for lectures when he had been offered the Louis I. Khan Chair at Pennsylvania State University. Doshi also exhibited at the Graham Foundation for studies in the Fine Arts, Chicago in 1988.³⁷⁹ Doshi sought to articulate the essence of his work through these illustrations, which reflected his architectural persona and vision.

Rao explained that Doshi decided to use the miniature style illustrations from the Rajput era (17th and 18th century) which were studied extensively to gain insights on their representation of various elements like buildings, trees, animals, and people. The miniature paintings fascinated Doshi as these, despite not being accurate like orthographic drawings or perspectives, were still effective in communicating the intended message, without providing factual information.

This style of representation gave Doshi the opportunity to develop what he called a “narrative sketch” that would capture the essence of the space rather than be the geometrically abstract, objective, and autonomous architectural drawing.³⁸⁰ Rao described

³⁷⁹ “The Vidhyadhar Nagar series was displayed in an exhibition curated by Charles Correa in Bombay in 1986, *Vistāra: Architecture of India* in the concluding section of modern architecture as an example of a post Le Corbusier city plan. Doshi gifted prints of the series to the Royal Institute of British Architects (RIBA) archive when he was awarded the Fellowship in 2007. Aranya Miniature was reproduced for a cover of a book on the planning of Aranya Housing.” Megha Rajguru, “Visions of Modernity: Architectural Vignettes and Modern Living in Urban India 1975–1990,” *Journal of Design History*- 31, 83-101. 10.1093/jdh/epx025, 2018, 10.

³⁸⁰ Ajit Rao, email exchange, Jun 15, 2020.

that Doshi emphasized a visual description that was effective in “capturing the experience remembered by memory rather than physical accuracy.”³⁸¹

“The brief that Doshi gave us was that supposing a villager visits his building and goes back to his village and describes it to the folks out there and sketches out his experience, what kind of drawing will emerge?”³⁸²

The intent was to make an illustration that did not require professional capabilities to read it but would convey the message to all. The miniature style illustrations were done by hand. Rao explained that Doshi came every morning with hand sketches done in ink, explaining the concepts he had for the Vidhyadhar Nagar Township project. He would discuss with the associates how these could be incorporated in the miniature illustration. The explorations that Rao did were with pencil on paper. He made the Vidhyadhar Nagar drawing using pencil, pen, colour pencils, felt-tip pens, magic markers on three ‘imperial’ size sheets (30 inches by 22 inches each) joined horizontally. The Sangath and Gandhi Labour Institute prints were screen-printed on single ‘imperial’ size drawing paper. Everything was done by hand, including each sheet of color-separation (7 colours in all) used for the manual screen-printing done by artist Walter D’souza. No digital means were used. The Aranya low-income Housing Scheme (1982) miniature painting style illustration

³⁸¹ Rajguru, “Visions of Modernity,” *Journal of Design History*, 9.

³⁸² Ibid.

was done in watercolor in 1989 by the lead for the project and associate at Doshi's office, Atul Kanetkar.³⁸³

These serigraphs for Sangath, Gandhi Labour Institute, and Vidhyadhar Nagar were palimpsests not only in their actual making but in the way they depicted several layers that influenced Doshi's work. The layers of colours of the serigraphs when seen separately brought out different elements the painting sought to represent. Their different layers came to be viewed together to be able to complete the full and intended picture. They seemed to claim that constituent layers did not have meaning in themselves but rather in their coming together. By not segregating layers such as the traditional, the modern, the designed, the vernacular, and such binaries one often encountered, but by bringing these together in a concurrent and enmeshed condition for each project and its illustration the architectural intent and representation became richer and meaningful for different participants. The miniature style illustrations also combined the different orthographic and axonometric drawings all in one.

Rao acknowledged the impression that working on these miniature style illustrations left on him and his work, as he realized the meaning and mode of operation of the traditional artists who made the miniatures, while at the same time understood the creative philosophy of Doshi. It also made him rethink the power of drawings. According to Rao,

³⁸³ Ibid.

both the traditional artists and Doshi layered two worlds, one tangible and one reflective. Doshi operated in these two worlds through stories.³⁸⁴ Rao reflects,

“So, it calls for a preparation in two worlds – firstly, grooming the mind to penetrate the world beyond (I use the term ‘spiritual’) and secondly the ability to translate the riches acquired there into a physical entity (the painting). The trick lies in preparing your mental plane to penetrate beyond the material preoccupations and seek in the eternal realms, then come back and translate the precious gems acquired into physical manifestation in the material realm.”³⁸⁵

Through tectonic stories, Doshi took one beyond the material reality of the buildings, while through the visual stories he brought the transcendental and ineffable poetic constructs back into the realm of an embodied experience. Ancient Shastras or treatises for different creative fields, explained Rao sought ways in which to do this. Indeed, the varied treatises like the Shilpa Shastra (treatise for art and crafts, 320 C.E.– 6th century C.E.), Natya Shastra (treatise for theatre and dance, 200 B.C.E-200 C.E.), Vaastu Shastra (treatise for architecture, 5-10 Century A.D.) did not describe the subjects they tackled in autonomous ways. These were accompanied by descriptions of necessary ritualistic traditions, depiction of the everyday along with the divine and mythological, that transported beyond the confines of the material world. These were called Vedangas or extensions of the Vedas (*Veda*, the ancient Indian Literature + *anga*, the parts of the body). Dance, sculpture, architecture, music, and other arts were interspersed within one another, as *angas* of a singular body. One could teach the art of theatre and dance (Natya Shastra)

³⁸⁴ Ajit Rao, Email exchange, June 15, 2020.

³⁸⁵ Ibid.

in a temple, where the sculptures on the temple walls showed mythical and divine figures frozen in significant postures and stances of the traditional dance. The interpenetration of the arts was overlaid by the penetration of mythological stories and episodes. This implied that when looking at the sculptures, one could visualize dance sequences or when engaging with dance one would be transported to myths and rituals. It layered the immediate material reality with other ones.³⁸⁶

Rao acknowledged that by making these illustrations he derived a deeper meaning of sketching and drawing for himself, not as a visual tool that represented the subject literally or realistically, but as a tool for communicating the meaning and essence of the represented. The essence that was represented was not limited to its visual depiction. Like dreams, these visual images projected an unreal real, so that the symbolic and the immeasurable surfaced. The illustrations were Doshi's attempt to define his architectural position and values as one which favored a traditional and urban modern, where spiritualism, mythologies, ritual, and traditions found home as much as the modernist aspirations to build structured and

³⁸⁶ Liesbeth Pankaja Bennink, and Kandhan Raja Deekshithar, Jayakumar Raja Deekshithar, Sankar Raja Deekshithar, "Shiva's Karanas in the temples of Tamil Nadu: the Natya Shastra in stone," August 20, 2013 "The art of dance in India has always been intertwined with sculpture, architecture, ritual and doctrine. For this there is no better illustration than the karanas . Not only do we know these 108 dance movements from their description in the Natya Shastra, we also have sculptural illustrations of them in ritually significant locations in temples in South India. Five temples are well known for the depiction of the karanas in their sculptural program. They are the Rajarajeshvara temple in Tanjore, the Nataraja temple in Chidambaram, the Sarangapani temple in Kumbakonam, the Arunachaleshvara temple in Thiruvannamalai and the Vriddhagirishvara temple in Vriddhachalam," <https://www.asianart.com/articles/karanas/index.html>, accessed October 23, 2020.

standardized ways to accommodate urban lifestyles. Doshi's work derived from a 'mythopoeic imagination,' which the miniature painting style illustration effectively used and made visible.

The miniature painting style illustrations for Sangath and Aranya were made post construction and presented for consideration the embedded rhetorical questions in the projects and Doshi's addressal of those. Although the illustrations were made post-completion of the projects, the themes and accents therein had their origin in the conception process. These could be better termed imaginative reconstructions of the completed projects—a kind of reflective imagination of the projects, which sought to emphasize the latent content and considerations that Doshi had for the projects.

Doshi was intrigued by the Japanese practice of miniaturization. It is worth quoting it in his own words,

“The more you miniaturize, the more expansive you become. You are looking at it in its totality. What you cannot grasp, you may now grasp and what you cannot touch, now you can, provided you see its connections. Thus, nuances appear, relationships blossom and the mind plunges deep within. There is silence. The static begins to become dynamic and a reverse process takes place. You see the expanse because the scales have melted.”³⁸⁷

For Doshi miniaturization was probably the distillation of the essence of the work, that allowed the understanding of elements at different scales and their relationship to each other and the whole. Miniaturization did not simply imply a reduction of scale for Doshi. I

³⁸⁷ Doshi, *Paths Uncharted*, 397.

argue that miniaturization happens in both the full-scale installations as well as the miniature painting style illustration. The meaning of miniaturization for Doshi seems to be the presentation of all forces that affect architectural spaces in a consolidated manner—perhaps the creation of a capsule that integrated the critical elements to give a powerful glimpse of the potency of architecture to create dreamy experiences. With detailed and fictional minutiae that brought together the multilayered story of worlds within the world, both the miniature style illustrations and the full-scale models created the ‘pause’ so to reorient, to embrace the imagination through dreaming extending the confines of a real, rational, and tangible world to embrace imaginative worlds. In “The Poetics of Space,” Gaston Bachelard articulates the power of miniatures. He writes,

“Values become engulfed in miniature, and miniature causes men to dream.”³⁸⁸

Bachelard describes, that when we look at microscopic images or through a magnifying glass, we involute into our world of imagination and evolute from the world around, to see afresh and beyond what we already see. The miniaturized world under the magnifying glass illuminates fascinating details that lead us to daydream about how the world operates by imaginatively interjecting into them. The scale of the miniatures does not allow a bodily insertion in it. Hence an imaginative interjection is the only way to redeem the contradiction of dimensions and enter into the miniaturized world. This steers

³⁸⁸ Gaston Bachelard, *The Poetics of Space* (Massachusetts: Beacon Press, 1994), 152.

one to “embrace the imagination,” where we are forced to cross “the threshold of absurdity” and representation is then dominated by imagination that is beyond logic.³⁸⁹

Doshi’s miniature painting style illustrations, like the full-scale installations, were protean examples amongst other ways of representation that Doshi explored, that conveyed the method, intent, and subject matter of the architectural work along with imparting the essence of the invisible in its semiotic content. Through the use of minutiae or details that were tangible as well as poetic and unexpected, both Doshi’s illustrations and installations forced one to imaginatively insert themselves to experience and discover their stories. The technique and mode of representation varied by the nature of and highlights in the project, which demanded the particular representation strategy. Doshi subverted the otherwise limiting rules of architectural drawings. The diversions from conventions of architectural representation that he added, with its undercurrent of *irrationality* for the scientifically and architecturally trained mind, induced the imaginative reading that Bachelard identified, furnishing a purely phenomenological discovery of the world.³⁹⁰ This reading stressed on the activity of perceiving and dreaming more than the object perceived or dreamt.

³⁸⁹ Ibid, 149, 158.

³⁹⁰ “The man with the magnifying glass takes the world as though it were quite new to him. If he were to tell us of the discoveries he has made, he would furnish us with documents of pure phenomenology, in which discovery of the world, or entry into the world, would be more than just a worn-out word, more than a word that has become tarnished through over-frequent philosophical use. A philosopher often describes his “entry into the world,” his “being in the world,” using a familiar object as symbol. He will describe his ink-bottle phenomenologically, and a paltry thing becomes the janitor of the wide world,” Ibid, 155.

(ii) *A Miniaturized World*

Historically, miniature paintings were done in the Hindu Rajput periods and Mughal courts ranging from as early as the 11th century to as late as the 18th century. These were called miniature paintings because they were hand-held paintings that were passed around in a group of viewers during an occasion like a marriage or festivity or in the royal courts of the Mughal emperors. The Rajput style miniatures had religious and mythological themes from the epics and religious scriptures while the Mughal miniatures were often to commemorate patrons and emperors in the form of portraiture or paintings depicting their valour and grand lifestyles.³⁹¹ As Rao had informed, while making the miniature style illustration, Doshi and the team studied the Rajput style as these conveyed the social and public lives and beliefs, rather than the commemoration of royal life.

³⁹¹ Vaidya referring to Pratapaditya Pal, *Painted Poems: Rajput Paintings from the Ramesh and Urmil Kapoor Collection* (Ahmedabad: Mapin Publishing Pvt. Ltd, 2004), *Translating Indian Miniature Paintings into a time-based Medium*, A Thesis by Aradhana Vaidya, Submitted to the Office of Graduate Studies of Texas A&M University in partial fulfillment of the requirements for the degree of Masters of of Science, May 2008, 1.



Figure 76: “Krishna and Râdhâ in a pavilion (Nihâl Chand), 18th century, Rajput Miniature (left)³⁹² and Abu’l Hasan. Emperor Jahangir At the Jharokha Window of The Agra Fort (right), ca. 1620, Aga Khan Museum, AKM136, Album Page, Emperor Jahangir at the Jharoka window, Mughal Miniature, CC BY-NC 2.5 CA Creative Commons license. © The Aga Khan Museum (right), Accession Number:AKM136, Creator: calligraphy attributed to Muhammad Husayn al-Kashmiri (“Zarin Qalam”), Place: India, Dimensions:56 x 35.2 cm, Date:late 16th – early 17th centuries, Materials and Technique: opaque watercolor, ink, and gold on paper. This double-sided page, intended for an album, is likely the product of two masters: Abu’l-Hasan, one of the most famous artists of the Mughal court, and Muhammad Husayn al-Kashmiri, honoured by the emperor Akbar (r. 1556–1605) with the title of Zarin Qalam (Golden Pen).”³⁹³

The distinctive qualities of these paintings were the earthy and vibrant tones used and the rich detailing done. They were a documentation of the social activities, textiles, clothes,

³⁹² “The work of art depicted in this image and the reproduction thereof are in the public domain worldwide. The reproduction is part of a collection of reproductions compiled by The Yorck Project. The compilation copyright is held by Zenodot Verlagsgesellschaft mbH and licensed under the GNU Free Documentation License, The Yorck Project (2002) 10.000 Meisterwerke der Malerei (DVD-ROM), distributed by DIRECTMEDIA Publishing GmbH. ISBN: 3936122202. - https://commons.wikimedia.org/wiki/File:Nih%C3%A2l_Chand_001.jpg,” accessed August 23, 2020.

³⁹³ <https://agakanmuseum.org/collection/artifact/jahangir-jharoka-window-agra-fort-folio-jahangirnameh-memoirs-jahangir-akm136>, accessed November 1, 2020.

rituals, traditions, and cultural norms prevalent in those times. These paintings did not follow rules of perspective, instead generating a “simultaneity of vision,”³⁹⁴ with their negation of the typical vanishing points and horizon line of the optic based technique or perspective. One part of the miniature could be looking at a window in elevation showcasing what was happening behind the walls while in another part of the same painting the top of the building or the terrace would be visible. This implied that the onlookers' eyes were positioned at several positions in the picture plane as opposed to the fixed vanishing point in a perspectival drawing. It seemed like a collage of various micro depictions or micro stories in different parts of the picture plane, that denoted different eye positions. By not being too concerned with perspectival accuracy, the mood of the painting was not compromised in a thrust to follow the mathematical procedure of drawing. Relative proportions between elements drawn also did not aim for exactitude. Instead, the effect that was sought was one that favoured an aesthetic depiction of the message.

The message that was conveyed derived usually from religious and mythological stories or sometimes as in the case of the Mughal style miniatures through a written narrative provided by the court.³⁹⁵ The scenes were arranged vertically on the picture plane. Distance was portrayed by making objects seem smaller and by pushing it towards the top. What was closest was on the bottom of the picture plane. Height was shown by using elements like trees and mountains. The painters held the paintings in hand while making

³⁹⁴ Verma, *Art and Material Culture in the Paintings of Akbar's Court*, 10-11.

³⁹⁵ Vaidya, *Translating Indian Miniature Paintings*, 23.

them and viewed them at arm's length to judge them.³⁹⁶ Perhaps, the ease of turning the picture in their hands to see different parts at different angles may have diminished the need for perspectival accuracy. The micro narratives could be easily studied in this proximity, better than would have been the case if viewed from a distance, in which case accuracy of depiction would perhaps be desired.

Although not hand-held Doshi similarly combined multiple viewpoints through the use of orthographic and axonometric drawings in his illustrations, perhaps with the objective of giving an embodied and virtual sense of movement through the spaces in the depicted projects. Doshi recounts Le Corbusier's fascination with the miniature paintings, especially one that depicted the Indian God Krishna and his beloved Radha. It showed both of them intertwined—playing the flute as well as dancing as if the two were one being. Doshi found the concept in the painting potent in conveying the whole, not as a sum of the components, but as an enhanced version of reality.³⁹⁷ These miniature paintings communicated at various levels and gave an expression to both the actual and the imagined. It was a space where both reality and fantasy existed in a poetic way.³⁹⁸ The depiction seemed efficient in creating the conceptual 'pause'—inviting engagement, contemplation, and reinterpretation of the embedded stories.

³⁹⁶ Ibid, 6.

³⁹⁷ Doshi, *Paths Uncharted*, 175.

³⁹⁸ Vaidya, *Translating Indian Miniature Paintings*, 1.



Figure 77: The miniature painting of Radha and Krishna that Le Corbusier admired hangs in Doshi's dining room, Ahmedabad. ©Pallavi Swaranjali, 2015.

By employing techniques that distanced the illustrations from conventional architectural drawings, although deriving from and based on those, Doshi's miniature painting style illustrations moved beyond the profession's confines, to allow them to appeal to the common man. Doshi writes,

“We made some rules for ourselves and conditioned ourselves to follow them, thus we put ourselves in prisons of our own making. We have come to this

because we are afraid. We are afraid because we constantly hanker for recognition by others, approval and endorsement of our work by others.”³⁹⁹

Doshi succinctly urges us to realize that rules are self-imposed, and we do not realize that these rules can be bent or disregarded where appropriate. On this note, one cannot but recall the conversation about the idiot I had with Doshi in one of the interviews at Sangath.

It is interesting to look at the word idiot’s etymology:

“The Greek adjective *idios* means “one’s own” or “private.” The derivative noun *idiōtēs* means “private person.” A Greek *idiōtēs* was a person who was not in the public eye, who held no public office.”⁴⁰⁰

This etymology resounds with Doshi’s concept of the idiot, as one who was not burdened by inhibitions or frameworks of convention. For him artistic creation was one where one experimented and did what one truly enjoyed within an ethical framework, by shedding borrowed baggage in the form of conventions, presuppositions, and the urge for approval. For Doshi imagination relied on intuition and spontaneity. Inspiration was sought in unprecedented sources and ideas were expressed to communicate the genuinity of efforts to conceive a world as it could be, rather than how others thought it should be. For Doshi, there was not a search for an ultimate truth, but always a search for the expansion of an established truth. Not dictated by only the requirement of having rigorous definitions, technical precision, whimsical programs, and professional jargon, this mindset extended

³⁹⁹ Doshi, *Paths Uncharted*, 275.

⁴⁰⁰ Meaning of Idiot, <https://www.merriam-webster.com/dictionary/idiot>, accessed August 18, 2020.

the opportunity to disregard boundaries that hampered the architectural imagination. Instead, it opened up the opportunity to take risks and explore various avenues to develop revelatory and generative faculties.

In scientific research a similar proposition had been put forward by Martin A. Schwartz, Department of Microbiology, University of Virginia, in an essay titled “The Importance of Stupidity in Scientific Research” in the *Journal of Cell Science*,

“Productive stupidity means being ignorant by choice. Focusing on important questions puts us in the awkward position of being ignorant. One of the beautiful things about science is that it allows us to bumble along, getting it wrong time after time, and feel perfectly fine as long as we learn something each time. The more comfortable we become with being stupid, the deeper we will wade into the unknown and the more likely we are to make big discoveries.”⁴⁰¹

Being ignorant knowingly is not an easy quality to imbibe. It requires greater critical thinking to be able to question the *status quo* and established norms. It needs a recalibration of professional pre-sets and notions and their reinvention to be able to circumvent top-down, imposed, and prevalent policies and frameworks.

With a similar agenda, the idiot also appeared as a dramatic archetype, for example the fool or clown in Shakespearean drama—clever commoners who outdid people of higher social standing, through their naive and ironic reasoning becoming “licenced

⁴⁰¹ Martin A. Schwartz, “The Importance of Stupidity in Scientific Research,” *Journal of Cell Science*, 2008 121: 1771 doi: 10.1242/jcs.033340, accepted 9 April 2008 *Journal of Cell Science* 121, 1771 Published by The Company of Biologists, 2008 doi:10.1242/jcs.033340, <https://jcs.biologists.org/content/121/11/1771>, accessed June 11, 2020, 1771.

critics.”⁴⁰² These clowns helped the audience distance themselves from the play and raised pertinent and real questions, acting as interlocutors who participated with the actors on stage as well as with the audience. Being fools, they were allowed to ask any questions that at the surface seemed unintelligent and funny, but often revealed deeper meanings. Like the twin concepts of socratic ignorance and socratic wisdom, which imply knowing in the not knowing, the wise man and the fool, combined and co-existed in these dramatic archetypes. The character of Mullah Nasruddin similarly gave representation to otherwise overlooked ways of looking at the world—providing the reflective ‘pause’—the uncomfortable but productive and persuasive reorientation from a prevalent frame of thought by questioning the obvious and the accepted.

Doshi recalled the time when Le Corbusier received the telegram informing him of the American Institute of Architects Gold Medal being awarded to him and asking if he would accept.

“What shall I answer? Should I accept?’ he [Le Corbusier] asked me [Doshi], I am sure half in jest. When I answered in the affirmative, he replied ‘OK, I will accept it’. ‘Every morning I am born in the skin of a donkey - Thanks I accept.’ was his reply.’ I thought about his reply. How wonderful? When one thinks that he is born a fool every day, he is free to act the way he chooses every day. There are no inhibitions, almost like an innocent child, with no baggage. Can I ever be free of my baggage? The choice is mine. It needs to efface all prejudices and welcome the morning rays.”⁴⁰³

⁴⁰² Enid Welsford, *The Fool: His Social and Literary History* (London: Faber and Faber, 1968), 256.

⁴⁰³ Doshi, *Paths Uncharted*, 125.

Doshi emphasized on being free of the baggage which led to a magical emptiness where one could forget the past and discover everything anew. His notion of the idiot (although he does not define it explicitly) emerged throughout in many forms in his writings be it in appreciating the idea of being born in the skin of the donkey, fool, or in thinking like a child. In being free of baggage and by wading into unknown realms, Doshi's exploration met new means of thinking and representing architecture.

Doshi described that for him every new project started with the mandate to begin afresh. Each subsequent project was an exploration to probe if there was a better way. He viewed "every problem as the mother of new ideas" and wrote that, "in order to get into that position, I should create a problem."⁴⁰⁴ In this process his "other self" created problems for him rather than showing the way.⁴⁰⁵ These problems that the other self (that I would like to call the idiot) created, made Doshi experiment and not take the regular route. It became an incessant search that consumed time and effort often going around in "circles,"

"but then at some point all the circles change into a single helical spiral, converging onto a point, and then one day, the door opens to an unexpected solution [...]. Most often the initial response is influenced by what I have seen recently, but unless I juxtapose it with what I had thought as the essential solution, it doesn't become what it should."⁴⁰⁶

⁴⁰⁴ Ibid, 206.

⁴⁰⁵ Ibid.

⁴⁰⁶ Ibid, 174.

Doshi's thinking of the twin personality of the architect and the idiot manifested in and was aided by the miniature paintings he used as it helped him switch between solid and dream stuff, between the old and the new, between knowing and not knowing, between the real and the fictional, between technique and subversion. This in-between—the real and the dream, which Doshi achieved through the storytelling, gave him the opportunity to think in *recto* and *verso*, like an architect and the idiot, between logic and absurdity, between creating and solving problems, between his private memories and his concerns for creating architecture that made a difference.

Storytelling imparted a lightness to architectural representation in the form of the miniature style illustrations. For Italian journalist and writer, Italo Calvino (1923-1985), lightness is not a pejorative term, but rather an “enlightened perspective.”⁴⁰⁷ Lightness did not imply a distancing from reality, rather a reorientation and approach to gaining new insights, that helped reduce the burden of gratuitous objectification, agendas, and stagnated ways of thinking. Calvino writes,

“Whenever humanity seems condemned to heaviness, I think I should fly like Perseus into a different space. I don't mean escaping into dreams or into the irrational. I mean that I have to change my approach, look at the world from a different perspective, with a different logic and with fresh methods of cognition and verification.”⁴⁰⁸

⁴⁰⁷ Italo Calvino, *Six Memos for the Next Millennium* (Cambridge, Massachusetts: Harvard University Press, 1988), 7.

⁴⁰⁸ *Ibid.*

The idiot that Doshi propounded was one who moved away from the confines of the conventions of representation in architecture instead looking at other art forms and creative processes to indulge in new forms of architectural consciousness. Doshi's openness that looked for architectural inspiration in the most unexpected sources, asserted a 'serendipitous imagination' capable of seeing and living anew, unrelated sources that added value to his architectural works. The word serendipity means an unexpected discovery.⁴⁰⁹ It is an unexpected stumbling upon novel things we may not be looking out for. Italian Novelist and Literary Critic, Umberto Eco (1932-2016) in his book *Serendipities: Language and Lunacy*, unravelled unanticipated discoveries that shaped human history favourably.⁴¹⁰ 'Serendipitous imagination' may be seen as referring to such experimentation as in the process of exploring and re-adapting the miniature paintings, where a new world of imagination and representation opened up. Doshi imported from miniaturization, an anagogical drawing,⁴¹¹ to give voice to fantasies, metaphors, socio-cultural practices, myths, and real and unreal possibilities in architectural thought. They did not only represent visible connotations but had the capacity to bring together disparate

⁴⁰⁹ Meaning of Serendipity, <https://www.merriam-webster.com/dictionary/serendipity>, Accessed October 30, 2020.

⁴¹⁰ Umberto Eco, *Serendipities, Language and Lunacy* (New York: Columbia University Press, 1998).

⁴¹¹ Marco Frascari, *Eleven Exercises in the Art of Architectural Drawing: Slow Food for the Architect's Imagination* (Abingdon, Oxon; New York: Routledge, 2011), 58. Anagogical reading brings together the literal, moral and metaphorical reading of architecture, Frascari and Goffi, *Marco Frascari's Dream House*, 16.

things at different scales—physical and metaphysical, connecting to the invisible and the dreamt.

(iii) 'Correcting' the Illustrations

After looking at Doshi's miniature painting style illustration, I decided to understand the working of the illustrations and the strategies therein by doing a similar illustration for the exhibition in Frascari Symposium III in 2017. I titled the drawing "Walking the Architectural Dream." It wove together dominant memories and fantasies that I recalled from my own life. Hence appeared scenes from my paternal grandparents' home, where agriculture was a primary occupation, and scenic beauty abounded while recalling excerpts from my maternal grandparents' house who lived in a posh urban setting, where tea was served in formal living, dining rooms, or on the porch. There appeared badminton courts, hopscotch or tree swings that depicted the fondest memories in my growing years. Parts of my architectural training manifest in the drawing board shown in the living room and in the methods used in the drawing. Images from traditional Indian settings were juxtaposed with my Canadian life of going to the beach or going for a walk with a stroller. The resulting image was like a dream, walking through the past, present, and a fantasized future at once, or combining Indian rural and urban settings with the Canadian streetscape, all in one canvas 33 inches by 33 inches in size.

When I started doing the drawing, I did quick hand sketches of these different stories

that I recalled. These were rough sketches on paper using pencil. I had decided to do the final drawing using Revit, a software I was well versed with. At this point I experienced the limitations that the software imposed on me. It did not let me construct my dream, which had juxtapositions of plans, sections, elevations, and axonometric drawings. The parametricism of the software did not allow me to indulge in my eccentricism. It kept reminding me that buildings are to be seen as separate plans, elevations, and sections that resulted in the detailed parametric three-dimensional view that was automatically generated by the software. I was not allowed to combine the orthographic drawings. The software wanted to build a reality for me while I wanted to indulge in a dream. I had to discard the software and use a combination of digital tools that allowed me to create my ‘incorrect’ dream. In this process, I painfully learnt the pleasures of the freedom that I had despite these complex tools for representation with their in-built restrictions. The pleasure lay in confounding the software by scrupulously finding ways in which I could have my way. In this process, I realized the various elements and strategies Doshi used in the miniature style illustrations.



Figure 78: Walking the Architectural Dream, Artwork by Pallavi Swaranjali, using CAD. © Pallavi Swaranjali, 2017.

Doshi's miniature style illustrations while deriving from standard architectural ways of drawing using plans, elevations, and axonometric took it to a new level of consciousness.

Rendering these illustrations as a drawing out of a comic or story book, unexpected elements, characters, and crisp observations of everyday life and activities, imparted to the illustrations the characteristic of being comprehensible and appealing for everybody. It provided a joyful way of embodied consciousness in the imaginative plane of the miniature style illustration.

The illustrations incited the ‘peripatetic imagination’ in various forms. Writer, educator and artist at Emily Carr University of Art and Design, Randy Lee Cutler, in her essay “On Speculative Walking: From the Peripatetic to the Peristaltic,” defined the word peripatetic as “one who walks from place to place.” She draws on Aristotle’s peripatetic school and confessions of Jean-Jacques Rousseau (1712-1778) that suggested their reliance on walking as a means to think and reflect.⁴¹² ‘Peripatetic imagination’ then can be defined as architectural thinking by actually or representationally moving through a building, looking around, up and down, pausing at a node, and then moving on. It brought forth an embodied and lived version in the representation that helped imagining and inhabiting the building as if in real life. The important features of these illustrations were the techniques they use to convert the process of looking at the illustration to one of a dynamic movement through the building in the illustration. The eye was led from one to the other element in the illustration, similar to how one would experience the actual space moving through it,

⁴¹² Randy Lee Cutler, “On Speculative Walking: From the Peripatetic to the Peristaltic,” <https://cmagazine.com/issues/121/on-speculative-walking-from-the-peripatetic-to-the-peristaltic>, accessed August 18, 2020.

perceiving parts of the building, at times as an elevation, at other times more dominantly as a plan or as a three-dimensional element.

The illustration that promoted the embodied consciousness and movement through the spaces—at once corporeal and cerebral, suggested Frascari’s “anagogical drawing.”⁴¹³ Unlike tactile and analogical drawings that refer to connotations of a visible presence, anagogical drawings transport to an invisible realm.⁴¹⁴ The activities, human figures, trees, and such elements of material culture, in the miniature style illustrations went beyond their function as an analogy to evoke the senses, to become an agency to reminisce myths, memories, aspirations, and fantasies.

Doshi borrowed from traditional miniature paintings, elements and strategies that he converted to his advantage to be used as a means of architectural representation. The striking similarity between the paintings and Doshi’s illustration was as mentioned the use of multiple viewpoints. Doshi’s miniature style illustrations were primarily based on a plan or elevation as a starting point. In Sangath’s illustration for example the site plan is the base of the drawing. On this base axonometric drawings and elevations are added at critical points for specific reasons. These helped cobble up an imaginative inhabitation of the space. In the illustration for Sangath, the axonometric element near the steps leading to the platform over which the barrel vaults were situated represented the projected and invisible “magical” windows that drew in light to the underground spaces beneath. The use of

⁴¹³ Frascari, *Eleven Exercises in the Art of Architectural Drawing*, 58.

⁴¹⁴ *Ibid*, 58-59.

axonometry seems strategic at this location because it depicted the level difference that separated the garden from the platform over which the barrel-vaults rested. The use of the axonometric drawing and the thick lines used for the steps, gave a sense of climbing up onto the platform and helped to *encounter* the projected windows much like one would encounter them on site.

Further, the barrel vaults drawn in plan and the supporting vertical walls in elevation were seen together in the drawing contributing to the ambulatory experience of the illustration, showing the movement on the platform around the barrel vaults and looking down into the studio through the vertical, glazed, and semicircular end faces of the barrel vaults. The plan of the entrance court to the building at the back of the site was accompanied by the elevation of the punctured wall near the entrance door. However, the punctured wall was shown perpendicular to its actual position on site. The floor mosaic of the mango tree was drawn not as a plan on the floor, but rather as a tree in an axonometric view, compellingly presenting the absent. The ‘pause’ as the separation between the drawing and the actual building, drew in the onlooker in such a way that architecture and its representation did not become a spectacle to be observed voyeuristically from afar, but a poetic and embodied experience in which all were to be immersed.

As compared to the historic Indian miniature paintings where human figures, their attire, and activities assumed great importance, in Doshi’s miniature style illustration for Sangath, human presence and their spatial activities were subtly emphasized. The human and the human-made, like the cars were placed outside on the adjoining road or in the

parking near the entry to the site. Within the enclosing boundary walls, Sangath appeared like a “quiet world” in the illustration just as Doshi had imagined it with emphasis on the flora, fauna, and the sky. It emphasized the inverted axis in Sangath, where the connection to the horizontal human world was negated in favour of the vertical connection to the cosmic forces. Outside the walls that surrounded Sangath a human figure was shown. The human figure looked like a deity out of the pages of a mythological story. The depiction of the human as such immediately added an imaginary layer to the drawing, making one ‘pause’ and rejoice in the imagination of encountering such characters in reality.

The play of colors was a major determinant for the embodied movement inside Sangath’s illustration. The gray on the street adjoining the site of Sangath continued on to the pathway through the garden into the back of the site towards the entry into the building. The gray differentiated the path from the garden and clearly directed the movement from the entry gate to the back. The gray walkway brought the eye to the center of the garden where from the interaction with the building especially the barrel vaults became prominent. All parts of the illustration that were in white indicated the aerial or plan view. The elevations and the dimension of height in the axonometric were shown in an earthy red color. The ‘peripatetic imagination’ was stimulated by this arrangement of color as much as by the existence of planes from different viewpoints so that one could imagine standing in front of a wall, walking over the steps, or under a tree in Sangath’s precincts.

The depiction of flora and fauna was thoughtfully considered in the illustration. Camels and peacocks are abundantly found in the western part of India where Ahmedabad

was located. The trees were shown symbolically with peacocks and ducks perched near the water body in the garden. The trees were not the neutral standardized trees that often appear in architectural drawings. They represented the abundant tropical vegetation of the area. These minutiae though trivial added to achieving the depiction of the particularities of the place where the project was situated.

At Sangath, using the site plan as the base drawing seemed to be a much-needed strategy. Through the use of the site plan, Doshi's use of the barrel vaults to create subterranean spaces was emphasized. The subterranean spaces remained hidden in the illustration as much as they were hidden when one was in the garden in Sangath. It also effectively represented the "invisible" architecture that he aimed for at Sangath, where the garden, flora, and fauna combined with the cosmic forces to create the peaceful aura at Sangath. If an elevation or section would have been used as the base drawing, the buildings would at once demand attention, which was not the case at Sangath. The plan also gained significance at Sangath because movement through the garden and along the side of the building and on top of the platform over which the barrel vaults sat, was the most prominent feature and could not have been emphasized if not for the plan used as the base drawing.

The use of plan in the miniature style illustration for Sangath also shed light on the way ancient miniatures seemed to have a vertical layout with things closer to the viewer on the bottom of the layout and the one's farther from the viewer on the top of the layout. The plan in showing the aerial view used the page or sheet as a plane where the elements were laid out from one side to the other—top to bottom or left to right. The base of the

illustration for Sangath as a site plan makes sense, as one is able to emphasize the journey from the entrance of the site at the bottom of the illustration right up to the top indicating the back of the site where the entrance to the building is situated.

A different image presented itself in the watercolor miniature style illustration of Aranya Low-income Housing Scheme in Indore, India, where the buildings shown on either side of the street were drawn in axonometry. Frascari's reading of the Proun Room (1919 to 1924) by Russian avant garde artist El Lissitzky (1890-1941) identified his axonometric drawing as capable of representing in one drawing various views, resulting in the inclusion of the spectator by giving choice to look at and insert themselves in different ways in the drawing.⁴¹⁵ Frascari described the operation of the subjunctive mode in the axonometric representations in Lissitzky's Prounean Room as follows:

“In these axonometric representations, the apprehension of architecture deals with embodiment. It makes sense that axonometric drawings should be the locus of the creative embodiment of architecture because they are objects standing between two natures, the recto and the verso, the floor and the ceiling, the outside and the inside, situated on the border between direct and indirect perceptual apprehension. In these drawings, architecture is represented in a subjunctive mode since construction constitutes an activity that cannot be subordinated to another enterprise.”⁴¹⁶

⁴¹⁵ As Marco Frascari reads the drawings of Lissitzky “Axonometric projection give us a counter perspective. One-point perspective centers one viewer at the time and inscribes the viewers into the space of the picture. Axonometric drawings, with its rejection of the horizon line and vanishing point, allows the viewers to situate themselves in any place on the two sides of the image,” Frascari, *Eleven Exercises in the Art of Architectural Drawing*, 168.

⁴¹⁶ *Ibid*, 168-9.

Frascari's description suggests that the axonometric drawings were tools for an embodied understanding of space, where until one inserted themselves in the drawing, the drawing fluctuated in its understanding. One could insert themselves either below, above, inside, or outside the planes in the drawing. The planes were not the defining elements, instead to make sense the human embodiment was pertinent. The axonometric drawing could represent this or that and if a definition was desired, the insertion and immersion of the onlooker was required.

The axonometric drawing with its planes in the x, y, z directions, allowed a sense of stability once there was an insertion. The insertion was a 'pause,' where a story was introduced in the drawing as a result of the involvement of the viewer and which 'paused' the fluctuation. The abstracted space was made heterogeneous when the story was introduced. To find their bearings, one had to be involved, and the making of the drawing was as much a making by the viewer as it was the making by the drawer.⁴¹⁷

In the Aranya watercolor illustration, a clever technique was used to further manipulate the axonometric drawing as a means of immersion and embodiment. The central spine of the drawing represented the street or laneway between the rows of houses on either side. The streetscape in Aranya was one which was lively and where the inhabitants conducted social and economic activities. The similarity to the *pol* houses strongly appeared here, where the private areas of the house extended into the public areas of the streets. The

⁴¹⁷ Ibid.

activities shown in the illustration encompassed domestic ones in the privacy of people's homes on terraces and balconies. Along with these, the illustration showed the spill out of the communal activities onto the in-between spaces on the street where several typical activities were shown such as vendors selling different products, vehicles moving, and people interacting with each other. To show these lively interactions, the illustration used a technique to open up the streetscape where the essence of the township in its community-building was best demonstrated. The illustration with the buildings on either side of the street manipulated the axonometry a step further, by combining mirrored axonometric drawings on either side of the central street that formed the spine of the illustration.



Figure 79: ‘In-correcting’ the drawing: On the left: Aranya Housing Scheme, Indore, Original Miniature painting style illustration (1989), Water Colour on paper, Photo Credit & Copyright: Vastushilpa Foundation, India., used with permission, not to be reused without the copyright owner’s permission, explorations by author (center and right), readapted using CAD and Photoshop. © Pallavi Swaranjali, 2020.

I redrew the axonometry to understand what would have been lost if this mirroring of the axonometric drawing had not happened on either side of the street. If rules of axonometry had been followed in the illustration the result would have been as shown in the second illustration shown in Figure 56, I drew using CAD and Photoshop, that aided the ‘correction’ of the drawing effortlessly. By mirroring the viewpoint on the central spine

of the street, multiple viewpoints were created resulting in opening up the drawing in the center to show the interaction of neighbours, economic activities, and festivities on the street. Resulting from this mirroring and opening of the drawing, the two facades facing the street became simultaneously visible, which would not have been the case if axonometric rules were not manipulated. With the two facades visible on either side of the street, one could imagine themselves walking on the street looking at the adjoining buildings in the same way as when one walks on the street and turns their head to look at different activities on both sides of it. This manipulation also facilitated the depiction of buildings around the cul-de-sac shown at the top of the drawing. The facade of the buildings became visible with the introduction of another viewpoint there, bringing to attention the activities in the cul-de-sac and the connection of surrounding buildings with the street life. The opening up the drawing in the centre was used in a reverse way to show the car at the bottom of the drawing, where instead of opening up the car along the centre it seems to have been closed in around a center line to accommodate the front and back of the car to be both visible in the drawing. In these strategies lay the ability to bend established objective rules so that one could make visible what otherwise would be concealed due to the enforcement of limiting rules.

The illustration of Aranya also suggested temporality in various ways. A look at the human figures invoked a sense of time by not only portraying people of different ages, but also from different times as evident in the mythological depiction of brides akin to the ancient miniature paintings. The temporal dimension also became visible by the depiction

of activities and festivities that varied with seasons and time of the year. A person using the terrace to fly kites with decorative strings that adorn the streets may be construed as suggesting the festivities that mark the season of harvest. In another part of the illustration the drying of *papada*, or other food material on the terrace indicate activities on an afternoon of a hot summer day while women strolling casually in groups imply a pleasant and breezy evening.

In the Aranya illustration, the peculiarity of the human figures, their vehicles and activities presented itself in their orientation. Some were shown in plan, some in elevation, some face sideways, others were frontally portrayed. This strongly negated the horizon line, thus inducing and facilitating a multi-orientational readability of the drawing in landscape or portrait mode. The buildings drawn in axonometry which already had the ability to be viewed in various directions, coupled with the non-directionality of human figures and their activities depicted in varying orientation, further aided in achieving the flexibility to orient the illustration in either way.

The next iteration of ‘corrections’ of the drawing was to remove the various activities, cultural symbols, and people from the illustration and introduce axonometric depiction of these in a uniform direction. With each iteration, the drawing became increasingly ‘correct’ in terms of the drawing technique but started to lose its anagogical and peripatetic dimensions, which had allowed the imaginal walking on the central street, climbing up the stairs onto terraces or standing under the shade of a tree. Immediately, the contronymic condition revealed itself in the redrawing of the original illustration. The comparison of the

original miniature painting style illustration and the ones redrawn proclaimed the ‘incorrect-corrections’ in the explorations and ‘correct errors’ in the original. Inversely, they showed the errors in the corrections in the redrawn images while showing the corrections that Doshi’s incorrect techniques induced.

One at once realizes the contribution of these strategies and elements that characterized these illustrations and added to its dream-like quality. The conceptual ‘pause’ was provided at these key points in the illustration where there was a playful and desired manipulation of the rules of drawing. One may call these *errors* but these were planned and deliberate subversions of rules that contributed to creating the ‘pause.’ These ‘pauses’ were critical in their subversions using the irrationality as an advantage. These were chiasmic structures that functioned to make the obvious, visible, and existing be perceived so that it transported to an imaginative consciousness of them. The imagination of space in these illustrations was a function of forming images in the mind as much as it was the process of deforming a visual image.

Another pertinent observation in the illustration for Aranya was that the mirroring of the buildings along the central street did not relate the two sides as a mirror image. The chiral images on both sides of the mirror line could not be superimposed. This was also assertively representative of the nature of the housing project that was Aranya. Aranya sites and services scheme, enabled the economically weaker section to buy a lot with sewer, electricity, and water. With materials bought from a cooperative and training provided, the inhabitants built their own homes over time. The result was a different configuration for

every home. Unlike most builder-built housing schemes, which use a cookie-cutter strategy of making similar houses one beside the other, this housing scheme gave a kit of parts that created elements like railings, staircase blocks, and such in a uniform way, but the combination of these were left up to the inhabitant.⁴¹⁸

The mirror line in the illustration could be construed as a critique of standardization and homogenization present in housing schemes of builder-initiated projects. The chirality of the images of the houses on either side of the mirror line of the street spoke volumes of the approach for the project. It seemed contronymic to say that erasure of standardization began as people started construction of their homes in Aranya. Social housing as a flexible, participatory structure, gave this project a sense of a collective act of obliteration—obliterating the effects of what they started with in the form of standardization and homogenization in the kit of parts. With time, the project celebrated differences in how these could be configured in bespoke ways.

In layering over a pre-established architectural vocabulary with the various possibilities of the elements by their manipulation by the residents, generated manifold possibilities and options. The involvement of the inhabitants marked the shift towards the recuperation of a more traditional approach to housing where residents were involved. The illustrations operated in the epigraphic mode to identify and reconstruct the central theme of the project in Aranya—one that thrived due to its communal life which supported

⁴¹⁸ Steele and Doshi, *The Complete Architecture of Balkrishna Doshi*, 115-129.

inhabitants in socio-cultural and economic ways and where personal characters, preferences, and priorities manifest in the different configurations of the homes.

A visit to Indore, India in 2015 revealed the festive and busy nature of the streets and the close-knit community of people who lived in Aranya. The connection to the streetscape and the entry to the homes recalled the *otla* as seen in the pol houses. These in-between spaces joining the street and the homes were used for parking bicycles and other vehicles or for sitting and chatting with neighbors. I felt a sense of *deja vous*, as though I had visited the place before only to realize that I had indeed visited it virtually through the miniature illustration.

The miniature style illustration for Vidhyadhar Nagar was different from the rest because it was a conceptual proposition, done as part of developmental studies for the Jaipur Development Authority. The concept was Doshi's vision for the urban design deriving inspiration from Le Corbusier as well as from the old city of Jaipur with emphasis on constructing a community that considered issues of transportation, mixed use, demographics, employment patterns, infrastructure, and environmental use.⁴¹⁹ Here as well the street became the focus of the illustration. The representation of Vidhyadhar Nagar used pink as the dominant colour. That was not surprising based on its proximity to and derivation from the old city of Jaipur, a UNESCO World Heritage City, which was known

⁴¹⁹ "A World of Imagination: drawings by BV Doshi," Text by Khushnu Hoof, Photography by Bikramjit Bose, Architecture and illustration, issue 21, issue 22, <https://www.apartmentomagazine.com/stories/a-world-of-imagination-drawings-by-bv-doshi/>, accessed August 18, 2020.

as the “pink city” due to the proliferation of pink coloured buildings in the city. For the project Doshi’s office had done the facade study of the streets of Jaipur to understand spatial elements that gave Jaipur its character.

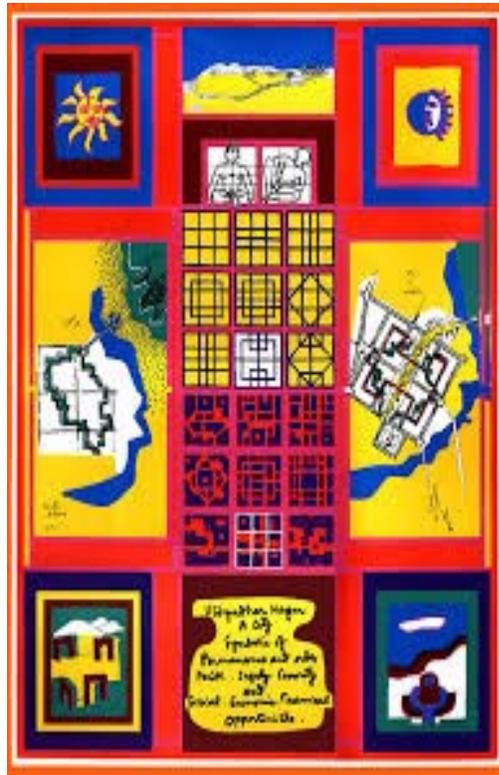


Figure 80: Balkrishna Doshi, The concept of Vidhyadhar Nagar, Jaipur, Miniature painting style illustration (1984-86), Serigraph, Manual screen printing, 1 Imperial size sheet. © Credit Vastushilpa Foundation, India, used with permission, not to be reused without the copyright owner’s permission.

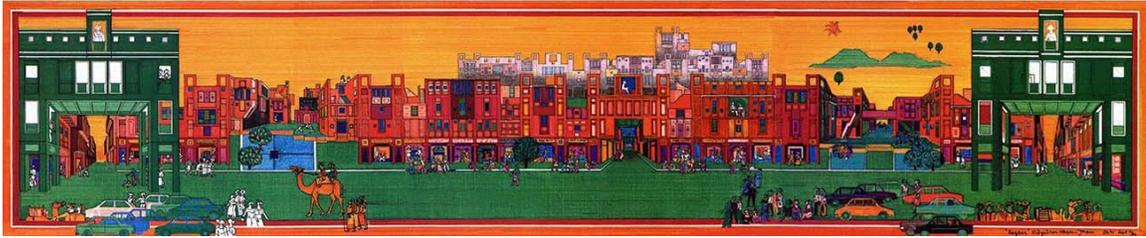


Figure 81: Balkrishna Doshi, Vidhyadhar Nagar, Jaipur, Miniature painting style illustration (1984-86), Serigraph, Manual screen printing, 3 Imperial size sheets. © Vastushilpa Foundation, India, used with permission, not to be reused without the copyright owner's permission.

The illustration combined elevations and axonometrics for this project. The city was conceptualized primarily by conceiving the relationship between the buildings and the transportation network within. The layout of roadways, streets, and laneways was elaborately planned. The concept illustration brought out the arrangement of the streets, concepts derived from the old city in the connection to the cosmic, and the spatial strategies used to combat the climate while also highlighting the modern principles of the grid and the resultant manipulation of urban circulation.

In the illustration of the Vidhyadhar Nagar concept, an elevation drawing provided the underlying structure, different from Sangath where the illustration used a site plan as the base drawing. This enabled the depiction of the scale and character of the buildings and the cityscape. Deriving from the city of Jaipur, Doshi sought to create spatial elements like the overhangs, balconies or *jharokhas*, and fenestrations that were climatological controls that gave the building facade a particular character due to the play of light and shade.

The view as suggested in the drawing appeared to be one from a distance probably implying the peripheral roads that were used for vehicular movement. Axonometric drawings penetrated the elevation to show perpendicular narrower pedestrian lanes like the old city of Jaipur, their entries accentuated and marked by the gateways. The play between the elevation and accompanying axonometric drawings suggested the expanse of the township in the depth of the picture plane. The overflow of the elements over the border or frame of the illustration also extended the ground outwards to suggest open areas that were an important feature of the township. The township appeared as a green oasis in the surrounding of the desert where it was located, which was indicated by the yellow background with little vegetation. The illustration reiterated the reciprocity between the technique and the nature of the project.

Most intriguing was the fact that the project represented the “nothingness” in architecture—meaning a visual exiguousness or deficit. The nature of Aranya’s illustration, as well as of Sangath implied a certain blindness to the idea of architecture as a finished, imposing, visually attractive, and well packaged solution. The visual or aesthetic capacities of these projects were calibrated in different terms. At Sangath for example the building facade was minimized by having much of the building underground and having almost 50 percent of the site constitute a garden, subduing the building facade or geometry to make it secondary. The illustration projected the garden more than the building by using the site plan as its base.

Similarly, the Aranya project was one that developed over time without the facade or form given much thought. The nature of the Aranya, as a project that was perpetually ongoing, substantiated the miniature style illustration that did not capture the finished state of the project but instead abstracted its nature and evolution by focusing instead on the imagination of life and activities in the scheme. Because of Aranya's evolutionary nature, its tangible reality and its representation could not be the same at any point in time. The difficulty of representing a perpetual "work of movement" that was Aranya, was achieved by creating a 'pause'—where the project and its representation remained differentiated in their likeness, and the visual appearance of the buildings were replaced by the lived experience of the space. The buildings were presented as a labyrinth through which the mind and body wandered and wondered to experience and bring an identification of known and loved activities, habits, memories, traditions, rituals, and mental images.

It brought forth the nature of architectural thinking and representation as Juhanni Pallasama defined it,

“Consequently, basic architectural experiences have a verb form rather than being nouns. Authentic architectural experiences consist then, for instance, of approaching or confronting a building, rather than the formal apprehension of a facade; of the act of entering and not simply the visual design of the door; of looking in or out through a window, rather than the window itself as a material object; or of occupying the sphere of warmth, rather than the fireplace as an object of visual design. Architectural space is lived space rather than physical space, and lived space always transcends geometry and measurability.”⁴²⁰

⁴²⁰ Juhani Pallasama, *Eyes of the Skin* (West Sussex: Wiley, 2012), 68.

Doshi emphasized the lived rather than the geometric experience of space as was evident in his comments on my drawing, which accompanied the story I had written for the Health Center in the Nalanda University Project. When engaging with the deliberate ‘oddities’ or divergence from the conventional in Doshi’s miniature style illustrations, micro stories emerged in different parts of the illustration showing the “construction and construing,”⁴²¹ of the labyrinthian wanderings and wonderings through corporeal, social, and cultural intricacies in the lived reality of the project. These illustrations reminded that by re-centering the emphasis on lived stories, the use of such anomalous drawings could trigger wholesome ways of thinking about architecture with consideration of its carnal, social, and cultural roles resulting in an ‘anagogical imagination’ redefining drawing as a tool for reading between the lines (here the drawn line) to engage in an imaginative demonstration of architecture.

The miniature style illustrations reinterpreted the tools already existing for representation in the architect’s arsenal and raised them over and above their established roles as predecessors to construction or as modes of description, to become generators of imaginative, rich, and embodied conceptualization and inhabitation of architectural spaces. These illustrations created the ‘pause,’ highlighting the need and potential to vary architectural representation in ways that also epistemologically represented the specificity and essence of each site and project.

⁴²¹ See footnote 24.

The miniature painting style illustrations operated at different scales. The private house and the urban street were represented together, static architectural configurations infused by various intriguing rituals and activities. These disregarded the notion of architecture as a provocative visual image and brought forth architecture as a setting that fostered activities and life in general highlighting the socio-cultural nature of architecture. These drawings alluded to the twin personality of the architect-idiot that percolated architectural imagination and helped maintain a balance between the solipsist and objective thinking of the architect and the imaginative conception and the involvement of the community and culture at large.

Doshi in these illustrations as well as in his approach to architecture in general insisted on oscillating between logic and absurdity, between the private and public, between knowing and not knowing—between the architect and the idiot. Both the full-scale installations for his exhibitions and the miniature painting style illustrations enabled the revealing of connections and understanding the totality of the experience that the built work hoped to engender.

“Is there a binding thread that joins the real and the imagined together?”⁴²² asked Doshi. He described that the mythical stories he enjoyed as a child often talked of imaginary people, places, and animals. These for him triggered lots of thoughts and images.⁴²³ He often had such dreams where he saw irrational things. He derived joy from

⁴²² Doshi, *Paths Uncharted*, 89.

⁴²³ *Ibid*, 34.

‘impossible possibilities’ that these suggested.⁴²⁴ He believes that for creation to happen one had to become “consciously subconscious.”⁴²⁵ For Doshi, there was no greater teacher than intuition and dreams because they give voice to fundamental and primordial needs.⁴²⁶ His representation in the miniature illustration broke rules, playfully induced deliberate errors and helped see things that accuracy often hid giving a dream-like aura to his representation as a result of the existence of impossible possibilities.

A basic question that came to the fore, through the study of these miniature style illustrations concerned the role of architectural representation. ‘Re-presentation’ also means a presentation of the building again. This re-presenting is a tool for communication with the client as well as with all associated with the creation including the architect themselves. It is a means not only to foster and give voice to the imagination, but also a way to present for reflection the various ingredients in the architectural solution. Doshi’s illustrations became a peripatetic musing and imagination, that metonymically allowed walking, and revisiting the architectural site of imagination, so as to enable a slow reflection on and assimilation of ideas inherent in the work as one moved through it physically, conceptually, and temporally. Doshi’s stories served to remind that architectural representation could and should provide an opportunity to bring in lightness in architectural thought that everyone could digest and enjoy.

⁴²⁴ Ibid, 36.

⁴²⁵ Ibid, 394.

⁴²⁶ Ibid, 364.

(iv) *From the Visual Image to the Visual Story*

Architect and academician Paul Emmons in his book *Drawing, Imagining, Building: Embodiment in Architectural Design Practices*, discusses Jonathan Swift's *Gulliver's Travels*, suggesting scale as a means to see our world anew.⁴²⁷ The manipulation of scale explored in the representation of Doshi's work, in its topological and temporal collapses, through the detailed miniature style illustrations for projects and the full scale installation of fragments of projects in his exhibition leads to a shifting and fractal scale in which one traverses architectural creation—at the level of the city as well as at scale of the intricacies of a floor mosaic. These add up to suggest an investigation of subtle and clever connections, and the reliance of architecture on micro and macro stories. The “melting of scales” that Doshi advocated in his appreciation for the Japanese art of miniaturization happened by traversing different scales, dissecting architectural conglomerations to create a wholesome understanding of architecture.⁴²⁸ This “melting of scale” appeared not in the negation of it but in its employment in diverse ways to bring out architectural elements and connections.

These illustrations and exhibition installations became works in themselves conjuring a new world of experience of the projects and their inherent characteristics. They shifted from a visual image to become visual stories in which the spatial, its imagination, and its representation did not stand divorced but operated together. They did not accurately portray

⁴²⁷ Paul Emmons, *Drawing, Imagining, Building: Embodiment in Architectural Design Practices* (London, NY: Routledge, 2019).

⁴²⁸ Doshi, *Paths Uncharted*, 397.

the spaces that they were supposed to represent but brought out aspects of how they were conceptualized or how they could be experienced. Hence, they became works in themselves. They brought out the spatial characteristics of space illuminating the personal imagination of the architect, and engaging the imagination of the percipient-dreamer, representing the numerous stories that architecture alludes to and conjures.

These deliberations like in the miniature style illustrations may not be the regular ways in which architects work, where efficiency, time management, and maximization of profits are often the aims. Indulgence in technological sagacity that limits intellectual and creative capacities of the architect while offering parametric, effective, and programmed solutions that minimize error and time consumption, is preferred over cultural, hermeneutic, and mantic deliberation and serendipities of the kind Doshi practiced. Doshi appreciated the efficiency of digital tools but observed that it prohibited chance to participate with their precision in input as opposed to:

“free moving pencils and pens [which] allow for overwriting, erasure, and participation.”⁴²⁹

The technological means at our disposal often induce an ‘amputated’ or ‘paraparetic’ imagination. They provide precise and mathematical visual images that can be used to create spectacular “walkthroughs,” but in a paraparetic way. The virtual reality’s apparent

⁴²⁹ Kathpalia, “The Joy of Making” in Neelkanth Chhaya ed., *Harnessing the Intangible*, 88.

claim to create an almost-real real strangely evaporates as soon as one looks down, not to be able to see their own legs and discover a peripatetic existence that ushers an estrangement. Some find it hard, even nauseating to inhabit such a reality.

Due to automation that digital media afford, it becomes easy to create seductive, numerous, and detailed images. After the meticulous and specialized process of parametric modelling is done, material palettes, and other settings assigned, it becomes easy to render images without giving much thought to what purpose these serve. In many cases, such a process does not involve any deliberation on what needs to be represented due to the ease and possibility of creating the many and redundant images. When this is the case, these renders are reduced to spectacles, leading to creative and imaginative inertia rather than imaginative habitation or imagination.

On the other hand, the peripatetic imagination in Doshi's illustration, that proffered encounters with the architectural activities that unfolded on site, was not to be assimilated as a single image but over time as one moved around on the site of the picture plane. These encompassed a sense of time by engaging in the mental wanderings as induced by the illustrations in which enactment happened in the memory or imagination. Empirical evidence has been provided demonstrating that the mental simulation of an architectural event in imagination also manifests in a carnal or embodied way. For example, when I imagine that there is a bump in the wall my hand feels the bump. This has been called "high

level simulation” or “enactment imagination.”⁴³⁰ The miniature painting style illustrations, although visual at first, afforded activities or emotions to be enacted in the mind triggering bodily or corporeal responses. As Pallasama contends,

“The elements of architecture are not visual units or gestalt; they are encounters, confrontations that interact with memory.”⁴³¹

Undeniably, the mode of representation in architecture is primarily and foremost visual—through drawings and models. The question is not only how to avoid ocularcentrism but more prominently how to use the visual representation in a way that uses the visuality to an advantage. In the miniature painting style illustration, the juxtaposition of various views and their departure from the conventional rules, deforms a realistic image, liberating the onlooker from its visual extravaganza to become heedful of stories that simulate memories, cultural connections, social activities, domestic and communal life, including aspects of food, dresses, games, people in the neighbourhood, and vehicles on the street not shown in methodical and realistic ways but as a collage or mosaic—the nature of which does not favour how we see them but how we imagine them by invoking the ‘synaesthetic imagination.’

⁴³⁰ Jenefer Robinson, "On Being Moved by Architecture." *The Journal of Aesthetics and Art Criticism* 70, no. 4 (2012): 337-53. Accessed July 14, 2020. www.jstor.org/stable/43496529. Citing Alvin Goldman, 48.

⁴³¹ Juhani Pallasama, *Eyes of the Skin* (West Sussex: John Wiley and Sons Ltd., 2012), 67.

The magic lies in creating the ‘pause’—that break from *seeing* the world rightly in precise and correct visual representation, instead using the disruption created by what may appear as error in the objective sense to foster the appearance of a playful world not exclusively dominated by conventions and rules and to let what Juhani Pallasama aptly describes as the task of architecture, “to make visible how the world touches us.”⁴³² These representations become companions to the buildings and to architectural imagination to understand how we move through the built and how it moves us.

⁴³² Ibid, 49.

Chapter 4: The Architect of his Word – Doshi's Written Stories

“It was a cold winter day, and a heavily dressed man noticed Nasrudin outside wearing very little clothing. ‘Mullah,’ the man said, ‘tell me, how is it that I am wearing all these clothes and still feel a little cold, whereas you are barely wearing anything yet seem unaffected by the weather?’

‘Well,’ replied Nasrudin, ‘I don’t have any more clothes, so I can’t afford to feel cold, whereas you have plenty of clothes, and thus have the liberty to feel cold.’”⁴³³

Keywords: linguistic imagination, narrative imagination, prophetic imagination, nostalgic imagination.⁴³⁴

⁴³³ Rich Heffern, Nasruddin and his donkey: Tales of the holy fool, Feb 9, 2011, <https://www.ncronline.org/blogs/earthbeat/eco-catholic/nasruddin-and-his-donkey-tales-holy-fool>, accessed July 9, 2020.

⁴³⁴ Parts of this chapter published by author in Architectural Storytelling- A Subjunctive Mode of Architectural Conceptualization and Experience in the works of Balkrishna Doshi, in Architecture and Culture, AHRA Journal, Taylor and Francis Online, Volume 6, Issue 2, on December 11, 2018. Also presented was the paper titled Art for Architecture, or Architecture for Art, at AR (t) CHITECTURE An International Conference at the Technion – Israel Institute of Technology Faculty of Architecture and Town Planning, 19-21 April 2016.

(i) The Architect of his Word

Stories were integral to Doshi's architecture and took different forms in his architectural creation as we have seen in previous chapters—tectonic (through his buildings and exhibition installations) and visual (through his miniature painting style illustrations). These provided 'pauses' that extended an invitation to all those involved to collaborate in the process of conceptualization and experience of the built work converting the architectonic process into a social and collaborative act as opposed to an idiosyncratic exercise on the part of the architect.⁴³⁵ When experiencing the built work and the tectonic stories, the 'pause' elicited an imaginative experience. On the other hand, the 'pause' imparted to the visual stories the capability of providing an embodied experience.

This chapter looks at Doshi's written stories. "The Revelation," "The Sacred Spring," and "The Legend of the Living Rock" written by Doshi are three stories that accompany three of his built works—the Husain Doshi Gufa (Ahmedabad, 1992-1995), the National Institute of Fashion Technology (Delhi, 1997), and Bharat Diamond Bourse (Mumbai, 1998) respectively.⁴³⁶ In these, Doshi explored yet another method of architectural representation, which used words instead of visual images. The written stories conjured

⁴³⁵ Parts of this paragraph published by author in *Architectural Storytelling- A Subjunctive Mode of Architectural Conceptualization and Experience in the works of Balkrishna Doshi*, in *Architecture and Culture*, AHRA Journal, Taylor and Francis Online, Volume 6, Issue 2, on December 11, 2018.

⁴³⁶ The stories are included in Steele and Doshi, *The Complete Architecture of Balkrishna Doshi*.

polysemic images in the imagination of the reader despite the absence of the dominating and realistic images.

This chapter first probes the nature of the projects for which the stories were written. It then dissects the written stories to understand Doshi's intent and the nature of his imagination in them after which it contemplates what these stories imparted to architectural thinking. Doshi's written stories narrated in words the intent and character of his architecture 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.⁴³⁷ The stories did not define these categories nor did they segregate them. In subtle ways these disparate and layered components suggested the ethics, intent, and character of the projects. These assumed the guise of stories because they were not proclamations or claims for fame, but a narration of how fundamental and ethical intents guided and shaped his architectural works.

These stories at best can be defined as elusive at first—what purpose did they serve especially as they were written after the associated projects were completed? The three projects that these stories accompanied were projects that seem anomalous in Doshi's career. In his article, "The Search for Joy in the Modern Project," Riyaz Tayyibji writes about Doshi and his contemporary and friend, Indian architect of repute, Charles Correa

⁴³⁷ Parts of this paragraph published by author in *Architectural Storytelling- A Subjunctive Mode of Architectural Conceptualization and Experience in the works of Balkrishna Doshi*, in *Architecture and Culture*, AHRA Journal, Taylor and Francis Online, Volume 6, Issue 2, on December 11, 2018.

(1930-2015) describing the professional “crisis” that they underwent in the late 1980s and 1990s. This was the time-frame also for the three projects for which the stories were written.

“Both Correa and Doshi tried their hand at ‘the language of post-modern architecture’. Doshi’s projects for the NIFT, Delhi and the Diamond Bourse, Mumbai were far from successful as the financial, technological and material developments were not in sync with the formal explorations that Doshi had attempted. Perhaps the representational issues consumed the more practical ones that Doshi had been so thorough with until then. Doshi understood that as much as he would have liked to be ‘with it’, to be considered amongst the ‘star’ architects of the world, he was deeply uncomfortable with the implications of this emerging trajectory.”⁴³⁸

Clearly the two projects described above and for which Doshi wrote the stories were projects he was not comfortable with. The Bharat Diamond Bourse project with its enormous scale and its commercial nature stands out as the largest project done by Doshi’s office. Three million square feet of this township housed all facilities for the Diamond traders in Mumbai. The project accommodated 30, 000 people on a site of 20 acres.⁴³⁹ The client had intended for the project to be only offices and trading halls, but Doshi emphasised the social and cultural aspects of the projects. This was critical to his architectural ideals but also beneficial for the diamond merchant community for whom the urban setup was being planned.

⁴³⁸ Tayyibji, “The Search for ‘Joy’ in the Modern Project,” Neelkanth Chhaya ed., *Harnessing the Intangible*, 103.

⁴³⁹ Steele and Doshi, *The Complete Architecture of Balkrishna Doshi*, 173.

The Bourse would, Doshi hoped, be exemplary for other projects of this nature in nurturing the community it served. Doshi's proposal sought to create a self-sufficient and environmentally conscious micro-city within the complex which was climatically designed to optimize the use of local resources, natural energy like wind and water, have community spaces like streets, courtyards, and bazaars, while replacing the prevalent high-rise skyscrapers with several low-rise buildings.⁴⁴⁰

In the Bourse Project, the management had a discord with Doshi. The politics that accompanied the project claimed authority over Doshi's methods. Doshi writes,

“Unfortunately, misunderstandings among the members about the facilities and their financial implications resulted in the project being stalled. With no solution in sight, eventually several committees in charge of the project were dissolved and painfully, the clients and we parted company when the bourse buildings were almost 70 per cent ready and most of the materials for the rest of the construction had already been procured.”⁴⁴¹

The management insisted on changes that were not in line with Doshi's philosophies of creating spaces for the wellbeing of the inhabitants. The management had other agendas due to their financial and hierarchical preferences. Architect, curator, and Doshi's granddaughter Khushnu Panthaki Hoof says:

⁴⁴⁰ Ibid, 174-5.

⁴⁴¹ Doshi, *Paths Uncharted*, 327.

“After the structure was finished, the management put a lot of pressure on changing a lot of things so he left the project, and, unfortunately, this was a time when (Doshi’s) office nearly shut down.”⁴⁴²

At the Vitra Exhibition of Doshi’s works, titled “Architecture for the People,” the Bourse is featured prominently not as one of the successful projects but as one which failed.

The webpage describing the projects in the exhibition states,

“Another failure is included – and, interestingly, it is the one project that looks clunky and unresolved. A market hall and offices for 7,000 diamond merchants in Bombay; one of the few fully commercial (rather than civic or institutional) projects he has been commissioned with.”⁴⁴³

The written story that accompanied the Bourse project seems to be giving voice to Doshi’s turmoil and aspirations, to shift the emphasis from the commercial nature of the project to one that architectural endeavors should be about—“an architecture for the people.”⁴⁴⁴ The stories provided an alternative view for architectural efforts, of not being a money-minting, bureaucratic activity but one that brought joy in the lives of those occupying the building. The written story described the aspirations that contributed

⁴⁴² Balkrishna Doshi: Architecture for the People, <https://www.studiointernational.com/index.php/balkrishna-doshi-architecture-for-the-people-review-vitra-design-museum-weil-am-rhein>, accessed August 18, 2020.

⁴⁴³ Ibid.

⁴⁴⁴ The retrospective exhibition for Doshi at the Vitra Design Museum, Germany, was titled “Architecture for the People,” <https://www.design-museum.de/en/exhibitions/detailpages/balkrishna-doshi-architecture-for-the-people.html>, Accessed August 18, 2020.

towards cultivating personal, collective, ethical, and environmental balance through the architectural creation.

The National Institute of Fashion Technology was a building commissioned by the Government of India. It was to be an institute that catered to training personnel for the fashion industry on the national level, on a site of 2.87 acres in the Hauz Khas area of New Delhi, India. It was intended to provide opportunities for students as well as professionals for continuing education. On one hand, it functioned as a research, education, and resource centre, while on the other it had areas for exhibitions, visual merchandising, and sales. The commercial nature of the project was not to be denied. Doshi wove real and unreal fragments in the design development phase of the project to attune the architectural story that seemed to be dictated by strong commercial motives. The story aligned the architectural team's imagination and the architecture to humanitarian and wellbeing concerns.

Another of the projects for which the story was written was Ahmedabad-ni-gufa (Caves of Ahmedabad, 1990-5), which was the meeting of an architect and an artist. Indian artist of international acclaim, Maqbool Fida Husain (1913–2011) and Doshi, got together to create an exhibition space for Husain. In the Gufa, the architect through the built form challenged the artist to revisit his own procedures. The nature of this project was again, one of a kind in Doshi's career. Mostly renowned for his housing and community-based projects, Doshi encountered a project where the purpose of the building was the display of work of a single artist, Husain. Doshi converted the objective of the building from the

celebration of a single artist's work to the celebration of the interdependence between art and architecture.

Husain could not hang any paintings on the curvilinear walls of the gallery that Doshi designed. Husain had to pick up his brushes and paints while using walls and ceilings as his canvas. He made bespoke metal sculptures of human figures for the Gufa.⁴⁴⁵ In the Gufa a coalesced interrelationship between art and architecture reverberated with the same interdependence as of music and architecture in the Gregorian chants in the cathedrals making one wonder if the chants seemed to be so powerful as a result of being in the cathedral or was the cathedral mystified due to the chants?

The nature of these projects demanded more effort so as to align them with Doshi's architectural priorities. The written stories perhaps indicated how Doshi dealt with projects outside his zone of comfort, subsequently subjugating the hegemonic and commercial nature of these, and proposing a humanistic, ethical, and imaginative alternative for such typologies. This chapter argues that Doshi's written stories were a 'pause' that separated an architecture of consumption—a materialistic and commodified view of architecture from a more holistic, inclusive, and humane architecture. Doshi's use of the subjunctive mode is clear in the use of the language in the written stories and in its depiction of his dreams and aspirations. Doshi's stories transported one to the world of personal and communal memories and associations. The subjunctive mode was also depicted in the

⁴⁴⁵ Doshi, *Paths Uncharted*, 336.

architectural activities of the stories that described a subjunctive space for the interaction of people, space, and time. In these stories, architecture was viewed not only through a positivistic lens but also through an imaginative, oneiric, and fantastical one.

As discussed earlier, the subjunctive mode of the verb in English grammar was 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 objective facts. Subjunctive verbs open the possibility of conversation and exchange as they do not limit narrative to that which is definitively given. In contrast, contemporary architectural practices, most times than not, tend to concentrate on making buildings that are considered “complete.” Designed in an office using advanced digital tools of representation and analysis, such projects 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.”⁴⁴⁶

Vesely described 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.⁴⁴⁷ For Vesely, no such system or vision can replace the unity or inseparability of the different levels of

⁴⁴⁶ Pérez-Gómez, *Attunement*, 127. Parts of this paragraph published by author in *Architectural Storytelling- A Subjunctive Mode of Architectural Conceptualization and Experience in the works of Balkrishna Doshi*, in *Architecture and Culture*, AHRA Journal, Taylor and Francis Online, Volume 6, Issue 2, on December 11, 2018.

⁴⁴⁷ Vesely, *Architecture in the Age of Divided Representation*, 4.

knowledge—geometrical definition, material imagination, experiential aspects—some more articulate, others more implicit, required for the genuine creativity of the art of building.⁴⁴⁸ Richard Sennett (b.1943) 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 practising 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.⁴⁴⁹ He asks that we counter this by learning to work in the subjunctive mode, a mode which facilitates the opening of an indeterminate open mutual space for cooperation.⁴⁵⁰

Doshi’s stories brought in different levels of knowledge—worldly and human, non-human, mythological, and fictional. Doshi’s storytelling derived from ancient Indian traditions of storytelling. 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 which dealt with the fundamental truths of human existence.⁴⁵¹ The ancient Indian

⁴⁴⁸ Ibid.

⁴⁴⁹ Richard Sennett, *Together – The Rituals, Pleasures and Politics of Cooperation* (New Haven, CT and London: Yale University Press, 2014), x–ix, 8. Parts of this paragraph published by author in Architectural Storytelling- A Subjunctive Mode of Architectural Conceptualization and Experience in the works of Balkrishna Doshi, in *Architecture and Culture*, AHRA Journal, Taylor and Francis Online, Volume 6, Issue 2, on December 11, 2018.

⁴⁵⁰ Ibid, 23. Parts of this paragraph published by author in Architectural Storytelling- A Subjunctive Mode of Architectural Conceptualization and Experience in the works of Balkrishna Doshi, in *Architecture and Culture*, AHRA Journal, Taylor and Francis Online, Volume 6, Issue 2, on December 11, 2018.

⁴⁵¹ Doshi, *Paths Uncharted*, 376.

epics in Sanskrit, Ramayana (7th century BCE roughly) and Mahabharata (3rd century BCE roughly) were stories of avatars of the Hindu God Vishnu, the Creator. The two epics portrayed the intertwining of the human and the divine in two ways. The Ramayana was the story of the human avatars of Gods who descended on the earth while in the Mahabharata, mortals were guided by the Gods to finally achieve heavenly abode. These stories were packed with the philosophies that guided ethical living based in the thick of the entanglements and messiness of human life. They consisted of characters that were human, divine, and mythical. Panchatantra were ancient Sanskrit stories with a moral, told for children and which combined animal characters with human ones.⁴⁵²

The characters in these stories indicated a mix of the human, animal, and the divine, and thus encompassed the spheres of the personal, communal, ecological, and the transcendental or spiritual. The plot of these ancient stories included the Hindu cosmos, or *Brahmanda*, which was made up of heaven (*swarg lok*) where the divine lived, earth (*prithvi lok*) where the humans lived, and the subterranean (*patal lok*) where the demons or *asuras* lived.⁴⁵³ This tripartite division was perhaps not geographic and may have alluded to the states of mind of people, which granted them the happiness of the divine, the mundanity of human life, and the unrest in the demonic. These scriptures as well as many Indian traditional buildings, functioned primarily to frame religious life, revealing cosmic

⁴⁵² Doshi, et al. *The Acrobat, the Yogi and the Sangathi*, 8.

⁴⁵³ Devdutt Pattanaik, Layers of the Hindu World, First Published in Sunday Mid-Day.'Devlok' on July 20, 2008, <https://devdutt.com/articles/layers-of-the-hindu-world/>, Republished online July 28, 2008, accessed July 14, 2020.

and transcendental meanings in the material world. The spirituality that these exuded made them a means to inculcate a wholesome and inclusive way of thinking and learning from each other, as well as from the non-human and natural worlds, emphasizing on humans as part of the world and not the center of it.

On reading Doshi's written stories, it is clear that he derived inspiration from such mythological stories. The written stories worked to remove the emphasis from the physical, material image of architecture and went beyond being a means of explanation to a means of reflection on what the buildings wanted to be and could be. In Doshi's words,

“Is there an absolute manner of seeing things, as someone has said? ... It seems to me that there are at least a thousand different ways to interpret things.”⁴⁵⁴

For Doshi, truth was to be perused and negotiated from varied points of view and was never singular. Doshi tells author, Vera Simone Bader, "for me, writing is clarifying my inner thoughts."⁴⁵⁵ This chapter argues that the written stories clarified and presented his architectural thought with the mandate to raise his works above an architecture of consumption to one based on mythical and iconographic programs. Curator of the exhibition at Vitra Design Museum, titled “Architecture for the People,” Jolanthe Kugler commented on the body of Doshi's work and its relevance for the European countries,

⁴⁵⁴ Doshi, *Paths Uncharted*, 229.

⁴⁵⁵ Balkrishna Doshi: Writings on Architecture & Identity, Vera Simone Bader (Editor) ArchiTangle, October 2019, <https://www.archiecho.com/balkrishna-doshi>, accessed June 14, 2020.

“It contains so many ideas which can help us to resolve our own problems. Foremost among his qualities in this respect is his humane approach to architecture. People are always at the centre of everything he does. That is quite exceptional. Some architects build to try and make themselves immortal. Mr. Doshi has never done that. He builds to empower people to build better lives.”⁴⁵⁶

This “humane approach” that Doshi adopted however did not cater to individualistic motives without consideration for the greater good of the community and the environment. In Doshi’s Bourse project, it would have been easier for Doshi to disregard his “ethical imagination” and embrace the impoverished proposals that the management made. However, Doshi refrained from it, and was determined to follow what he thought was best from his own moral, ethical, and professional standards than to give in to what was easily doable or possible. Landrum defines “ethical imagination” as one that deals with deciding not simply “what is possible” but “what is best” and involves empathy to understand situations and scenarios.⁴⁵⁷

“This empathic imagination demands putting oneself in the shoes of multiple others while recalibrating one’s own moral and professional compass, discerning, deliberating and desiring a common good. However, “urgent” a present opportunity or crisis may seem, such careful consideration slows down the rush to judgment. Ethical imagination, the root of any collective imagination worth pursuing, takes time. It is an ethos marked by reflective pauses and awkward, even painful, interruptions.”⁴⁵⁸

⁴⁵⁶ Balkrishna Doshi: Architecture for the People, <https://www.studiointernational.com/index.php/balkrishna-doshi-architecture-for-the-people-review-vitra-design-museum-weil-am-rhein>, accessed July 12, 2020.

⁴⁵⁷ Landrum, “Varieties of Architectural Imagination,” *Warehouse*, 73.

⁴⁵⁸ *Ibid.*

Doshi's efforts to not succumb to the trend of the objective and commercially profitable architectural approach was to counteract it by the architecture with the 'subjunctive pause.' He proved to be an 'architect of his words' whose ideologies did not falter even in difficult times in his career. Through the study of his written stories, this chapter elucidates Doshi's encounter with the commercially mandated nature of architecture which he tackled in ways that did not surrender to these and remained steadfast in upholding an ethical practice. In the following sections, the focus and characters of the story, its plot, and tone will be examined in greater detail to see how Doshi seamlessly wove elements—the real-unreal, human-non-human-divine, transcending temporal planes and deriving from wakefulness and dream, to include the indicative and the subjunctive modes.

(ii) The Nature of Imagination in Doshi's Written Stories

Doshi's written stories brought forth a "linguistic" or "narrative" imagination that presented a discourse with himself and others during the architectural process. Landrum derives from Pérez-Gómez to describe that linguistic imagination produces "poetic images" while the narrative imagination brings together these poetic images with "fictional plots."⁴⁵⁹ Doshi's written stories appeared to incite the imagination in architectural

⁴⁵⁹ As we will see in the next chapter, during the Bourse Project, Doshi and the client did not see eye to eye and had to part ways leading to a great financial loss at Sangath.

accounts that avoided the lackluster language used in architectural programs and concept statements that served as instrumental and objective descriptions of moves towards a safe solution. The verbal discourse in Doshi's stories can be described as one that gave rise to a thoughtful imagination based on understanding of individual, fundamental, and cultural narratives. The stories not only derived from such narratives but reintroduced these to the audience in the form of the architectural story. The literary images that these stories conjured were not conclusive but inspired imaginative faculties of readers to create a resonance with these imaginal worlds and derive from them their own worlds of understanding and experience, "a world within the world." Landrum argues that,

"Verbal communication is not simply the delivery of thoughts already fashioned in our heads, but the very means by which we think, discover and make the potential for understanding available both to ourselves and others."⁴⁶⁰

Doshi's stories were a tool to incite reflection for himself and others. Doshi referred to the Indian Jain scholar and poet, Hemachandra Acharya (c.1088-c.1173), with his many contributions to grammar, philosophy, and history. Doshi was particularly fascinated by his account of the ancient city of Patan, India. Acharya's description of the city took the form of a story narrated from the lens of a visitor to the city. Doshi found that this had an indelible mark on him due to the magical mental images the story created. The association of these images to vestiges of traditional and cultural lives of the people, made him adopt

⁴⁶⁰ Lisa Landrum, "Varieties of Architectural Imagination," *Warehouse*, 76.

the employment of such techniques in his own practice to achieve felicitous ends.⁴⁶¹ These images connected to the fundamental, biological, and cultural proclivity of beings. In the story by Acharya, Doshi was intrigued by the images from nature and those that were composed of layers that accumulated over time in a certain place. These for him induced enigma and curiosity.⁴⁶²

In his study of traditional buildings, towns, and scriptures, Doshi became aware of the “deep absorptions of different cultures” in the Indian fabric. This spirit of assimilation that Doshi identified from his study of Indian art, architecture, and philosophy was characteristic in Indian history which had poignant accounts of altruism, philanthropy, and empathy, by Indian patrons and rulers, who invited and allowed the assimilation of the various layers over time. Looking at traditional Indian architecture, Doshi was intrigued by the “patina of a place changing over time,” subject to many different influences.⁴⁶³ The spaces that emerged between built forms and the coexistence of fragments from different periods and styles fascinated him, asserting credibility to his belief that notions such as style and genres were limiting to the imagination, and could traverse spatial or temporal categorization.⁴⁶⁴ Doshi instead tried to understand what the layers had in common, and what gave them their creative quality beyond any categorization,

⁴⁶¹ Doshi et. al. *The Acrobat, the Yogi and the Sangathi*, 8.

⁴⁶² Ibid, 7-8.

⁴⁶³ Doshi et. al., *The Acrobat, the Yogi and the Sangathi*, 22.

⁴⁶⁴ Parts of this paragraph published by author in *Architectural Storytelling- A Subjunctive Mode of Architectural Conceptualization and Experience in the works of Balkrishna Doshi*,

“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?” writes Doshi.⁴⁶⁵

Doshi’s search was not one to understand the historical or traditional styles, but to understand the essence of creativity that made these ancient examples relevant and appealing over time. The diverse attributes that the layering of these brought forth did not remain contradictory but become additive in instilling a wholesome creativity. For Doshi, the notion of historical architectural style was 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.”⁴⁶⁶

These examples of the past viewed in the present still made sense because of the fundamental and mythic factors that governed them that were not tied to a particular style or philosophy but worked more inwardly to create worlds where one could dwell poetically.

in *Architecture and Culture*, AHRA Journal, Taylor and Francis Online, Volume 6, Issue 2, on December 11, 2018.

⁴⁶⁵ Ibid, 6.

⁴⁶⁶ Balkrishna Doshi, unpublished notes accessed by the author in Doshi’s office Sangath in Ahmedabad, Mitacs Globalink Research Award, September 2015.

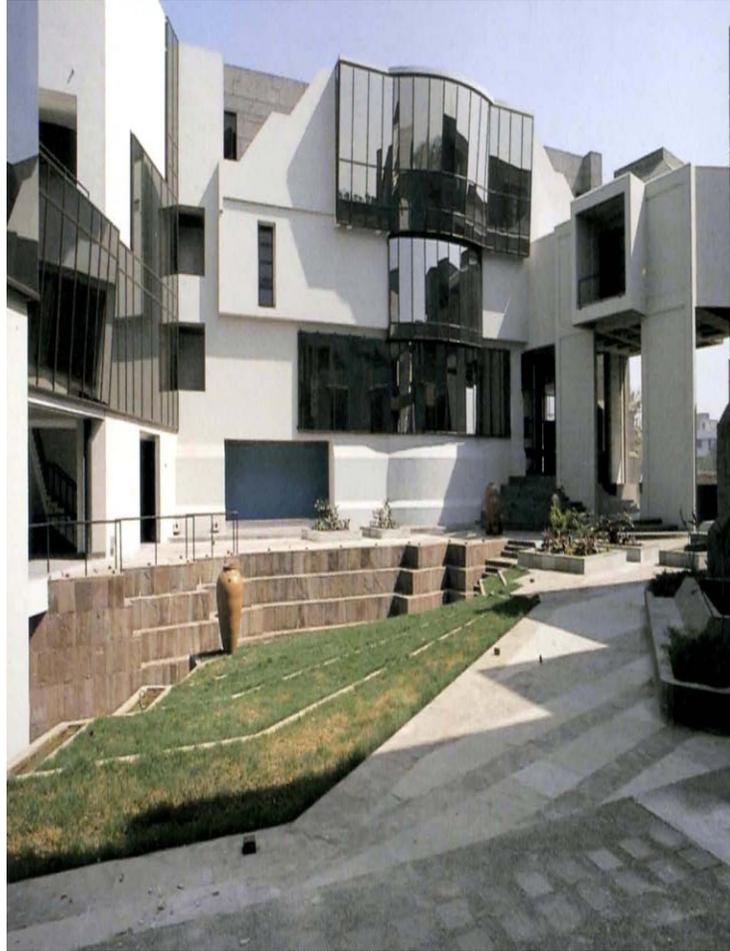


Figure 82: Exterior Courtyard and stepped courtyard, Balkrishna Doshi, National Institute of Fashion Technology, New Delhi (1994).⁴⁶⁷ © Photo Credit Vastushilpa Foundation, India, used with permission, not to be reused without the copyright owner's permission.

⁴⁶⁷ Balkrishna Doshi, National Institute of Fashion Technology, New Delhi (1994), <https://www.sangath.org/projects/national-institute-of-fashion-technology-nift-new-delhi/>, accessed October 23, 2020.



Figure 83: Exterior Façade, Balkrishna Doshi, National Institute of Fashion Technology, New Delhi (1994).⁴⁶⁸ © Photo Credit Vastushilpa Foundation, India, used with permission, not to be reused without the copyright owner's permission.

⁴⁶⁸ Balkrishna Doshi, National Institute of Fashion Technology, New Delhi (1994), <https://www.sangath.org/projects/national-institute-of-fashion-technology-nift-new-delhi/>, accessed October 23, 2020.



Figure 84: Stepped Courtyard and water tank, Balkrishna Doshi, National Institute of Fashion Technology, New Delhi (1994).⁴⁶⁹ © Photo Credit Vastushilpa Foundation, India, used with permission, not to be reused without the copyright owner's permission.

He sought to create a similar unison of fragments in his work. In Delhi's National Institute of Fashion Technology (NIFT, 1997), each building in the complex adopted a different architectural language and referred to different historical times.⁴⁷⁰ Doshi foresaw

⁴⁶⁹ Balkrishna Doshi, National Institute of Fashion Technology, New Delhi (1994), <https://www.sangath.org/projects/national-institute-of-fashion-technology-nift-new-delhi/>, accessed October 23, 2020.

⁴⁷⁰ Parts of this paragraph published by author in Architectural Storytelling- A Subjunctive Mode of Architectural Conceptualization and Experience in the works of Balkrishna Doshi, in Architecture and Culture, AHRA Journal, Taylor and Francis Online, Volume 6, Issue 2, on December 11, 2018.

the possibility of criticism of his approach in the contemporary and prevalent mindset in the profession that favored a unified and well-defined architectural theme. NIFT as a modern building made of geometrical mass and glass facades, was complemented with outdoor spaces that employed earthy color palettes and organic materials. Doshi's 'ethical imagination' perhaps sought a balance between the commercial demand of effective classrooms and display areas, with the in-between spaces or "pauses" —the tangible place of rest, relaxation, and reflection connecting to the cosmic and to a fabricated cultural memory proposed by Doshi's story.

Doshi used storytelling to explain to his colleagues and clients the varied imagery and multiple layers of the architecture at NIFT. These stories originated orally; they were elaborated slowly over the course of the design process and combined with accounts of things which 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.⁴⁷¹ 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 deep. People gathered there to sing, dance, and to select their future husbands or wives. 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 onto NIFT, so goes the story, asking them to preserve what they could of its sacrality, and also to “add a present-day dimension to it.”⁴⁷²

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 was sacred and, if so, whether this should be made more publicly known.⁴⁷³ In the story, a sense of history was invoked which the architecture could then recreate. In reality, the courtyard, water feature, and steps referred to a past which 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

⁴⁷¹ Author’s recorded interview with Doshi, September 25, 2015, Sangath, Ahmedabad, India. Sponsored by the Mitacs Globalink Research Award, September-December 2015, Grant number: IT05730.

⁴⁷² Steele and Doshi, *The Complete Architecture of Balkrishna Doshi*, 171. Parts of this paragraph published by author in *Architectural Storytelling- A Subjunctive Mode of Architectural Conceptualization and Experience in the works of Balkrishna Doshi*, in *Architecture and Culture*, AHRA Journal, Taylor and Francis Online, Volume 6, Issue 2, on December 11, 2018.

⁴⁷³ Doshi, *Paths Uncharted*, 338.

for whom a feeling of mystery had been engendered; the synthetic construct of the story about the building, its site, and history sparked the imagination of a much wider audience in their engagement with it.⁴⁷⁴ The nostalgic and poetic images that these accounts suggested, created an augmented experience of reality. Despite knowing that these were a constructed reality, it did not hamper their magical effect. It was as though this magical component were valued as they made the otherwise prosaic reality of the building into a more universally resonant world of the imagination. The imaginary aspect aided in a ‘nostalgic or historical imagination,’ one that conjectured a historical past to poetically engage in the project of the future.

The story and the fictional component therein, had their base in the traditional precedents that Doshi studied. The idea of the central courtyard reminded of the *chowks* of the *pol* houses. Doshi conceived the courtyard as a similar *en-route*, in-between space, where the inhabitants from various parts of the building could participate. The water streams, the stepped terrain, and their materiality around the sunken court recalled the stepped well complexes or *vavs*, and the water tank at Sarkhej Roza. These familiar precedents in the vicinity of the site, at once, gave credibility to Doshi’s story calling on cultural sensibilities, and reinventing poetic ways to describe qualities of the architectural reality.

⁴⁷⁴ Parts of this paragraph published by author in Architectural Storytelling- A Subjunctive Mode of Architectural Conceptualization and Experience in the works of Balkrishna Doshi, in Architecture and Culture, AHRA Journal, Taylor and Francis Online, Volume 6, Issue 2, on December 11, 2018.

The story projected the stepped courtyard that Doshi's design proposal had as a fictional vestige from the past in the form of the steps and water tanks. The story revered the stepped tank as sacred that had attracted pilgrims in the past. In the context of its present function in NIFT, this already raised the status of the courtyard to a historical element. Here the subjunctive mode intensified as Doshi inserted the wishful and nostalgic albeit fictitious flavour to his proposed building of NIFT. In the excerpt from the written story below, Doshi was talking about his own concepts in the varied buildings surrounding the central courtyard he designed at NIFT, but he portrayed that the varied imagery developed over time around the sacred water tank.

“During the last century, many upgrades and renovations of the building took place. However, to retain the sense of belonging to the past, a few areas of the building were kept intact. Any new material or treatment that was added to the building became like a collage.”⁴⁷⁵

Instead of talking about the building as a juxtaposition of elements from different genres, Doshi in the layered diegesis of the story, gave the expression of a temporal layering at play in these buildings. He poetically described the courtyard,

“Over the years, the village was totally engulfed by large developments and it became a miniscule part of the new urban scene of the twentieth century. The new laws of hygiene were introduced. Water supply and drainage were provided. For this upgradation the buildings were cut in many parts. As a result, the building became fragments of earlier continuous complex.”⁴⁷⁶

⁴⁷⁵ Steele and Doshi, *Complete Architecture of Balkrishna Doshi*, 170.

⁴⁷⁶ Ibid.

In this written account what stands out prominently was the absence of Doshi, the architect and the project itself. Doshi played the role of the storyteller here, narrating the tale of the site and how it came to be over many centuries. Any mention of the design process of NIFT was absent. The layering of different kinds of spaces thus appeared like a natural process that happened over time. The story of “The Sacred Spring” reified the opposition between truth and falsehood by fabricating a real falsehood, or a false reality. It did 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.”⁴⁷⁷ The story’s role was 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 allowed for the structuring of past and present to be reinterpreted, reconceived, and re-experienced.⁴⁷⁸ It

⁴⁷⁷ 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.” Parts of this paragraph published by author in *Architectural Storytelling- A Subjunctive Mode of Architectural Conceptualization and Experience in the works of Balkrishna Doshi*, in *Architecture and Culture*, AHRA Journal, Taylor and Francis Online, Volume 6, Issue 2, on December 11, 2018.

⁴⁷⁸ Jerome de Groot, *The Historical Novel* (London: Routledge, 2009), 126; E. H.

helped outline “new ways of being in the world.”⁴⁷⁹ Writing the story was important for Doshi, lest it be forgotten and so that the commercial nature and perception of the project would fade to give way to a remaking of a felicitous and re-imagined world, where everyone could dwell happily.⁴⁸⁰

“The Revelation” was a story that accompanied the project called Husain-Doshi Gufa (1992-95) in Ahmedabad. As described earlier, this project was done in association with Indian painter M.F. Husain, where the program was to build a gallery for the exhibition of Husain’s works. 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 in Hindi). Through the built form, Doshi subverted the notion of an exhibition gallery as a container for the exhibits and turned it into a space of inspiration for artists and architects as well for the general public. It was conceived as a place for dialogue and discourse on artistic practices and themes.⁴⁸¹ The obverted question that arose with the project was if architecture was for art or art for architecture?

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.

⁴⁷⁹ 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.

⁴⁸⁰ Parts of this paragraph published by author in *Architectural Storytelling- A Subjunctive Mode of Architectural Conceptualization and Experience in the works of Balkrishna Doshi*, in *Architecture and Culture*, AHRA Journal, Taylor and Francis Online, Volume 6, Issue 2, on December 11, 2018.

⁴⁸¹ Steele and Doshi, *Complete Architecture of Balkrishna Doshi*, 155.

The written story, titled “The Revelation” gathered together the wide range of sources of inspiration for the Gufa. It blended formal references with an account of the way the Gufa was made—through a combination of digital and traditional techniques. A step ahead from the story of NIFT, this story derived not only from fictional architectural precedents but relied on mythologies and dreams, possibly as an effort to dull other references that Doshi latched on for the project in this experimentative phase of his career.⁴⁸² Author James Steele in his book, “The Complete Architecture of Balkrishna Doshi,” explains,

“Ironically, the methods used to construct this building which touches such primal chords, were reliant on computer-aided programmes and complicated concrete-shell engineering, putting it clearly into that new category of structure exemplified by Frank Gehry’s Guggenheim Museum in Bilbao, Spain, which could not have been conceived without computer visualization and representation.”⁴⁸³

Doshi appeared as a narrator in the story where he also featured as the architect. The story described the coincidences and chance interventions that accompanied and enriched the open-ended architectural process for the Gufa. According to the story, Doshi casually visited the site of the Centre for Environmental Planning and Technology (CEPT), Ahmedabad, six years prior to when Husain contacted him for the Gufa, which was built on the campus of CEPT. Doshi made many visits to the CEPT campus, where the site of the Gufa came to be located later. In the story, Doshi writes,

⁴⁸² This is detailed in the following sections of the dissertation.

⁴⁸³ Steele and Doshi, *Complete Architecture of Balkrishna Doshi*, 144.

“The earth always rekindles many dormant ideas in me. I feel happy when the earth itself provides me with clues for a solution to the design.”⁴⁸⁴

Immediately one can see that Doshi brought attention to the site and his negotiation there. Although happening in the story, such accounts portray the subjunctive mode in Doshi’s wishful inclination to revert to his own ways of conceiving architecture transpiring from conditions of the site, while experimenting with the new way of thinking of architecture on the computer screen.

The story described the CEPT campus where he had planted a number of the medicinal neem trees to replace the mango trees that had dried up. Doshi believed the mango trees had dried up due to the excessive construction happening there. The story continues to explain how on one of his visits to the campus, a strange incident happened. It is worth quoting in full the hallucination that Doshi describes, reverting to the subjunctive mode in his story (as-if, the tree trying to communicate with him, diviner):

“One late evening it was very calm, and it so happened that one of the oldest neem trees next to the present Gufa site began to sway purposefully, as if to call my attention. As soon as I noticed this unusual swaying of one single tree, I went near it and sat down next to its trunk. Gradually, the tree calmed down and as if to focus my attention to a particular spot, dropped a branch from its foliage. Strangely, it is the same location where the Gufa presently stands. Shocked by this rather unusual happening, I picked up the branch and, no sooner that I held the fallen branch in my hands, my entire body began to vibrate as if I was a diviner.”⁴⁸⁵

⁴⁸⁴ Ibid, 146.

⁴⁸⁵ Ibid, 146-7.

Surely, Doshi sweeps one into the world of imagination. One can *see* the open site surrounded by trees, while the apparition of the future Gufa lurks in the air somewhere in the background ready to descend and materialize. It seems that the accounts of Doshi's oneiric experience even though allude to an unrealized activity, locate the present time and happenings in relation to a future that appears certain and tangible ("where the Gufa presently stands"). This certain future is to be achieved after the 'pause' —that appears in the uncertainty and the open-endedness of the present, in the description of the fantastical events that lead to the certain end—the Gufa. The finality of the future subtly suggests that the stories were written afterwards. They could not have been written earlier due to the open-ended process that Doshi adopted. If the stories were to be written before, a final product could still have existed, but it could not have been certain. The story would have been a channeled effort to reach that imagined end, whereas in Doshi's story, the end was the actual building but the way to get there was unreal and dreamy.

In the 'pause,' the reader's curiosity is raised, wondering how these events led to the making of the existing Gufa. One is at once drawn in to contemplate the tentative meeting point of the present events being described in the story and the certain future. Doshi's stories project an unhindered traversing of time—the present, past, and future layered up to explain the complexity of architectural thought.

The tree with human-like characteristics brought forth the joy of impossible possibilities and at the same time recalled something akin to what Landrum describes as

the “Ecological Imagination,”⁴⁸⁶ that refers to a sensibility towards the ecosystem, site, and place. Doshi’s account of the neem tree urging him to the site and the hallucination thereafter, emphasized his acknowledgement of maintaining a balance in the ecosystem as an important architectural consideration. It also reminds of the Panchatantra stories, mentioned earlier which proposed the interconnectedness of the human and the non-human world in a balanced ecosystem. This sensibility towards the contexts was nuanced further by Doshi by attempting to consider not only the present and tangible context of the site of the project but also concocted mythical contexts that give his imagination a socio-cultural and spiritual tint.

The story further described Doshi holding the fallen twig in his hand and sitting on the site when he felt as though he was being pulled towards the earth, which made him inadvertently close his eyes. Although, in the story, Doshi closed his eyes to ward off the giddy effect of that pull, one may interpret it as a moment when he closes his eyes and dreamt. The story continued to describe the hallucination that Doshi had after,

“Immediately, there appeared a body of a large tortoise-like form. Unlike the normal tortoise, this was long and had two large mouths facing each other at the opposite ends. They were interconnected with many shells of different shapes and sizes. It had six legs and, in their manner, and positions appeared to be attempting to somehow move. Yet I did not clearly notice any movement.

Anyway, on some of the shells, there appeared a few snouts with apertures trying to capture perhaps fresh air or light. I tried to comprehend this strange image and

⁴⁸⁶ Landrum, “Varieties of Architectural Imagination,” *Warehouse*, 74.

even tried to relate it to the legend of Kurma avatar, one of Lord Vishnu's re-incarnation.”⁴⁸⁷

With closed eyes, Doshi sees the Kurma. Doshi's rendition of the mythological figure of Kurma, the tortoise with the shell, which stands for an interiority, probably implied a looking within for self-reflection. According to the story, this incident had happened years before Husain approached Doshi for the Gufa and when Husain and Doshi started looking for a site for the gallery, this incident was not on Doshi's mind. Doshi was surprised when coincidentally Husain chose the site on the CEPT campus for the future Gufa. The image that Husain and Doshi had was a subterranean and flowing indefinite form. For months, Doshi worked on his ideas but was not able to arrive at any solution. The 'pause' that the project experienced was because Doshi was not able to decide how to visualize a "present-day Gufa.”⁴⁸⁸ Doshi writes,

“When things don't seem to work, I usually leave them alone. I have realized that they do resurface and only when an appropriate response is ready.”⁴⁸⁹

In this 'pause,' Doshi dwelled on alternatives in various ways. Doshi revisited the site in an attempt to find "clues.”⁴⁹⁰ He returned home and had a dream that night in which Doshi described how the same "Kurma" or the mythological tortoise-like form that he had

⁴⁸⁷ Steele and Doshi, *Complete Architecture of Balkrishna Doshi*, 147.

⁴⁸⁸ *Ibid*, 150.

⁴⁸⁹ *Ibid*.

⁴⁹⁰ *Ibid*, 150.

seen years ago reappeared. Kurma questioned Doshi's approach to architecture and reminded him of the discoveries made by Giulio Romano and others during the post Renaissance and Baroque period, urging him to remember the experience he had when he saw the fluid forms at Le Corbusier's Chapel at Ronchamp.

“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 illusions and scooping of a solid mass into continuous layered elements as in Kailash Temple at Ellora and how they are essential to make us realize that the space and form that we see are part of the infinite and hence timeless and illusory.”⁴⁹¹

One can immediately feel the negotiations going on in Doshi's mind to reconcile his exposure to traditional Indian architecture along with his interactions with modern masters like Le Corbusier and Kahn with the new postmodernist architectural language that he was experimenting with in the Gufa. Throughout the story it seems that Doshi is re-calibrating his experimental approach with the more familiar ones, negotiating between many polarities. The story in the form of the description of a dream, gave him the freedom to talk about various sources all at once. The guise of a dream was to facilitate the questions that were raised in Doshi's mind and the angst he was going through contemplating a new direction to his work. In the form of the Kurma, Doshi represented the innermost thoughts that he may have had, that become freely articulated through the dream.

⁴⁹¹ Ibid, 151.

In short, what I want you to do,” said 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.”⁴⁹²

Kurma's suggestion was forward looking towards change but without losing touch of Doshi's inherent ability to connect to the process and place. The stories that Doshi had originally written and which I accessed in his office on his recommendation, were slightly different from the ones published in the book “The Complete Architecture of Balkrishna Doshi,” by James Steele.⁴⁹³ The published version described a longer dream which included the real happenings during the design process. Probably, Doshi wanted to render some of the mundane construction details as more poetic and ‘dreamy.’ It also indicated the process that the project entailed, constantly moving between rationality of thought to the impossibilities of the dream.

The story described how from sketches of caves and other objects mimicking the form that Doshi had seen in his dream, evolved a series of hand molded foam and clay models, which were manipulated incessantly in the search for the fluid Gufa like form. This required rethinking standard construction methods and techniques. Doshi and Husain chose ferrocement technology, with a structure of 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

⁴⁹² Ibid, 154.

⁴⁹³ Ibid.

retained, rather than being levelled, 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.⁴⁹⁴ As described in the published story, in the dream the Kurma took the form that denoted what the gufa wanted to be, a “living being.”

“Then I saw that it [the Kurma] had a very thin tenuous skin covered with white, shiny surface. The modulation of this skin was complex due to the intermingling of many rounded shapes of varied heights, dimensions and inclinations. On these dome-like structures there appeared protrusions almost like apertures in a bunker trying to track celestial objects.”⁴⁹⁵

Doshi’s dream did not project an image of the gufa, it described the mythological Kurma taking the form of the building suggesting the form for the gufa. Quite contrary to this form that Kurma adopted, were the holograms that it projected later in the story describing the suggestions to incorporate digital means to achieve the fluid forms suggested for the Gufa. He writes,

“Amazing as it sounds at this juncture, it then projected, like holograms, a series of egg-like forms, forms of fruits, forms of bones and mentioned that such forms do not exist in nature and that man is capable of constructing them if he took the aid of the latest computers as well as the material technology.”⁴⁹⁶

⁴⁹⁴ Parts of this paragraph published by author in Architectural Storytelling- A Subjunctive Mode of Architectural Conceptualization and Experience in the works of Balkrishna Doshi, in Architecture and Culture, AHRA Journal, Taylor and Francis Online, Volume 6, Issue 2, on December 11, 2018.

⁴⁹⁵ Ibid, 151.

⁴⁹⁶ Ibid,153.

Interestingly, Doshi's dream indicated the use of holograms by the mythological and magical Kurma, giving way to a discussion of the use of technology in architectural creation. Doshi's description of the Kurma suggesting that he take advantage of technology to execute the process, indicated a sort of justification for his new way of tinkering with architecture. It seemed like Doshi was in a conversation with himself, which manifested in the form of the dream through which a nod of approval was obtained or better sought from the mythic Kurma. A clear indication of seeking refuge in the familiar and close to heart ideologies while treading into drastically different territories, by combining rationality and dreams presents itself.

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.⁴⁹⁷ The same construction details are described as follows in the published story,

⁴⁹⁷ Parts of this paragraph published by author in Architectural Storytelling- A Subjunctive Mode of Architectural Conceptualization and Experience in the works of Balkrishna Doshi, in Architecture and Culture, AHRA Journal, Taylor and Francis Online, Volume 6, Issue 2, on December 11, 2018.

“Kurma then continued to project the simple yet very skilfully crafted tribal huts, the bamboo structures of the Nagas, the mud huts of Rajasthanis. I suddenly realized that even today we have the adivasis (the tribals) who lead a simple life and for them to build natural forms is as natural as breathing. What they need perhaps is guidance. Kurma was perhaps reading my thoughts and said that, ‘like timeless legends which depict the aspirations of man, here is your chance to connect our ancient traditions of crafts with new technologies aided with computers.’”⁴⁹⁸

Here Doshi appeared in third person looking at himself dreaming as well as thinking in the story. He looked rationally from outside at the frame within the dream while I watched him from outside of the frame of the story where he was seen analysing his own dream. The story is ingenious in this way as it combines the acts of Doshi dreaming, thinking, and inviting the reader to reflect as well. The dreaming becomes a concentrated thinking, bringing forth the ‘right angles,’ which leads to clarifying thoughts and moving towards a solution. It starts to confound whether in the story Doshi is talking about a dream or his design process or both. It also confounds because looking at the frame of the story and its temporal play, it seems impossible to define if the dreams prognosticate the forms of the Gufa, or the experimental nature of the Gufa necessitated the creation of the dream. At this point it seems best not to clarify anything, lest it spoil the magic of the story and the poetic fantasies it created, defying the very premise upon which Doshi’s stories and subsequently his broader architectural approach was built upon—to dream in and with

⁴⁹⁸ Ibid,154.

architecture through the subjunctive ‘pause’ that the conundrums created. Kurma in Doshi’s dream tells him,

“Doshi, do not get confused about dream and wakefulness because they are different only if seen through your personal lifetime. Viewed on a different scale, both are the same.”⁴⁹⁹

Doshi was dreaming in the story or perhaps dreaming the story, treading the fine line of separation between different states of alertness, where he seems to be more alert and conscious than in the actually awake condition. Doshi described in the story how he was awakened from the dream at 8 a.m. by his wife, indicating the hypnopompic nature of the dream, the “[drowsy] state between sleeping and waking.”⁵⁰⁰ This is suggestive of the nature of the dream in the story which is both a rational dream and a dreamy rationale.

The story further described how following the directives given by Kurma in the dream, Doshi proceeded with the conception of the Gufa. During the building process, the local tribal people, practicing familiar and their very own construction techniques, felt able also to perform their usual rituals of dance and worship around the site for nine days. This in turn inspired 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

⁴⁹⁹ Ibid,153.

⁵⁰⁰ B. Brant Bynum, “The Ways of the Imagination,” in *The Romantic Imagination in the Works of Gustavo Adolfo Bécquer* (Chapel Hill: University of North Carolina Press for its Department of Romance Studies,1993), Stable URL: http://www.jstor.com/stable/10.5149/9781469645131_bynum.5, 94.

the universe on his many hoods; Vishnu is often depicted resting on him.⁵⁰¹ Doshi's story was a mix of fantastical fiction, technical knowledge, and detailed accounts of actual events. It incorporated 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."⁵⁰² The story also brought forth the social nature of architecture—at the Gufa, architectural design, construction, and embellishment came together in an act of fellowship, with the self as well as with others all with reference to a deeper understanding of what it might mean to make, to order, or give shape to things.⁵⁰³ The story was the attempt to bundle up the experimentative nature of the project with Doshi's established and comfortable ways of architectural thinking.

"The Legend of the Living Rock" was the story that accompanied the building of the Bharat Diamond Bourse in Mumbai (1998),⁵⁰⁴ a place intended to gather together all the

⁵⁰¹ Steele and Doshi, *Complete Architecture of Balkrishna Doshi*, 155. The story of Sheshnaag, Sheshanaga or Ses:anaga is described in the Puranas, ancient Hindu texts in praise of the deities.

⁵⁰² 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.'"

⁵⁰³ Parts of this paragraph published by author in *Architectural Storytelling- A Subjunctive Mode of Architectural Conceptualization and Experience in the works of Balkrishna Doshi*, in *Architecture and Culture*, AHRA Journal, Taylor and Francis Online, Volume 6, Issue 2, on December 11, 2018.

⁵⁰⁴ Steele and Doshi, *The Complete Architecture of Balkrishna Doshi*, 181.

activities of the diamond trading community in Mumbai.⁵⁰⁵ The Bourse was built on a reclaimed site where rock strata lay only a few meters below the ground.⁵⁰⁶ According to the story, early on in the construction stage of the project Doshi received an urgent call from the building contractor calling him to the site, after the excavation of the foundation had begun. In the story, Doshi called what he witnessed on going to the site, a miracle, that guided the rest of the project. Excavated to a depth of ten meters, the site revealed a rock bed riven with textures and patterns.⁵⁰⁷ Doshi described the bedrock with astute mathematical accuracy, “350 metres wide and 250 meters wide rock” while adding precise date for the event, on June 17, 1992. Doshi writes,

“Almost in the centre of this rather flat 8-hectare rock, there was a glowing outcrop like a stub. It was rather large for its height, but in its transparency and formation, it had the character of a beautiful, uncut diamond. It appeared that its glow was generated from its efforts to pull the whole land mass up, almost like the mythological story of the churning of the sea, samudra manthan.”⁵⁰⁸

⁵⁰⁵ Ibid, 173.

⁵⁰⁶ Ibid.

⁵⁰⁷ Parts of this paragraph published by author in Architectural Storytelling- A Subjunctive Mode of Architectural Conceptualization and Experience in the works of Balkrishna Doshi, in Architecture and Culture, AHRA Journal, Taylor and Francis Online, Volume 6, Issue 2, on December 11, 2018.

⁵⁰⁸ Ibid, 181.



Figure 85: Interior view, Balkrishna Doshi, Amdavad-ni-Gufa, 1995, Ahmedabad. © Pallavi Swaranjali, 2015.



Figure 86: Interior view, Balkrishna Doshi, Amdavad-ni-Gufa, 1995, Ahmedabad. © Pallavi Swaranjali, 2015.

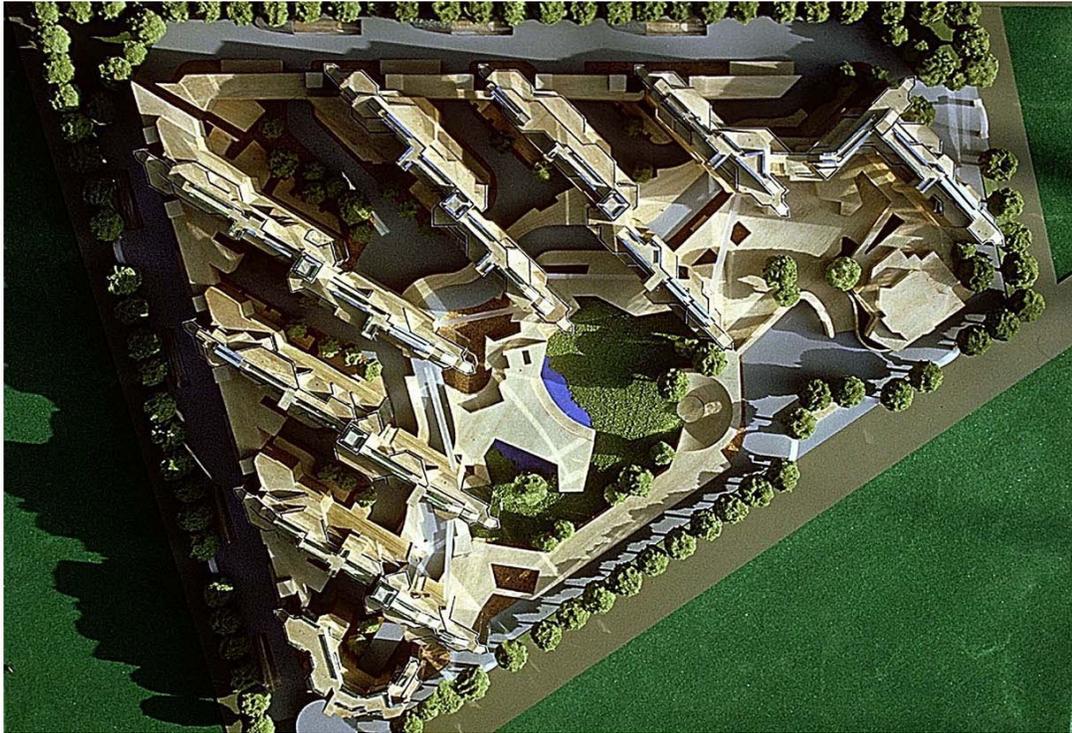


Figure 87: Balkrishna Doshi, Bharat Diamond Bourse, Mumbai (1992).⁵⁰⁹ © Photo Credit Vastushilpa Foundation, India, used with permission, not to be reused without the copyright owner's permission.

The story had the same tone as the story for the Gufa, with Doshi narrating the story in first person. However, the dream in the story of the Gufa is replaced by the description of an almost waking dream. The events that are miraculous according to Doshi, appear to be happening in reality in the story. Doshi removes the frame of a dream, to cross the threshold between dream and reality and enter the space of the dream. Architecture presents

⁵⁰⁹ Balkrishna Doshi, Bharat Diamond Bourse Model, <https://www.sangath.org/projects/bharat-diamond-bourse-mumbai/>, accessed October 23, 2020.

itself in a dream-like stance but in the reality of the world. Dreams and reality are not clearly separated, but the story's nature makes one feel that Doshi and his team were living a dream. In the story, Doshi goes a step further suspending the need to separate the dream-like and real components. It highlights perhaps how his architectural imagination allowed him to dream, not as a way to make castles in the air, but in an emotional-rational way to infuse pragmatic, mathematical, and structural concerns with the 'right angle,' that suffused them with poetic human sensibilities.

A balance between the scientific or objective and the mythological or fictional approach kept manifesting as the story proceeded. On one hand the pundits or religious masters were called who attributed to the event a mythological flavour by evoking the story of *samudra manthan*, while on the other hand, scientists from various acclaimed Institutes in India like the "Tata Institute for Fundamental Research, Atomic Energy Commission and other national laboratories" were contacted to scientifically study the phenomenon.⁵¹⁰

Doshi's referral to the Pundits' mythological story of the *samudra manthan* also was a common thread with the story of the Gufa. Kurma appears again in the *samudra manthan* (hindi for the churning of the ocean).⁵¹¹ In the mythological story of the *Samudra Manthan*, the Hindu *Devas*(gods) and *Asuras* (demons) joined hands to obtain *amrut* or the "the elixir of immortality,"⁵¹² believed to be located under the ocean. In an effort to obtain the *amrut*,

⁵¹⁰ Ibid, 182.

⁵¹¹ Kurma, Hindu Mythology, <https://www.britannica.com/topic/Kurma>, Accessed July 7, 2020.

⁵¹² Ibid.

they churned the sea to get to the bottom of the bed. For the churning to happen the rope was provided by using the mythological serpent, Vasuki and using Mount Mandara as a churning stick. To steady the mountain, Lord Vishnu in his tortoise avatar, Kurma provided the steady foundation by holding the mountain on his back.⁵¹³

Rock terrain and the water features on the site of the Bourse project immediately lent themselves to be articulated through this mythological story of the mountain on Kurma's back churning the ocean. Doshi's ability to connect these to his project, may not be just to create poetic images for others. Doshi's sensibilities made him perhaps 'see' the world animated and as a story itself. He did not describe an image for others, instead perhaps shared an image he had in his imagination. In the written story, the description of the "stub" that appeared in the bedrock and which reminded of an uncut diamond, or the pivot for the mythological *samudra-manthan*, Doshi appeared to be creating not only an analogy but also an anagogy, dissolving the threshold between sensation and signification, urging the readers of his story and his architecture, to obtain a mystical interpretation that elevated the mental image of the Bourse.

The story continued to describe the process of photographing the excavated site, and overlaying the photographs on the previously done design drawings, in an attempt to see the two layers together. The story goes,

⁵¹³ Ibid.

“it became clear to us that this site must be an ancient quarry from where the last ratna (jewel) had emerged. We also felt that this quarry must have been a major trading centre of precious stones in the ancient past.”⁵¹⁴

Here the story takes an interesting turn suggesting that the photographs of the exposed bedrock provided the underlying structure for analysis and further development of the project as it seemed that the bedrock had exposed itself as an ancient precious stone quarry to provide guidelines for the design of the diamond merchants community megastructure that was Bourse. In the photographs Doshi and his team *saw* what looked like peripheral roads which connected to ramps moving in various directions. Doshi concluded that this may have been for transportation of the stones. From the peripheral road, the photographs also indicated service lanes, which Doshi felt concurred with his own plan for the Bourse. By analysing the photograph, the team extracted many features from this *ancient* quarry layout which seemed to be arranged such as to take advantage of the prevailing breezes for climate control and to avoid the harmful radiation due to the quarrying.

Through the descriptions of the forms that the bedrock revealed, Doshi narrates in the story the various features that he finalised for the Bourse. The story described how the project was re-worked, drawing after drawing, overlay after overlay, until it seemed almost natural that the various fissures running from the central rock outcrop were transformed into channels of water running through the landscaped gardens of the Bourse, bodies of

⁵¹⁴ Steele and Doshi, *The Complete Architecture of Balkrishna Doshi*, 182.

water which were utilized in the festivals held there, as well as being used pragmatically, for climate control. The Bourse thus came to be with offices, a business center, exhibition space, restaurants, banks, laboratories, medical, and dental facilities, its near self-sufficiency complemented by its wastewater recycling system. It had shady streets and courtyards framed by slim towers which drew in cool winds along the water channels.⁵¹⁵ The miraculous event seemed to have guided the design of the Bourse or inversely the design of the Bourse was poetically captured in the miraculous event.

The written stories presented a chiral question for consideration—was the story the representation of the built work or was the built work the representation of the story? As opposed to the drawing, which stood as a representation of the building, the story presented itself via the building and represented the building while the building represented and presented the story—a double consciousness. This is different when we consider a construction or architectural drawing that represents the architectural creation and ceases being the focus once the building is made. “The Legend” was no mere project description, but a beguiling weave of observation, fantasy, and documentary, which became a metonym for the imaginative habitation of the site.⁵¹⁶ Alternating between the two conditions, the story and the building vied for the status of representation.

⁵¹⁵ Parts of this paragraph published by author in *Architectural Storytelling- A Subjunctive Mode of Architectural Conceptualization and Experience* in the works of Balkrishna Doshi, in *Architecture and Culture*, AHRA Journal, Taylor and Francis Online, Volume 6, Issue 2, on December 11, 2018.

⁵¹⁶ Ibid.

(iii) The Architectural As-if

Doshi appeared in different roles in these written stories. He was sometimes a character in the story, sometimes narrator, sometimes orchestrator, sometimes the “empirical reader,”⁵¹⁷ who borrowed myths and tales to invest in them or elaborated from them his own fictions, stories, and built work. The stories utilized the subjunctive mode and did not so much explain or describe something that happened independently from them as enact that happening. By rejecting an objective perspective, the stories were not ways of seeing or looking on so much as a way of involving those who engaged with its ‘construction.’ They were not merely descriptions of something, but they constituted and participated in its making. To listen to them, to become caught up in their multiple vantage points or worlds, meant to become involved in constructing the setting they created. Consisting, among other things, descriptions of architectural conceptualization and construction processes, discussions of the aesthetic as well as the technical, they called on a particular kind of reflective judgement that was again one of involvement. The act of imagining that the stories demanded meant that the spaces they evoked were in turn embodied constructs, their aesthetic and technical expression sensed as much as conceptually understood.⁵¹⁸

⁵¹⁷ 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.

⁵¹⁸ Parts of this paragraph published by author in *Architectural Storytelling- A Subjunctive Mode of Architectural Conceptualization and Experience in the works of Balkrishna Doshi*, in *Architecture and Culture*, AHRA Journal, Taylor and Francis Online, Volume 6, Issue 2, on December 11, 2018.

Doshi's stories brought actuality and fiction together in a way that was generative and creative. When they work to render the "absurd real" and the "real absurd,"⁵¹⁹ it was by understanding pragmatism and fantasy to be not antagonistic but fully compatible. The stories acted as a critique of architecture viewed as prescriptive, instrumental, problem-solver, and aesthetic spectacle, viewed from afar, but they did not do so by calling out what they criticized. Instead, they drew people into the thick of architecture as an intense experience that was fully interwoven with their lives, practical, perhaps beautiful, but also poetic, oneiric. Through storytelling, Doshi aimed 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 socio cultural, the mythological, the personal, the collective.⁵²⁰ Indian architect and theorist, Durganand Balsaver talking about Doshi's approach, reminds us about the nature of such an imagination,

"oscillating and layered state of mind, simultaneously playful and serious, dynamic and static, pragmatic and spontaneous, fluid and inert, chaotic and ordered ..."⁵²¹

⁵¹⁹ Doshi et al., *The Acrobat, the Yogi and the Sangathi*, 23.

⁵²⁰ Parts of this paragraph published by author in Architectural Storytelling- A Subjunctive Mode of Architectural Conceptualization and Experience in the works of Balkrishna Doshi, in *Architecture and Culture*, AHRA Journal, Taylor and Francis Online, Volume 6, Issue 2, on December 11, 2018.

⁵²¹ Durganand Balsaver, "The Paradox of Doshi's Mythical Realism," in Chhaya ed., *Harnessing the Intangible*, 81.

The written stories seemed to be a strategic and essential tool for Doshi especially due to the nature of the projects they were associated with, so that consumerist and commercial agencies omnipotent in the architectural scene did not suppress and suffocate the essential and humanitarian joys that Doshi proffered for architecture. The stories helped balance the demands of such projects with efforts for the moderation of the “machine-like” and expeditious nature of the program, in an effort to help give himself, the other designers in the process, along with the users the means to see the felicitous possibilities and the scope for dreaming in architectural works.

These stories created ‘pauses’ to reimagine and dwell in the space. Doshi’s work fostered the realization that reason and anti-reason, sense and nonsense, design and chance, fact and fantasy, consciousness and unconsciousness, private and public, subjective and political belonged together as necessary parts that completed the story.⁵²²

By explicitly bringing in fantasy, adding an “as if” dimension to the technical and the aesthetic, Doshi’s architectural storytelling gave all of its players a way of sharing in the development of its plot while also exploring ways to explore un-tread territories for himself. Given an imaginative means of articulating experience, those involved engaged with each other and with the self, and also with questions of what it meant to make or to build. If the program underlying traditional buildings was based on allusions to their

⁵²² Parts of this paragraph published by author in *Architectural Storytelling- A Subjunctive Mode of Architectural Conceptualization and Experience in the works of Balkrishna Doshi*, in *Architecture and Culture*, AHRA Journal, Taylor and Francis Online, Volume 6, Issue 2, on December 11, 2018.

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,”⁵²³ Doshi’s work raised the possibility of a modern version of such a program. It posited an architecture that operated reciprocally between the instrumental and the poetic, to continually re-found culture. Both true and realistically impossible, quintessential and particular, evolved and evolving, Doshi concluded and his works demonstrated that architecture had the capacity to carry many messages and fulfill many roles, but to do that it must possess the “magic of a story.”⁵²⁴

⁵²³ Pérez-Gómez, *Attunement*, 71.

⁵²⁴ Doshi, “The Nature of Architecture,” in Melotto, *Sangath: Indian Architecture between Tradition and Modernity*, 35.

Parts of this paragraph published by author in Architectural Storytelling- A Subjunctive Mode of Architectural Conceptualization and Experience in the works of Balkrishna Doshi, in *Architecture and Culture*, AHRA Journal, Taylor and Francis Online, Volume 6, Issue 2, on December 11, 2018.

In Conclusion: The Subjunctive Pause



Figure 88: Mullah Nasruddin Illustration 3 © Pallavi Swaranjali.

“Mullah had a dream.

A man knocked at his door and asked if he could spend the night in his house. He said he would pay 10 gold coins for the privilege. Mullah agreed and showed him to his room.

The next morning, the man thanked Mullah and began taking out gold coins from his purse. He took out nine and stopped.

‘You promised to give me ten!’ shouted Mullah and awoke. He looked around for the man but there was no one there.

He quickly shut his eyes again. ‘All right all right,’ he said. ‘Give me nine!’”⁵²⁵

Keywords: subjunctive, cononymy, authorship, imagination, perception, dreams, virtual

⁵²⁵ Retold by Chanchal Dey, illustrated by Goutam Chattopadhyay, *Stories of Mullah Nasruddin* (Kolkata: Book Club, 2009), 30-31.

(i) *Authorship and the Nature of Architectural Imagination*

Doshi identified that in the Indian arts and architectural traditions there existed less or no proof of authorship of the artistic and architectural works. He writes,

“Indian arts traditions emphasize anonymity about creators of the artistic works. For most of the great historic architecture, no one would ever know who designed it or who sponsored it. If you search carefully you may, in a corner of a wall or at the base of a column or on one of the layers of a plinth, find an inscription or markings that might offer clues about the designer or the patron. This is a result of the belief in impermanence of all things. Hence, authorship, ownership, a rigid structure or a space too well-defined does not touch us. Encroachment and abuse constantly change what was there; in a pristine state finally, what endure are the main structure and basic tenets of its making.”⁵²⁶

Doshi’s architecture achieved timelessness by changing, aging, and evolving with time. His belief in the impermanence of life elevated the virtue of “nothingness” in his architectural endeavors. His built works and stories through the chiasmus of the material and imaginative constructs, lent to his architecture its “nothingness” and open-endedness, in turn eliciting a profundity. Doshi believed that there were many contributors to traditional architecture which incorporated an ongoing architectural process stretching over centuries and over generations.⁵²⁷ Such co-making automatically warranted anonymity and

⁵²⁶ Doshi, *Paths Uncharted*, 22.

⁵²⁷ Ibid, 270, and 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, 2 (1964): 17–20.

assimilated change over time as a given. With that frame of mind, Doshi allowed participation in the architectural process so that the act of collectively dreaming spaces happened by the introduction of the subjunctive ‘pause’ —a place of happy dreaming, reflecting, and co-making. For Doshi, it was no longer about solving the architectural knot, as much as it was about getting engrossed in it, welcoming participation, mixing therefore the planned with the unpredictable, the visible with the invisible. His design process did not attribute entire power in the hands of the architect alone, but invited ideas from different and many sources, and in this process, refrained from expeditiousness.

In present times, the vulnerability of architecture to change and decay is seldom acknowledged and the control and completeness that architects often seek seems suppositious. On the contrary, timelessness is projected as the desired virtue that seeks the immortality, grandeur, and permanence of buildings over years bringing ever-lasting acclaim to the architect who designed it. Architectural control and authorship are what the litigious architectural licensure process ensures and demands.

This chapter opens up broader discussions about questions of authorship and control that Doshi’s way of approaching architecture raises and the effects of such a line of thought on the relationship between the built work and its representation in architecture.

Architect and architectural historian Jonathan Hill (b.1958), in his article “The Use of Architects,” explained the probable reasons why architects enjoy authorship of their work

and do not want to forgo control. Instead, a passive recipient and user of the architectural services is preferred.⁵²⁸ Hill writes,

“The role of the user is an important consideration in the architect's design process but, in specific circumstances, the unpredictable presence of the user is a threat to the status of the architect.”⁵²⁹

Hill explained that this attitude of architects is due to the fact that the term architecture lacks any “legal protection,” hence allowing anyone and everyone to be able to engage in architectural activities, unlike other licenced fields for example surgery.⁵³⁰ Hill contends that this induces a social and financial insecurity in the architects who then try to claim as much authority, expertise, and control as they can to dictate the form as well as the use of the buildings. By converting the architectural process into an abstracted mental process with the architectural drawings also contributing to that effect, they endeavor to induce the idea of a passive user. Hill derived that the terms that fostered the concept of a passive recipient of architectural services were “user,” “occupant,” or “inhabitant” and such that implied that the user—uses, occupies, or inhabits space. This affirmed the abstraction of the user as a recipient of what the architects designed for them and the abstracted set of drawings asserted the competency of being an architect. Hill concludes that architects

⁵²⁸ Jonathan Hill, “The Use of Architects,” *Urban Studies*, February 2001, Vol. 38, No. 2, Special Issue: The Barrier Free City, (Sage Publications Ltd, February 2001), 351-365.

⁵²⁹ *Ibid*, 352.

⁵³⁰ *Ibid*.

however they may try cannot control all facets of architecture or exclude the user especially due to the fact that they are the ones who are in charge after the building is made.⁵³¹

His open-ended process that invited participation from the user in different ways through his tectonic, visual, and verbal stories (oral and written), did so by involving them both in the design and representation process as well in the freedom of use and experience of space after the architect's work was completed. Doshi did not exercise absolute control but definitely orchestrated the roles of the contributing characters and wove them together to make the architectural process like a live theatre. In the live theatre, the audience is involved by merging the actors in the crowd. There is spontaneity that is hence encouraged, but the actors who blend with the real audience, steer the thread of the play away from a chaotic rambling of sorts towards a more coherent albeit open plot. A combination of spontaneity and discretion characterizes this process, where neither is everything governed by the actors nor is everything left in the hands of the audience. In this process, optimal combination of chance and choice pervades. Doshi's primary role in the open-ended architectural process appears similar to the orchestrator-architect.

It is easy to assume, albeit wrongly that the open-ended process and the "nothingness" in the architecture that characterized Doshi's works, probably resulted in a diminished role of the architect and their imaginative faculty. The scenario is far from that. In this open-ended process, Doshi practiced and encouraged various forms of imagination that I have

⁵³¹ Ibid, 354.

been describing in the preceding chapters. Contrary to the insecurity of architects like the ones that Hill described, which resulted in their frantic efforts to show the exclusivity, complexity, and importance of their services, Doshi's open for participation and deceptively uncomplicated, straightforward, and simplistic nature of his work, demonstrated a layering of varieties of architectural imagination.

Landrum, in her article "Varieties of Architectural Imagination," provides a list of the varieties of architectural imagination, the combination of which make a memorable work of architecture.⁵³² Doshi's approach created a subjunctive space for collaboration and participation in his buildings and in the representation layered various varieties of imagination and hence achieved a holistic way of approaching architecture. The balance that Doshi exercised in the inclusion of choice and chance in his works, gave rise to the co-existence of the varieties of imagination. The open-endedness in projects like Aranya or LIC housing schemes let the users participate in the actual making of spaces over time, after Doshi provided them with the initiating structure. The initiating structure was liberating as well as restraining. Although freedom was granted in the expansions that users could do with time, Doshi exercised an ethical restraint so that the freedom was not manipulated to meet malicious ends. The terraces that were provided in the LIC Housing Scheme allowed construction in particular areas of the existing structure so that one resident's expansion did not adversely affect the other. The kit of parts and training

⁵³² Landrum, "Varieties of Architectural Imagination," *Warehouse Journal* 25, 71, 78.

provided in Aranya was the control mechanism which ensured safe and well-constructed spaces.

From Landrum’s list of the varieties of architectural Imagination, an architecture of chance such as Doshi’s exemplified many—it borrowed from the architect a “personal imagination;” from the community a “collective imagination;” from the intent of balancing the ecosystem and deriving from the particularity of place an “ecological imagination;” from the conscious engagement with the site, construction, and materials a “tectonic” and “material imagination;” through the engagement with stories a “linguistic” and “narrative Imagination.”⁵³³ Through Doshi’s creative process, built work, and its representation the list of these varieties of architectural imagination was expanded—be it through the “*jugad*” that fostered the ‘heuristic and serendipitous imagination;’ the assimilation of stories on site and through socio-cultural sources that manifest as the ‘contextual imagination;’ or the ‘peripatetic imagination’ evoked through his buildings and miniature painting style illustration; or through his stories that evoked the ‘mythopoeic’ and ‘nostalgic imagination’ and served in a mantic way through a ‘prophetic imagination.’

A layering of these various kinds of imagination explored architectural making from several viewpoints, to replace the otherwise prevalent ‘retinal,’ ‘amputated,’ or ‘paraparetic’ imagination that the architecture of consumption defined for the “production of space.”⁵³⁴ By not emphasizing on authorship and replacing it by the balance of control,

⁵³³ Ibid, 71-78.

⁵³⁴ Henri Lefebvre, *The Production of Space* (Oxford, UK: Blackwell Publishing, 1998).

choice, and chance Doshi inadvertently seemed more in control. The redefined role as an architect-orchestrator allowed the inclusion of several varieties of architectural imagination and added richness to the work without diminishing authority over or credit for the work. The derivation from the real and fictional, conventional and the subverted, rationality and dreams in his stories subtracted the dimensions of abstraction from the architectural representation that Hill describes, to counteract the muted spectator of architectural works with an active participant-dreamer in the story.

In this process, architecture and its representation assumed the quality of a dream. Doshi believed dreams to be at the heart of all varieties of the imagination.⁵³⁵ In this dream, his architectural built works and its representation assumed a contronymic position, blurring the line between built work and its representation by creating a ‘virtuality.’ The next section describes how storytelling layered with varied types of imagination affected the relationship between his built work and its representation.

(ii) The Contonymic Nature of Presentation and Representation in Doshi’s Work

In conversations of architectural representation and its roles, what is often examined is the correspondence between the represented and the experienced reality in buildings. Technical drawings with their verisimilitude aid precisely in the construction process but as Frascari suggests, limit the possibility of playfulness and experimentation. Frascari calls for “non-trivial drawings,” conceptual or suggestive drawings that provide a dreaming

⁵³⁵ Doshi, *Paths Uncharted*, 364.

apparatus to create poetic worlds.⁵³⁶ These two ways of approaching representation differ in their strategies to represent an architectural work—the former is mathematical and precise, while the latter is experiential or conceptual. In Doshi’s case the act of being involved was prime. Be it in his buildings, illustrations, or written stories, the correspondence of a tangible material reality and its experience was not a simple act of perception and could be understood considering that experience was layered at any point in time. The present was not simply about interacting with the material reality at that point in time. The present moment was always an overlay of the past memories and experiences over the perception of the present moment and the future expectations. This was amply demonstrated in his storytelling that characterized an intriguing temporality comprising memories, cultural sensibilities, and fantasies.

In the phenomenological tradition, Edmund Husserl (1859-1938) explained that it is impossible to experience the present as a “punctum” or as an “instantaneous now” that breaks from a larger temporal continuum.⁵³⁷ One experienced a “thick” present moment, which was a combination of “primal impression,” “protention (looking forward),” and “retention (looking back).”⁵³⁸ Husserl characterized these layers as acts of perception or “presentation,” and “representation.” At one moment, things “present” themselves and are combined with “representations” from the past and the future.

⁵³⁶ Frascari, *Eleven Exercises in the Art of Architectural Drawing*, 3.

⁵³⁷ Pérez-Gómez, *Attunement*, 151-2.

⁵³⁸ Pérez-Gómez, *Attunement*, 152.

Husserl's "Phantasy, Image Consciousness, and Memory (1898–1925)," defined "presentation" as perception. For Husserl, memory and expectation were representation—'re'-presentation, meaning presenting the perception again.

"If perception is the consciousness of what now exists as present in person, memory is the consciousness of what is past and expectation is the consciousness of what is future."⁵³⁹

If representation was a presentation again, it implied that one had experienced it before. Representation hence was the consciousness of something as-if, but in touch with an actual past/being.⁵⁴⁰ According to Husserl, memory was not simply remembering of a past object. It implied a consciousness that one perceived it in the past—a consciousness that happened in the present moment—in the "here and now."⁵⁴¹ It implied a reliving of it in the present. Presentation and representation both had one thing in common for Husserl—an embodied consciousness of something as existing as present in person now, before, or later. Representation, for Husserl resulted in an embodied experience. When we remembered sitting on the metal bench in the park on a fall day in the past, we still felt the hardness and coldness of the bench. If we thought of sitting on a metal bench on a cold future day, our body cringed at the imagined feel of the metal and its cold surface. This is because we had had the actual perception or the presentation in the past and hence

⁵³⁹ Edmund Husserl and John Barnett Brough, *Phantasy, Image Consciousness, and Memory*, 1898-1925 (Dordrecht: Kluwer Academic, 2005), XXXIV.

⁵⁴⁰ *Ibid*, XXXVI-XXXVII.

⁵⁴¹ *Ibid*, XXXIV.

representation was possible. Husserl defined “phantasy” as one that transported into its own world in which what was phantasized was not believed to be actual at all. He writes,

“Memory, in its own fashion, is also the consciousness of something as-if, but it remains in touch with an actual past and therefore with actual being. Phantasy’s as-if, on the other hand, is unique in that it is directed precisely against actual existence (673). There are no phantasy objects—understood as existing objects. There are no existing phantasy worlds.”⁵⁴²

Doshi’s stories—tectonic, visual, or written, were embodied and reflexive processes, which involved one in the full context of a socio-cultural reality in a space of translation where there was a reinterpretation of cultural sensibilities and traditions with reflexive bodily awareness within the situated experience of the projects. At first look, these varied forms of storytelling qualified as Husserl’s category of “representation” as they portrayed the built work, its characteristics, and its symbolic value.

On revisiting the idea of Doshi’s stories and their status as “representation,” it will not be wrong to say that Doshi’s stories did not exactly represent the materially built. Rather than being a geometric likeness or exact material description, these stories waned the physical/material image of the associated buildings and were used as portals to travel to imaginative and virtual worlds. The story metonymically indicated the site/plot of the building subject to imaginative habitation but more potently these ‘anagogical’ stories took one beyond the built work by invoking social and cultural histories and activities, dreams,

⁵⁴² Ibid, XXXVII.

mythologies, playfulness, inconsistencies, or fabricated realities. They referred to a virtual world encompassing yet beyond the built work.

The stories that Doshi wove to imagine the buildings were based not on an unprecedented and unknown something that was yet to come but from familiar and already experienced ways of living joining the conception of this future intervention. Doshi's written and oral stories were invested with such verisimilitude that some mistook them to be real, while others aspired to create them. A sense of history of the place was invoked in the story, and the building recreated it. This synthetic construct within the materiality of the built ignited a sense of mystery and enigma sparking the imagination of the audience in their engagement with the built.

Fantasy and reality appeared enmeshed, so much so that what was real and unreal seemed to stop mattering as one entered the imaginative virtual world that Doshi created. The story assumed importance and the building appeared as a way to substantiate the story. The water tank at NIFT seemed to be the remnant of the imaginary past that the concocted story conjured. The built project of NIFT became a representation of a past way of engaging bodily, socially, and culturally. The spaces and the details in the buildings for which the stories were written, all seemed to be substantiating the written story. Doshi did not conjure a future imagined building but propelled the listener into an embodied imagination associating the existing conditions on site with a fictional, oneiric occurrence, or by linking it to a mythical past. When one looked at the building, it seemed to be the remnants or memory of the happenings in the story—hence a representation.

As described earlier, according to Husserl, to be able to represent one needs to evoke the same consciousness or experience as with the actual being. Actual being, explained Husserl did not segregate the layers of presentation, representation, or phantasy. They appeared one inside the other. Husserl took experience as lived to be a constant mix of perceptions, memories, expectations, phantasies, judgments, and so on. Parts of reality and phantasy were inserted one in the other. When one was in focus the other receded and vice versa, but both existed simultaneously. Husserl described that one could perceive something and then “phantasize” it to be different, say in colour or texture. On the other hand, one could “phantasize,” while keeping the surrounding reality intact. Husserl asserted that actual representation was constituted together by weaving these real and unreal elements, and there was constantly the shifting of focus from one to the other.⁵⁴³

Doshi’s story made the physical condition of the architectural elements take second stage and gave way to its performative capacity in evoking memories, phantasies, and expectations. This architectural consciousness contained representations (memories or expectations) and their prior or future perception which manifest in the built form. The quiet world that presented itself in the miniature style illustration for Sangath, was what one perceived and sought when one went to Sangath. At Sangath, looking at the mosaic of the dried mango tree evoked its memory. The built work provoked a memory and an embodied perception of the mango tree, in an expectation that it would regrow and return

⁵⁴³ Ibid, XXXIX.

sometime in the future, as Doshi had narrated. The mosaic and the tectonic story that accompanied it made one virtually experience the rustling of its leaves and the shade of it on a summer day. The stepped courtyard at NIFT recalled the ancient village and the sacred tank.

The realization that manifested here was that these tectonic works were representations—a memory or expectation of the actual tree, or the memory of the sacred tank in the village. The built space referred not to itself and its own perception but to the perception of another reality that was physically absent—the perception of a memory or a future expectation—hence more suitable to be categorized as a representation. The Gufa represented Kurma who visited Doshi in his dreams. The mind re-experienced an embodied reenacting of the tortoise-like shape of Kurma. It was not any tortoise, but the mythological divine tortoise who visited Doshi in his dreams and took the form of the Gufa that was re-experienced and solidified in the forms of the Gufa. The various layers in the imagination of Doshi's work created an esoteric nature and definition of presentation and representation in his work, where the fallacy of self-reference was transcended to evoke the invisible.

The presentation and representation became fluctuating and interchangeable processes in Doshi's storytelling -- both representing each other by evoking imagined and enticing forms of psycho-somatic experiences. This happened because of the virtuality—an imagined reality that Doshi's stories created, a veil that he introduced as the 'pause'—that induced the unexpected, illusory, and mythical context in his work. Along with the virtuality, the stories conditioned a state of mind that was not perplexed or troubled by

these and had no intentions to clarify them. Rather this form of a mindset relished the presence and contradiction of the virtual world. There existed a reality independent from and outside of the built and its representation, that led to a constant focusing and defocusing on the building as representations *versus* the story as representation, always with respect to the external and virtual reality. The ancient water tank and courtyard from the past in NIFT, or the excavated remnants of the quarry at Bourse, or the angry client visiting Sangath and pacified in the garden represented in the miniature style illustration, or the ritualistic and mythological overlay in Aranya's miniature style illustration also drawing from traditional *pol* houses, contributed to making this appealing and satiating virtual reality, that brought personal, communal, tectonic, nostalgic, prophetic, or mythopoeic imagination together. The buildings represented what the stories conjured, while the stories conjured embodied reconstruction of buildings and ways of living from the past, dreams, and myths.

With the focussing and defocusing between real and imaginary, a space opened up between architectural presentation and representation imparting a contronymic nature to Doshi's architectural creation, where his architectural storytelling forged a virtual reality and, in the process, a more than real architecture was created. In his works, presentation and representation appeared as an enmeshed condition and an embodied consciousness hence asserted with the story as well as the built, each complementing and representing the other and referring to the associated virtual reality. The building and the story together presented a fantastical reality, or a virtuality reinforced as strongly by one as by the other.

The story became only partly fictional, as it was made real by the existence of the building, while the building was made more real and imaginatively inhabitable when complemented by a story that was fictional and unreal.

Doshi demonstrated and encouraged an ability to live simultaneously and harmoniously in multiple worlds—real and virtual, without cognitive dissonance. His architectural creation was not a stand-alone object—a noun, but a virtual, mental construct that was dreamt—hence a verb. He operated in both the modes of this verb, the indicative which was factual and rational, and the subjunctive which was the fictional, unreal, and dream-like. He used fantasy for an increased appreciation of the real, vivifying inert facts. His *modus operandi* exhibited the contronymic quality of at once acting as presentation and representation, at once being an individual construct but open to further exploration by users who became collaborators with him using references from the stories to relish contradictions and enjoy the play in living the inconsistencies and the ‘pauses.’ They extrapolated possibilities adding to the architectural story, imagining prequels and sequels, making the process at once of the architect-author as well as theirs. Doshi’s process was a contronymic one in a contronymic human world, one that as Pérez-Gómez rightly notes “tolerates ambiguity, contradiction, madness, or confusion, but not lack of meaning.”⁵⁴⁴

The stories fostered the ‘pause,’ where making happened at two levels—tangible construction of space, as well as a construing of architecture and the ways of living therein.

⁵⁴⁴ Pérez-Gómez, *Attunement*, 166.

Truth and falsehood were not relevant in Doshi's stories, which abandoned mere emphasis on aesthetic delight instead purporting to reflect on life as a choreography of rituals, memories, and expectations. The spatial reality was a mix of "the real, virtual, and the imaginary" —which Doshi presented and acknowledged in the title of his exhibition. The self-conscious practice of dwelling in these stories did not exclude either rationality, spirituality, or socio-cultural beliefs. It simply bracketed the singularity of each of these as potentially errant and incomplete. A combination of these and an openness to alternative interpretations was what the stories suggested fostering an inquiring attitude toward the many possibilities of being.

(iii) *"Doshi's Real, Virtual, and the Imaginary"*⁵⁴⁵

Jorge Luis Borges (1899-1986), in "The Avatars of the Tortoise" writes, "Art--always--requires visible unrealities."⁵⁴⁶ Doshi's stories that combined reality and myth, and dreams and wakefulness, were a rhetorical procedure to set the stage where tangible and hypothetical components of imagination were both important players. The result of the architect and the idiot working together was to release the virtual and dream-like content of somatic reality. In the midst of rationalist and functionalist building practices and empty

⁵⁴⁵ The title of Doshi's retrospective exhibition, Balkrishna Doshi. Celebrating Habitat—The Real, the Virtual & the Imaginary, at Exhibition Hall, National Gallery of Modern Art, Jaipur House, Delhi, October 9, 2014 - December 7, 2014 and Power Station of Art, Shanghai, July 29, 2017- October 29, 2017.

⁵⁴⁶ Jorge Luis Borges, *Avatars of the Tortoise*, <http://faculty.cord.edu/andersod/BorgesAvatars.pdf>, accessed July 2020.

formalism of today, one entered Doshi's virtual world concocted through his stories made up of mythologies, daydreams, enacted dreams, imaginary realities, and real imaginaries.

Doshi's virtuality described a joyful and desired world. Doshi writes,

“To establish roots, one should create one's own myth and establish contexts. Without this framing, architecture cannot become valid. Climate, technology, function, economy are normal ways of establishing the context of architecture. However, they would not necessarily touch the psyche, which links the past, the present and the future.”⁵⁴⁷

Doshi's tectonic, visual, and verbal stories, all referenced a virtual world—a dream that enveloped the architectural dream of his projects. This virtual world provided a context to the projects, in addition to its conventional and physical architectural context. The virtual context was an imaginary construct that defied albeit intensified logical, realistic, or pragmatic frameworks. This virtual context was a dream shaping the architectural dream and shaped by and for it. The stories of architecture became the architecture of the story in the virtual world. The virtuality was set in the architectural work, but the settings of the architectural works were created by the virtual. Frascari writes,

“In the dream we seek clarification of the ontological dimension of our human construction.”⁵⁴⁸

⁵⁴⁷ Doshi, *Paths Uncharted*, 73.

⁵⁴⁸ Frascari, and Goffi, *Marco Frascari's Dream House*, 6.

The ontological dimensions were also the search in Doshi's virtual world. Doshi's architectural ways did not seek to just present the building in the surrounding world. They created a real-virtual world within which the architectural work existed and from which it derived its ontological dimension. The inhabitants participated in making and relishing this imaginal world that they could actually and physically live in. The nature of virtuality is explained by architectural theorist and academician, Donald Kunze, in his article "Architecture as Reading; Virtuality, Secrecy, Monstrosity" as follows,

"The phenomenon of virtual space is fundamental to the way human beings relate perceptually, behaviorally, and existentially to their world. Virtuality is the presence of what is not literally present, and it thus enables the immanence of building to be annealed to the past and future, analogous form, and hypothetical possibility. In sum, virtuality is synonymous with "architecture" proper, as opposed to building simple. Through the use of gesture, the non-present is made present and given a secret status ruled by a non- classical or "grotesque" order."⁵⁴⁹

Kunze makes one realize that the virtuality is achieved by the silence in muted gestures and through what he terms as monstrosity, the contradiction and defiance of convention. For Kunze, the monstrosity is not "clarity, continuity, and consistency" but "contradiction, enigma, mental difficulties, and metaphor."⁵⁵⁰ For Kunze, "virtuality," "gesture," and "monstrosity" are the factors that make reading even possible. Reading as a metaphor leads

⁵⁴⁹ Donald Kunze, "Architecture as Reading; Virtuality, Secrecy, Monstrosity," *Journal of Architectural Education* (1984-), Summer, 1988, Vol. 41, No. 4 (Summer, 1988), 28-37 Published by Taylor & Francis, Ltd. on behalf of the Association of Collegiate Schools of Architecture, Inc. Stable URL: <http://www.jstor.com/stable/1425010>, 28.

⁵⁵⁰ *Ibid*, 31.

to an understanding of the building beyond the apparent and conventional ways of perceiving a building. The real and the conventional do not allow us to read, instead they talk. Through the virtuality, gestures, and monstrosity that constitute an “architecture of reading,” Kunze contended, the building promotes reading in architecture.⁵⁵¹

In Doshi’s work, the virtuality was the result of the ‘pause’—in the form of the unexpected, contradictory, erroneous, the unreal, and the mythological, that gave it the ability to be read by the immersion and captivation of the dreamer-reader. The meaning in Doshi’s architectural endeavors lay in the visible unrealities of the virtual worlds, where contradiction, fiction, errors, real unrealities, all give rise to the virtuality created through the tectonic, visual, and verbal stories. Although the mind realized the unrealities of the virtual world, it still found it desirable and energizing. The building, the accompanying illustrations, and the written stories seemed to represent this common virtuality and, in the process, recalled each other—the elements that together created the virtuality. These became new and fictional ways of experiencing the tangible architectural works.

Doshi’s was not an optical virtual world. The virtuality appeared in the “nothingness” of the built form that Doshi sought. His buildings were ‘dimensionless’ without this virtuality. The virtuality did not present the already and materially present which acquired nothingness. It presented and further whetted the appetite for that which need not be said but wanted to be heard. The virtual world actualized an imaginary truth and the “visible

⁵⁵¹ Ibid, 28.

unrealities” gave sheen to the perception of the tangible world. His imagination combined unrealities in the reality of the world. Doshi’s imagination seemed like a kaleidoscope that superimposed the real and the unreal,

“Like I am sitting here now and I see this tree and think that may be a monkey is going up the tree. I may think about a crocodile going up too and I might remember Saint Kabir saying, 'isn't it a miracle that the river is on fire and fish is climbing the tree?' I then see a fish climbing the tree. Then I might recall the landscapes in the film, 'The Lord of the Rings'. I see the valleys; I see those big birds flying and what not. I can fly with them and see what they see. I can touch down to the ground and continue going deep down.”⁵⁵²

The power of his storytelling vignettes resided in their ability to carve out an architectural consciousness in a virtuality—an imagined reality that replaced the adherence to the prescriptive and overbearing conventions and norms. Kunze quotes Giambattista Vico (1668-1744) to bring forth the force of a poetic virtual world that elevates simple things to profound truths,

"The poet... because his business is with the majority of men, induces persuasion by giving plastic portrayals of exalted actions and characters; he works, as it were, with 'invented' examples. As a result, he may depart from the daily semblances of truth, in order to be able to frame a loftier semblance of reality. He departs from inconstant, unpredictable nature in order to pursue a more constant, more abiding reality. He creates imaginary figments which, in a way, are more real than physical reality itself."⁵⁵³

⁵⁵² Doshi, *Paths Uncharted*, 34.

⁵⁵³ Kunze quoting Vico, Giambattista Vico, *On the Study Methods of Our Time* trans. Elio Gianturco (New York: The Library of the Liberal Arts, 1965), 43, Kunze, “Architecture as Reading,” *Journal of Architectural Education*, 36.

Doshi presented an unreal world through his stories without imposing a singular truth and with contradiction, to confound and excite the mind. The “joy” of the creation lay in the imaginative world-making that the virtuality resulted from and propagated. It became ethical in that it did not mediate a reality. For Doshi, ethical considerations lay in the intention of the activity not in its means.⁵⁵⁴ He did not ‘tell’ but everyone knew by becoming engaged in the “reading.”

In his book, *As If: Modern Enchantment and the Literary Pre-history of Virtual Reality*, Professor of History, Michael Saler describes the fantastic virtual worlds of the imagination that emerged in Europe and America in the late nineteenth century.⁵⁵⁵ The worlds of writers such as Arthur Conan Doyle (1859-1930), J.R.R. Tolkien (1892-1973), or H.P. Lovecraft (1890-1937) 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.”⁵⁵⁶

⁵⁵⁴ Doshi, et al. *The Acrobat, the Yogi and the Sangathi*, 11.

⁵⁵⁵ Parts of this paragraph published by author in Architectural Storytelling- A Subjunctive Mode of Architectural Conceptualization and Experience in the works of Balkrishna Doshi, in *Architecture and Culture*, AHRA Journal, Taylor and Francis Online, Volume 6, Issue 2, on December 11, 2018.

⁵⁵⁶ Michael T. Saler, *As If: Modern Enchantment and the Literary Pre-history of Virtual Reality* (Oxford: Oxford University Press, 2012), 6-7.

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.”⁵⁵⁷

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 Einstein’s reliance on such thought experiments as well as philosopher Hans Vaihinger’s 1911 publication *The Philosophy of “As If;” A System of the Theoretical, Practical and Religious Fictions of Mankind*, provide examples.⁵⁵⁸ Saler argues that “ironic imagination re-enchanted the modern world without abjuring modernity’s commitment to rational critique.”⁵⁵⁹ The intertwining of reality and fiction took on the role of magic for the modern mind through the “willing activation of pretense.”⁵⁶⁰ These examples show how reality and fiction were

⁵⁵⁷ Ibid, 25.

⁵⁵⁸ Hans Vaihinger’s *Die Philosophie des AlsOb* (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.

⁵⁵⁹ Ibid.

⁵⁶⁰ Ibid, 28.

the two sides of the same coin. They were symbiotic in their relationship, and not two opposites one signifying the absence of the other.⁵⁶¹

Doshi considered the Indian polymath, poet, and philosopher, Rabindranath Tagore (1861-1941) as one of his gurus. The anthropic principle was discussed by Tagore in a conversation about the nature of reality with Albert Einstein, when Tagore visited Einstein's house in Cauth, near Berlin in 1930.⁵⁶² According to Tagore, the universe existed in and due to the human consciousness. He believed,

“The world is a human world — the scientific view of it is also that of the scientific man. Therefore, the world apart from us does not exist; it is a relative world, depending for its reality upon our consciousness.”⁵⁶³

⁵⁶¹ Parts of this paragraph published by author in Architectural Storytelling- A Subjunctive Mode of Architectural Conceptualization and Experience in the works of Balkrishna Doshi, in Architecture and Culture, AHRA Journal, Taylor and Francis Online, Volume 6, Issue 2, on December 11, 2018.

⁵⁶² “ON THE NATURE OF REALITY, Albert Einstein in Conversation with Rabindranath Tagore,” 1930, Tagore visited Einstein's house in Caputh, near Berlin, on July 14, 1930. The discussion between the two great men was recorded, and was subsequently published in the January, 1931 issue of *Modern Review*.” https://mast.queensu.ca/~murty/einstein_tagore.pdf, accessed Nov 20, 2020.

⁵⁶³ Ibid.

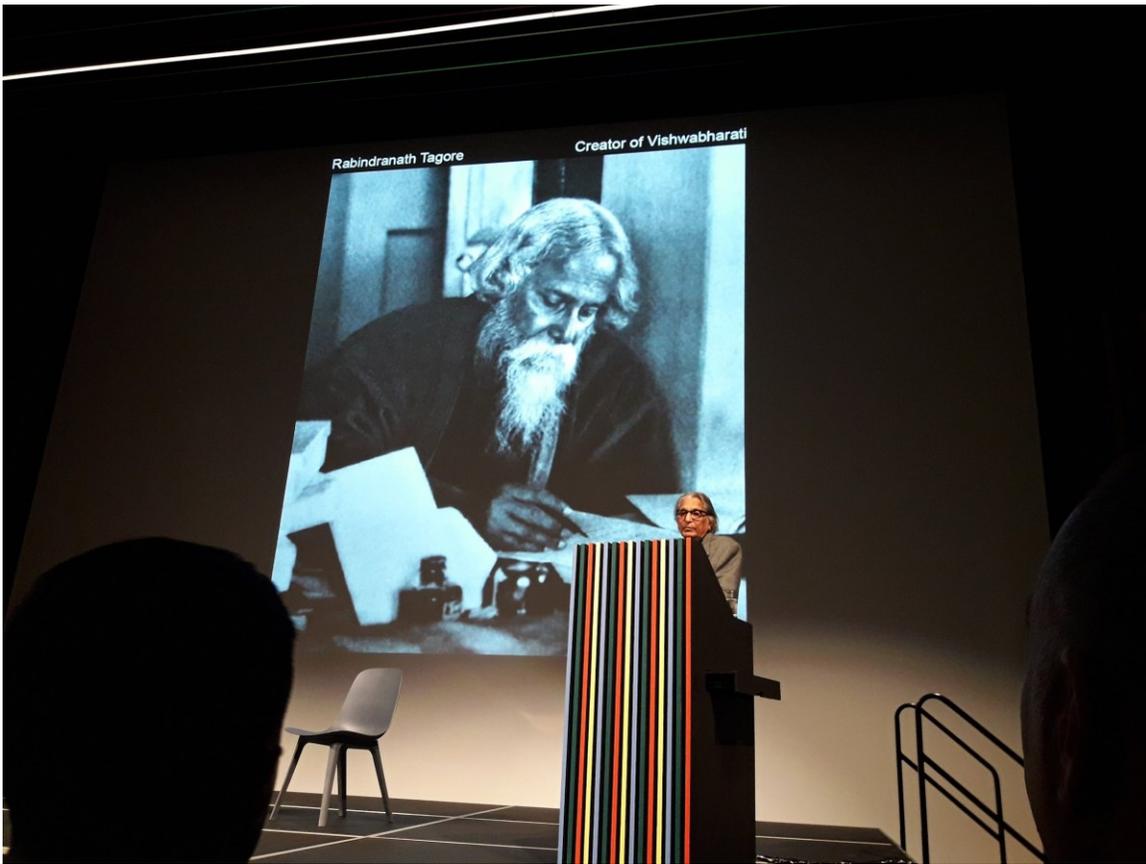


Figure 89: Doshi talking about Rabindranath Tagore, Pritzker Prize Public Lecture, Daniel's School for Architecture, Toronto. © Pallavi Swaranjali, 2018.

The consciousness of Doshi's architecture derived from the participation of all involved. The built work was more meaningful due to the consciousness that the stories evoked. Doshi's virtuality completed material reality by enhancing it. Hidden within one another, as worlds within the world, the real, virtual, and the imaginary, oscillated between the material and the immaterial, and between perception and dreams. Doshi's architectural works (buildings, illustration, stories) did not suggest a virtuality because of an absence of

materiality but by going beyond the materiality to the imaginal that existed in the consciousness of the percipients. The perceived absence of an imposing materiality was due to a more appealing virtuality, preferring fictions rather than facts and permeated by memory, associations, and the unreal rather than facts and the perceivable. Virtuality was orchestrated through participation in the dream that Doshi conjured. As Kunze says,

“The principle of our access to the virtual is based on the act of reading, where the movement from the actual to the virtual is simultaneously a spatial and a philosophical transformation. Reading is not simply the translation of phonetic or iconographic characters into their linguistic equivalents, but a restructuring of the space of appearance.”⁵⁶⁴

The virtual world that Doshi created did not transport to any place or time, it carried one into an imaginary nowhere. It traversed temporally and across geographies but asserted itself in its being in the here and now—in his built work. It dissolved the retinal real and created an unreal real. In being a nothing it became many things. It connected not only to the earthly but to the fundamental and divine sensibilities. Both the real and the virtual realms became equally habitable, equally rational. The physicality of the built induced an immateriality redirected to dreams, fantasies, memories. On the other hand, focusing on the stories reminded of the tangibility and solidity of the building. Doshi was involved in sketching stories and writing illustrations. Metonymically, architecture was used to forge the ‘structure’ of the stories while the stories forged the ‘plot’ of the building.

⁵⁶⁴ Donald Kunze, “Architecture as Reading,” *Journal of Architectural Education*, 28.

The varied forms of the story, unlike the photo realistic images, did not provide a fixed image of the unbuilt, absent future building nor did it act like a mirror documenting a building already existing. Instead, it provided a provocative absence, showing nothing but leading to construing and reflection. In the various dreams within dreams, story within story, the disregard for the evident, the nothingness in the tangible, or the layering of the virtual, Doshi's work imparted to architecture a status that was more than a professional service. Architectural creation became a dreaming device to realize salubrious conditions enriching social, cultural, as well as corporeal sensibilities. His storytelling involved reminiscing and imagining while at the same time fostered remembrance and reinvention by embodying it in the built and its representation. His were not false stories aimed at perpetuating the abhorrent, exploitative, and political structures. In the Nietzschean sense,⁵⁶⁵ Doshi's stories could be described as dreams where one was awake. They were apparatuses to fully participate in the dream while knowing that one was dreaming.

The audience for his stories were many. His stories were as much for others as for himself to spark his imagination in conceptualizing and experiencing architecture and the life within. The *Sangathi* storytellers disseminated the stories to the visitors at Sangath while themselves imbibing the quality of architectural storytelling. The intern designing the National Institute of Fashion Technology, New Delhi or the guests at its inaugural ceremony all relished and corroborated the fictional story as it nurtured their imaginative

⁵⁶⁵ Friedrich Nietzsche, *Human, All Too Human*, Translated by Reginald Hollingdale, Introduction by Richard Schacht, (Cambridge: Cambridge University Press, 1996).

conception of the space. All forms of storytelling that Doshi adopted indicated that he dreamt architecture—an act between reasoning, fantasizing, and discovering by chance. It was a consciousness that went beyond that which could be described objectively, to that which was dream-like. The invitation to participate in Doshi's imaginary worlds provided playful spaces in which these synthetic constructs segued into discussions about the real-world attuning those involved to be able to embrace complementarities, and employ fiction to convey multiple meanings simultaneously for a more capacious definition of rationality.

(iv) Conclusions

The particularity of the virtuality that Doshi created through his storytelling-dreaming lay in its ability to blur the line between his built work and its representation. The built and its representation became elements that created this virtuality together and in turn were created with the virtuality as a background. The building made the fictional stories real and the stories made the built work imaginary. The virtuality diminished the distinction between the building and its representation. In referencing this virtuality, they became analogous, accompanying one another in the creation of a virtual world within the rational one.

Like dreams, this induced a double experience of time in the stories. In dreams consciousness flows in and out of the sleeping and waking states. An inversion happens when an external stimulus coincides with a dream event. One may have often dreamt they are locked up in a heated chamber and woke up sweating only to realize that it was a hot

night for that thick blanket they were using. Polymath Pavel Florensky (1882-1937) concluded that dreams are experienced twice, and time moves towards the present and awake state, and there happens the inversion from the dream to reality. First a logical series of events happen in the dream and when the external stimuli, like the blanket, coincides with the dream event, a recoiling happens, and time moves towards the present and awake setting.⁵⁶⁶

Doshi's built work and the stories had a fluctuating vector of this inversion from the dream to reality that lent contronymy to his work. This fluctuation happened when the written stories as dreams were partially substantiated by the presence of the building while the building became part of a fictional reality with the written stories. His exhibitions were such that they recreated vestiges of the actual buildings while parts of the gallery space itself turned into his building. The imaginal miniature painting style illustrations muted the absolute depiction of the built work while the imaginal nature of the built work determined the nature of the illustration, oscillating from the macro to micro, from divine to human. Thus, existed a contronymic relationship between architecture and its representation in his work, when they assumed each other's characteristics. Architecture and its representation combined in their effort to create the virtual world. Instead of representing the buildings, architectural representation stood for the representation of the virtuality, while the buildings seemed to be a material representation of that virtuality.

⁵⁶⁶ Pavel Florensky, *Iconostasis*, Translated by Donal Sheehan and Olga Andrejev (Crestwood, NY: St. Vladimar's Seminary Press [1922], 1996), 45.

The virtuality was a result of the dreaming that Doshi practiced and induced others to practice by creating the ‘pause.’ The ‘pause’ coerced one to dream, with its undercurrent of irrationality, supposed error, and such peculiarities that were only handled by the faculty of the imagination. The ‘pause’ was contronymic and oscillated between reality and fiction, when he wrote the stories, between knowing and not knowing when he did not explicitly define built spaces, and yet fostered the cultural sensibilities of people, or between right and wrong, when he created ‘correct errors’ or ‘incorrect corrections’ in the miniature style illustration in which the built and the drawn did not correlate exactly. These were the deliberate points of reorienting the mind to dream, operating at the threshold between the real and the imaginary.

Happiness was intrinsically discovered in the virtuality by each participant in the architectural play. In his article, “The Happy Paradox,” Francesco Garutti contends how in a world where “anxiety-producing socio-political situation” is rampaging, the definition of happiness has become mediated, commercialized, and commodified. This is marked by the creation of wellness standards and happiness indices, through an advanced system of data collection, where architecture appears as a major contributor towards the determination of these standards and wellness. Garutti writes,

“A new serenity economy—characterized by materials and surfaces for sleep, digital systems to control the home, urban safety systems that oscillate between darkness and sustainable lighting, plans for using nature from the wild to the urban—is taking shape within the context of the political and marketing campaigns

that rebrand the ambiguously individualistic nature of the very notion of happiness.”⁵⁶⁷

In contrast to this commodified view of happiness, this dissertation argues that Doshi offers an architectural ideal which is virtual, highlighting that architecture's potency is in the surfacing of its latent content that proffers happy visions and dreams. Based on this argument, the dissertation contends that the building and its representation should give a perceptual scaffolding that sustains an imaginative engagement. In a world where happiness is commodified, mathematically determined, and established, the subjunctive ‘pause’ needs to be introduced in architectural practice, education, and in a wider discourse, so that all can seek happiness and not be dictated as how to be happy.

⁵⁶⁷ The Happy Paradox, Notes from ongoing research by Francesco Garutti, Canadian Centre for Architecture, October 2018. <https://www.cca.qc.ca/en/articles/issues/27/will-happiness-find-us/64484/the-happy-paradox>, accessed August 20, 2020.

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Appendices

Photographs of works by Balkrishna Doshi.

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Appendix A:

Photographs of Balkrishna Doshi's Amdavad ni Gufa, 1995, Ahmedabad,

PC and Copyright: Pallavi Swaranjali, 2015.

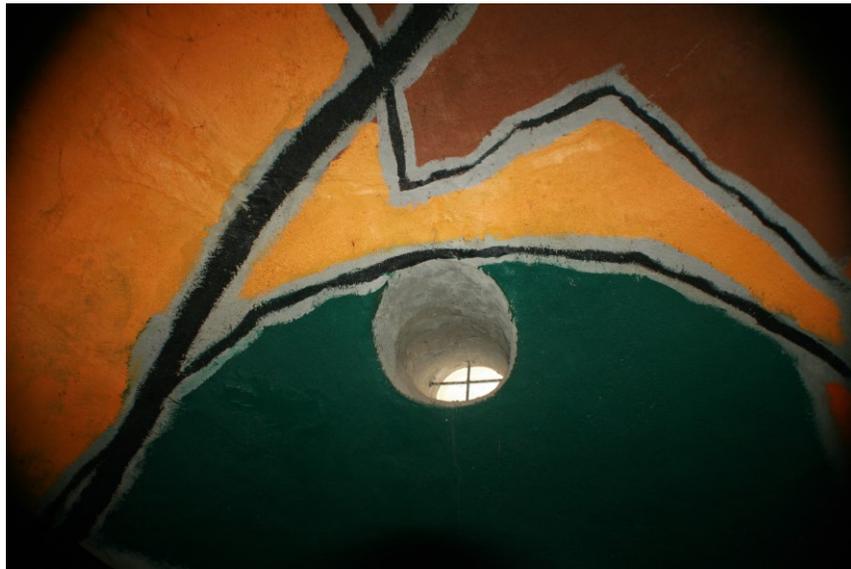


Figure 90: Porthole windows, Balkrishna Doshi's Amdavad-ni-Gufa, 1995, Ahmedabad. © Pallavi Swaranjali, 2018.



Figure 91: Interior view showing tree-like columns, Balkrishna Doshi's Amdavad-ni-Gufa, 1995, Ahmedabad. © Pallavi Swaranjali, 2018.



Figure 92: Interior view showing Husain's paintings on the dome, Balkrishna Doshi's Amdavad-ni-Gufa, 1995, Ahmedabad. © Pallavi Swaranjali, 2018.



Figure 93: Interior View showing Husain's sculptures, Balkrishna Doshi's Amdavad-ni-Gufa, 1995, Ahmedabad. © Pallavi Swaranjali, 2018.



Figure 94: Interior view showing the exit door and Husain's sculptures, Balkrishna Doshi's Amdavad-ni-Gufa, 1995, Ahmedabad. © Pallavi Swaranjali, 2018.



Figure 95: Interior View showing Husain's sculptures and paintings on the wall with the light filtering in through the porthole windows, Balkrishna Doshi's Amdavad-ni-Gufa, 1995, Ahmedabad. © Pallavi Swaranjali, 2018.



Figure 96: Exuberant interior view, Balkrishna Doshi's Amdavad-ni-Gufa, 1995, Ahmedabad. © Pallavi Swaranjali, 2018.



Figure 97: Exterior view, Balkrishna Doshi's Amdavad-ni-Gufa, 1995, Ahmedabad. © Pallavi Swaranjali, 2018.



Figure 98: Exterior view showing the entrance to the underground Gufa, Balkrishna Doshi's Amdavad-ni-Gufa, 1995, Ahmedabad. © Pallavi Swaranjali, 2018.



Figure 99: The lush greenery around the Gufa, Balkrishna Doshi's Amdavad-ni-Gufa, 1995, Ahmedabad. © Pallavi Swaranjali, 2018.



Figure 100: Exterior view showing the domes with the mythological Sheshnaag painted atop, Balkrishna Doshi's Amdavad-ni-Gufa, 1995, Ahmedabad. © Pallavi Swaranjali, 2018.



Figure 101: Book Store and Charles Hewitt Gallery adjacent to the Gufa, Balkrishna Doshi's Amdavad-ni-Gufa, 1995, Ahmedabad. © Pallavi Swaranjali, 2018.

Appendix B:

Photographs of Balkrishna Doshi's Sangath, 1981, Ahmedabad.

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Figure 102: Lotus tank in the garden, Balkrishna Doshi's Sangath, 1981, Ahmedabad. © Pallavi Swaranjali, 2018.



Figure 103: Garden and pathway, Balkrishna Doshi's Sangath, 1981, Ahmedabad. © Pallavi Swaranjali, 2018.



Figure 104: Stepped Garden, Balkrishna Doshi's Sangath, 1981, Ahmedabad. © Pallavi Swaranjali, 2018.



Figure 105: Floor mosaic on the pathway through the garden, Balkrishna Doshi's Sangath, 1981, Ahmedabad. © Pallavi Swaranjali, 2018.



Figure 106: Garden space, Balkrishna Doshi's Sangath, 1981, Ahmedabad. © Pallavi Swaranjali, 2018.



Figure 107: Mosaic table in the garden with workshop behind, Balkrishna Doshi's Sangath, 1981, Ahmedabad. © Pallavi Swaranjali, 2018.



Figure 108: Sunken Entrance to the office at the back of the site, Balkrishna Doshi's Sangath, 1981, Ahmedabad. © Pallavi Swaranjali, 2018.

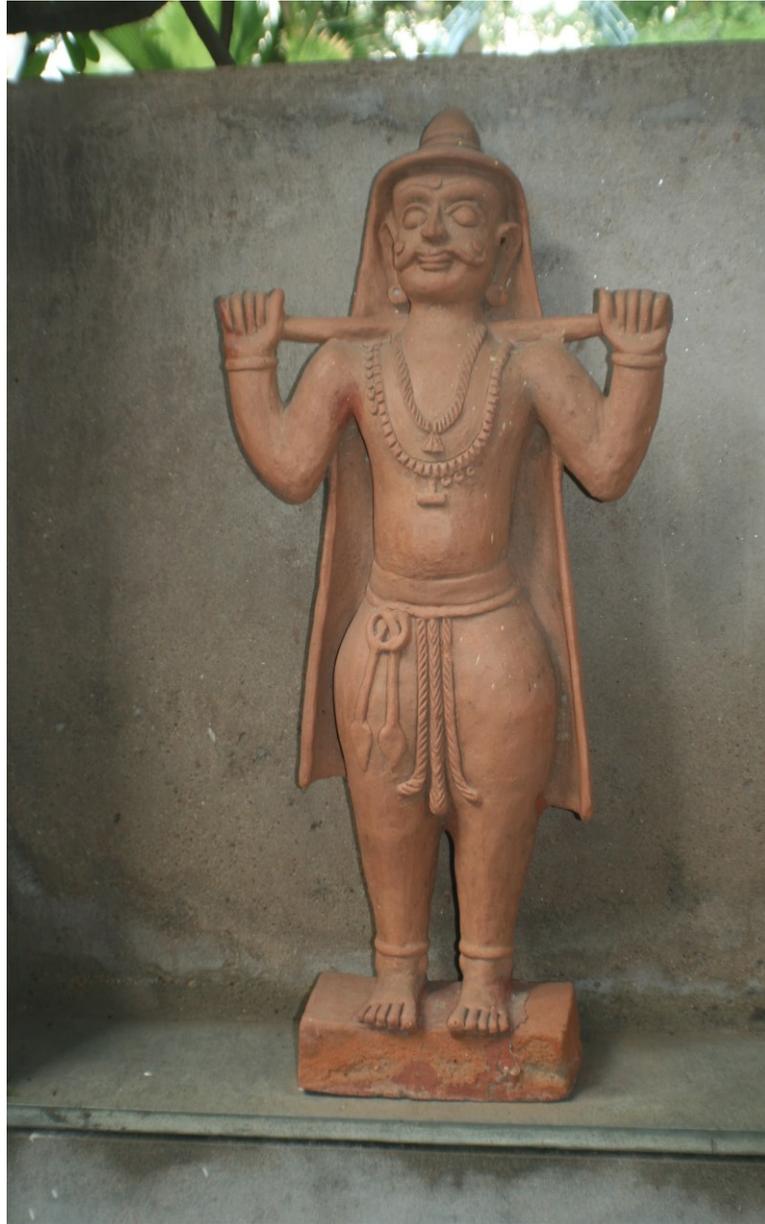


Figure 109: Terracotta Statue near entrance to the office, Balkrishna Doshi's Sangath, 1981, Ahmedabad. © Pallavi Swaranjali, 2018.



Figure 110: Entrance Gate, Balkrishna Doshi's Sangath, 1981, Ahmedabad. © Pallavi Swaranjali, 2018.



Figure 111: Barrel Vaults at the back of the site, Balkrishna Doshi's Sangath, 1981, Ahmedabad. © Pallavi Swaranjali, 2018.



Figure 112: Studio Space, Balkrishna Doshi's Sangath, 1981, Ahmedabad. © Pallavi Swaranjali, 2018.



Figure 113: View from the underground studio looking up, Balkrishna Doshi's Sangath, 1981, Ahmedabad.
© Pallavi Swaranjali, 2018.

Appendix C:

Photographs of Balkrishna Doshi's Gandhi Labor Institute, 1984, Ahmedabad.

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Figure 114: Exterior View, Balkrishna Doshi's Gandhi Labour Institute, 1984, Ahmedabad. © Pallavi Swaranjali, 2018.



Figure 115: Entrance, Balkrishna Doshi's Gandhi Labour Institute, 1984, Ahmedabad. © Pallavi Swaranjali, 2018.



Figure 116: Main Staircase, Balkrishna Doshi's Gandhi Labour Institute, 1984, Ahmedabad. © Pallavi Swaranjali, 2018.



Figure 117: Staircase and vaulted ceiling, Balkrishna Doshi's Gandhi Labour Institute, 1984, Ahmedabad.
© Pallavi Swaranjali, 2018.



Figure 118: Landscaping in the courtyard, Balkrishna Doshi's Gandhi Labour Institute, 1984, Ahmedabad.
© Pallavi Swaranjali, 2018.



Figure 119: Vibrant colors of staircase leading down to classrooms, Balkrishna Doshi's Gandhi Labour Institute, 1984, Ahmedabad. © Pallavi Swaranjali, 2018.



Figure 120: Semi-open hallways, Balkrishna Doshi's Gandhi Labour Institute, 1984, Ahmedabad. © Pallavi Swaranjali, 2018.

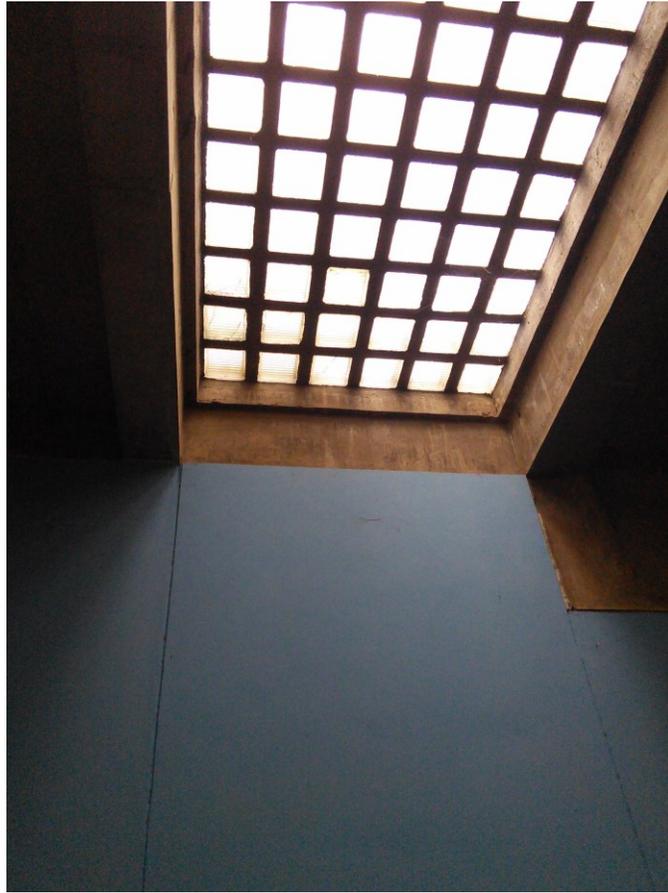


Figure 121: Skylight, Balkrishna Doshi's Gandhi Labour Institute, 1984, Ahmedabad. © Pallavi Swaranjali, 2018.



Figure 122: Stepped courtyard, Balkrishna Doshi's Gandhi Labour Institute, 1984, Ahmedabad. © Pallavi Swaranjali, 2018.

Appendix D:

Photographs of Balkrishna Doshi's Kamala House, 1959, Ahmedabad.

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Figure 123: Exterior View, Balkrishna Doshi's Kamala House, 1959, Ahmedabad. © Pallavi Swaranjali, 2018.



Figure 124: Main Door, Balkrishna Doshi's Kamala House, 1959, Ahmedabad. © Pallavi Swaranjali, 2018.



Figure 125: Basement View, Balkrishna Doshi's Kamala House, 1959, Ahmedabad. © Pallavi Swaranjali, 2018.



Figure 126: View of Garden from the living room, Balkrishna Doshi's Kamala House, 1959, Ahmedabad.
© Pallavi Swaranjali, 2018.



Figure 127: Dining Room, Balkrishna Doshi's Kamala House, 1959, Ahmedabad. © Pallavi Swaranjali, 2018.

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