

DIA@Delhi

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DIA@Delhi

Studio Master
Professor Martin Rein-Cano

DIA Series

This book is part of a series of scientific publications, which, at loose intervals, will publish the results of thematic studio projects as a reflection of the work accomplished within the DIA master course. As such, they will reveal a panorama of architectural discourse about the city, society, history as well as the tectonic object as perceived through the eyes of students from all over the world.

Alfred Jacoby, Director DIA
Johannes Kister, Director Public Affairs DIA

#1 Amsterdam Housing (2012)	Arie Graafland
#2 Jerusalem: The Damascus Gate (2013)	Arie Graafland and Alfred Jacoby
#3 After Geometry (2015)	Attilio Terragni
#4 Redesign (2015)	Gunnar Hartmann
#5 DIA@Delhi (2016)	Martin Rein-Cano
#6 History of the European City (2016)	Alfred Jacoby

Introducing 'DIA@Delhi'

Prof. Alfred Jacoby (Director DIA)

This New DIA book expounds and continues the existing DIA Series' tradition of proposing and commenting on contemporary design teaching innovation.

The publication under the editorship of Prof Martin Rein-Cano is the result of a unique experiment undertaken at DIA.

It is a report of an exploration into a design studio sample, that researches an inter-cultural, cross-national and interdisciplinary approach.

From November 2015 to January 2016 a group of 30+ students from DIA (Germany), Oslo Akershus University of Design (Norway) and from the Design Village New Delhi (India) collaborated in several different design tasks, set to them by a group of teachers from each of the participating institutions.

In addition the book includes the results of the full Semester Studio of Prof. Martin Rein-Cano, (DIA) the lead design partner of the landscape architectural firm TOPOTEK 1, (Berlin).

As a Professor at DIA, Martin Rein-Cano's studio approach is driven by his professional work. It sets a strong focus on the design possibilities of exchange – exchange between typologies, cultures, societies and disciplines.

'DIA@Delhi' is a reflection of the meeting point of this prismatic view.

Between these two worlds, Dessau and Delhi, the studio explores a multitude of design subjects seen through an array of professional, social and cultural lenses.

The book is the result of an innovative and academically valid format

Prof Alfred Jacoby

Dipl.Arch.ETH, MA Cantab.

Director DIA

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Preface

DIA@DELHI

Martin Rein-Cano

There are perhaps few places of greater opposite extremes than Delhi, India and Dessau, Germany. Where Delhi's abundantly populous, rich and colourful chaos brings rousing life to its city streets, quaint Dessau with the historic Bauhaus at its core sits in cool, temperate and steady German composure. This unlikely pair, an odd couple from disparate temperaments and continents, however grew strangely closer this past year as a motley international crew of students and professors downsized the seemingly insurmountable cultural difference and physical distance.

Bound by architecture, the Dessau International Architecture Graduate School (DIA) and The Design Village (TDV) in Delhi fostered this link through a fifteen week all or nothing collaborative master course, "DIA@Delhi". Reminiscent of the Bauhaus teaching philosophy which aimed to synthesize art and life, work and play, the course veered from the typical academic format to focus on learning through knee deep collaboratively gained experience, through the exchange of diverse practices and insights and from the benefit of a seamless social and educational atmosphere. As such, the course from October through January took place eleven weeks in balmy India and four weeks in frigid Dessau.

Composed of twenty eight students, half from DIA and half from TDV, the course commenced with a series of one week design workshops held in India where Delhi became the stopping ground for a richly international DIA crowd, accompanied by their Delhi savvy TDV counterparts. Workshop topics explored a crash course diversity of DIA, Design Village and the University of Ahmedabad's guest professor expertise including urban analysis, product design, public participation, urban planning, landscape architecture, natural resource consumption, design and build, sustainable design and informal architectural intervention. Confronted with the arresting vibrancy and unique social dynamics of India, DIA students and professors lived together in The Design Village neighbourhood of Noida in the Delhi metropolitan region. In this bustling context DIA participants were pushed to closely consider the course design issues from an Indian perspective. Alternatively, through participant exchange, new TDV students and professors were exposed to perspectives of both design and of India, from East and West Europe, the Americas and Africa.

Throughout the workshops, students and professors ventured out to the Noida/Delhi neighbourhoods and further afar on two one week excursions - delving deeper into the landscape, architectural and cultural diversity that is India. With each workshop brought new professors, new views, new excursions, more professional exposure and all in all more experiences to stir the pot.

Transplanted and entirely translocated, the course culminated in a four-week studio session in Dessau focused on the elaboration of one design workshop. Flipping the course dynamics on its head, DIA students (though very few actually German) became the welcoming German ambassadors to their Indian counterparts. Temporarily calling Dessau their home, The Design Village students thus joined the foreign DIA students as foreigners in a foreign land. Straddled geographically, learning, producing and living together in both the Indian and then the German context, the professor and student body were thus exposed to the Indianness of India, to the Germanness of Germany - but also to the internationalism of the group in total, which lay everywhere and somehow nowhere in-between.

Through this multi-layered encounter the sense of groundlessness worked as an equalizing force where teachers and students and those of DIA and TDV alike, were always left slightly off foot, always between two places. This experience pushed the questioning of assumed standards, allowed the confrontation of difference and the necessity for each participant to carve an individual path within the pluralistic educational community.

While perhaps on first assumption these two locales, Dessau and Delhi, are from opposing worlds, the group, though grounded in these two cities, came to reflect the reality of an ever more globalized society less bound by distance and more connected by shared interests, concerns and professional and educational affinities. In the book before you, you will find an outline of the journey the students and the professors took in reaching this fusion, as well as a body of selected student work which speaks of this hybridized experience, of this world between worlds somewhere in Dessau, somewhere in Delhi and in so many and no places in between.

Workshops

Foreword

Prof. Sourabh Gupta - November 2015

"Lets give the faculty and students at DIA, an equal chance to learn."

Probably the most encouraging words, I had heard the entire month; these came from Alfred Jacoby, the director of the Dessau Institute of Architecture in Germany.

I had just finished giving my lecture on "attitude and architecture, a contemporary Indian perspective" (also the title of a book I recently authored) at DIA as an invited guest lecturer, through the kind introduction of my work partner, Martin Rein Cano, founder of Topotek1 in Berlin, the renowned German landscape architecture firm.

Over dinner, when we were having a chat with Martin, Alfred casually popped those words and then there was simply no looking back. This is how the architecture masterclass between The Design Village and the Dessau institute of architecture came about.

It is special to see, and probably the biggest motivation as well, when you have people who share your vision and reciprocate your energy without the garb of the limitations and realities of energies and time. It is even more refreshing when such a proposal comes from someone from a different culture, a different country.

The vision of the TDV-DIA master-class, entailed enriching students and teachers alike, through a cross-cultural context. Lecturers from Argentina, Serbia, Italy, Germany, Russia, India along with students from Uganda to Uruguay (among other nations) came together for this exercise in international culture and educational exchange.

I perceive that life for me has been a process of continuous evolution and learning and the experience of getting this master-class up and about was one that made me pause, take a breathe, to share. While preaching is not really my cup of tea, sharing ideas and thoughts with students and peers, is another matter altogether as I enjoyed sharing my learning, my speculations through the master class.

As dangerous as it sounds, I have always believed, that when in doubt, one must go for it; and an experiment like the masterclass, in an educational environment, a design and architecture one in particular, is totally worth it. The beauty of the initiative was the careful

mix of students, some Indian, others from abroad. Some who left jobs to take up the course, as well as others who took a break from college or office, most importantly from all walks of life. It was stirring to see professors come and teach in an alien environment and context. The masterclass was a fairly immersive programme, as they spent most of their time with a group of thirty eager minds to guide and be guided with. The intensity was spirited and the reciprocation of energies was unparalleled. The experience also encompassed students staying on campus with make shift dorms and accommodations. Completely out of their comfort zones, literally as well as metaphorically, camping in the front lawn and discussions on the wooden deck were some unforgettable moments. The way students embraced the local context was significant, one could see them walk through slums, dance in wedding processions, hitch hike, jump onto rickshaws and the like. The excursions, both the planned and unplanned included visits to cities like Chandigarh, Agra, Lucknow and a site visit to Allahabad. Each, being unique in their identities, vocabularies and cultural heritage. A fitting finale was to see the students celebrating Diwali, the Indian festival of lights at the Lucknow studio.

The proof of the pudding is in eating it – aptly stated, and demonstrated at the final jury at Dessau, where the final workable- creative yet practical- solutions were presented. Design that was not superficial, rather very thoughtful – and sympathetic to the particular climate-culture-client context.

Thanks are due to Siddharth and Kashi for conducting the India studio with me; Vidhu and Bhawana from the Design Village team for organizing the entire experience, Beeke from DIA for seeing this through and of course Martin for helping turn a mad thought into reality, and how!

Workshop Introduction

Prof. Martin Rein-Cano

Set out onto the streets of the Noida neighbourhood in the outskirts of Delhi and venturing beyond to the cities of Agra, Lucknow, Varanasi and Allahabad, students and professors turned India inside out and upside down exploring the social, cultural, environmental and architectural landscape from a myriad of angles and attitudes.

Through a series of one week workshops, in search of a view more panoramic and for research strategies as dynamic as their surroundings, students were asked to explore, draw maps, conduct interviews, take measurements, document observations, engage in debate and of course (when in India), taste test too. Workshop outcomes varied from strategic blueprints, prototypes, design proposals and physical interventions.

The weeklong workshops included *Two for Commons*, *Opportunity in Place and Time: Culture, Collaboration & Learning*, *Sustainable Design Methods*, *Eating India*, *Prosumption*, *children_learning_school* and *Allahabad*. *Two for Commons* led by Professor Ivan Kucina investigated the concept of urban voids and spatial leftovers in the Noida neighbourhood as potential spaces for architectural activation. Led by Professor Peter Ruge, *Sustainable Design Methods* asked students to search high and low to pinpoint possible sustainable methods to interject into the existing fabric of the neighbourhood. *Opportunity in Place and Time: Culture, Collaboration & Learning*, taught by Sourabh Gupta and Vihdu Kaskikar considered architecture in the context of the filters of space, form, maps and the senses. *Eating India*, led by Ph.D. candidate Julia Jocoby, did just that, exploring Indian cuisine and the new design of associated utensils.

Focusing on water issues, the workshop *Prosumption* taught by Professor Gunnar Hartmann explored water quality and water demands from the regional to the neighbourhood scale. Run by Professor Johannes Kalvelage, *children_learning_school* examined educational environments and participatory design focused on the neighbourhood youth.

Lastly, the *Allahabad Ghat workshop* taught collaboratively by Professor Martin Rein-Cano and Professor Johanna Meyer-Grohbrügge focused on the modern design of an age old Indian landscape architectural typology - the ghat.

From perspectives as broad as the city scale to interventions at the handheld dimension, the workshops explored the vastness of design typologies and implementation. This diverse concoction of workshop material, formulated around professor expertise and cultural exchange, exposed students to a barrage of contextually relevant issues, to a full diversity of working scales and to a wide toolbox of essential analytical, research and design know how.

The architectural studio sampler thus provided a broader view of what is India as well as professional possibilities - offering students a better taste of the country in which they studied while exploring where their interests and talents lie for future careers choices.

Sustainable Design Methods

Prof. Peter Ruge - October 2015

Introduction

We are positive, we think about the three columns of sustainability, and the unity of body, mind and soul, and from this find the criteria to evaluate different processes and methods for sustainable design.

Our workshop thus asked these main questions:

What is sustainability?

What is design?

Which methods can we use to achieve sustainable design?

For the workshop we ventured out from the classroom (physically and virtually) and found locations where we assumed it necessary to change the way of thinking and to develop different approaches to solutions – a street corner, a high-rise block, a residential area, a technical challenge, a water treatment or electricity issue, a waste problem, or perhaps ways in which we spend our money, an outcome of how people act among themselves or a consequence of various way of living.

You have just uttered: "That is everywhere! What kind of sustainability do you teach? How can one find the right location? How can one define sustainable goals?"

But the method is practical: We were looking for a place where we could increase our sense of well-being, a deeper understanding and our love to the world. So, yes, that is everywhere!

Process

We ran through various tasks where we were able to implement the way of sustainable thinking into a location, a project or an intervention.

A process of brainstorming, open discussion and the possibilities of our own way led us to 36 main topics, 14 questions, 7 criteria and 7 projects.

We evaluated these important personal topics, questions, criteria and projects and took our decision on how to work in the field of sustainability. We asked ourselves what a truly sustainable project should look like. Should we use the energy of the sun, the power of social environment or the economic paradigms to install a project?

During this elaborate brain storming two projects were evaluated to understand the process and products of sustainable design and were tested in the field: #Bamboo Chaya and #Ek Akhbaarbaarbaar.

#Bamboochaya focused on improving the local conditions of the street vendor to create shade and to alter their private spaces. Chaya is a Hindi goddess, the second wife of the god of the sun, Surya.

#Ek Akhbaarbaarbaar, is Hindu for Ek Akhbaar (newspaper) and baarbaar (again and again) it was a proposal for a rental newspaper for the Delhi Metro which was successfully tested on metro line 6.

Results

The final presentation showed the result of these powerful interventions, which were not limited to the projects themselves. The group of individuals understood that joining sustainable forces empowers new design ideas and that through such actions the slow shift towards sustainability is starting to change.

Thanks

I would like to thank all of the participants for their time and the successful *Sustainable Design Methods* workshop at TDV.

And do not forget, that you are the ones sitting in the driver seats of sustainability. Most of the intro, the process and the results that you have already forgotten through the weeks which followed, will pop back one day when you change your view and go beyond your planet. You are free to find your location between the expanding and contracting universe.



Two for Commons

Prof. Ivan Kucina - October 2015

Introduction

Two for Commons was a workshop that explored strategies to convert Delhi's spatial, cultural and mental voids into common places. The goal was to design interventions that will appear instead of voids as a serial of architecture installations that provide initial condition for two persons to meet, talk, work, eat, rest, relax, play and enjoy together. Each of the installations were designed by one student from The Design Village and one student from DIA. Students followed creative processes that included space finding, mental mapping, user centred analysis, scripting and prototyping.

Students created a comprehensive variety of outcomes at a diverse scale of strategic intent- from portable devices to permanent constructions. This workshop provided an intense bubble for experimentation and debate as we came to grips with Delhi's many extremes of urban reality.

Voids appeared everywhere in the city at many levels, shapes and scales. They were emerging as unforeseen leftovers of an uneven urban growth. Voids encompassed the whole spectrum of urban phenomena: between unused and overused space, informal and formal, generic and customized, vacant and full, provisional and lasting... They were the spaces in-between fulfilled desires, ambitions, territories and interests.

Creating commons laid claim on architecture as part of an on going process in which production of the space is shared between different actors, both institutionalized and non-institutionalized. Two For Commons sought to understand how to maintain lively controversies instead of conflicts, how to create smart means for social exchange among concurrent ways of living,

Monday, October 26

Students looked for their void in the areas they chose. Found voids were observed for a few hours, scanned and mapped. Mapping transposed relations between observer, his/her personal memories and phantasies, notes on people who were appearing, their behaviours and communications, and the unspoken character of observed place.

Tuesday, October 27

Determined on the basis of taxonomy, students sorted and ordered their collected

notes. Activities and reflections of people were divided according to: events, habits, relationships, meanings; while spatial phenomena were divided into: places, routes, territories, attractors...Mental maps were developed from sketches into the 3 dimensional form of a diagram. Each student invented mapping language in response to content mapped and impressions found.

Wednesday, October 28

Students used prepared questionnaires to question themselves and students from the DIA Delhi Studio still in Dessau online. The outcome was a common profile whose attributes were organized as triggers and unmet needs, motivations and symbolic capital. Interactions between common profiles and mapped voids made trajectories for developing design script and prototypes. Following these trajectories, students imagined new spatial situations related to existing voids that matched to their common profile.

Thursday, October 29

Using these developed conceptual bases students made a serial of fast and subsequent 3D working models of their intervention. The first working model determined programmatic elements and their relations. The second one structuralized spatial capacity for the activities that were programmed. The third working model translated spatial relations into architectural language.

Friday, October 30

Students developed final prototypes. New designs were a surprise for everyone – a kind of discovery. While finalizing work, students asked each other the questions as follows: Why is this design different from the existing? What kind of emotional reaction is expected? Why would anybody would love it? Which value does it bring to society?

Saturday, October 31

For the presentation and critique students prepared: sketch drawings on a board 421x594 mm, a pdf slide show 20x20 seconds and 400 seconds of storytelling. During the day DIA students who had arrived the night before joined the discussion.



Opportunity in Place and Time: Culture, Collaboration & Learning

Prof. Sourabh Gupta & Prof. Vihdu Kaskikar - November 2015

Studio Brief

Behaviour of space, urban space, is a complex phenomenon. Not only does the space carry an inherent identity in its articulation, it is also absorbed differently, by diverse individuals, as a 'place'. Time plays a dynamic role contextually, particularly as culture and climate, altering and precipitating identities. We apply emotional and conceptual filters to imagine, perceive, record, analyse and represent urbanity. These filters form the critical vocabulary of one's design conversation in the necessary individual/ collaborative dichotomy of the creative process.

Context

This workshop was an exercise in studying and establishing architectures of experience and navigation through two conceptual filters of space, form, maps and the five sensorial filters.

A part of the old city fabric of Delhi (more precisely Shahjahanabad) – between Chandni Chowk & Chawdi Bazar, North and West of the Jama Masjid respectively – was set as the district to be studied.

The reasons for choosing a traditional urban fabric are as following:

1. Scale – the human body being the measure instead of the motor car.
2. Grain – walk-able block sizes because of distances and shade.
3. Density – close proximity of buildings and activities.
4. Intensity – incessant and overlapping nature of activities and experiences.
5. Adaptation – transitory nature of events both spatially and temporally and the reason for choosing this particular district is that it is perhaps the richest when it comes to experiencing an urban fabric.

Process

Participants were divided into seven groups corresponding to afore mentioned filters. Every group comprised of both Indian and foreign students such that each would challenge the familiarity and exoticness in the other with regards to the area under study. Each group had to traverse the selected district to experience and record the environment with specific attention to their assigned filter.

Studio sessions following site visits were spent deliberating on the recording, the methods of representations and, most challenging of all tasks, the definition of the filters themselves. Although all filters had their share of confusion in definition and degree of overlap with another or more filters, taste had to be interpreted as food, while tactility threw open a gamut of questions such as people touching people, buildings, breeze, light, shade and so on, besides the idea of buildings touching buildings and the nature of tactility changing through dawn to dusk. Space & Form would tend to coincide with Sight – colour could define form or texture could define space. However, what emerged is that Sight has a great threshold for fragmentation in perception – although we tire but don't get exhausted by the incessant noise of signage along a street. Space & Form, on the other hand, rely on greater continuity followed by aberration to register – the clearing of the square at the end of a long narrow street or the tower emerging from the murmur of silhouettes hemming a plaza.

Besides challenging the notion of mapping through an emotive, cognitive, experiential approach, the exercises raised several questions against the loss of certain values of habitation with the obliteration of traditional built fabrics.

Site & Design

Mid-week, the site of intervention was introduced to the participants: a sizeable linear piece of land along the main artery of Netaji Subhash Marg, east of Jama Masjid. The purpose and vocation, program and vocabulary of the architecture were to be extracts of each group's learning from the context, without imitating it.

Recommended Reading

Design Of Cities, Edmund Bacon

Image Of A City, Kevin Lynch

City Shaped, Spiro Kostof

Learning From Las Vegas, Robert Venturi

Great Streets, Allan Jacobs



Eating India

Julia Jacoby - November, 2015

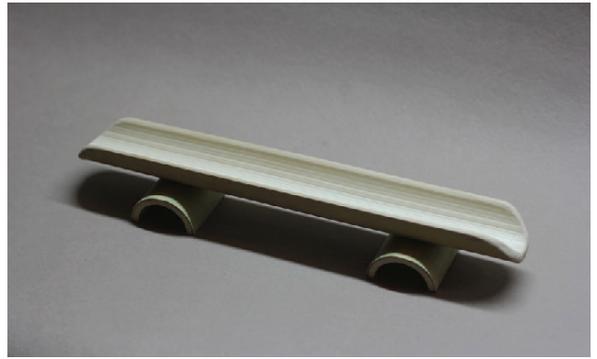
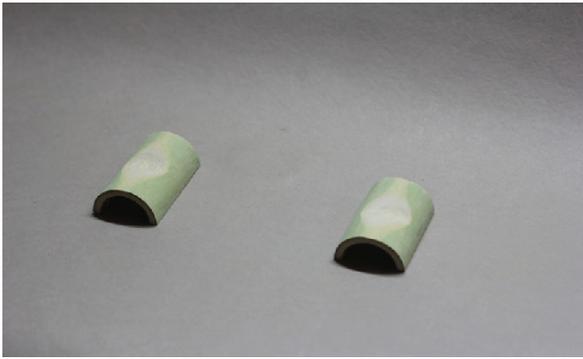
Was a product design workshop that explored the relationship between food culture and design, asking what can be learned by examining the [often-metaphorical] intersection of the consumption of meals and the production of artefacts used in these processes? In a culture that includes the Food Channel and the knife-juggling chefs, food has become not only an obsession but also an alternative art form. In which we can all find a home and a talking point. Food in this global world is often a very tangible lifeline to the respective homes that the traveller has left behind. However, it also often acts as a means to explore foreign cultures. It invites conversations and the sharing of memories between people and allows them to highlight not just their differences but also more importantly their commonalities.

As human beings, we all need to eat and as designers, we have the possibility to analyse this eating experience and meaning of food for others and us. Allowing us to use this information to create a physical response. Which we can use to enhance or diminish any wanted part of the experience. In the weeklong workshop, the students did just that. In teams of two, this international group of students chose an Indian dish as their starting point for the exploration. Analysing the food and its culture through the processes of preparing it, the social settings of its consumption as well as the architecture of the utensils and surroundings used to enjoy the meal. However, in their fieldwork and later conversations it became apparent that the experience of a meal could not just be limited to the surroundings or the design of packaging and utensils. What was more important were the memories, textures and smells that the design team experienced together as well as through each other. The native as well as the foreign students got to eat and taste their chosen dish anew. Through the joint creative process of eating, exploring flavours, interactions and cultural identity. The students began capturing these experiences in a number of journey maps, sketches, images and other forms of mixed media. These maps became the first design response, creating a visual and written language for the design team allowing them to delineate the aim of their design. Which was then pursued in the process of product prototyping. Ultimately ending with a potluck

dinner, in which each student brought their dish and design to the communal table for discussion and joint enjoyment.

Student Work

Evgeniia Zhukova



Prosumption

Dr. Gunnar Hartmann - November 2015 with Cibi Coimbatore¹ and Jaideep Acharya²

Preface

Rural life demanded that all inhabitants grow and make things—the concept of a self-sufficient village economy (Gandhi). City life spatially segregated the place of production and the place of consumption. The city presented a place of protection, allowed for cultural freedom, and granted greater access to trade. As a result, it allowed for a wide variety of activities to emerge. Knowledge gain, specialization, and innovation happened only in cities—even agriculture was first invented in the city and then exported to the rural areas (Jacobs). At the same time, the city “deskilled” its dwellers and made them dependent on an economy based on service.³ In this way, the city turned its inhabitants into consumers.

Up until now, the consumption of resources was dictated by geopolitical thinking (based on the location of coal, oil, and gas reserves). These nonrenewable resources require immense infrastructures, which means that today’s prevailing energy systems rely on the logic of centrality. Although most urban centres have evolved into polycentric cities, their supporting energy infrastructures are still based on a centralized and one-way organization. Tomorrow’s networks, based on renewable energy, will draw their energy from the local area and therefore will follow the logic of decentralization. As this happens, the places of production and those of consumption will converge.

With the trading and exchanging of various forms and amounts of energy, a new economic market will rise. Such an economy thinks “lean” by reevaluating any form of waste (a system’s output) as a tradable commodity (another system’s input). Within this market, various zones of conflict inevitably arise. For example, the rather recent enthusiasm for renewable energy like biomass has turned literally into a “biomess.” That is, the interests of food production are colliding with the interests of energy production—not to mention the coinciding side effects on animal habitats. To resolve these conflicts, new multisector energy systems based on prosumption will start to emerge. Like any natural system, these heterotopic networks will resemble self-regulating infrastructures that coevolve and therefore are codependent on a wide range of inputs and outputs. Tomorrow’s city will rely on prosumers.

Workshop

The workshop focused on the prosumption of water in the context of Noida. Unavoidably, the nature of this subject required the students to think on a variety of scales (on the scale of the region, the city, the block, and the building) and over long-term (over decadal, annual, monthly, and daily patterns). Students were asked to explore in small teams the ecological, technical, and cultural opportunities and challenges of the proximity between the places of production (processing, treatment, and purification) and consumption of water in the formal and informal settlements of Noida.

Findings

The Noida case study reveals some peculiar yet distressing practices that are prevalent in informal settlements of dense cities. Covering an area of 189,000 square meters, right below a high voltage transmission line, the settlements, which are home to 11,700 families, have grown stronger by substantiating their permanence over the last 30 years.⁴ They have survived despite any government aid and prospered to a self-propelled economy offering wide range of services to the neighbourhood. With an established welfare association engaging in developmental work, the settlements seem resilient to stay unperturbed for a long time to come. A great degree of resourcefulness can be witnessed, where efficiency follows function and human standards are questioned everyday. Right from building materials to the technology employed, a paradigm shift is visible in a way tomorrow’s informal neighbourhoods will be build and function. But they are marred with poor foresight and short-term planning.

While lots of care and efficiency goes in storage and daily use of water, the regard for groundwater and sewage is clearly absent. Groundwater is the only source and routine tapping has resulted in alarming depletion of water table. Dearth of a proper sewage system pollutes groundwater and further exposes children to water-borne diseases. Water vendors, which play an important part in service delivery, enjoy a total monopoly in selling water as a commodity.⁵ The lack of potent laws and government’s helplessness have conceived an unregulated bottling industry that distributes unsafe drinking water to neighbourhoods, while posing a big threat to human life.

Acknowledging water vendors, as an integral part of the system, will help to initiate implementations of more comprehensive and trusted policies, which will eventually serve end-users better. Interests of customers, vendors, and utilities will be better resolved through official recognition of their roles and responsibilities. Involving neighborhood participation in rainwater harvesting to replenish existing stepwells as catch water basins and waste segregation and management will promote a healthy environment and self-sufficiency. Urban planning strategies could provide a pragmatic approach to the way infrastructure services will function as open network systems in the future.



- 1 Cibi Coimbatore, a DIA graduate from southern India, now working as assistant professors at the Department of Architecture at Anna University in Chennai, will join the workshop. His thesis project together with Deepak on water prosumption (part of my Prosumer Habitat Studio at DIA winter semester 2012/13 and summer semester 2013) has won a Merit Award in professional category in FuturArc Prize 2014 competition hosted by BCI Asia, Philippines and FuturArc.
- 2 Jaideep Acharya's thesis project (winter semester 2015/16 and summer semester 2016 at DIA) focused among other things on the informal settlements of Noida.
- 3 Socialism as well as capitalism exploited the environment. Both relied on standardized mass production (celebrating the division of labor) and mass consumption.
- 4 Singh. Shivendra. K, (June 12, 2013), Slum soil business prospects of Noida Inc, The Economic Times. Website. http://articles.economictimes.indiatimes.com/2013-06-12/news/39925869_1_videocon-pucca-houses-sector. Retrieved July 5, 2016.
- 5 Kjellen.M & McGranahan.G, (2006), Informal Water Vendors and the Urban Poor, International Institute for Environment and Development.: London, IIED.



Images

- 1 purification of bore well water by informal water filtering plant
- 2 private water vendor
- 3 blocked drainage gutters



children_learning_school

Prof. Johannes Kalvelage November 2015

Education is a fundamental human right and without it, peace and the fruitful development of individuals, families, communities, societies and nations will not flourish. Arts and crafts, industry, science and democracy would be unconceivable without a fundamental apperception of learning and its humane and effective institutionalization.

The concept of the workshop "children_learning_school" was a dedication to the children in the neighbourhood of 'The Design Village' (TDV) in Noida/New Delhi. It began by initiating a basic inquiry concerning the formative role of education in human development, the living conditions of children in the adjoining urban district and the social choices they have in regard to education and their learning conditions.

Investigations were made in the field and the idea was to include and involve residents, particularly the children of the community. The process of investigative social interaction was supported and stimulated by actual and immediate situations the students experienced outside of TDV.

More attention was then paid to the existing community facilities and civic institutions related to the field of learning and education. Taking into account the urban fabric and the structure and availability of public space in the area, the focus was extended to the possible future implementation of such facilities.

The situation in and around 'The Design Village' (TDV) had already, within the first several weeks of their stay, put the students into a psychologically demanding state and a strong feeling arose that something had to be done right away, right now and on the spot. Their immediate impulse was to react on the given circumstances with an instant and personal intervention that maintained the notion of a "bottom-up" approach as opposed to a "top-down" architectural plan.

However, a visit to the neighbourhood-school, where pupils and teachers could be interviewed and classroom-facilities be studied in detail, this inevitably placed more emphasis on the question of educational space and sustainable solutions in the field of learning. Attention also turned to the improvement of individual opportunities within a society, which was highly competitive, but lacking in professional skills necessary to an industrialized economy. They were not only in need of experts in financial mathematics and computer sciences but equally in need of skilled workers in the repair and assembling shops who could read, write and assimilate the demands of a complex and modern society.

The question emerged as to what an academic workshop could actually achieve in this matter.

What is an architectural project in comparison to an instant action? What is it compared to an intervention that could subsequently involve the existing community and particularly the children with their many accumulated needs? Were they not hoping for immediate solutions from the 'engineers' so auspiciously working inside this TDV 'industry', while perhaps one of their deepest wishes was to possibly work there as well in the future? Was it not the duty and genuine intention of these Europeans to do something for the poor, here and now?

Were the students and the children of the neighbourhood not thinking the same?

An empty plot of about 3000 sqm located right next to the TDV was more than inviting for an architectural project taking into account many of the concerns of the children in this neighbourhood. Children needed more than simply reading in unison, being elbow to elbow with their classmates, seated on the floor because tables and chairs had become incompatible with the large number of students in classrooms designed in colonial standards for a lesser population. Beyond these out-dated standards there was a serious lack of teachers and resources as well.

The workshop then began to concentrate on spatial concepts for an educational environment. The results of the research in connection with critical and creative reflections about local learning spaces led to design-strategies and architectural typologies focussing on children and enhancing their education, health, equality, social choices and cultural development. Particularly theatre as a means of informal education was becoming a general consent.

It was difficult for the students to enter the abstract level of architecture and its genuine field of intervention where Architecture can actually contribute to changes for the better and improvement of social conditions. A field that proves to be demanding, requiring a lot of vigour and mental efforts, a field of influence that cannot be activated within a few hours or days, but which needs months and years. A field of anticipation which supports and can endure over a long, long process of realization, a field of art in which its performing agents are truly and painfully involved in shaping a future, the art of careful configuration, the art which makes the difference, and which makes the difference in the long run.

Informal Architect

Vasylysa Shchogoleva

We met a teenager in the street of the informal settlement of the industrial area, Noida.

He was 13 years old. The kid could read a paragraph in English, but was not able to understand the meaning. To communicate, we used Google-translator for English-Hindi, Hindi-English. He knew very well how to read and type in his mother tongue, Hindi.

Through observations, one can easily see the presence of the basic tactical and practical knowledge of the local community in Noida. Most people were focused on the primary needs for survival. They knew how to make a shelter, get access to water, how to grow and sell food, make and stitch clothes, and give first aid assistance. This knowledge was passed from parents to children without the need for any formal institution. One can also find that here kids are working together with their parents in order to sufficiently maintain family income (even despite the law in India prohibits it). Such life circumstances lead the youth to question: Why should I go to the school?

The government provides a system of free access to public education using extra benefits like lunch, free shoes, and uniforms, even providing bicycles for the girls etc. At the same time, the facilities are not the same from area to area. The public school we visited in the neighbourhood was without tables and chairs, without sufficient amount of teachers, but filled with young kids. One class was filled up with 70-80 pupils sitting on the bare floor. Young children don't see an interest in gaining a formal education that is beyond the basic knowledge.

In these circumstances the question of informal education becomes crucial. How do you leave an open door for young minds and ensure that he/she is able to make his/her decision regarding the future and become not only a shopkeeper but also maybe an artist or a badminton player?

As architects, how could we address the question of the education system's current circumstances? We could propose re-planning and improvement of the existing public school, keeping in mind the need of rethinking an approach for the education system. The political will to fund this project simply wasn't there. Construction of the new building funded by private means posed a question: does the client stay the same? (As legal construction in the informal areas is prohibited.)

How do we address informality, which is a product of unbalanced economic distribution, in order to provide opportunities for human growth and development using architectural means? As a group of students, many of us saw potential in step-by-step development. Small-scale temporary interventions on the streets of the disadvantaged neighbourhoods could provide a spark and curiosity for knowledge. In this case, an architect may become a manager and a co-worker of the larger interdisciplinary group, where he/she is able to provide technical or managerial assistance that is needed. It could be a participatory project where space for education may appear first in the outdoor setting and later gain indoor spaces if such are needed.

Sometimes the situation changes, and one might find him/herself asking: should I take part in this project or should I drop it? We faced this question ourselves when we were given a big empty plot in the area and proposed to design a school. It's easier to say no, but then the question is: aren't you dropping the responsibility of making this space better?

Architecture does have the power to inspire, provoke questions, and bring opportunities and change. Especially when it's being made with a respect to the existing situation, understanding its potentials and problems while projecting future changes that space will create. Understanding the various future scenarios and the involvement of the future users is an essential part of the work, both in the informal and formal settlement. At some point, an architect might become a voice for the public he/she designs and builds for. There might be failures and unpredictable outcomes throughout the process, even up till the very end when the project is realized. It is necessary to try, even if it sometimes results with a failure, in order to bring change, as architecture can't be done only through thinking about it, it needs to be experienced in order to bring change and inspire.

As a result of our week workshop in Noida, personally, I understood that the urgent wish to propose an immediate and direct intervention must be introduced, but along with a long-term vision of a more stable development and proposal with involvement of the local people and their potential and existing basic knowledge that can be used and elaborated through collaboration.

A Bus Full of Students, a Week to Remember

Beeke Bartlet November 2015

Excursion I: Uttar Pradesh (Noida – Agra – Lucknow – Varanasi)

Recollecting the impressions, surprisingly enough, they appear with calm softness and then more obviously with intense sensory character – the biting density of Noida, the quiet oasis of TDV-complex like a contemplative urban cloister within the tightly clattered mosaic of dwellers and sellers, the cool marble of the Taj Mahal changing colours in the evening sun, the roughness and stickiness of grasping kids' hands, the bazaars wrapping all things moving and squeezing in shouting colours, spices, sounds and smells from all angles, the irrigent sweet-spicy candy in a ceremony at the Monkey God's Temple, a cool breeze on the Ganges River while Varanasi is waking up, fades of mantras and smoke evaporating to our boat from its shores.

The geographical facts of the tour:

NOIDA (New Okhla Industrial Development Authority), is ranked "Best City in Uttar Pradesh and Best City in Housing in all of India" in awards conducted by APB news in 2015 - a statement that seems oddly theoretical when being asked for a description gained by personal experience of a couple of days of this area which was home to the students for two months and the starting point of our bus tour to:

Agra - for tourists synonymic with a visit to the Taj Mahal; a site impressively unimpressed by the amount of visitors around it;

Lucknow – with visits to its dense bazaar on the evening of Diwali, a festival of light that carries an importance in the Hindu calendar that is usually conveyed by comparing it to Christmas for Christians. Knowing this made it even more special that the Indian students were willing to share that time with the international guests instead of their families, and the celebration that was arranged together at the house of TDV in Lucknow will be kept as a very fond memory – along with the traditional clothes purchased earlier in enduring bargaining;

Varanasi – after all the great impressions India had offered us already the ghats at the holy river Ganges were: overwhelming, the final destination of the bus tour, which was a vantage point for understanding. A space where everything happens at the same

time – hair dressing, fortune-telling, clothes washing, the burning of the dead, flirting, spitting, worshipping, bargaining etc.

What had, with the finger on the map, looked like a little glimpse of Uttar Pradesh in Northern India soon felt like travelling the world. Well, in a sense the world it was at least from where the international guests were coming from, lead with generous hospitality and great care by students from India who at some point took it as their responsibility to even check first if the local toilet conditions were up to meet Western comfort before signalling their OK for a pit stop on the road. And how these minds did their best expanding to accommodate the amount of experiences offered! Taking in what they could day and night (and always "us Germans" waiting somewhere for a schedule to kick in: trying to adjust our inner timing, but a week was not enough to make us expand a comfort zone of clocks and measurements enough to arrive in most others' settings).

What was bright and shiny and in-your-face at day, often enough appeared abandoned to empty shadows at night – welcoming any moments of possible alienation as lessons how to move in territories of foreign patterns with appreciation. The quick read: when you start giving in to the temptation of immediate opinions and forcing the flows around you to fit familiar images the pain starts, but when you manage to go with the flow you'll always be amazed. It takes some training to be at ease with a constant state of not grasping at interpretation by comparison, in one moment believing to have understood a little something more only to experience the opposite the next... floating arrangements, impermanence even, a very high bench mark for architects.

If and how these experiences have or have not influenced the work of the participating students can probably not be answered exhaustively neither by this book nor by the projects, but together they may convey an idea of the high intensity that this very unique project was asking from and rewarding everyone involved with. I for my part thank each one of them, particularly Franziska and Vidhu who had the nerves to see this through in all its details, and am especially grateful for the students' continuous enthusiasm that carried a lot of weight and made this adventure a unique journey. Dhanyavaad!



Allahabad Ghat Workshop

Martin Rein-Cano /Johanna Meyer-Grohbrügge - November 2015

India as a country indicative of rapid development in the 21st century, yet entrenched in centuries rich historical context, allows for the unique exploration of design in a strongly duplicitous setting at the cusp between past and future. The Allahabad Ghat workshop, lead in tandem by Professor Martin Rein-Cano and Professor J. Meyer-Grohbrügge considered the design of a modern ghat along the historical Ganges River in the ancient city of Allahabad.

The ghat is a centuries old Indian architectural intervention utilized to access water and for religious ceremonies, markedly that of cremation. At present the ghat remains a necessary infrastructural and religious feature of modern India. As cities along the Ganges are commonly perched high above the river, ghats connect a distance between city and water that can be quite drastic, even more so in the dry season when the water can drop some 15 meters.

To holistically understand and experience the Indian ghat first hand, an excursion took place prior to the workshop. Visiting the epicentre of ghat culture, the group travelled up and down the Ganges River in Varanasi investigating a number of the thousands of ghats along the famous and holy water body. In addition the group visited the site in Allahabad to grasp the location, scale and context of the project site.

Back in the studio at TDV, to begin to generate the student's vision for their modern ghat intervention, the one-week workshop focused strictly on the formal architectural possibilities of ascendance and descendance. To understand ways to negotiate the steep terrain of the Allahabad Ghat site, students worked only with models considering the possibilities of stairs, ramps and paths to create the connection. In generating their concepts students considered the aesthetic architectural quality, the rhythm of physical passage and the potential and need for rest/public gathering space. Each student constructed three conceptual models that explored a variety of formal language and ways of access. Of these three explorations one was chosen to further explore in the three-week studio help in Dessau.



India Impressions

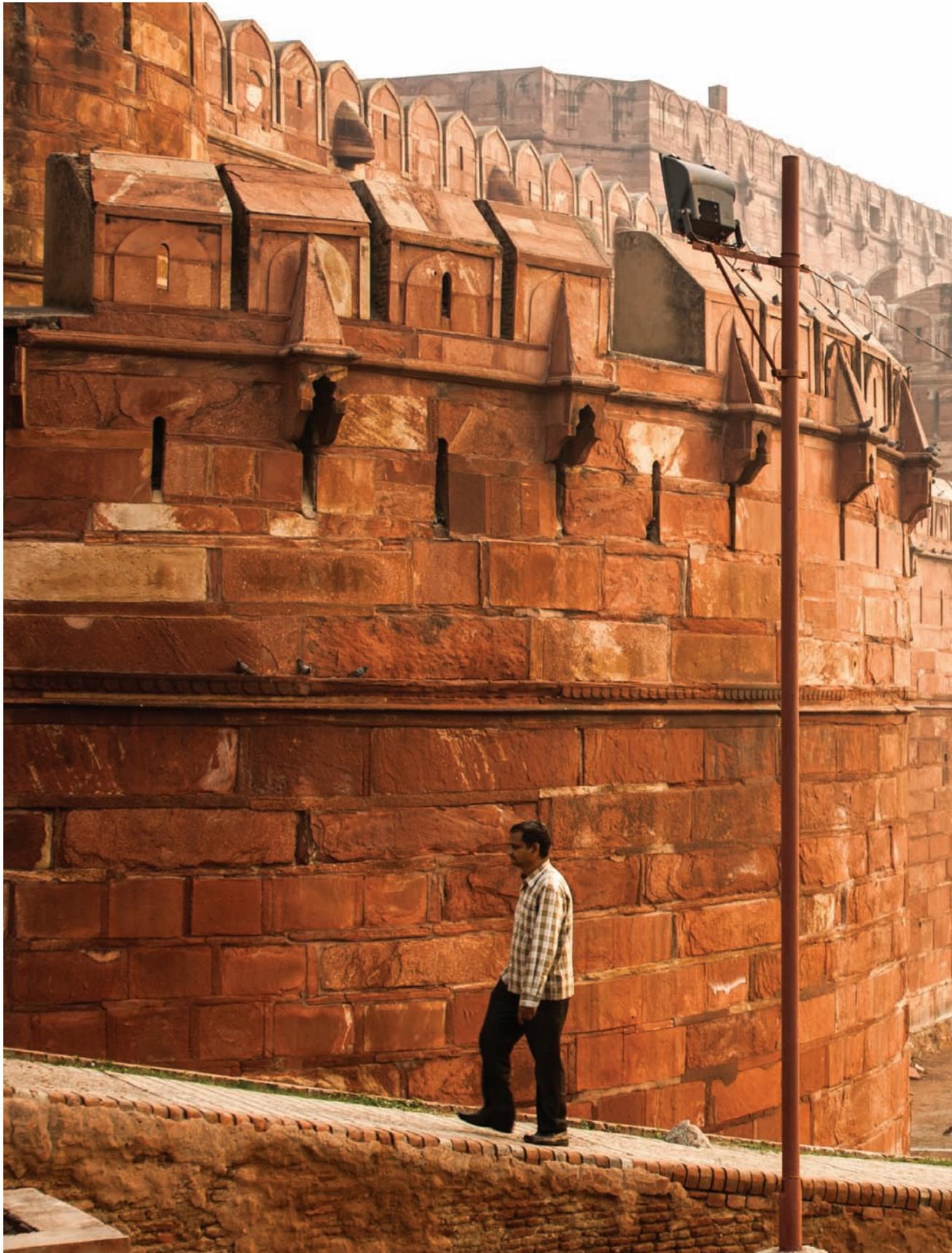


photo by: Mats Põllumaa





photo by: Mats Põllumaa



photo by: Richa Arora



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photo by: Siddhesh Karanjai





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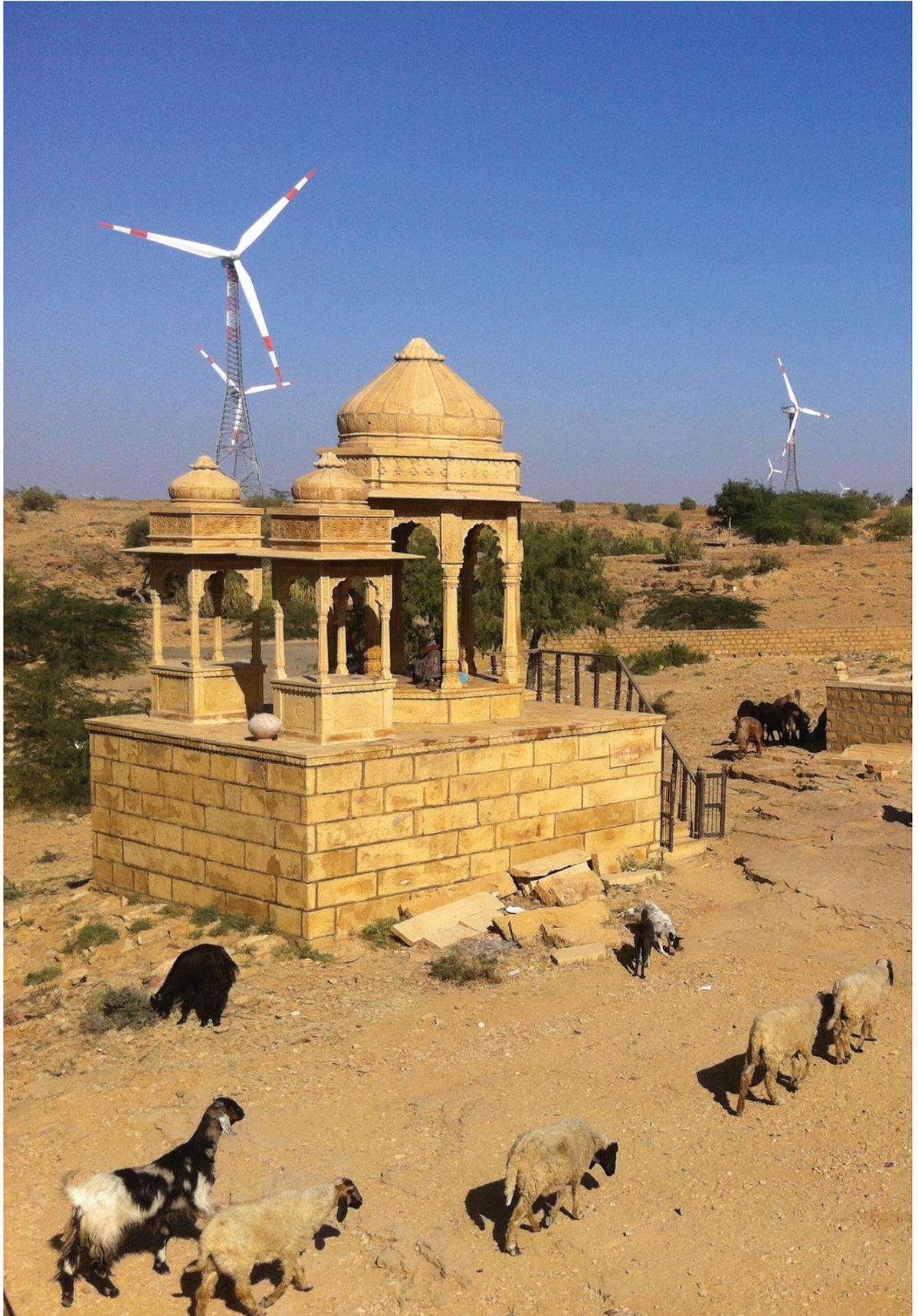


photo by: Evgeniia Zhukova



photo by: Evgeniia Zhukova





photo by: Alejandro Garin





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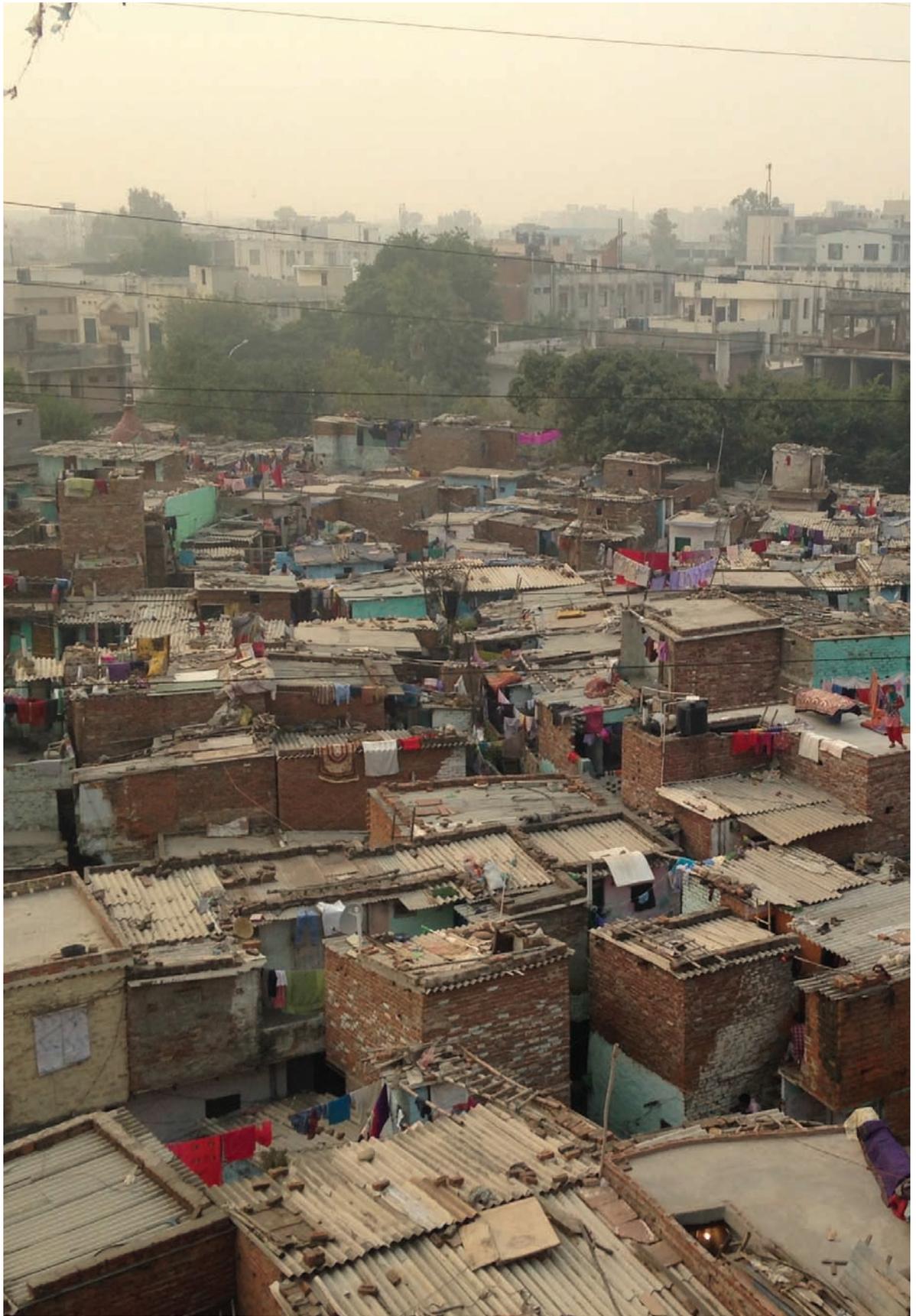


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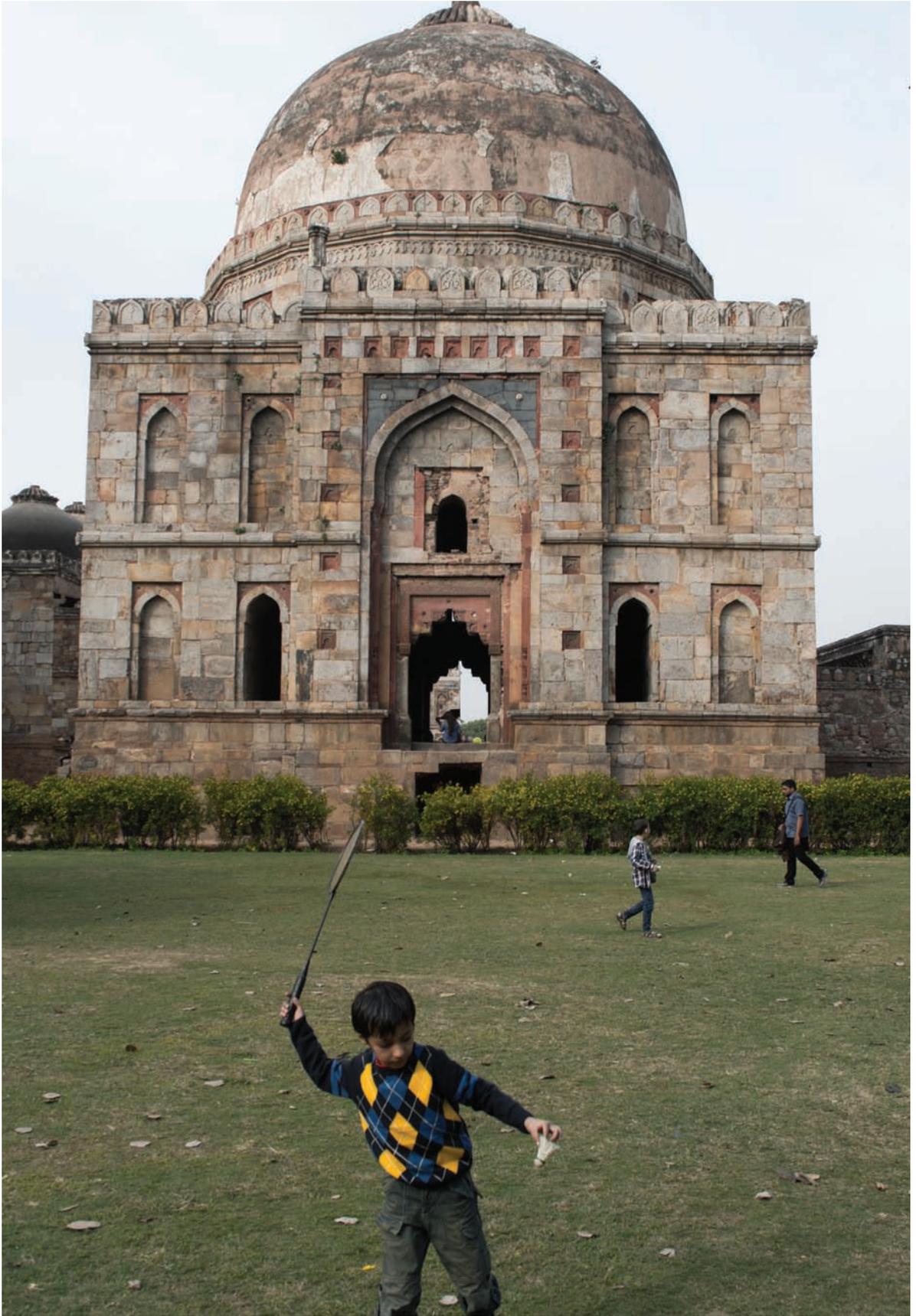


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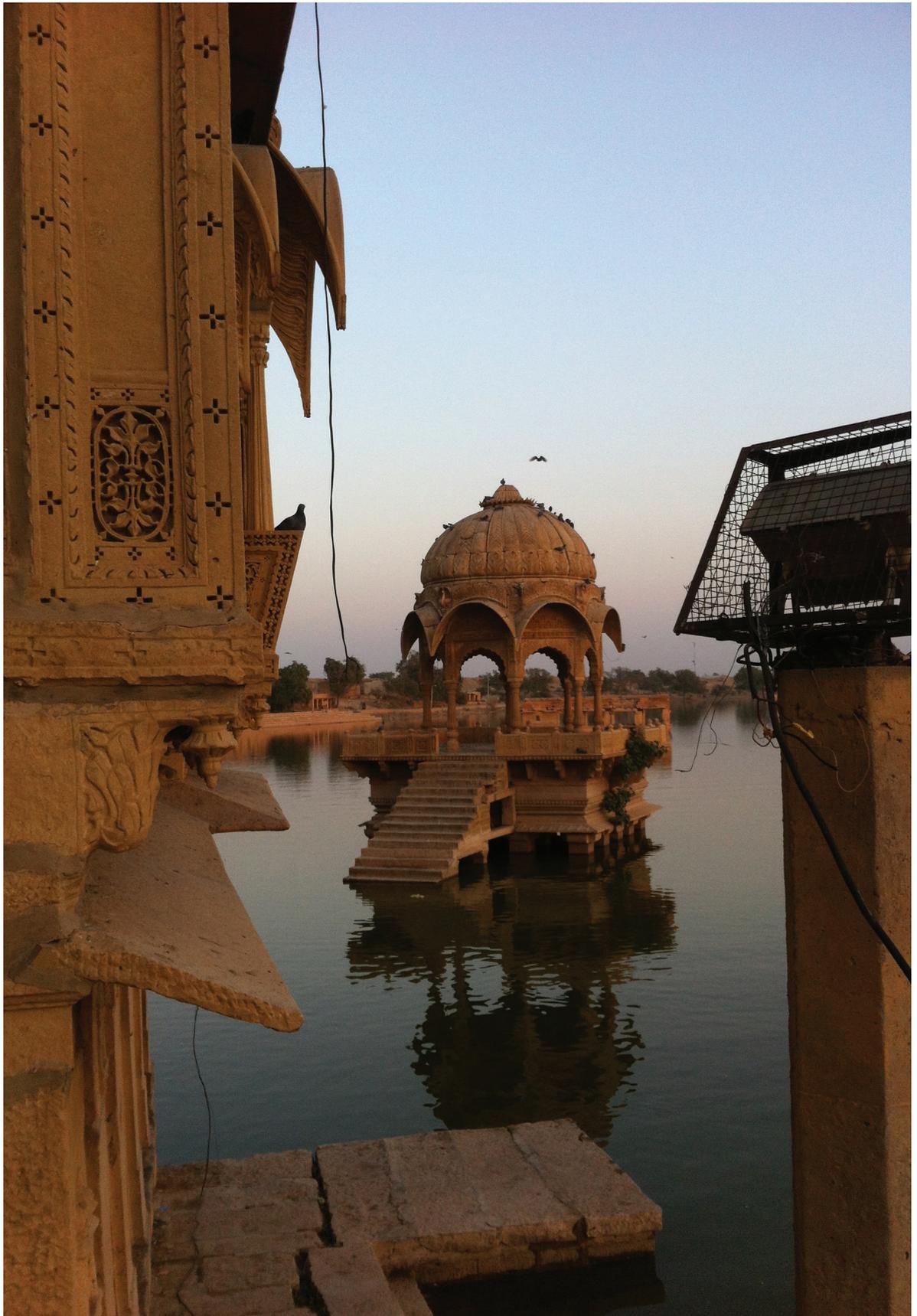


photo by: Evgeniia Zhukova



photo by: Mariia Potapova



photo by: Mariia Potapova





photo by: Vasilisa Shchogoleva



photo by: Hilette Lindeque



photo by: Siddhesh Karanjai





photo by: Larisa Tsvetkova





photo by: Mats Põllumaa





photo by: Larisa Tsvetkova





photo by: Larisa Tsvetkova





photo by: Larisa Tsvetkova



Studio Work

Allahabad Ghat Studio

Martin Rein-Cano

Perhaps only second to the path, the step marks one of the first human landscape architectural interventions. As an ancient and yet everyday tool, the step is a powerful physical manifestation of the human need and desire to form the world around us - allowing our bodies to more easily inhabit and traverse it.

By more firmly negotiating the bodily actions of ascendance and descendance, this utilitarian device bridges gaps between otherwise disassociated worlds and creates possibility of fluidity where before there was none. The step allows the body to negotiate the planet in ways otherwise outside of our everyday abilities.

By virtue of going with or against gravity, through the paced physical engagement of mass and relief, the step too provokes an intimate anatomical/architectural connection. Reflected in the tempo of one's pulse by way of the rhythm of the step, architecture becomes an intimate bodily experience. Further, by so strictly structuring movement in space, this architectural tool generates a construct on which time can be discerned. One can for example estimate the time and effort up to a fourth floor walk up, or the jaunt down a generous staircase to the sea. As such, the step allows architecture to become an intelligible and yet physically personal journey.

This intimate connection between body, time, movement and place has allowed the step greater power beyond just the physical world. Whether moving up closer towards the heavens or deeper to the underworld, the power of up and down, and thus the step, is often an integral and strongly metaphorical aspect of religious architectural and landscape architectural typologies. This can be seen for example through the simple symbolism of the ascension from the street up the church steps, and further, the step up to the altar; or greater so, the treacherous climb and procession up a Mayan pyramid or a Mesopotamian Ziggurat.

Whether as simple as point A to point B, or as symbolic as this world to the next, the step is thus a powerful and timeless tool. One such example firmly at this threshold is the Indian ghat. The term ghat refers to a series of steps leading down to a body of water, most often holy water. As a divine element, access to water is essential in India.

Along the holiest of Indian water bodies, the Ganges River, thus rest thousands of these stepped structures bringing the holy water body in closer connection with the inhabited world. With cities often perched high above the river, the ghats can span great heights, a distance that grows shorter seasonally with the coming of the rainy season and the rising of the water by some fifteen meters.

While ghats are utilized for everyday purposes such as public gathering spaces and for clothes washing and bathing, perhaps most importantly ghats are used for religious rituals such as the burning of the dead for cremation and are important places in Indian religious mythology. The ghat is as such an essential public infrastructure and yet a significant religious site with associations in the present world and that after.

Just as heavily used today as ever, the ghat remains a necessary infrastructural and religious feature of modern India. Yet in a country growing increasingly more and more dense in population, the heavy use of the water by way of the ghat for everyday and religious purposes leaves the Ganges rich with contamination and refuse.

Centred on the fascination of these crossroads, the Allahabad Ghat studio lead by Martin Rein-Cano focused on the design of a modern ghat along the Ganges in Allahabad, the second oldest and seventh largest city in India. Students were to consider the ghat at this nexus between landscape and architecture, the body and infrastructure, and society and the environment - all within the context of modern India.

In so doing the following featured design concoctions aim to address the traditional social, spiritual and utilitarian aspects of the ghat while confronting issues of water pollution, rainy season rising water levels and incredibly dense population use. Further, the designs pose to re-examine the age-old device - the step - as an evolving tool to bring human experience, the elements, spirituality, architecture and landscape architecture in closer synthesis.

Johanna Grau

Inspired by the form and concept of the architecture of traditional Indian stepwells, the project features a repetitive structure of steps and pools creating a movement parallel to the river.

The main purpose here is not to reach the Ganges through the most direct and efficient path but celebrating the journey itself.

The voyage through the ghat will be interrupted by water basins that offer a possibility of bathing and cleaning the body and soul in preparation of the ritual ceremonies that are taking place at the riverside.

By the time the pilgrim reaches the holy river his or her karma will have been washed clean literally.

A stepwell is a building typology providing access to water that eventually also became a socio-religious institution. Traditional stepwells often feature steps in non-axial alignments with platforms that create circuitous movement and pause points in order to celebrate and enhance the importance of water.

The steps of a ghat and a stepwell fulfil similar functions – it is the way to reach the water that differentiates them.

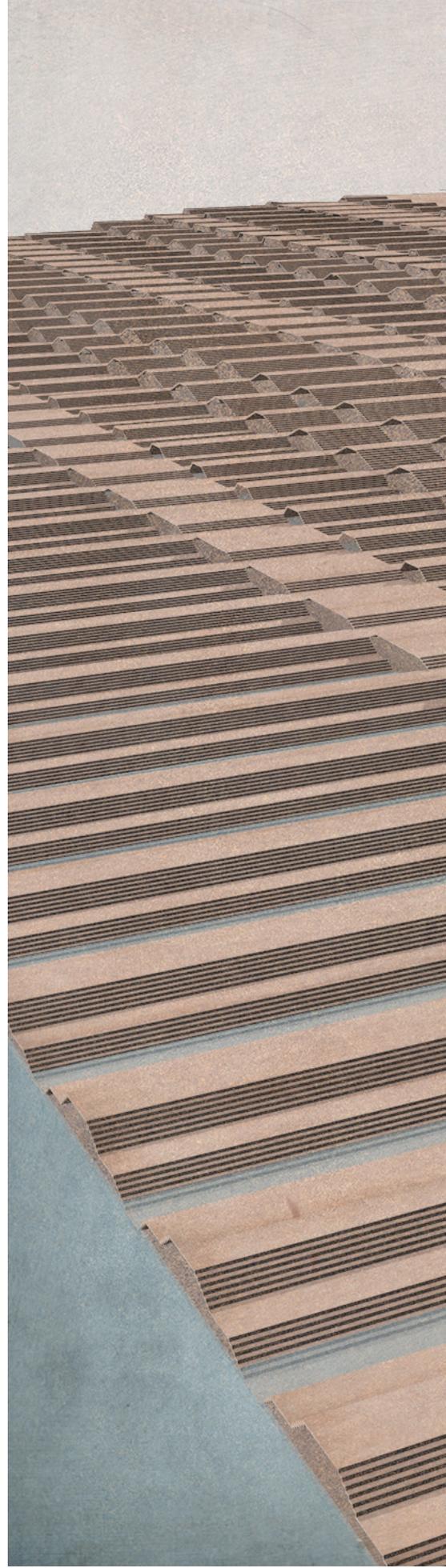
The project can be seen as a reinterpretation of the traditional well's steps reassembling them in order to create a transition from land to water.

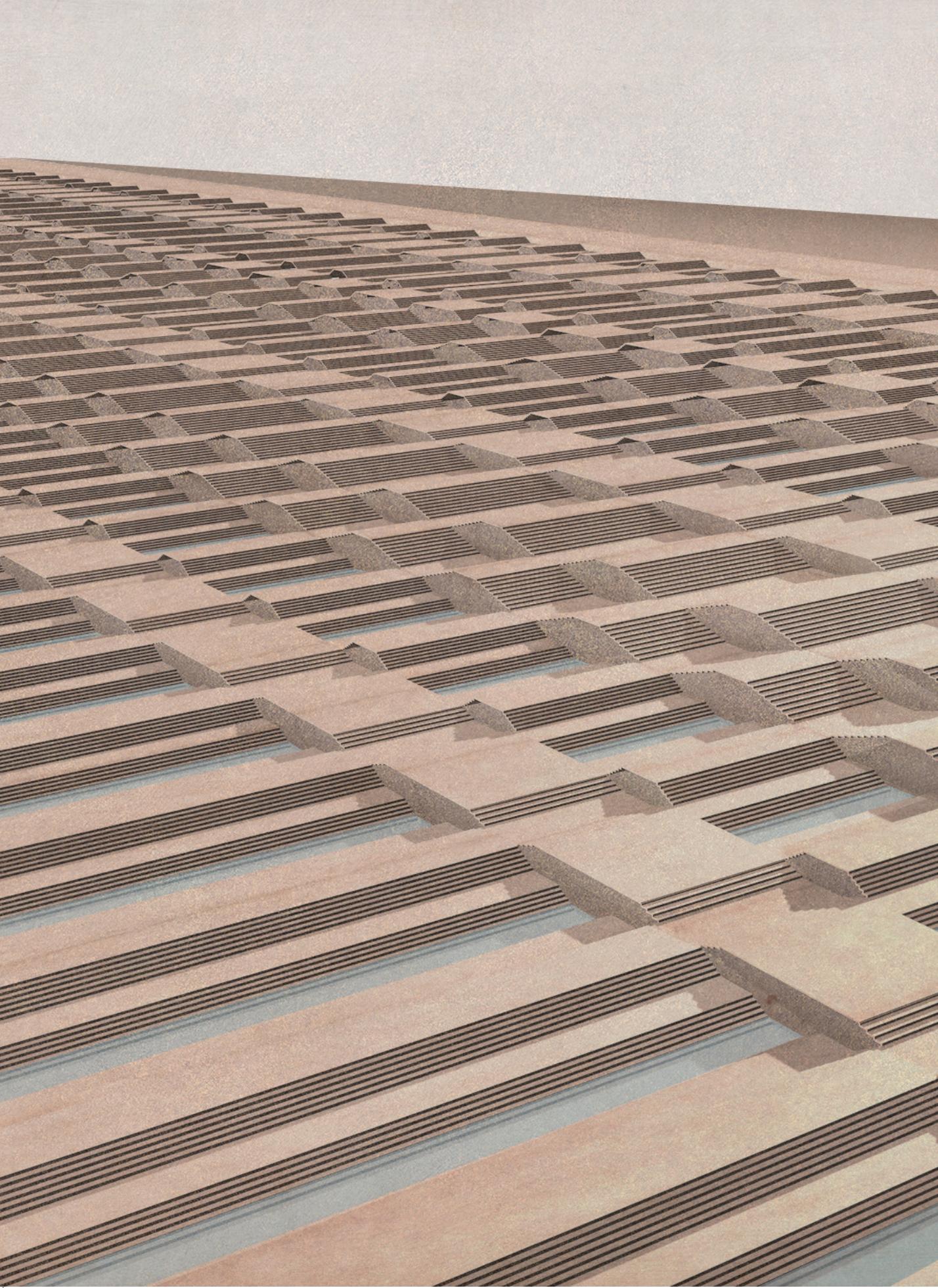
The steps and platforms establish a movement parallel to the Ganges, imitating and aligning with the flow of the water still contrasting, as they are a tectonic, solid structure.

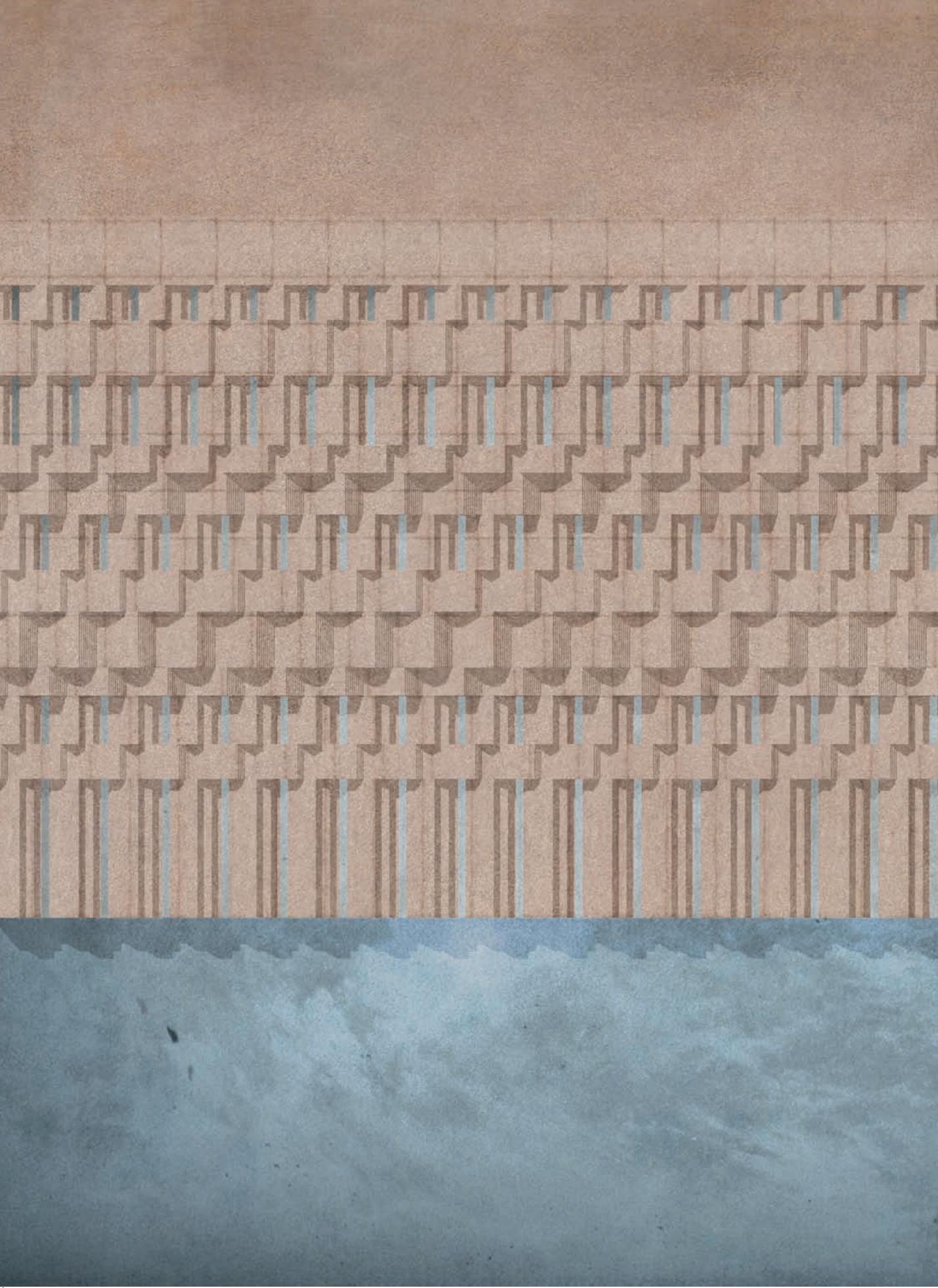
In order to provide different areas and sequences of space the scale and widths of steps differentiate. Spaces seem to grow and decrease, narrow and widen naturally. Platforms and pools reinforce the concept of pausing.

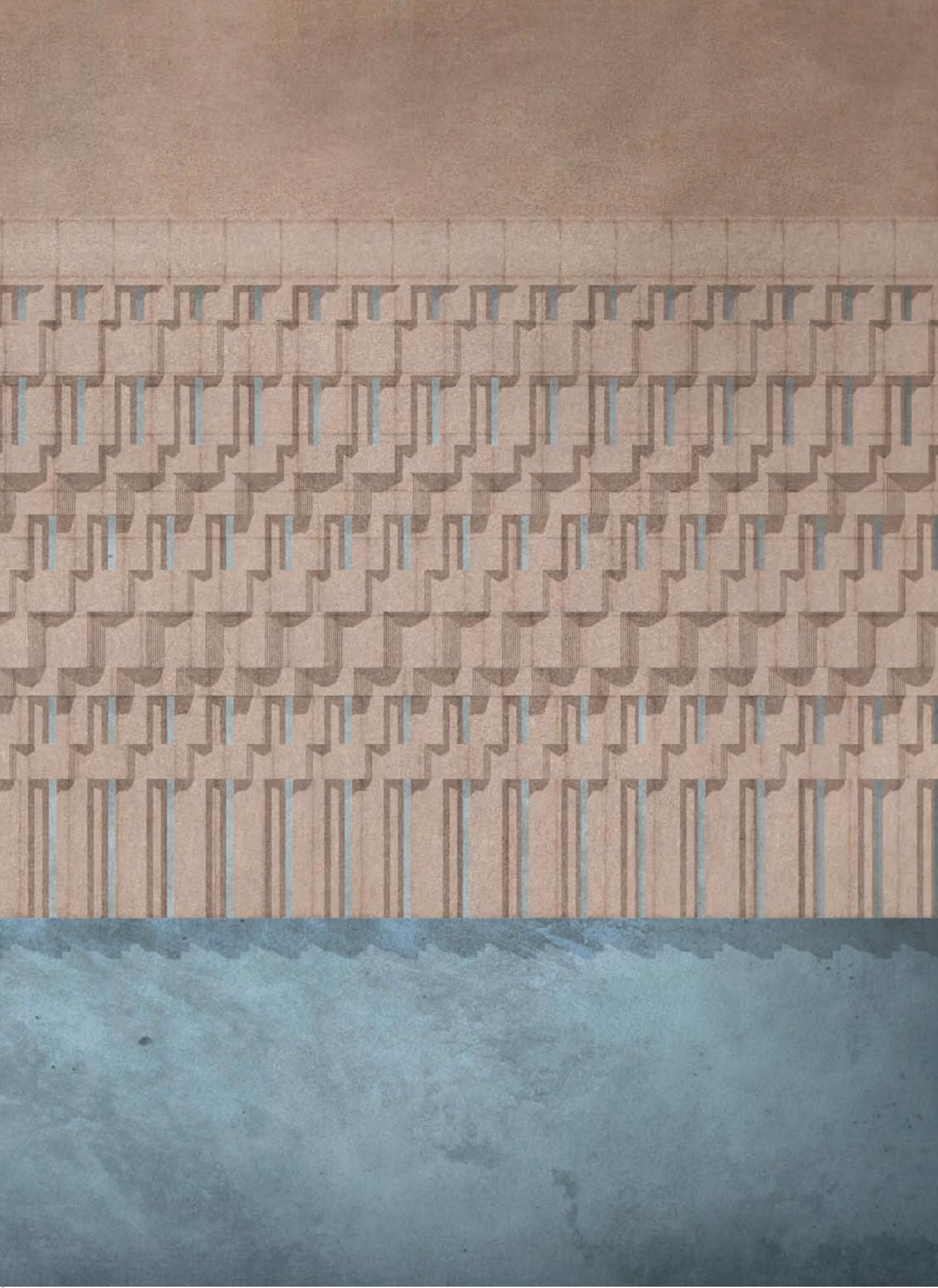
The parallel and winding movement through the series of spaces create changing perspectives, which evoke different atmospheres throughout the journey gradually ending in the water.

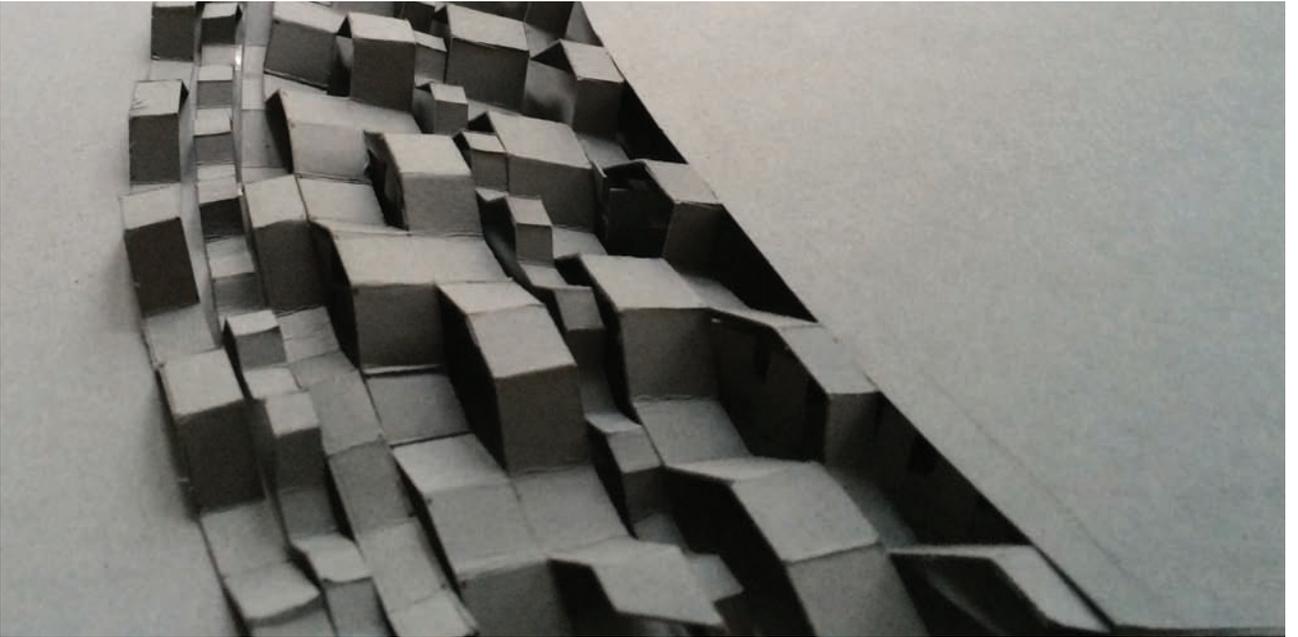
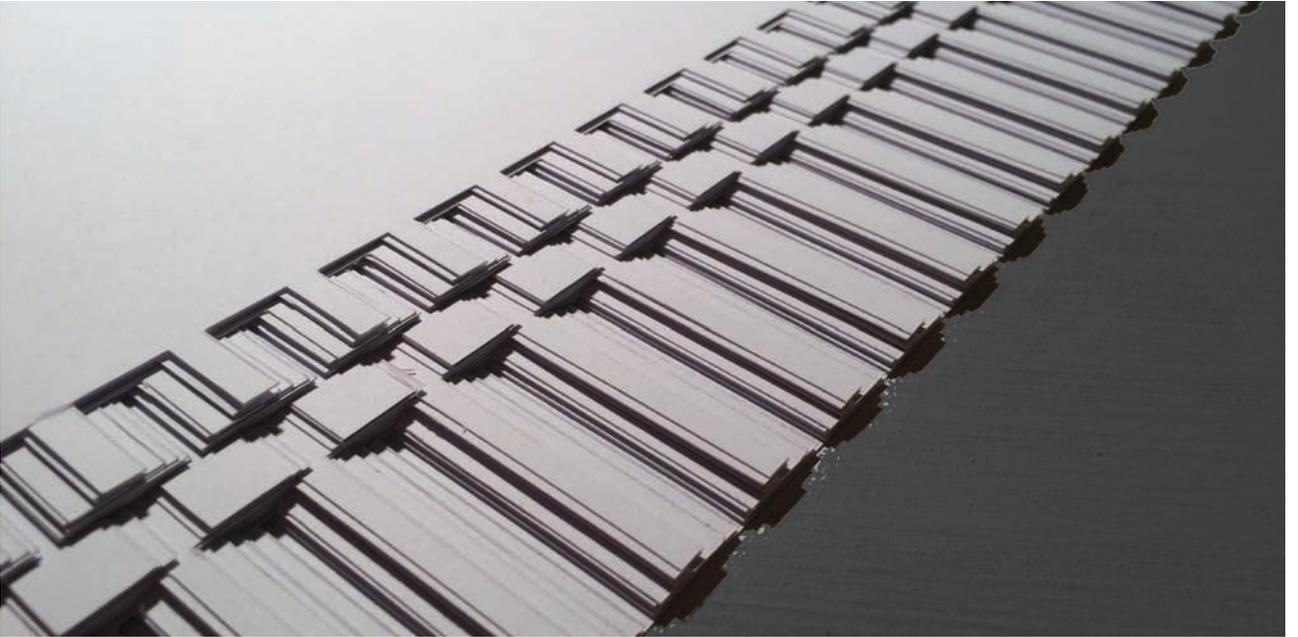
Meanwhile the concept of steps forms a pattern-like structure that could be endlessly repeated, representing the cycle of life and reincarnation.

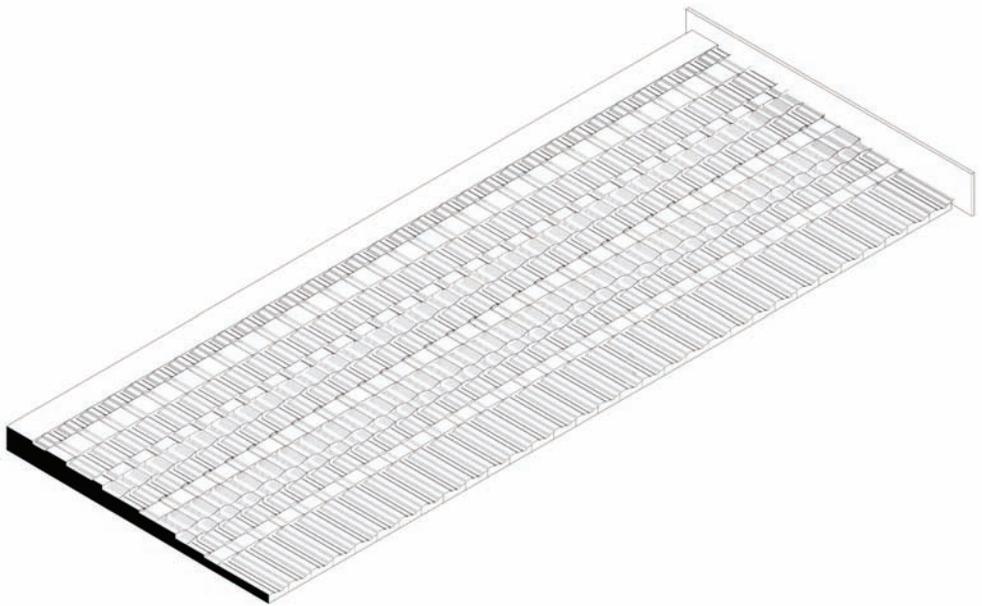
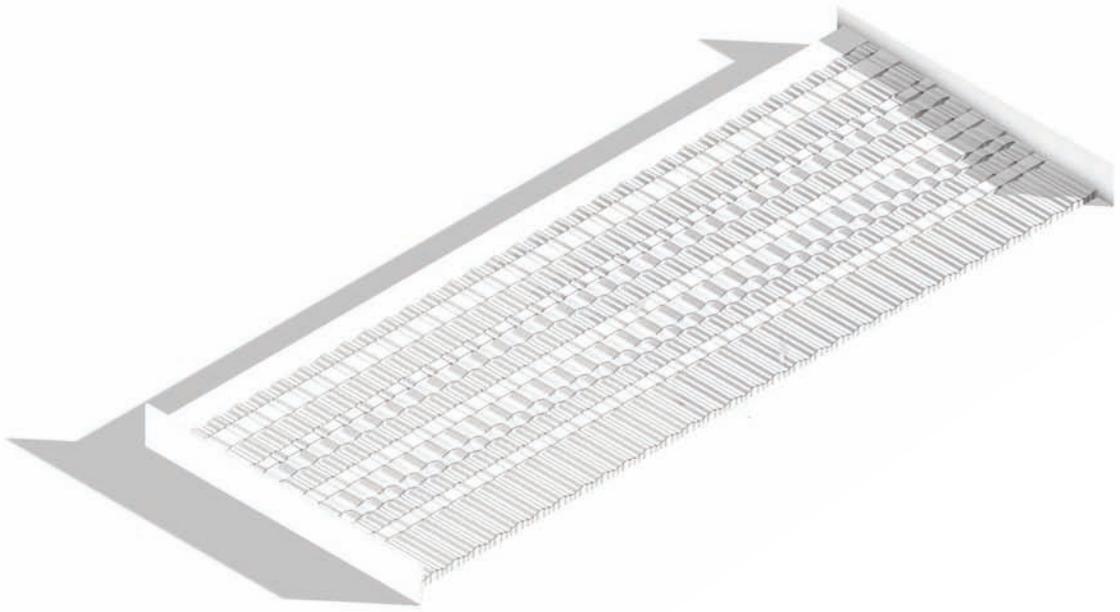












Cecilia Ambrois

Dessau, Germany

Cecilia Ambrois

A simple and elemental structure is repeated in the whole field, appearing as a mega-structure leading into the river. The basic repetition of stairs and platforms create an isotropic space with infinite possibilities of movement and flow, generating a no ending way into the Ganges.

Through an imaginary fiction a favorable experience for a sacred descent is sought to be created. The endless repetition on the way to the water is a resemblance of a ritual, or even one in itself. The path to the river is a sequence of echoed actions, some kind of religious offering to the celebrated river.

An analogy can be traced between the different platforms that lead into the river, with its countless choices of stairs, and the established cultural and religious belief in reincarnation, or a series of birth and rebirths (Samsara). The transmigration into another life depends on the karma, that the soul (Jiva) carries. Thus, the present life is a consequence of the preceding one, evolving according to our previous behaviors, and affecting us countless times, until one achieves nirvana (moksha).

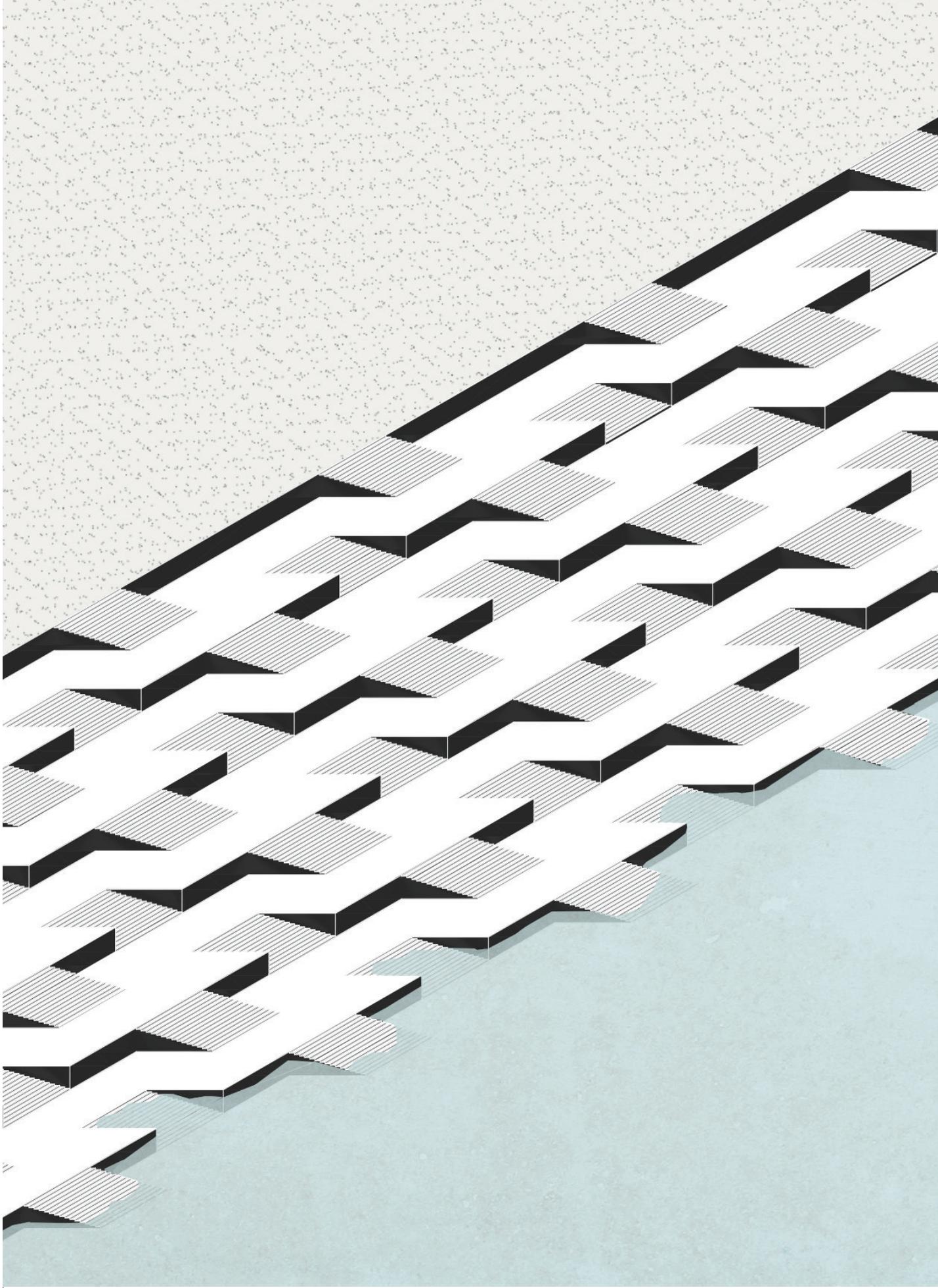
Each choice is free and leads you into another cycle; into another platform form where to proceed. The ghat is therefore a weaving and interweaving of stairs and platforms, or metaphorically of the peoples acts, thoughts and beliefs.

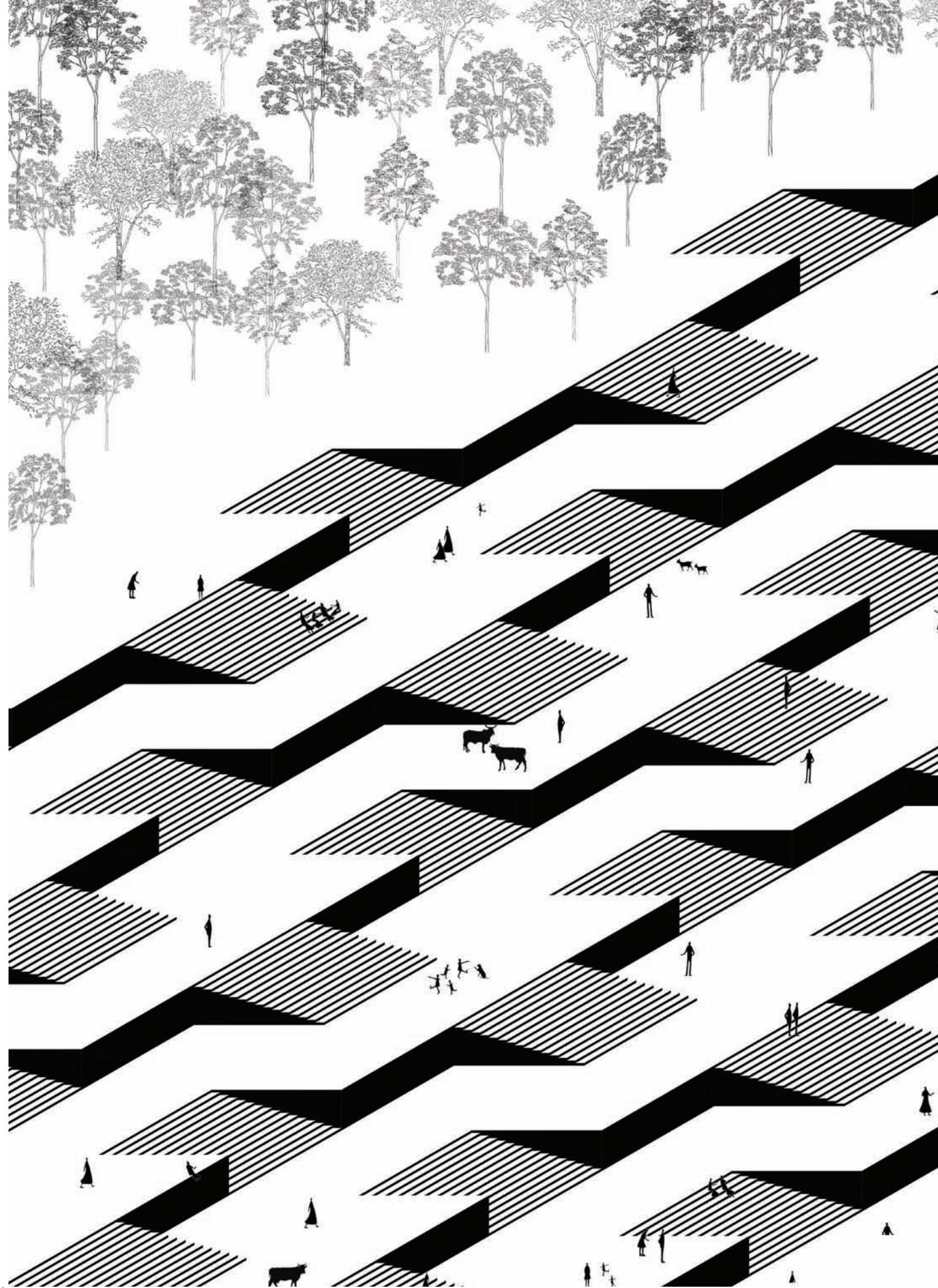
The river appears as a relief after this maze, which does not exist without the user. The structure is activated with the flow of the pilgrims, awaking an inexistent program that seeks to influence the spirit through an encounter with the elemental. Thus, the ghat does not offer anything else than stairs and platforms, which can be used and appropriated in different ways by each user. Consequently, an endless and identical reiteration of the same module is a blank page for the development of various rhythms and atmospheres. The diversity of the Indian culture is enhanced by a seemingly empty structure.

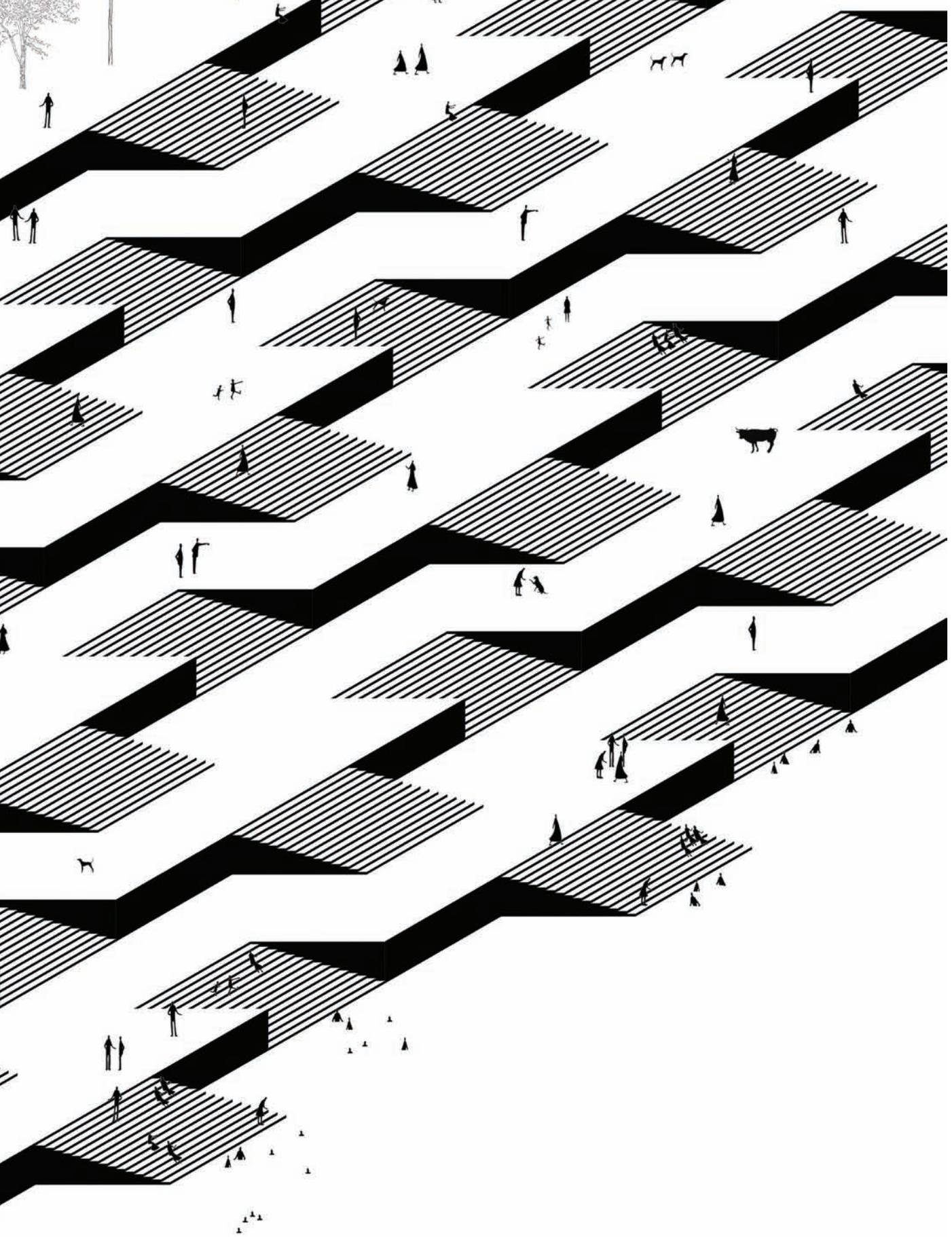
The infinite temple is born and reborn with each person again and again, and then, dissolved in the river.

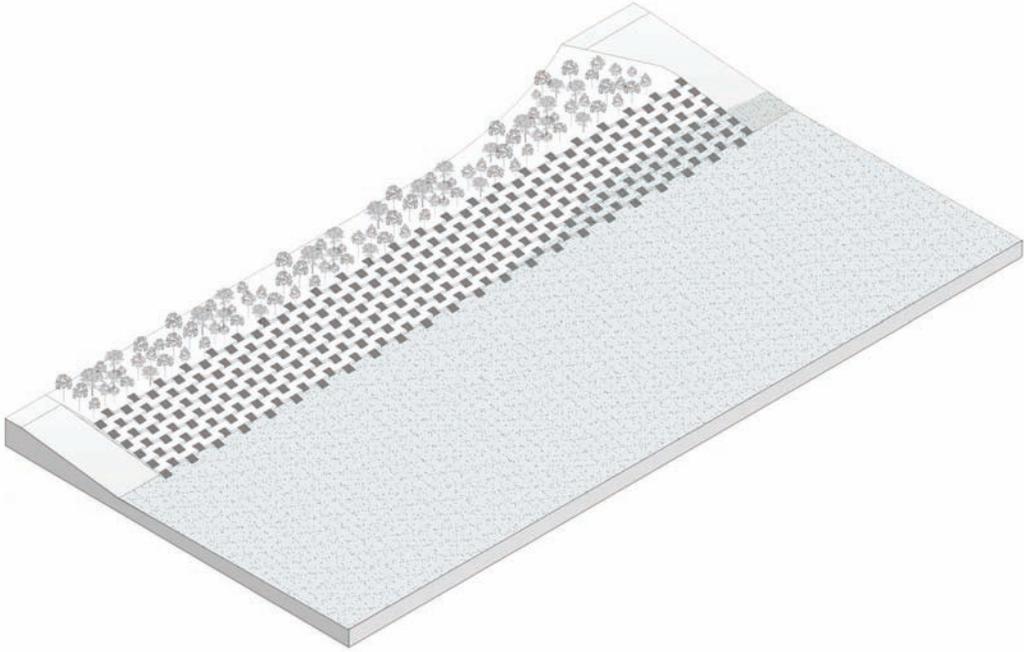
"(..) He believed in an infinite series of times, in a growing, dizzying net of divergent, convergent and parallel times. This network of times which approached one another, forked, broke off, or were unaware of one another for centuries, embraces all possibilities of time. We do not exist in the majority of these times; in some you exist, and not I; in others I, and not you; in others, both of us. (...)"

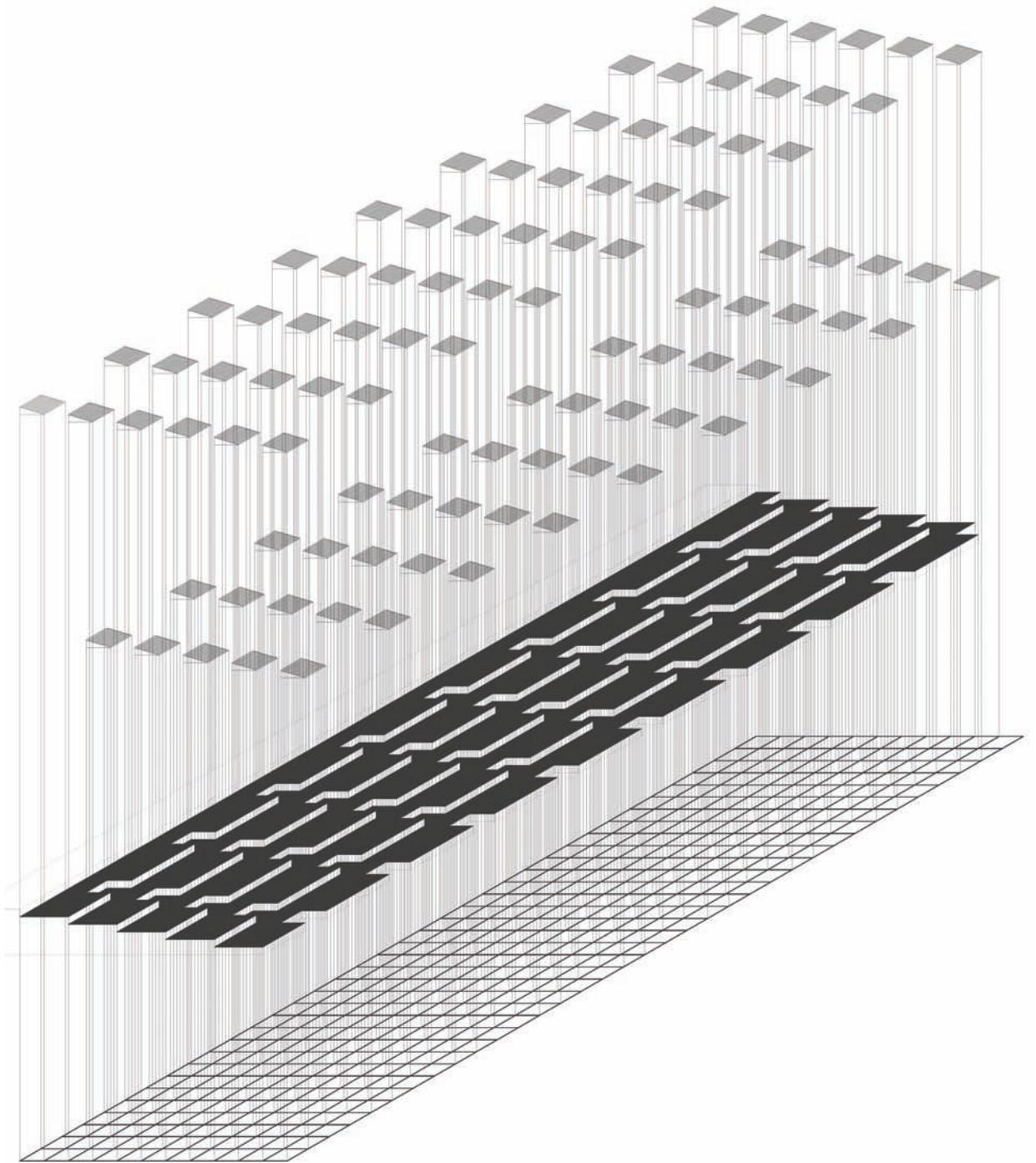
Jorge Luis Borges, *The Garden of Forking Paths*











Mariia Potapova

Dessau, Germany

Mariia Potapova

During my recent travels in India, I came across a number of places and people with different faith, following different religions. In spite of the differences in rituals and beliefs, I realized all were in some way or the other seeking the same thing.

People are in search of prosperity, happiness and penance. These are aspects people are constantly working towards to achieve in the daily walk of life. However at times they need a retrospective space to reflect their deeds and contemplate the things they will do in future.

The ghat project in Allahabad provided me with the ideal opportunity to capture this realization into a design form language.

The traditional ghat is usually a wide flight of stairs leading from the land to the river where people take baths with the intention to cleanse their sins or before going for prayer. I saw the opportunity in the project to assimilate the important aspects of reflection and retrospection. I interpreted the ghat as a journey, similar to the walk of life of a common person.

The start of this journey is from the road at the end of this site to the river. My design provides a simple approach to the river in the form of four wide ramps, which stretch across the length of the site. The descent through the ramp is a process, which takes a person away from the busy city life into a space of transition before the river.

The ramps are designed so that they can work as a place for prayer. Pavilions and niches inside of the ramps can be used in a variety of ways.









Evgeniia Zhukova

Dessau, Germany

Evgeniia Zhukova

The ghat project located in Allahabad took as the base for its design the intense and versatile lifestyle of the site. Being situated at the meeting point of three holy rivers, the designed ghat is supposed to be actively involved in all the ceremonies of Hindu religion. Knowing that Allahabad is one of the main attractions for pilgrims during Kumbh Mela festival, the project had to be designed to give the space for all the main religious activities, which involve hundreds of people.

The main aim of the whole structure is to deliver the majority of people from the street level to the holy Ganges' water, and aside from this, to provide different types of spaces from routine activities to ritual bathing activities, like meditating and praying.

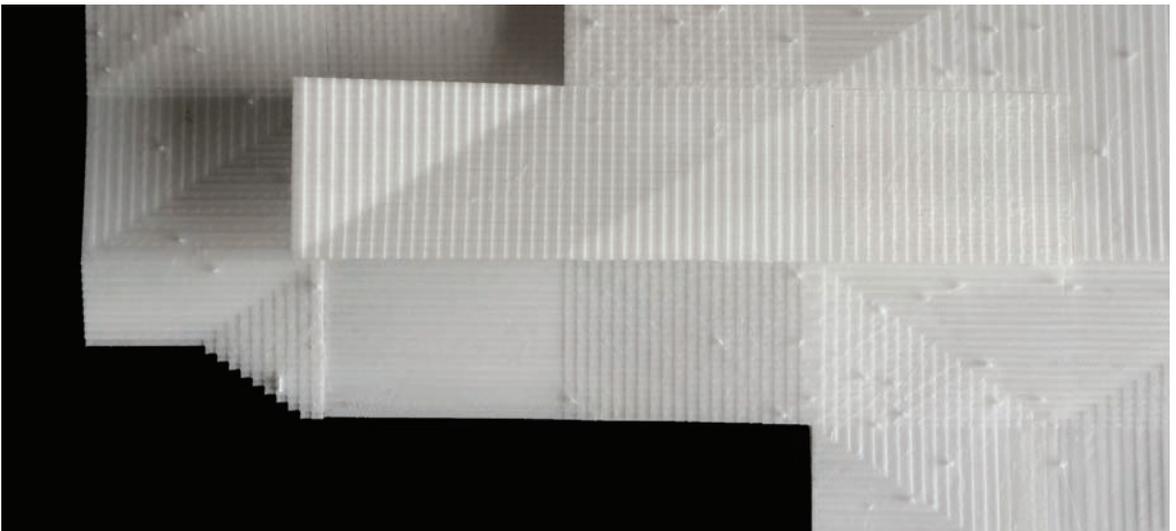
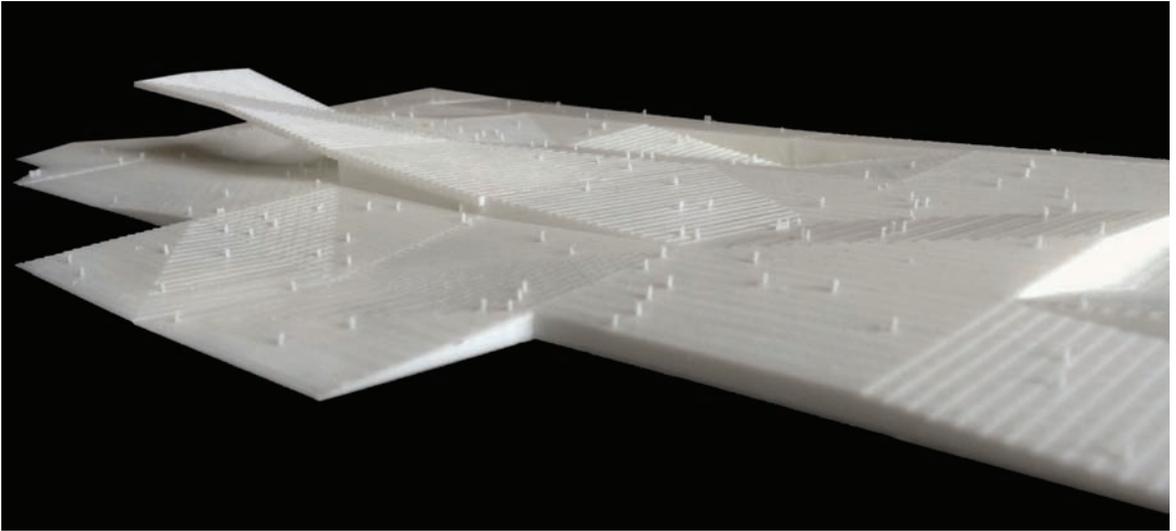
Religion and one's relation to it has always been very intimate. And being at holy places people might want to feel one-to-one with their belief. Due to this, the structure of the designed ghat is calling for people's personal decisions, not limiting but instead providing multiple opportunities for fulfilling one's religious demands. The ghat offers to choose between going to the morning prayer directly to the water, or stopping halfway to admire the sunrise; socializing being in the group, or choosing a more intimate space; going to the river, or staying near the pools.

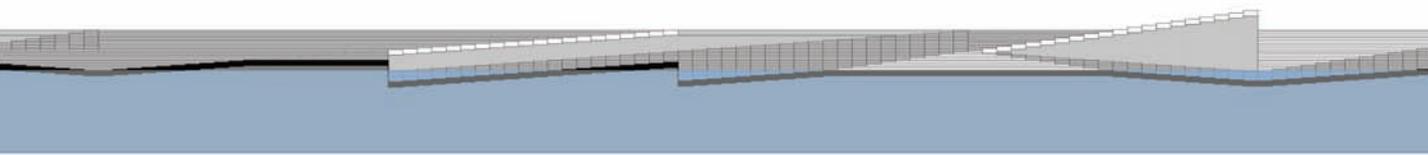
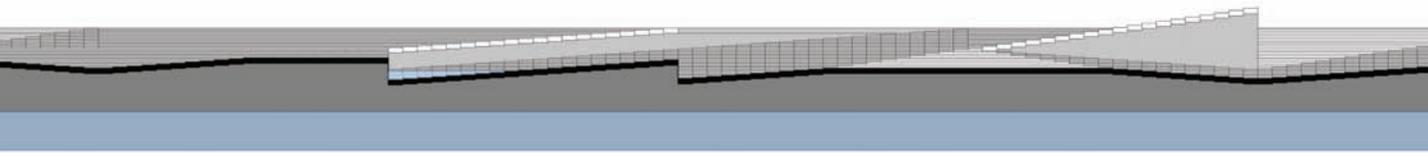
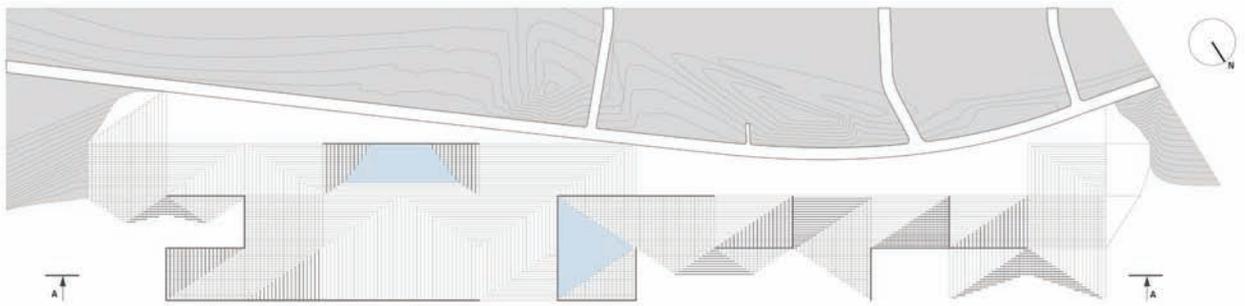
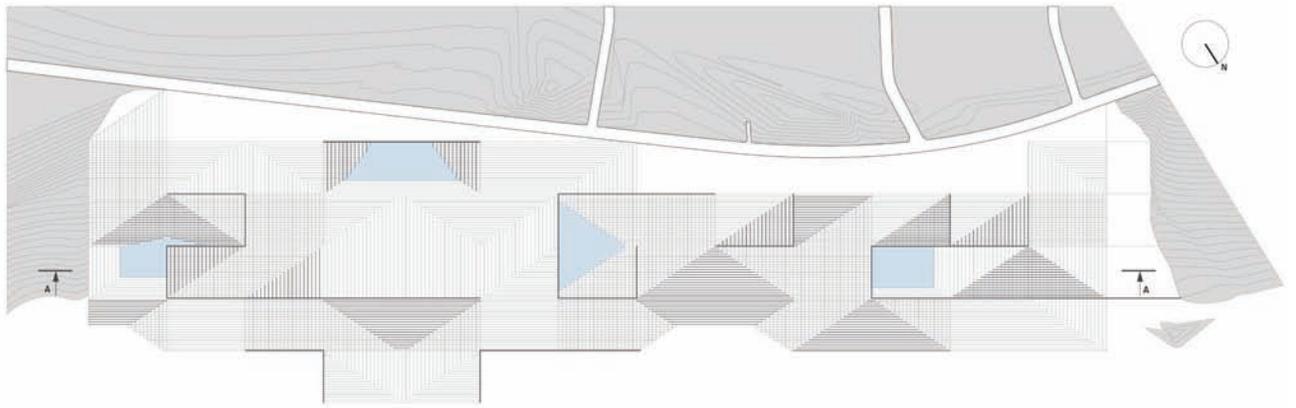
Spatial design of the ghat took as the main driving forces physical features of existing landscape. The built structure's skeleton is a manipulation of anchor points of a perfect grid 37x56 meters wide. By pulling corners of the grid up and down at 4, 8 or 12 meters, mostly imitating natural landscape, a large and diverse ghat structure was created. Each cell of the grid is represented by a solid platform, divided on the steps. The offered platform types are designed to maintain stylistic unity of the project and provide multipurpose spaces. All the steps have the same width of 1.8 meters, however varying in length, which starts from 2.8 to 56 meters, which makes them comfortable for walking and suitable for use as ritual platforms. The height of the steps are considered for convenience: 20 centimetres tall – convenient to go up and down; 40 centimetres – proper to sit on and possible to go down; 60 centimetres tall – only suitable to sit on, being too high to either go down or climb up. Each type of the platforms either provides only steps to walk through, or platforms of

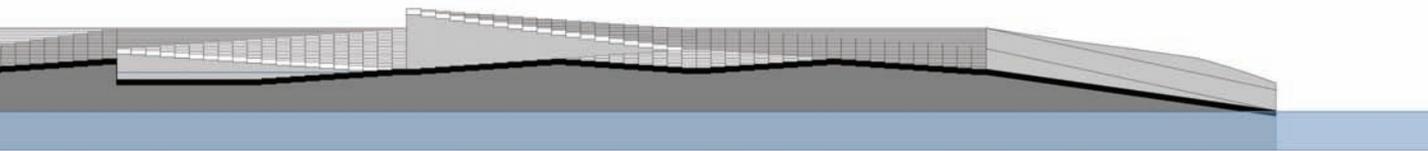
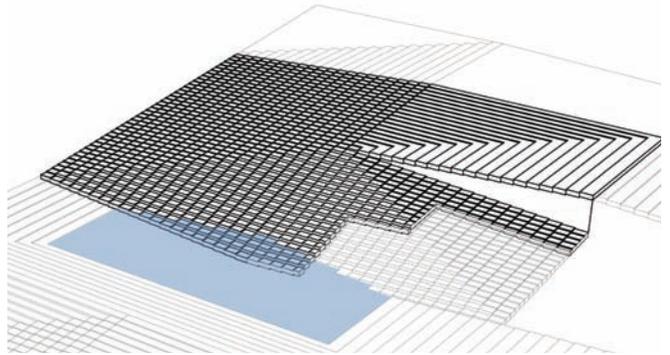
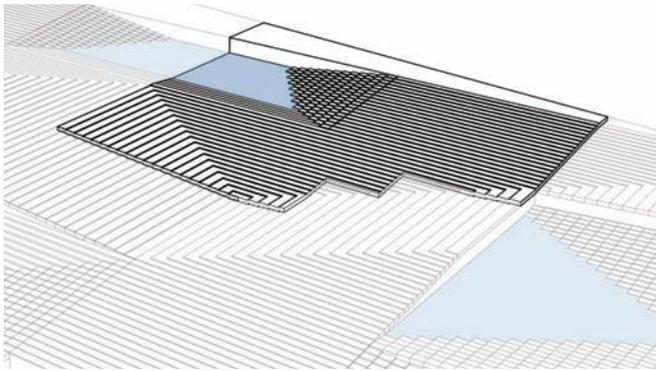
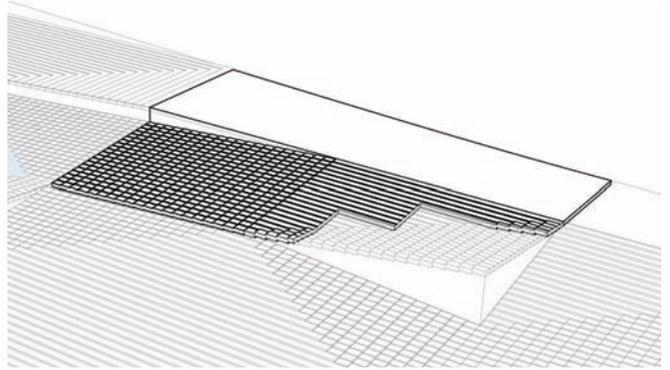
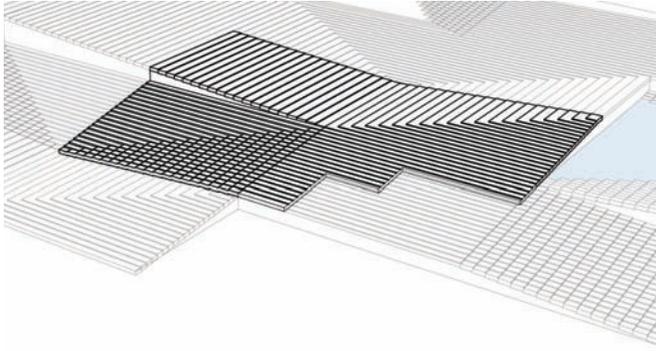
mixed use. One half is provided as area to sit, looking mainly towards the river, and another half to walk, being a comfortable way to connect sitting platforms with ones for walking. This controlled diversity unobtrusively directs people's movement.

Emulating nature, the ghat creates its own "hills" by way of steps double or triple in height, oriented to protect the created platforms from the summer sun. Pools of filtered Ganges water represent 'lakes', for those who are not able or willing to go down to the river. Gentle slopes create artificial "beaches" and breaks, preventing people from directly reaching the water.

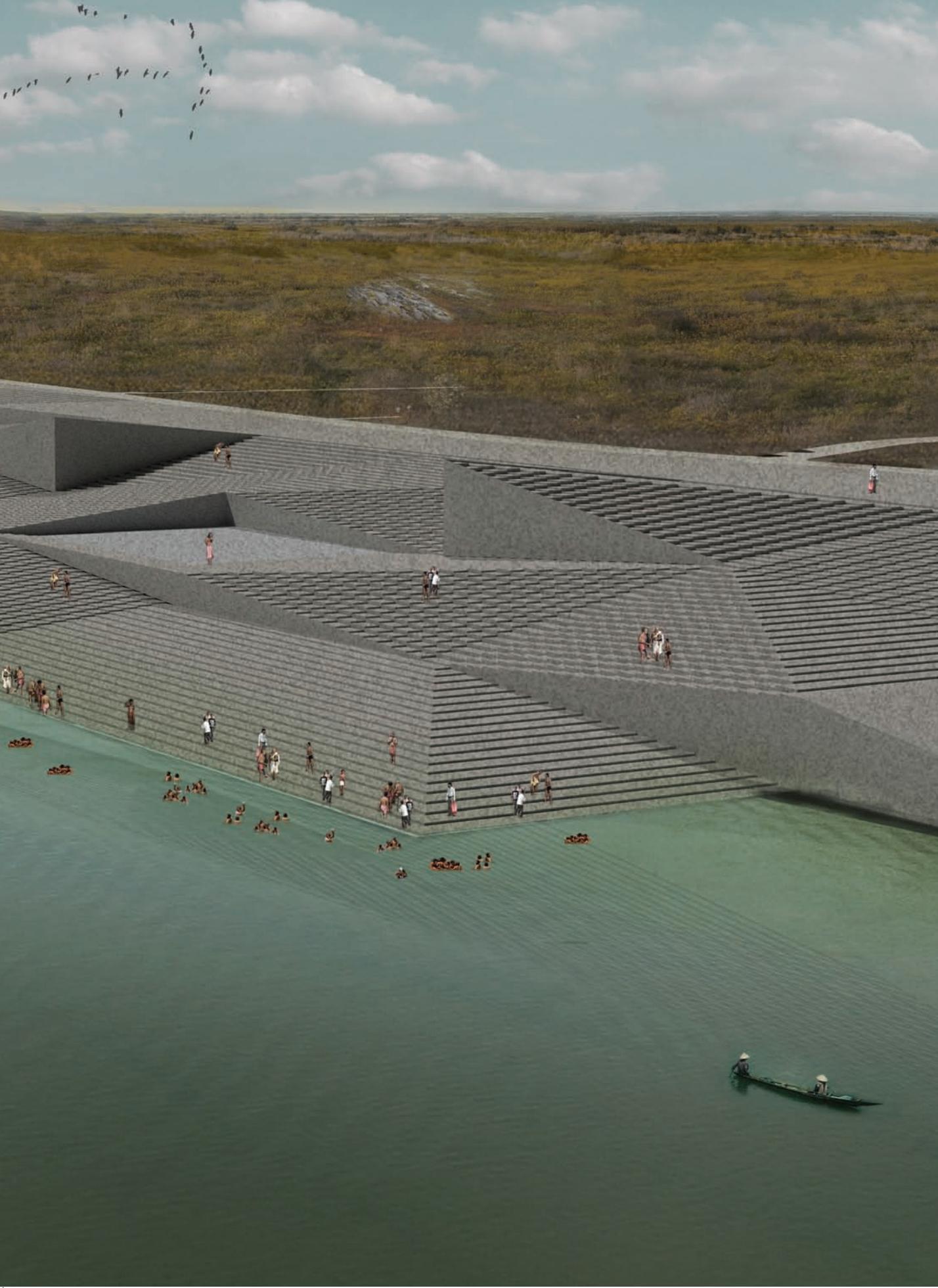
During the dry season all the area of the ghat is usable. When it is monsoon time, the rising level of the water covers half of the ghat, however without depriving the structure the ability to serve its original function. Lower steps are covered with water; some of the pools are merging with the river, transforming the straight artificial outline of the ghat, into a more natural and irregular shoreline.











Mariya Zimniakova

Dessau, Germany

Mariya Zimniakova

The main aim of every believer is to worship and bathe in the sacred water of the River Ganges. It is religiously believed that a bath in the sacred river cleanses one of his sins. It is a route offered to the believers for penance. The most important place lies in front of the site, where three rivers meet. This confluence makes the spot highly important for the pilgrims, a place where most people desire to bathe.

A geographical study of the site reveals that, the river changes banks in the dry and monsoon seasons. During the course an enormous amount of water is drained from the coast. At the same time the water level is not constant and changes with time on a daily basis. The challenge is to address the spiritual and geographic significance and behaviour of the site and river to come up with an intervention, which will accommodate the river and facilitate the pilgrims at the same time.

The intervention is brought about by a system of floating platforms, which goes up and down with the level of the river. Spread across the massive width of the confluence of rivers, each of these platforms becomes a ghat in itself providing people access to the river. The platforms can be accessed by boats from the part of the ghat along the bank of the river.

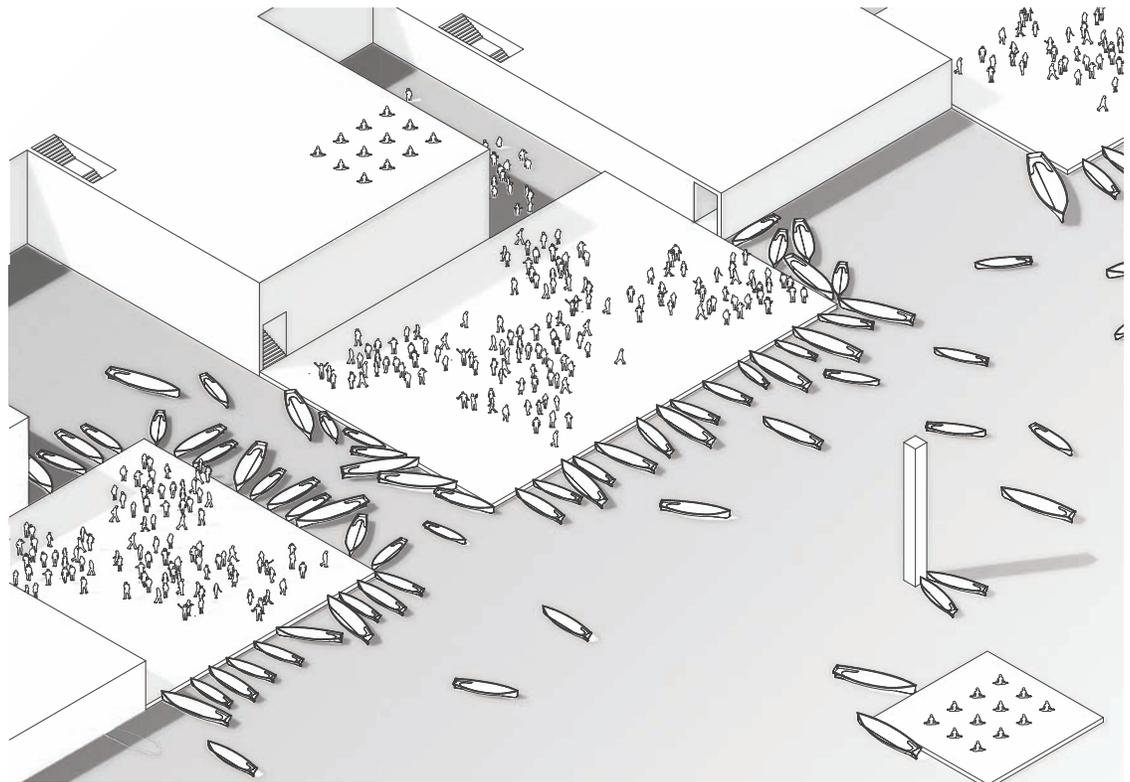
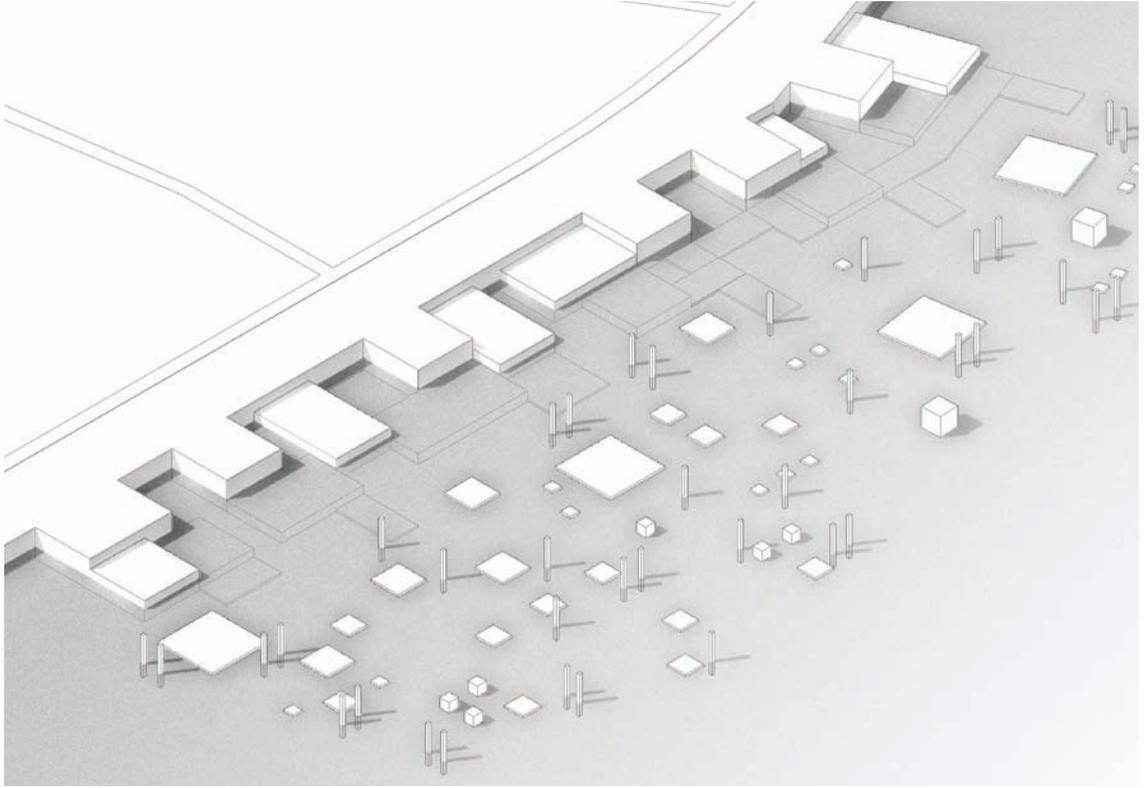
In the overall scheme of the intervention, the projected area becomes a large port for boats to take people to floating platforms with different functions, so people have access to water anytime of the season. All rituals, such as bathing, praying, meditation, ceremonies and cremation, happen at floating platforms which are connected by ropes to the ground and influenced by water flow, so people can feel the power of the river.

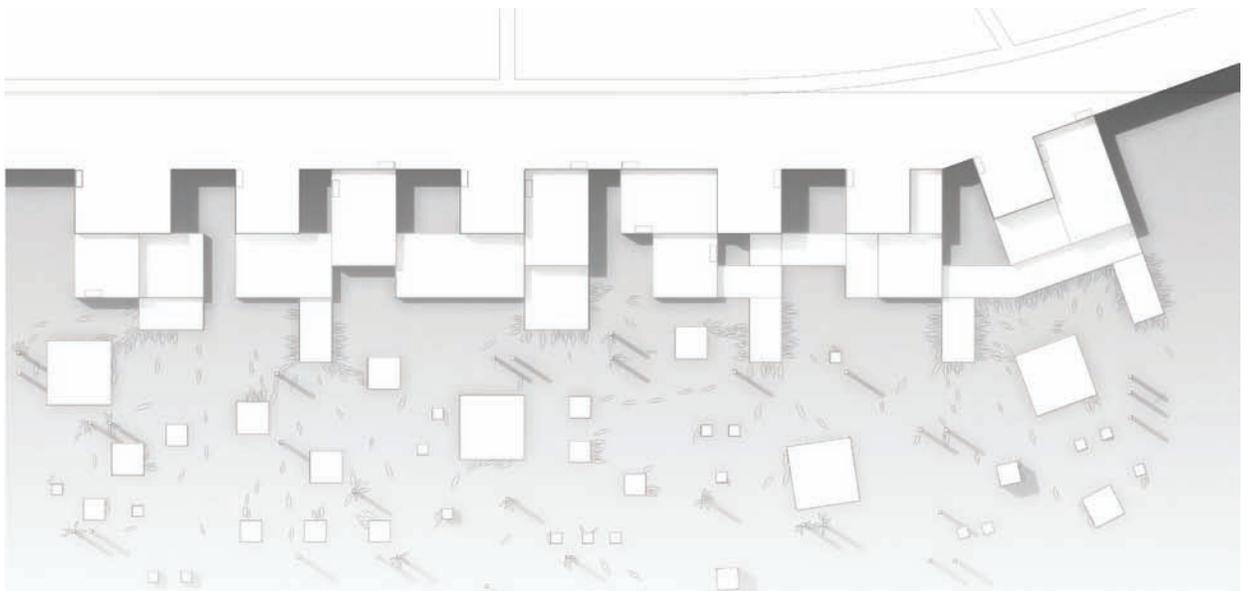
The port is a composition of squares set at different levels starting from the road level and leading to the water level. These squares at different time of the year, based on the water level act as piers from where boats ferry people to the floating platforms. The squares at different levels are connected with hidden straight flight staircases, thereby providing easy access and also keeping intact the overall form of the design intervention. The squares also provide space for functions such as Visitor centre, commerce and all

public amenities such as toilets, changing rooms, etc.

Most of the ceremonies are held in the morning and in the evening when there is either fog or darkness. With a view to facilitate the rituals the design intervention includes the idea of landmarks in the space. These landmarks are tall vertical columns protruding out of the water surface and scattered around the platforms. These columns can be illuminated to form landmark points within the space. They also become space for boat landings and add to the overall mysticism of the space.

The intervention allows people not only to reach the holy water through the squares but also to be part of the flow of the river and experience the force and power of the rivers through the platforms. This in itself is complementary to the purpose of the ghat, which is to provide access to the river and let the believers perform the ceremonies with prayers and rituals to what is there in front and what is beyond.







Mats Põllumaa

Dessau, Germany

Mats Pöllumaa

My experience in India during these couple of months can be summed up with following words – chaos in order. Despite the seeming disorder, everything follows a certain pattern. One can feel a constant buzz and an unexplainable vibration in every moment of the day. The river Ganges has a particularly significant role in creating this atmosphere in India.

The river has always been crucial in everyday life providing water and food. Together with daily routines of an individual, the riverbanks have also been used for trade and social interaction. It is a lifeline to millions of Indians who live along its course and depend on it for their daily needs. In addition the entire river has a very important role in the religious context.

The Ganges is the most sacred river to Hindus and it is a religious epicentre of Hinduism. Hindus bathe in its waters, paying homage to their ancestors and gods. They celebrate the Avatarana, Kumbh Mela, a mass Hindu pilgrimage of faith in which Hindus gather to bathe in a sacred river and Diwali, a light celebration I had a chance to see. Moreover, they perform ceremonies for the deceased where bodies are cremated and the ashes are washed away by the river. To reach the Ganges, ghats, as stairs to the holy waters, are used as the main access. The idea of the ghat is the continuous celebration of life and death through everyday activities. The ghat is all about reaching water and interacting with it. All in all ghats are used for both mundane and religious purposes.

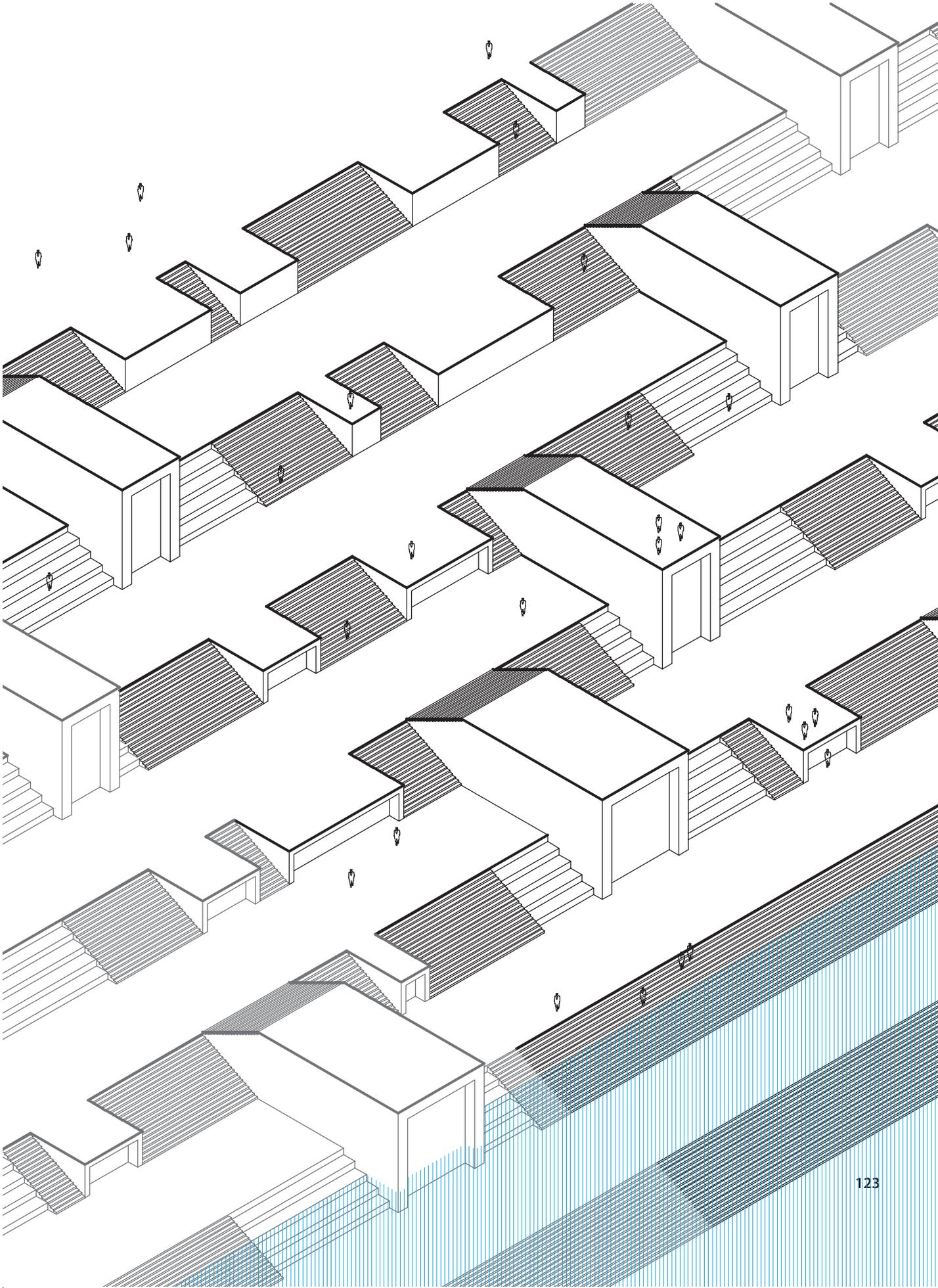
In addition to all, it is important to keep in mind the natural aspect of the river Ganges. Starting from the Himalayan valleys and ending in the bay of Bengal, the 2500 km long river forms a great force of nature. Depending on the time of the year the water level in different parts of the river can change up to 15 meters. This natural phenomenon also contributes to the religious context of Hinduism. The combination of these two major forces, religion and the river, come together in Triveni Sangam where the project site is located.

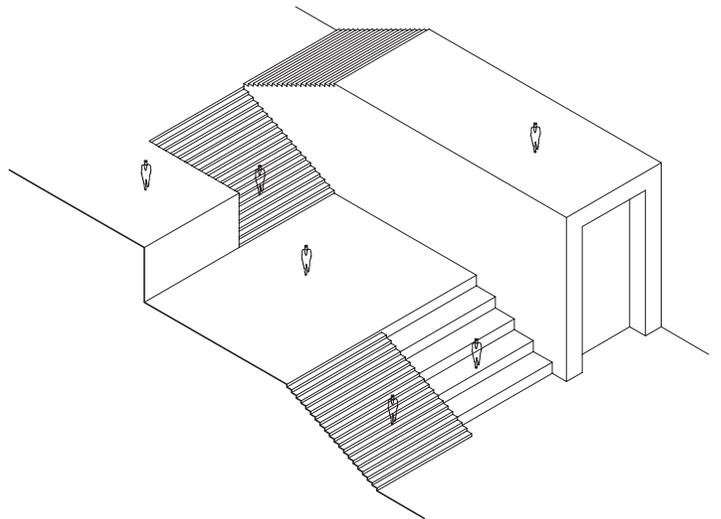
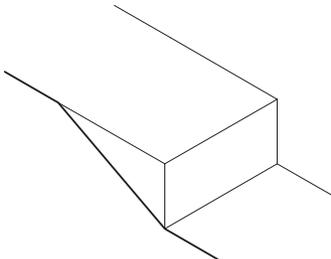
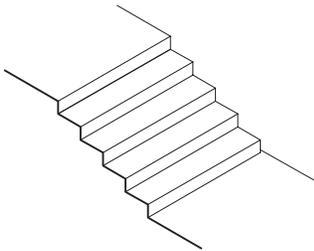
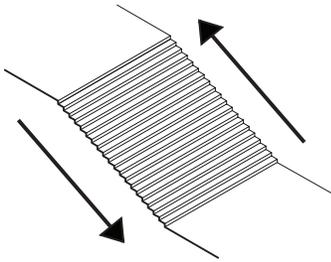
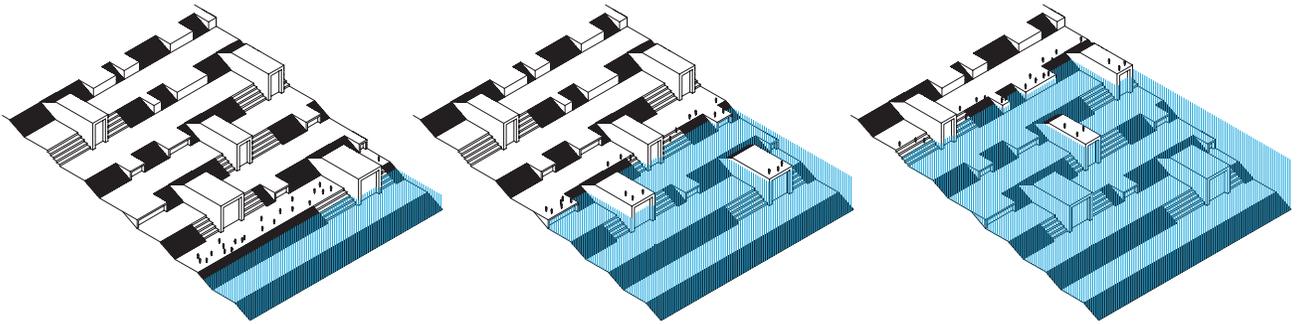
There are two different dimensions to this ghat design. Firstly, the monumental aspect of the ghat as a whole is to be considered. Standing on the higher platform one can sense the sacred atmosphere and

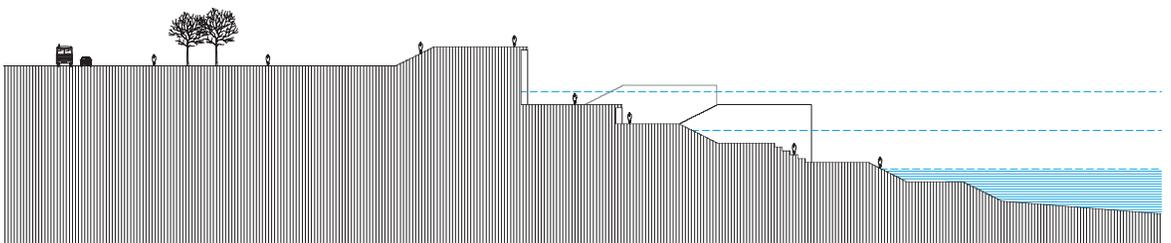
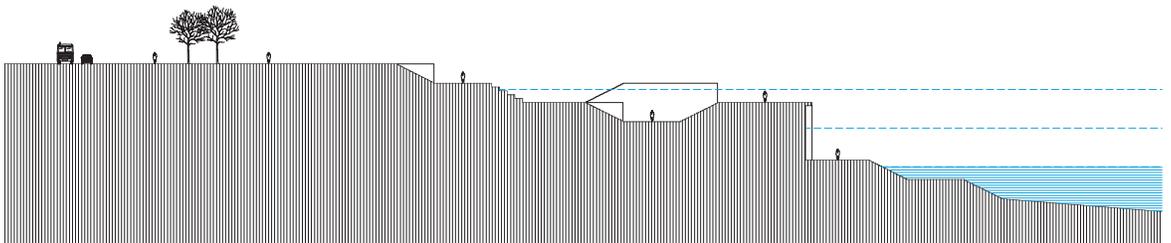
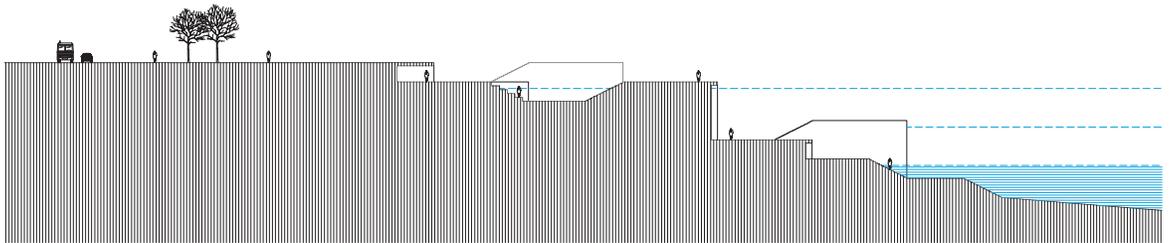
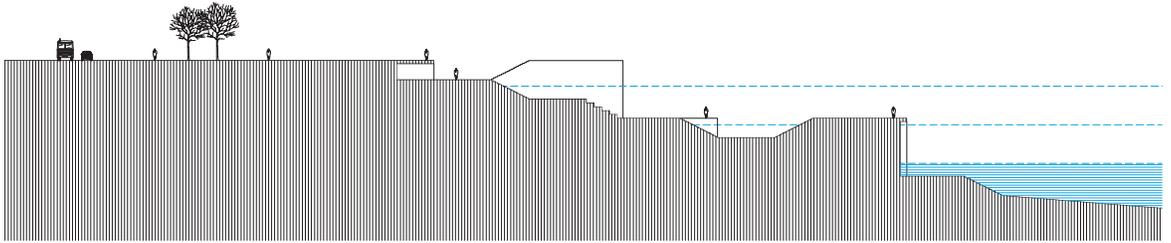
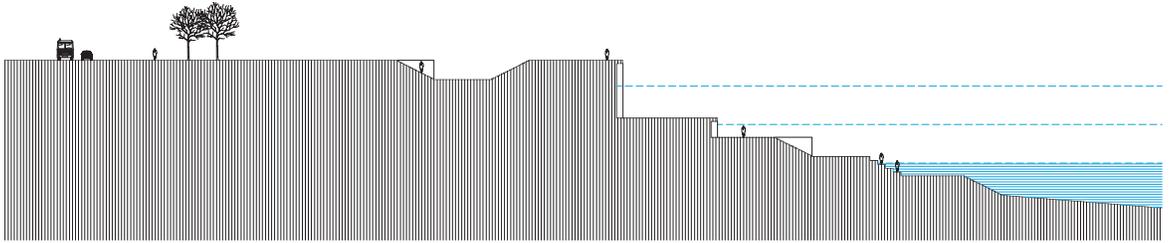
endlessness of the place. Secondly and most importantly, while people are using the ghat, they can feel the human scale aspect, which is familiar from the dense structure of Indian cities.

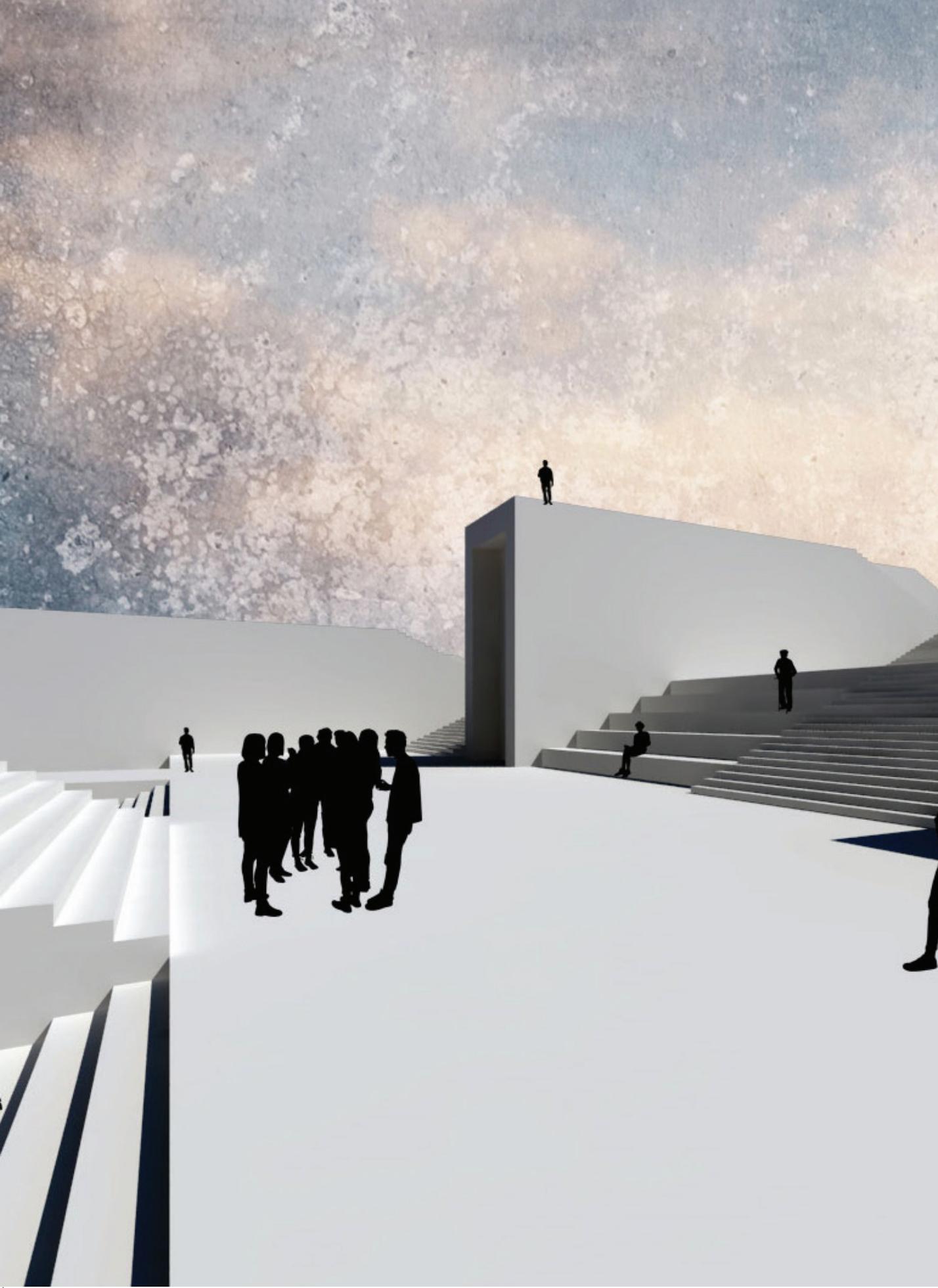
Repetitive nature of religious rituals and winding movement of the river define a pattern to reach the water. This pattern is translated into three main spatial elements such as active and passive stairs as well as platforms. Active stairs provide continuous vertical movement – downward stairs are winding towards the water and upward stairs allow access to elevated platforms. Higher platforms serve as viewpoints from where one is able to grasp the monumental scale of the ghat. During high tide the water forming new spatial experience shapes ghat-islands from those higher platforms. River-facing sides of these platforms function as temples and are neighboured by passive stairs for religious and other daily activities.

The ghat maintains its usability throughout the year as activities move according to seasonal water level. Thus, even during the high tide, the higher parts of the Ghat can still be used according to their initial function. This gives people chance to perform their daily routines despite the time of the year or the moods of the river.











John Lindner

A ghat, a series of steps gradually connecting the land to the water, is a center for cultural and spiritual activities deeply rooted in Indian traditions. Here various notions of life dwell beside each other, representing the Indian belief in the cycle of life.

The ghat design consists of 272 monumental columns aligned to a checked grid of 1088 square fields, measuring 11 by 11 meters each. The Grid divides the slope between land and river into 16 rows parallel to the river flow, which are crossed by 68 rows heading towards the river. While the stepped terrain drops, the column heights increase towards the river achieving a horizontal sea of columns throughout the grid. Giving the beholder an impression of infinity.

Each column is cut to a certain height by a parabolic tunnel, reminiscent of Hindu temple cupolas, which refer to the universe. The walls enclosing the tunnel again are sliced into columns allowing flashes of light to enter sideways transforming the column into passages. The upper volume of each column bares a crematorium lit only by a square chimney hole in the center of the ceiling.

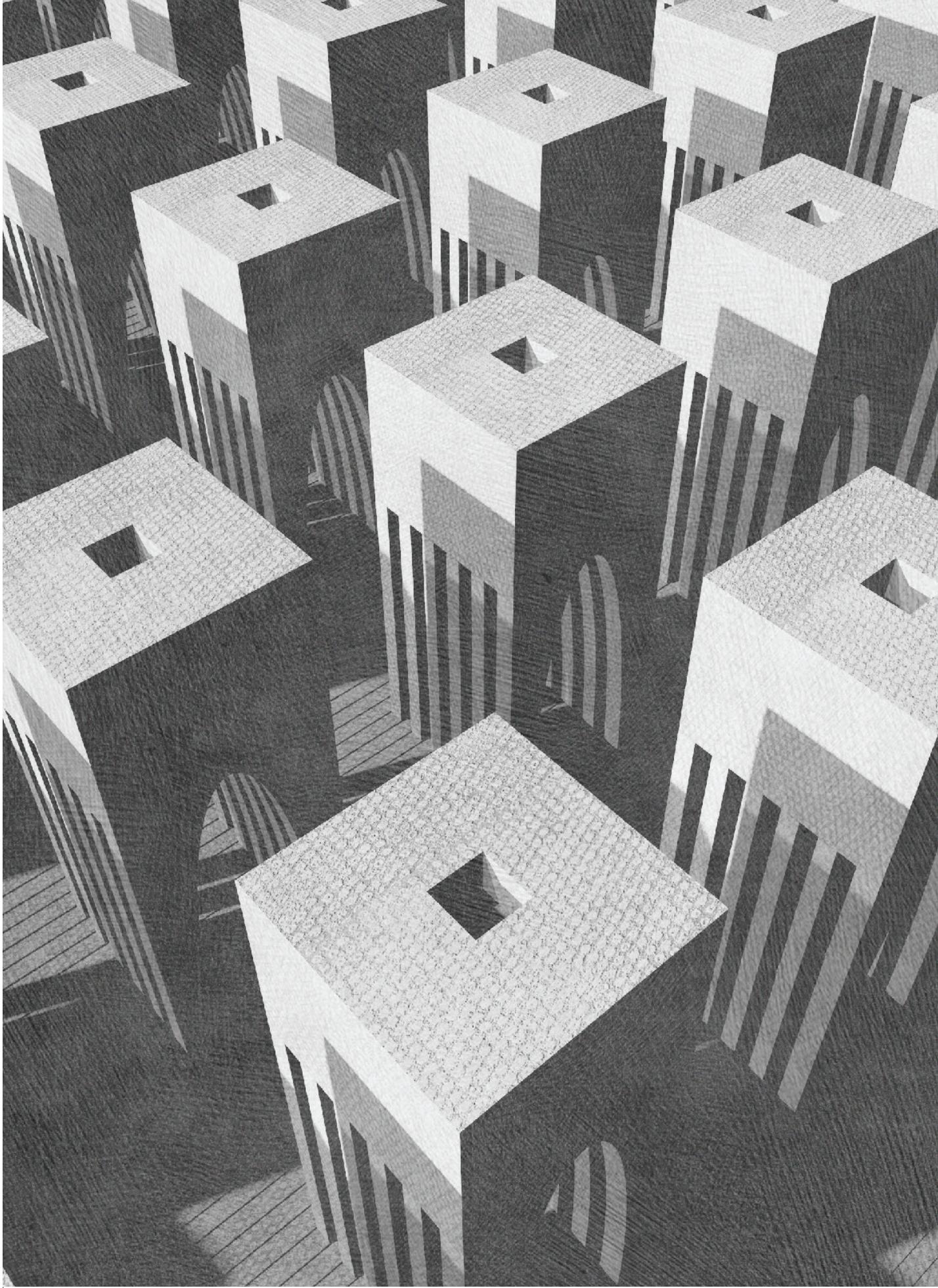
The overall fabric consists of open and semi-open spaces beneath closed volumes. The cremation area is located above all other functions representing the idea of life as a cycle with death being both the ending and beginning. The cubic and centered spaces provide a sacred and private area for the relatives of those passed away. While the cremation area is reached through a staircase barred inside the columns of one side, a ramp inside a column on the river side provides a connection to the water of the Ganges, closing the cycle when carrying the ashes away.

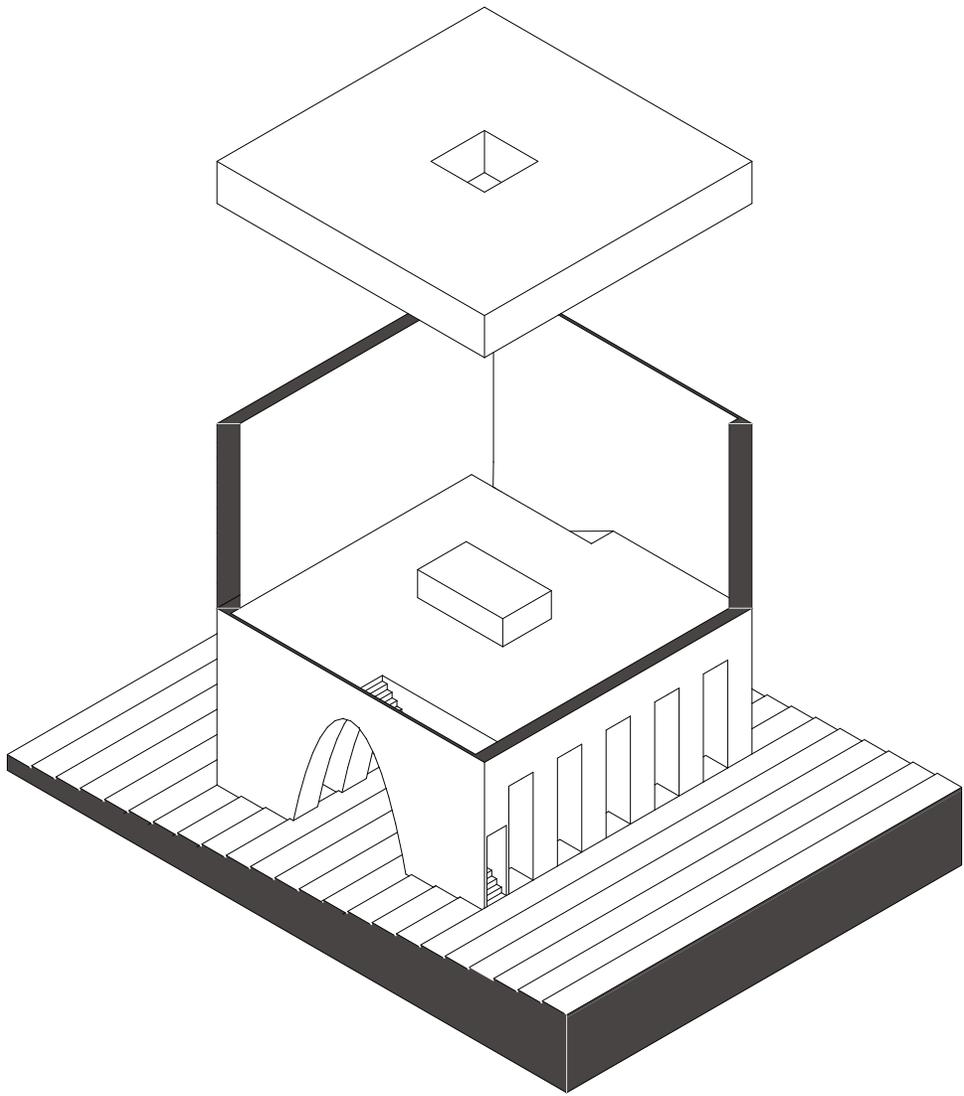
On the ground level, descending the steps towards the water, columns are rising higher to both sides while direct light eventually fades out giving space to a diffusely lit aura. The beholder gradually enters into a spiritual world. While passages between the columns connect the spirit to earth, water and sky spaces beneath the columns offer intimate atmospheres. The view is limited to the water on one end and the land to the other. Increasing in height and light towards the river, the spaces contrast to the passages growing darker. Varied lighting

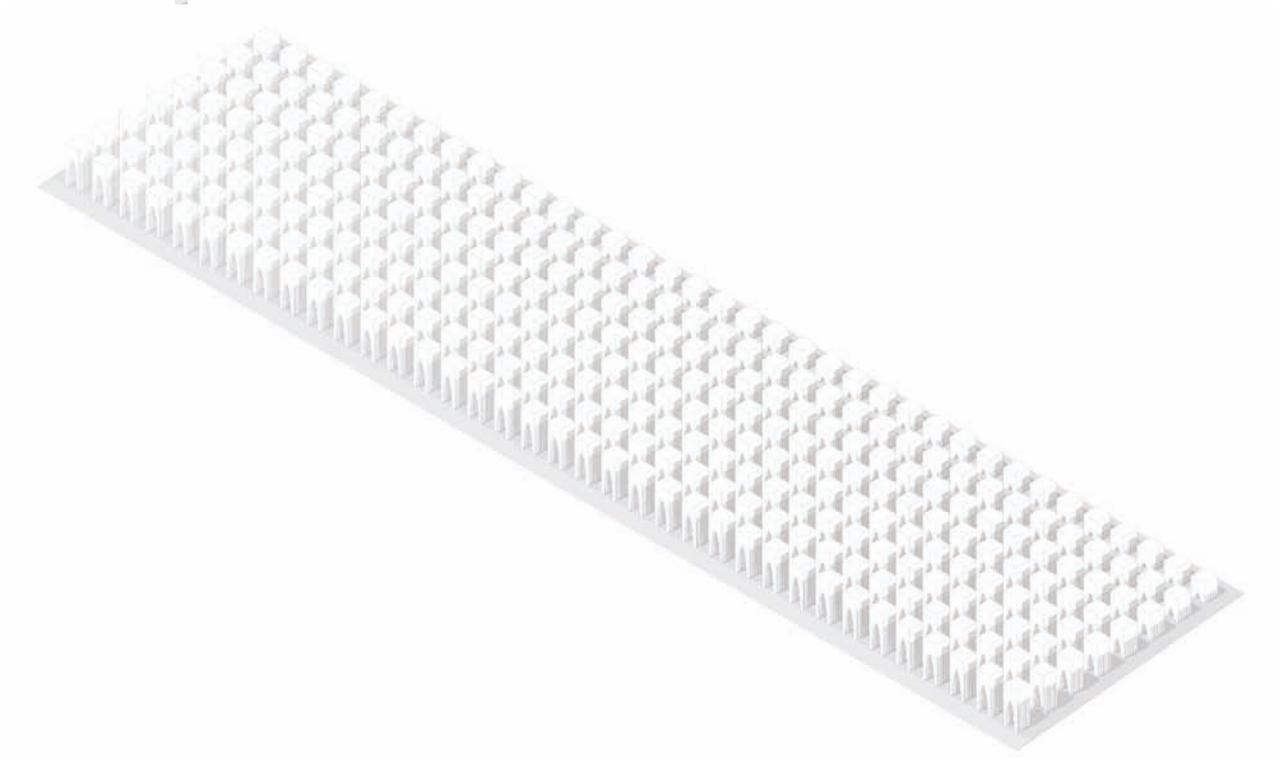
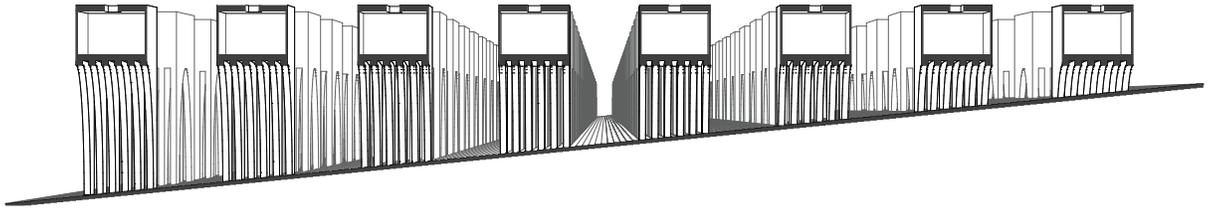
evokes a dynamic balance between creation, destruction and reconstruction.

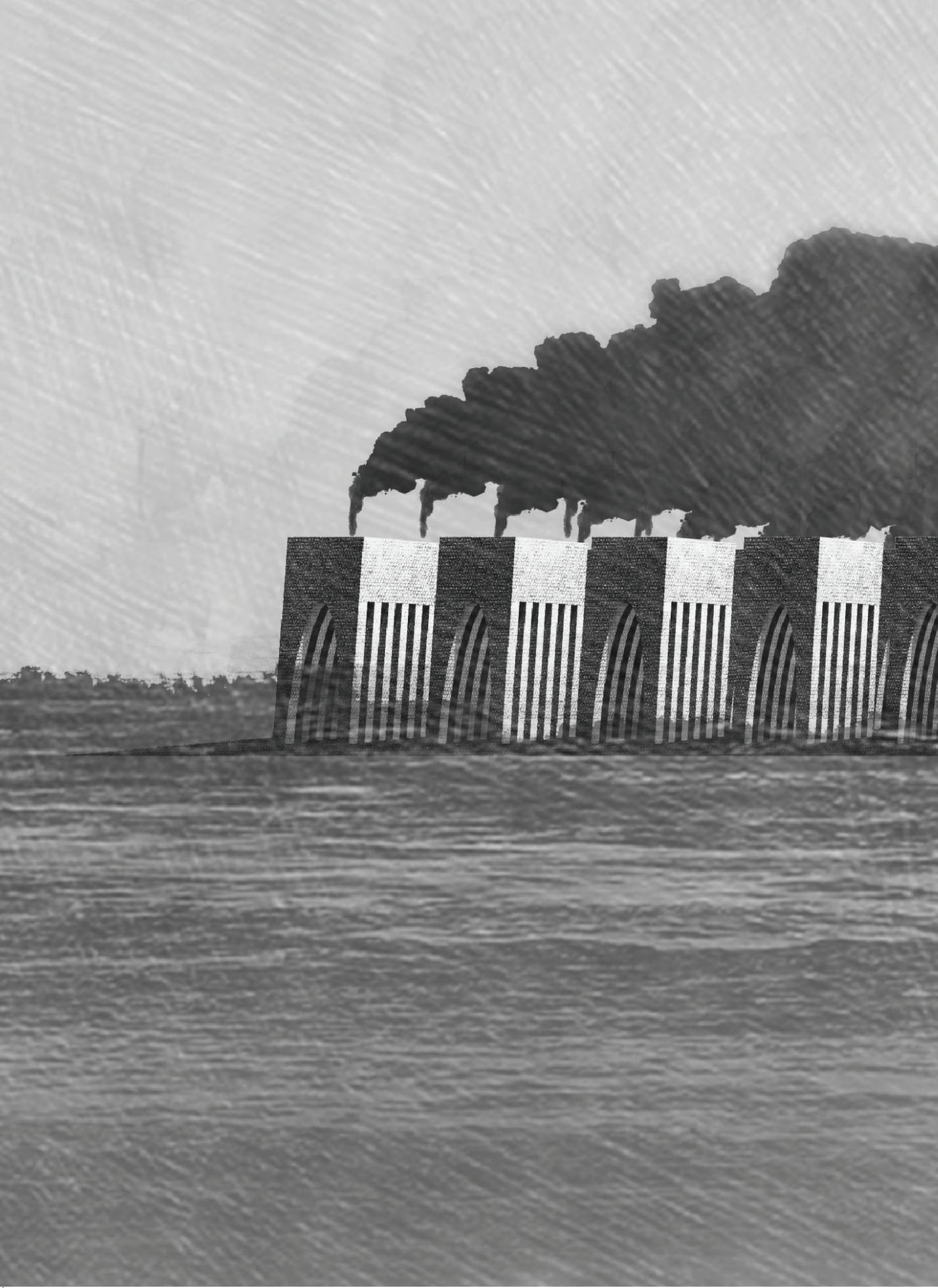
Motion is possible on two axes, into the river and parallel to its stream, due to the tunneled columns the river sight line is never lost maintaining focus on the holy water.

During the monsoon season the ghat lets the Ganges grow to its full potential and involves it strongly into the theme. One third of the structure becomes flooded. Due to their height, spaces beneath as well as the cremation areas themselves stay accessible by boat. The different states throughout the year reflect the theme of circularity and blend it over activities happening throughout time.











Arjun Sara

What should a modern ghat be like? Should it respond in the same way as the ancient ones? Or could the ghat offer various journeys to water, each having their own story to tell?

The design started with simply choreographing patterns to approach the water. The site is filled up with a solid mass, through which a number of experiences are perforated, and approached using identical portals. An imaginary grid of 5 meters x 5 meters is overlapped on the solid mass, which gives us the possible points to place the portals. The portals are planned in a way that they do not overpower the openness of the urban plaza, and also becomes an urban sculpture when viewed from the other side of the river.

Pathways or caves of worship?

After entering into the portal (internal diameter of 3.5 meters) the user descends down using a spiral staircase. As they move towards the Ganges, the sound of the flowing water and small frames of the river triggers the sense of the intimacy towards their prayers or rituals. With the help of different skylights, each pathway would affect each individual in a different way. Some pathways have a wide ramp opening directly into the water, whereas some are like a labyrinth, allowing the user to explore. A large inventory of sections and plans was formed as part of the process to see the relationship of human scale in respect to each space, which is further incorporated to have different stories.

What would attract people to move in a particular way - a magnet?

Hidden inner courtyards are referred here as magnets, as they would bring the explorer into the light. Further, they would offer a number of choices or rather decisions to make, to continue their story. The courtyards are also supported with small shops. The scale of the courtyards decides their public usage and shops built around it, some are as wide to gather a number of people for a family ritual while others being so intimate just having space for one to sit and meditate. In the case of flood, some might even become small pools for rituals. The boundaries of these courtyards are 2.5 meters high from the plaza, which becomes an interesting background for a number of

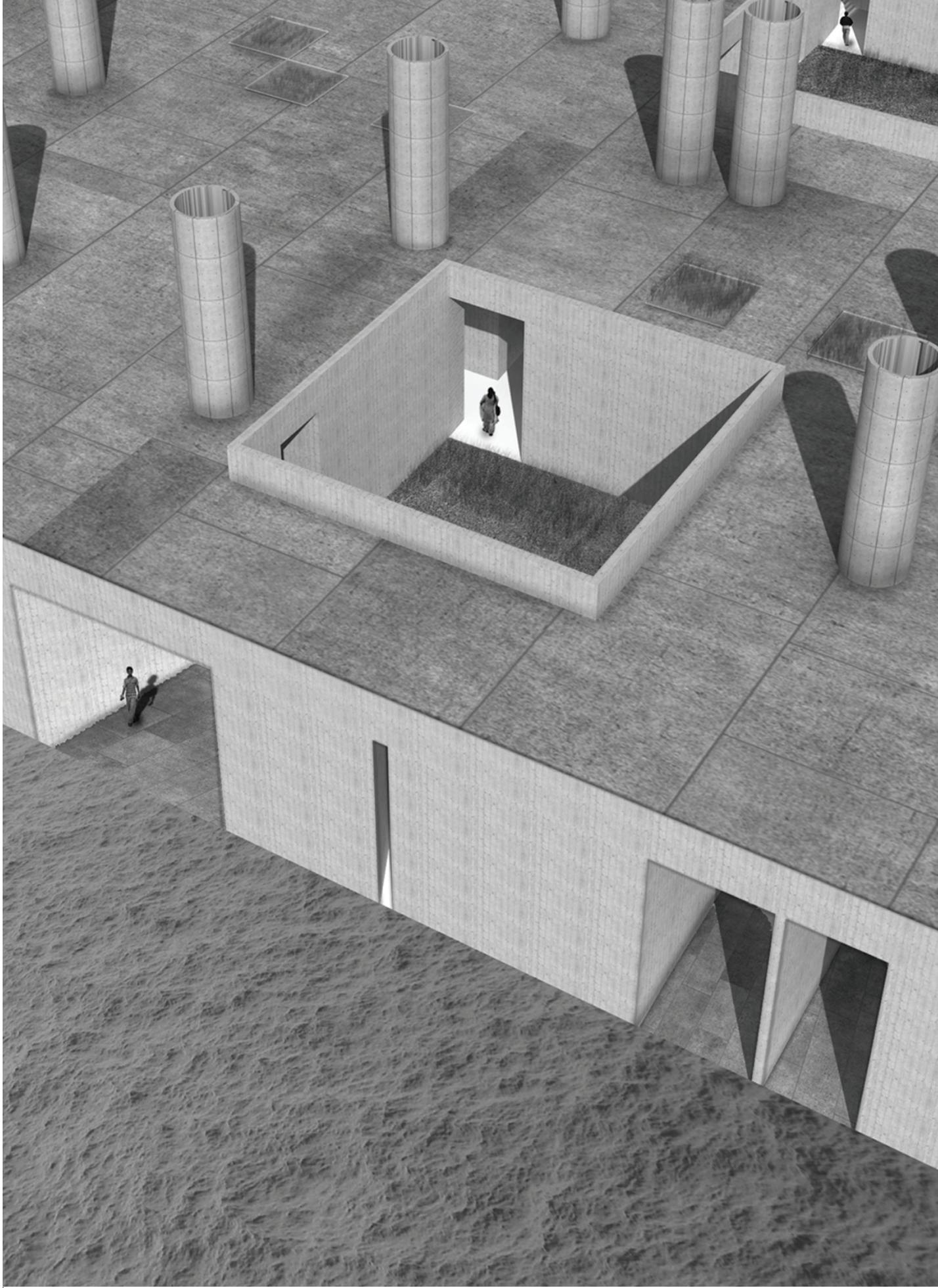
social activities in the urban plaza.

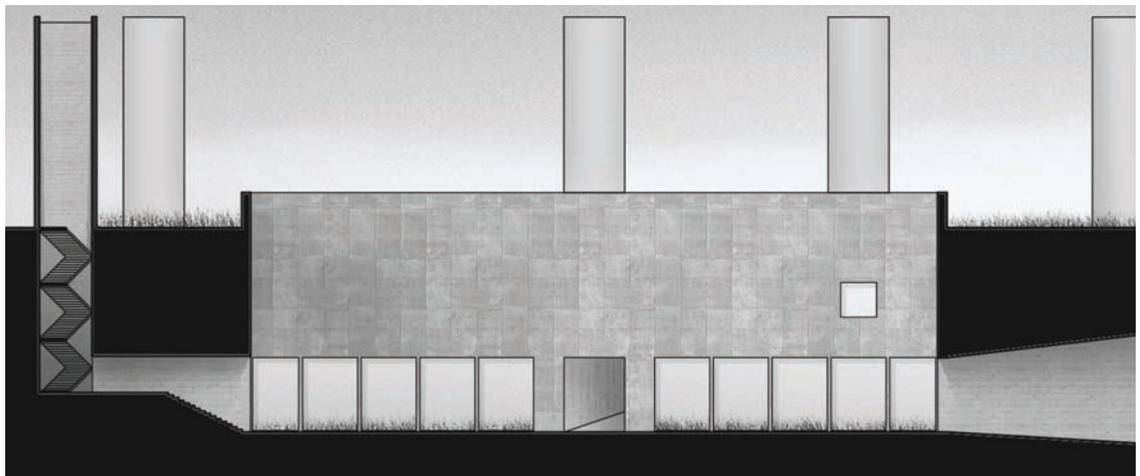
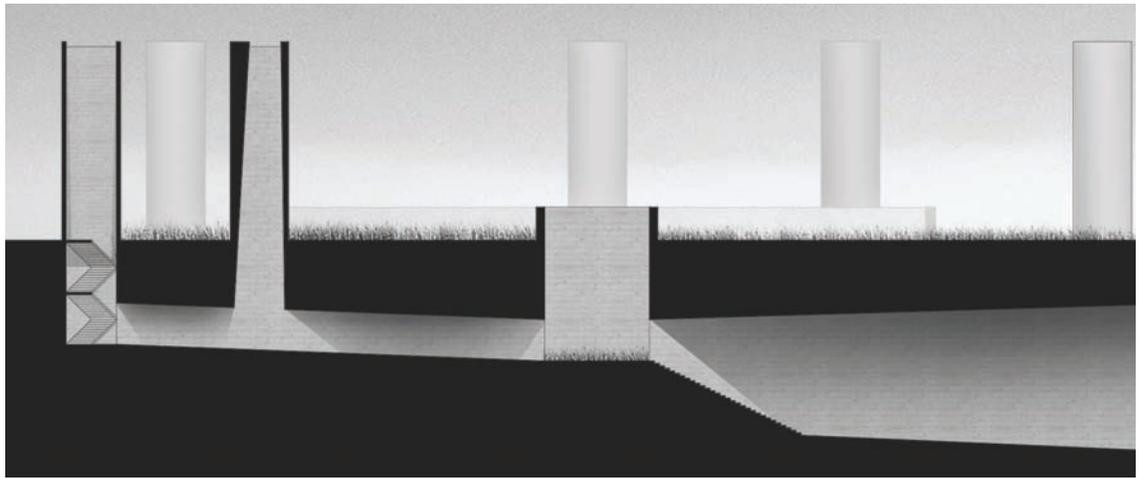
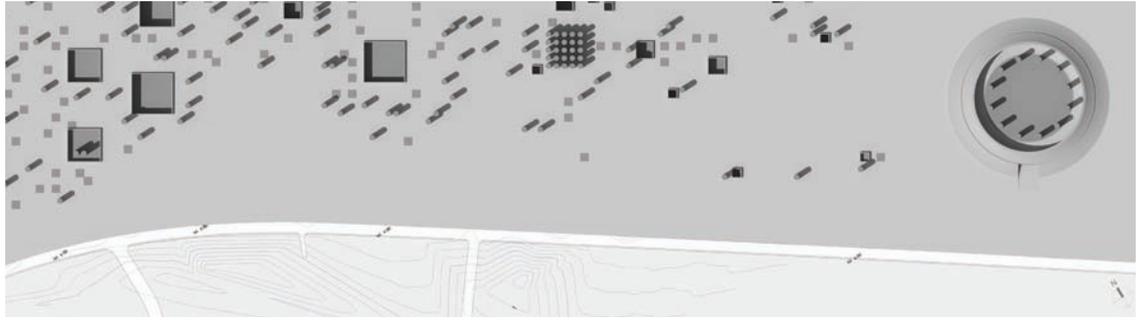
How would the pathways meet the Ganges?

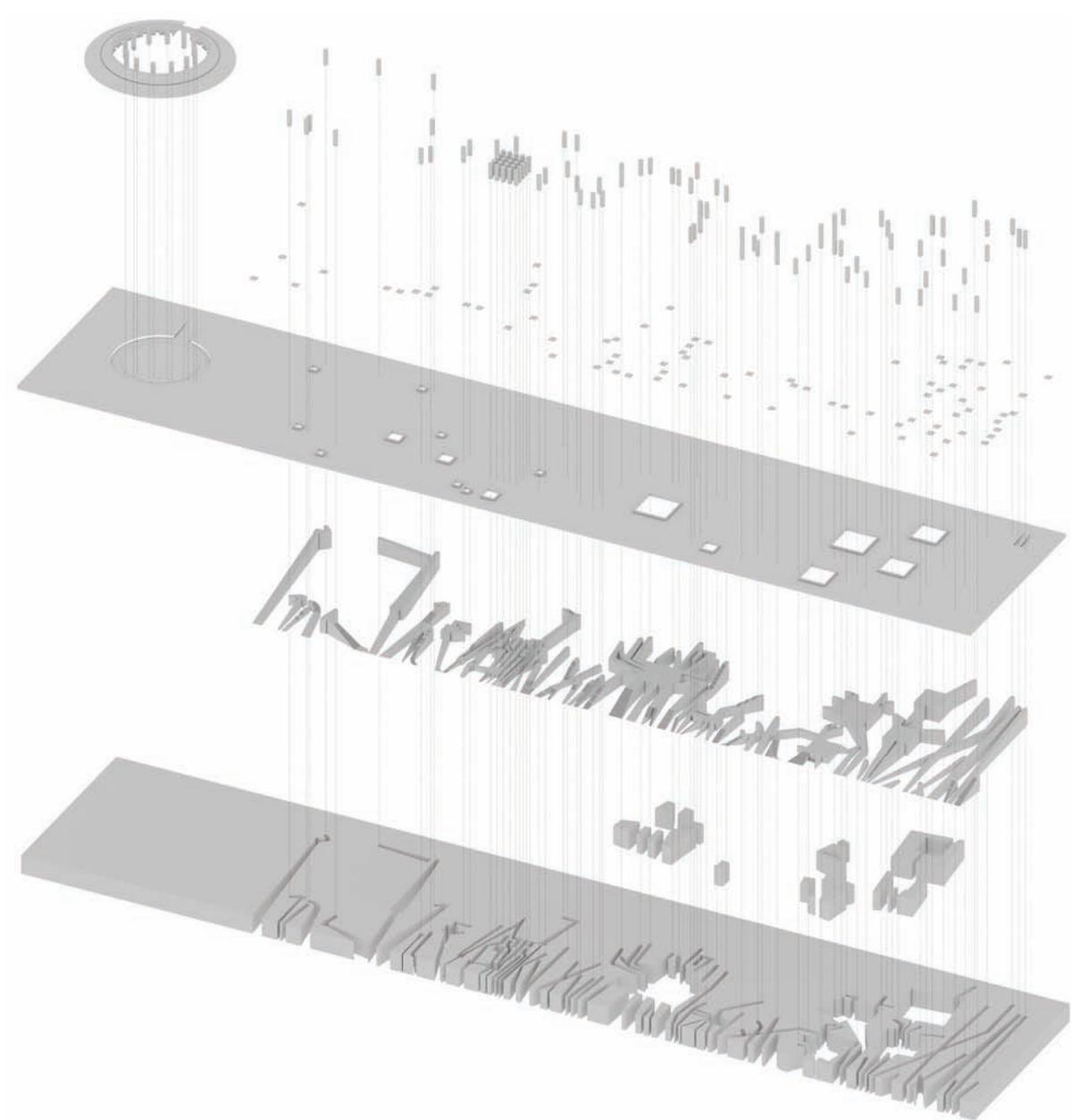
Each pathway leading to the Ganges opens up as an individual frame and interacts with the water in its own way. When viewed from the other side of the river or from the boat, a series of frames emerges with people performing their own rituals individually, but acting together as the urban actors. The frames are also influenced by the rise in the water level, making the experience more varied & dynamic.

What typology of functions should a modern ghat cater to? Urban park? Or crematorium?

The modern ghat offers the city of Allahabad a large urban park, where people of all age groups come together to enjoy nature and the view of the Sangam. The planned open spaces would be used for large gatherings in case of festivals. On the one hand, the ghat becomes a joyful journey of life, and with the crematorium, on the other hand, makes the journey come to a halt, a place for silence. The boundary walls for the crematorium rise very smoothly from the plaza and form an open frustum, maintaining privacy. The crematorium consists of a large water body in the centre with 12 chimneys in it, and seating spaces in the outermost ring, which also leads to the Ganges. Placing the crematorium on the southeast end of the site makes it more introverted.











Neha Korde

Delhi, India

Neha Korde

It was an amazing journey to reach this point from the beginning!

The design "process" which was always the main focus of the workshop really has helped to shape up our final design deliverables for the ghat design. Different workshops since the beginning gave an indirect insight towards an approach to follow while designing irrespective of the end product.

The image of Varanasi has such a strong imprint in everyone's mind that when we think of proposing an idea, it was really difficult to detach ourselves from the emotional and philosophical values we have bound towards it! The journey from life to death...!

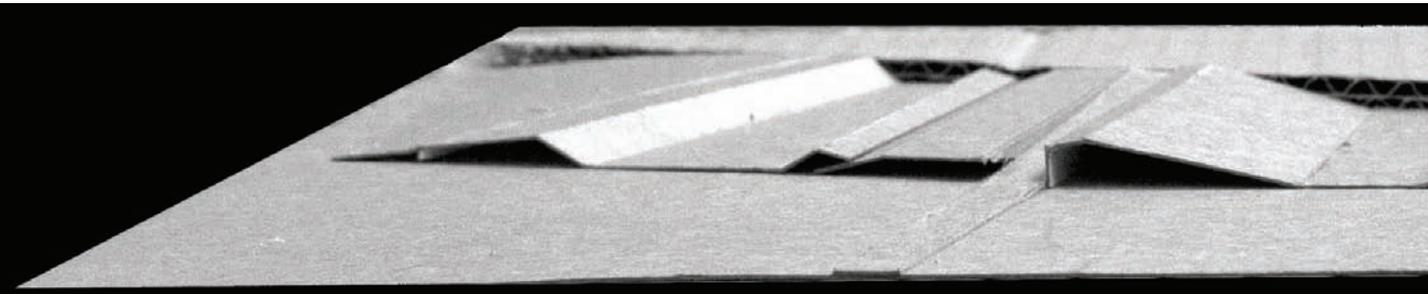
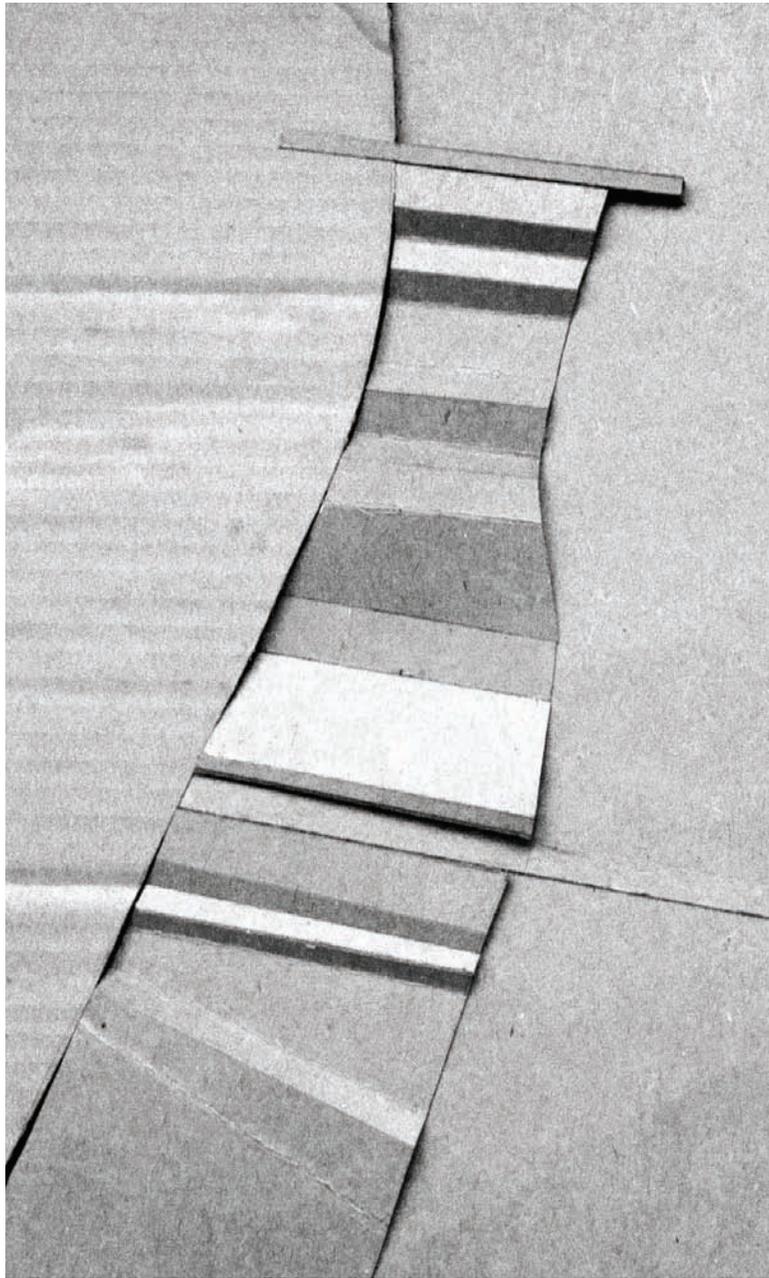
But the way the exercise was focused to develop a morphological language to reach "water" to emphasize the natural entity the Ganges, it helped us towards having a liberal approach and look at it analytically.

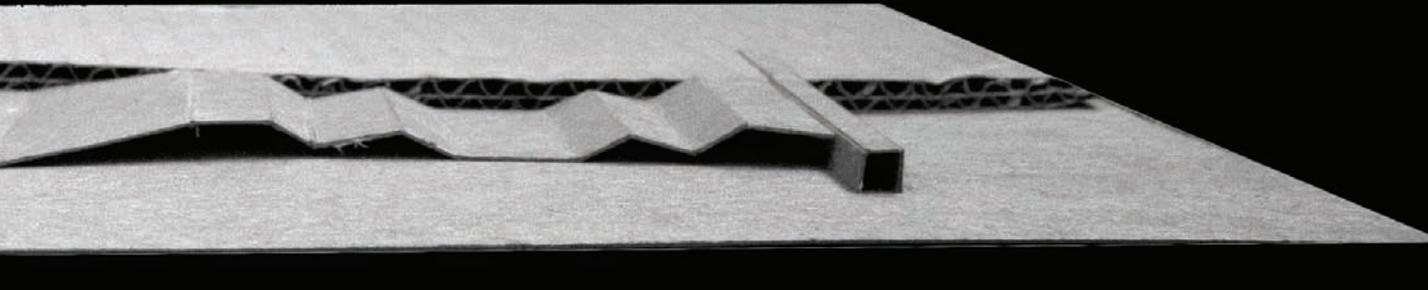
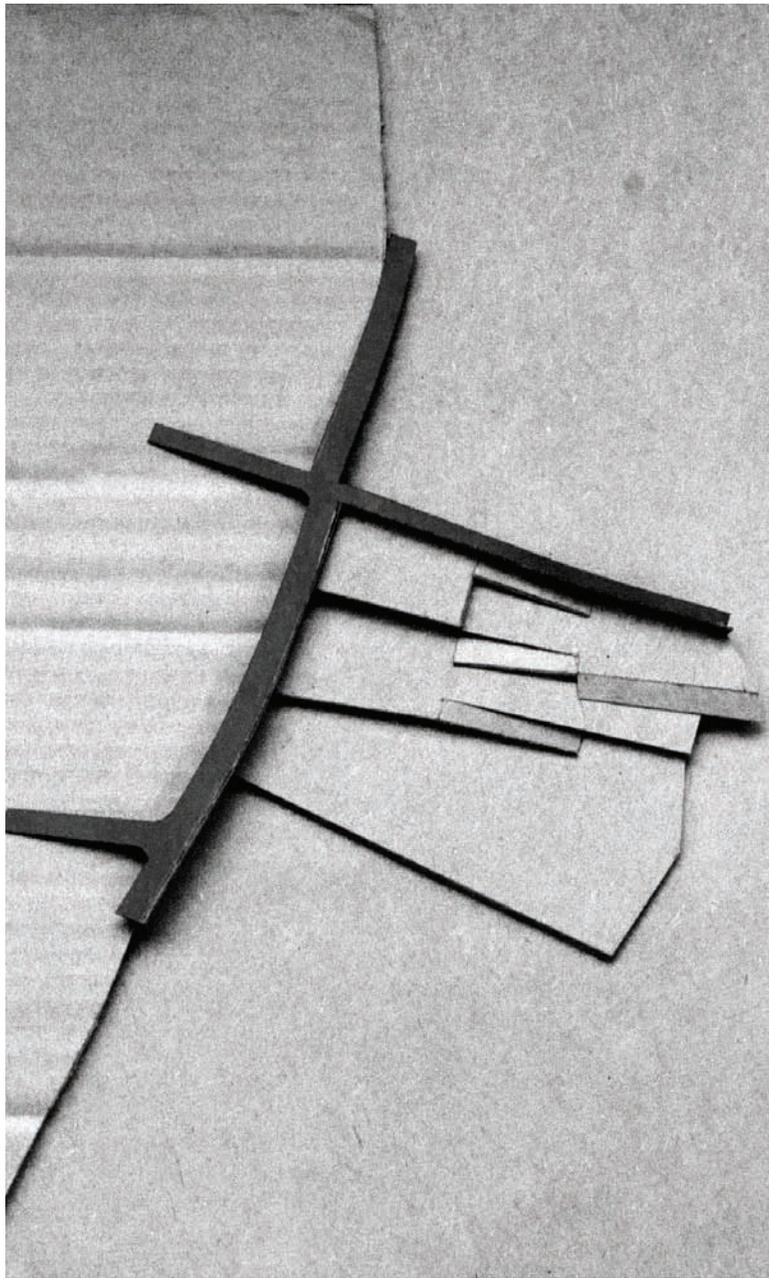
The initial idea considered the use of ramps instead of steps to have an uninterrupted view towards the water and the city one is receding from, periodically.

So, the intention was to have platforms at different levels each of them reaching till the edge of the water so that the crowd gets separated in equal intervals. It also helps to define different functions at each plane such as worshipping, ritual bathing and meditating etc.

And when one reaches at the lowest platform, one can reach the water directly where he/she is completely cut off from the dense fabric of the city and becoming a part of the Ganges. The whole morphology seems to follow the pattern of the waves horizontally. And it feels like a piano on the water, which plays along with the rhythm of the waves!







Manish Kumar Sharma

Delhi, India

Manish Kumar Sharma

Ghats are the riverfront steps leading down to the Holy River. In the Indian context, ghats are basically steps leading to the purification of sins and salvation. There are different kinds of activities performed related to one's beliefs and rituals. It's said in Hindu religion that, "we are born in water and after death our body goes to water". Water is so precious and so important for Indians and when it's about the river Ganges importance becomes greatly significant.

But the way the exercise was focused to develop a morphological language to reach "water" to emphasise the natural entity the Ganges, it helped us towards having a liberal approach and look at it analytically.

While designing the steps on the site I began with three major aspects/thoughts to be fulfilled. First, the traditional approach towards the river; second, all the spaces to emerge from a single plane; third, providing all the functional spaces and services under the staircases with different shade patterns at different times.

The concept of steps leading to the river coming out from a single surface gives a feel of origami and creates an interesting shade pattern underneath. The steps are based upon the traditional stepwells (Baori) of Indian architecture. They are designed in such a way that if seen from the front it looks like waves of water leading upside down to touch the surface. The desire of interaction between activities and people on different levels has been made through the zigzagging of staircases.

At the starting of the staircases straight platforms towards the river create space for different rituals and activities. These platforms define the different activity areas such as prayer, cremation, bathing etc.

On the step intervals there are a few decks approaching towards the river. These decks create a viewpoint to see the River Ganges, the sunset and different activities.

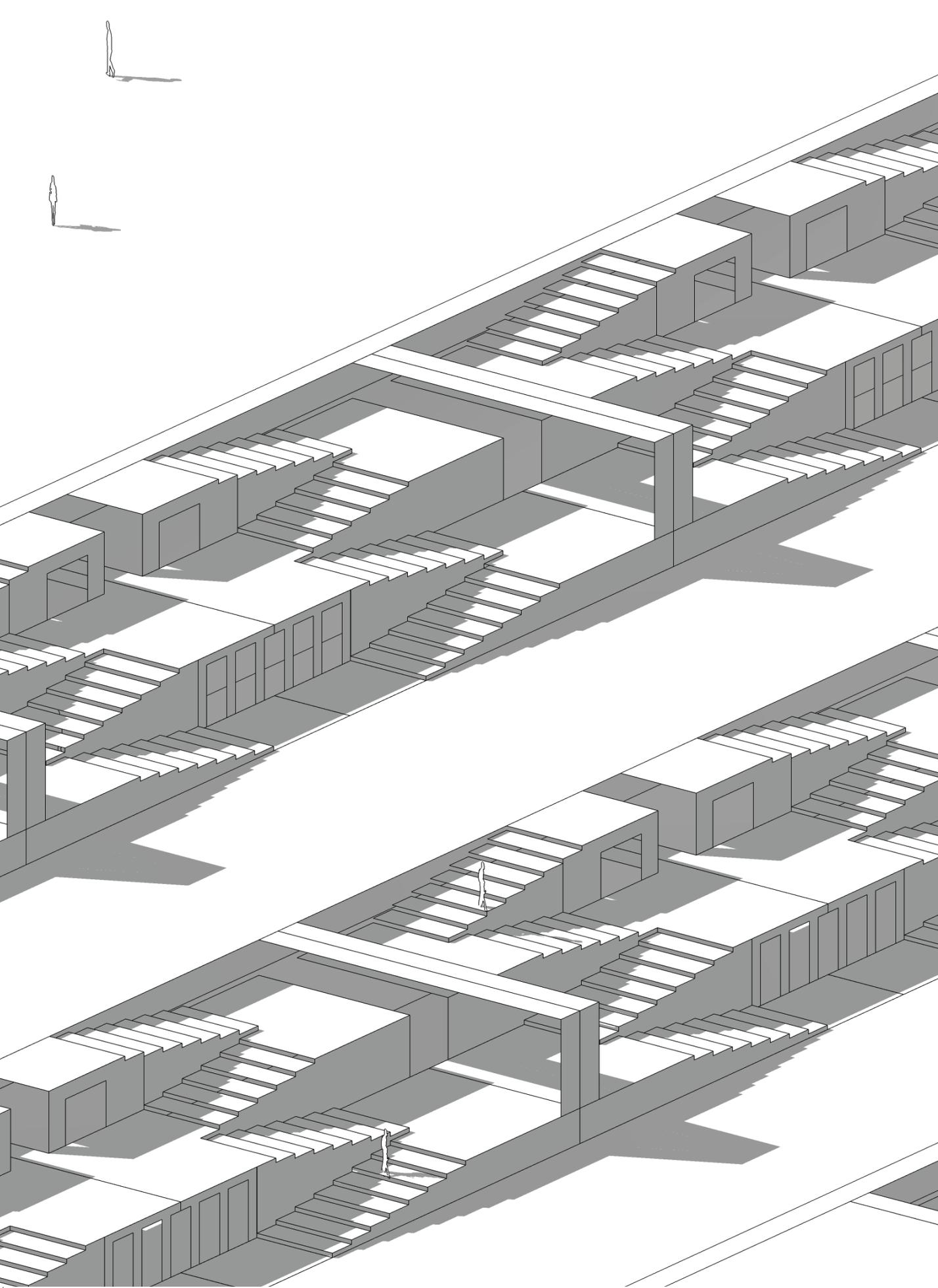
The entire built mass is rotated along an axis to provide the views.

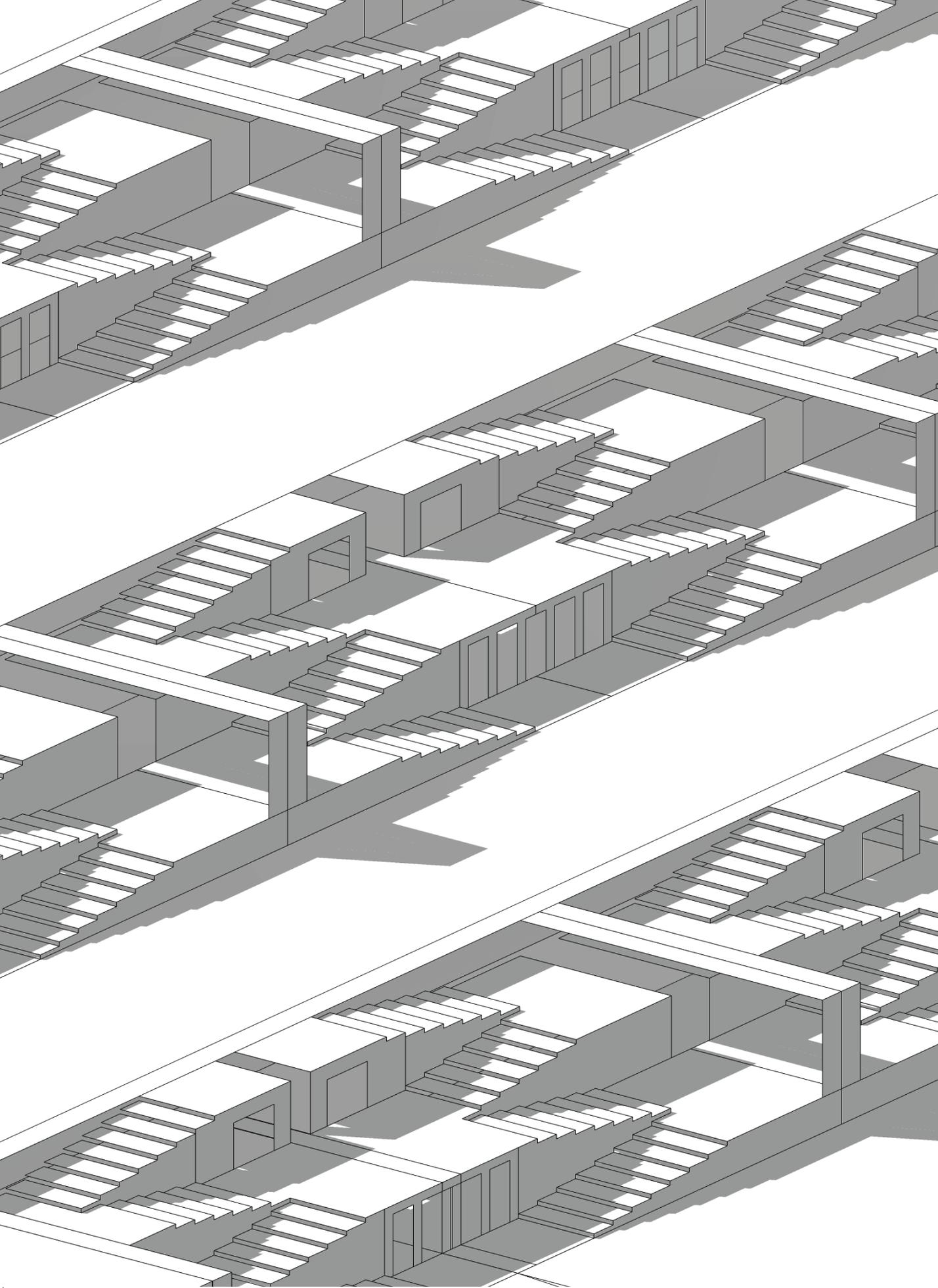
At elevation the original skyline of Varanasi is mimicked through the same concept of paper folding. This gives complexness to the entire built mass while in contrast a collection of trees balance the built character.

All the activities and functions are placed according to the river flow so that none of them can effect the other. From the left there is the worshiping area, boating area, bathing and rituals and then lastly there is the cremation area.

On the first step is provided the pooja and worshiping area, as in the Hindu traditions the water coming from the temples and pooja is considered to be very holy for all the performed religious activities. From here the water travels to the various activity areas ending at the cremation area - which literally means "last sacrifice". Which can be done here in front of the holy worshiped water coming from the worshiping area







Alejandro Garin

Dessau, Germany

Alejandro Garin

A ghat is, at the same time, a place of gathering, of everyday use and a religious space. Something as simple as a set of stairs reaching the river becomes remarkably dynamic and full of life when these stairs reach the Ganges and the people using them are Indians. Colours, rituals, clothes being washed, dead bodies being cremated, people taking baths, everything happening simultaneously in an apparent chaos that somehow works.

Indian culture has always respected the water; step wells, step ponds and ghats can be found all over the country. The ghats, however, are the ones that have a direct contact with the river. They are the ones that know all the different moods that the river has through the year. In the monsoon season, when the rain fulfils the flow of the river, this, in return, reaches the ghat in a friendly hug that last only until the dry season, when the mood of the river changes, now missing some of its flow, making it distant. The ghat must know how to react to each of these different situations, because that is its purpose, to be there for the river. It is the way of Indians to say that they care, that they are not indifferent.

When it comes to design a space like this, that is meant to be use by millions of people, one of the most important issues is to use a language that can be understood by the bigger audience. But not because of this, the language should be simplistic; it should operate in different levels of understanding. When you reduce a ghat into its elemental aspect, what is left is a set of stairs reaching the river. This is the very first level of understanding. Every person in India will immediately understand that as a ghat.

The proposal explores the elementary aspects of the ghat. Starting from the very first intention that these places have, to reach the water. For that, the project extends the original borderline of the site and "gets" into the river. This (again) elementary human act has implied an extremely powerful strength. The river, as a strong natural force, needs a strong human gesture to step into it without being dragged away.

This manifests in the project as seven concrete blocks that hold the stairs. At this point a series of changes were implemented. The blocks are not rectangular but trapezoidal; with this, the movement towards the water is reinforced at the same time that, because of the flow of the river, the water is dragged in. Also, the stairs are not facing the river; they are rotated in order to be facing the next block. With this, the user will experience going down before a fifteen-meter

concrete wall, which is immersed in the river. This generates a strong poetic atmosphere where the user find oneself approaching the water with no other obstacle but their own personal feelings. The big mass that the wall represents acts as a void. The architecture does not try to communicate something to the user, but provides this big void in which each one can print one's own feelings and thoughts. With this, the act of getting into the river becomes an interaction between two elements: person and water.

As a way for the ghat to respond to the changes of the water level, or, as it was said before, the different moods of the river, each block has at the end of it a set of stairs that descend five meters and generates a flexible space. This space during the dry season, when the water level is low, acts as a platform from where the user will be able to connect to the river in a visual way, through a frame that captures a portion of the landscape. During the monsoon season, when the water level raises, this space becomes a natural pool, providing a completely different experience.

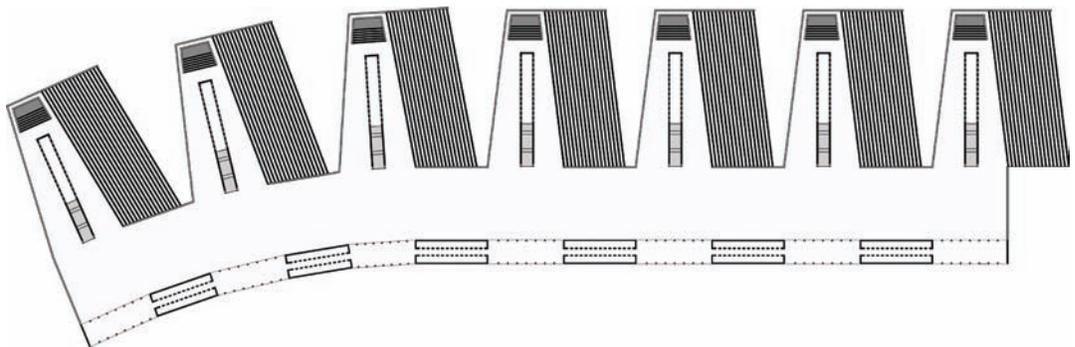
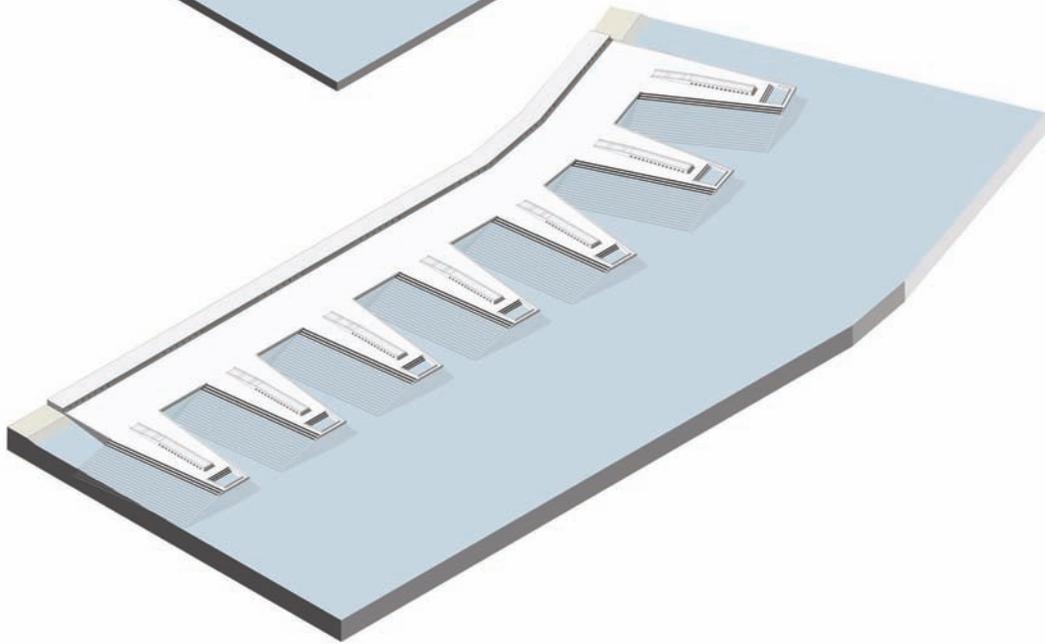
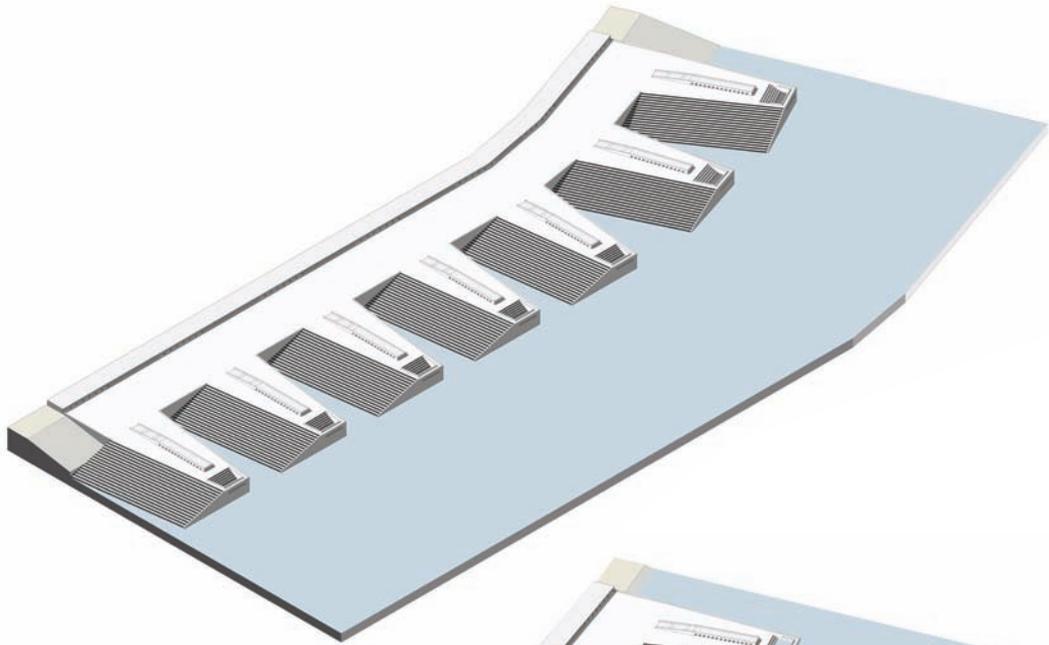
In India, because of the weather, shaded spaces are very important. That is why every block has a shaded religious space. This space is generated through a layering operation from which the floor becomes a ramp that rises up to five meters. With this, two different situations are created; first, an elevated platform from where the user can contemplate the immensity of the river; secondly, this platform becomes the roof of the religious space.

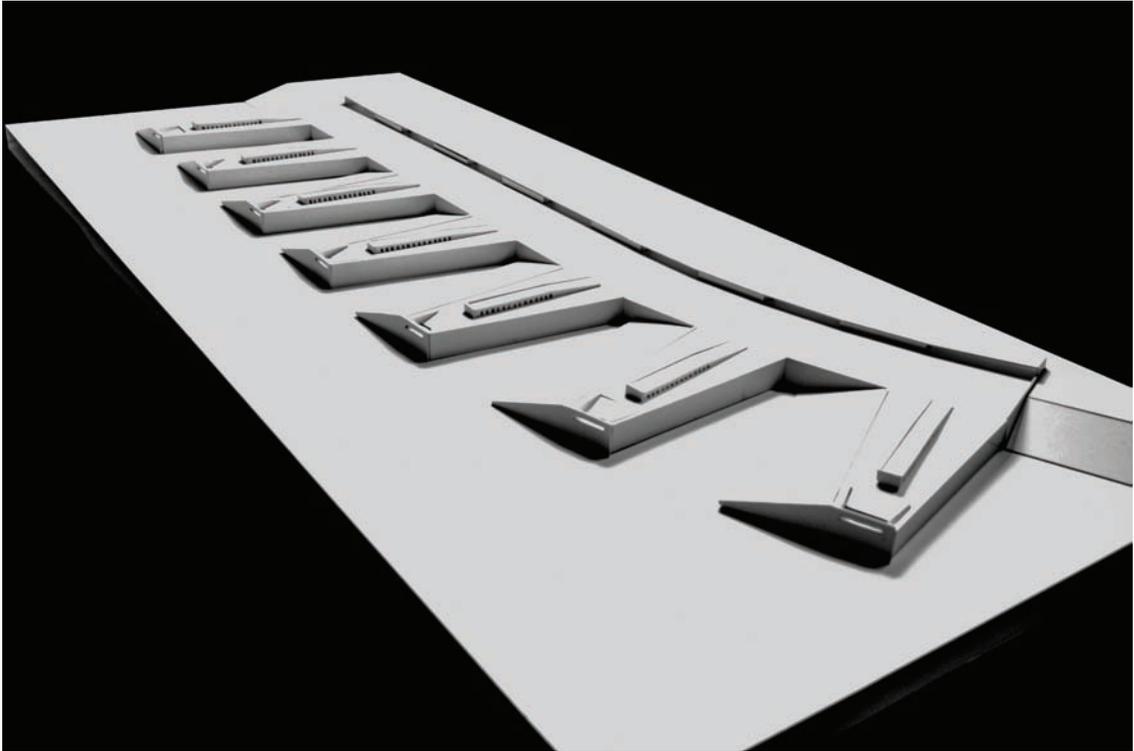
Finally, in the transition between outside and inside the ghat, a big shaded space is provided, only this time with periodic large entrances with pavilions that can be used as toilettes and changing rooms.

In Allahabad one of the biggest gatherings of people in the world occurs every twelve years, the Kumbh Mela. Millions of people go to this place to take a bath in the Ganges because of religious believes. For this reason, a big plaza was provided. This space can function as a gathering place for a large amount of people.

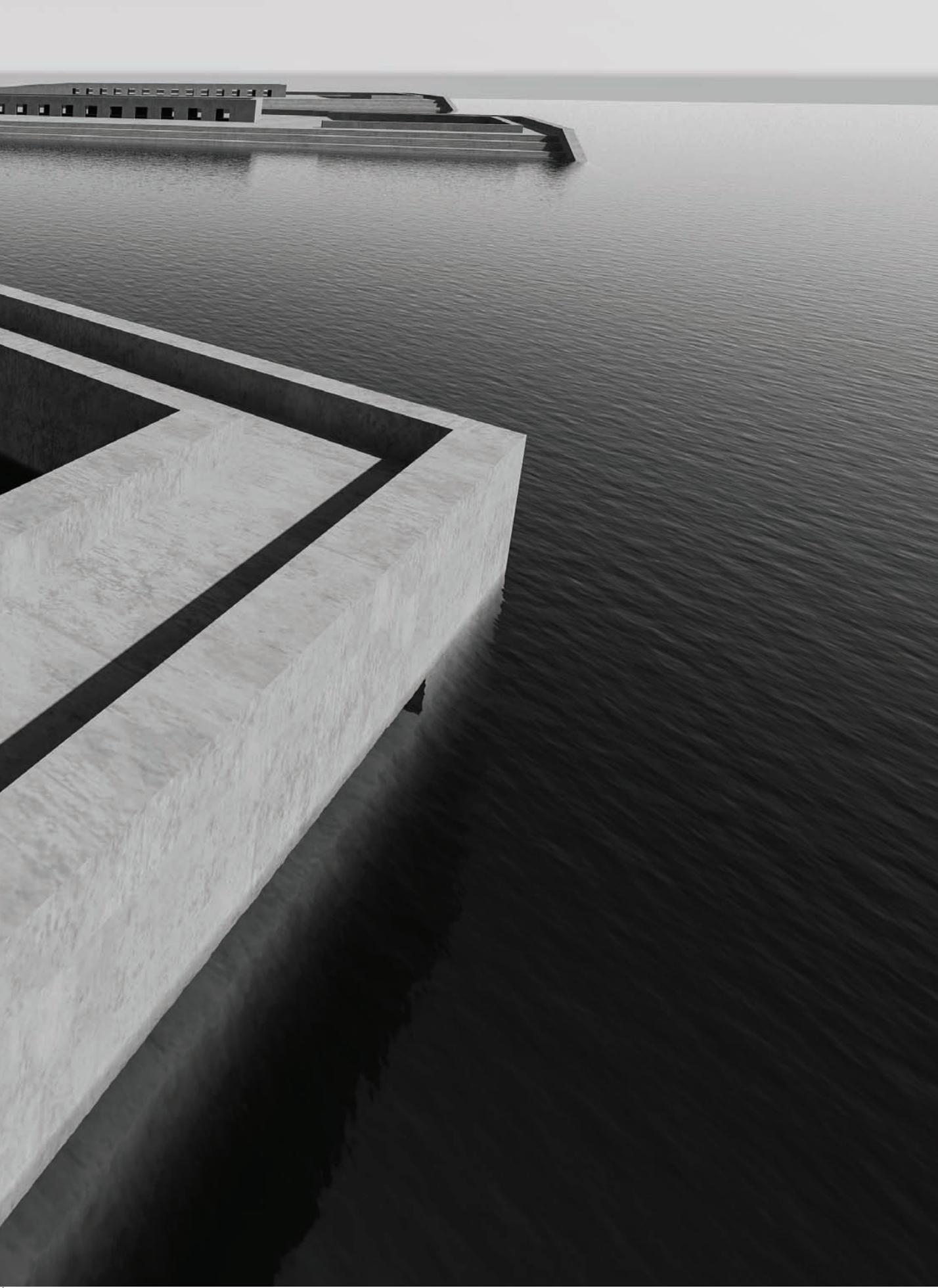
As a conclusion, the Allahabad Ghat deals with the elementary human act of reaching the water. It generates different ways of experience this in an atmosphere of induction and not conduction. The specialties created, because of the scale, material and elements, have a religious imprint into them. It provides a generous plaza to hold lots of people and gives some basic infrastructure to the site.











Credits

Credits

Director DIA

Prof. Alfred Jacoby, Dipl.Arch. ETH, MA Cantab

Studio Master

Martin Rein-Cano

Preface

Prof. Dr. h.c. Lars Lerup

Students

Arora Richa

Garg Mansi

Gupta Akanksha

Jadav Rashmita Harshadbhai

Karanjai Siddhesh

Korde Neha

Mazumdar Aditya

Panchasara Abhay Dipak

Podder Ankur

Rajendra Rane Neha

Sara Arjun

Sharma Manish Kumar

Sobti Dhevat

Wadhwa Mayank

Ambrois Cacilia

Delgado Guillermo

Garin Alejandro

Grau Johanna

Lindeque Hilette

Lindner John

Markay Selam

Özdemir Selim Deniz

Pöllumaa Mats

Potapova Mariia

Purgino Fabio

Shchogoleva Vasilisa

Zhukova Evgeniia

Zimniakova Mariya

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Berlin, September 2016

Martin Rein-Cano

**Publisher**

DIA Architecture School
Anhalt University Department 3
Bauhausstraße 5
06844 Dessau

Fon +49(0)340 - 5197 1531
Fax +49(0)340 - 5197 1599

info@dia-architecture.de
www.dia-architecture.de
www.afg-hs-anhalt.de

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Martin Rein-Cano

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