

An Urban Development Strategy
for New Aruna Nagar,
Majnu Ka Tilla, Delhi
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Majnu Ka Tilla, Delhi

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Abbreviations

CTA:

Central Tibetan Administration – the Tibetan government in exile founded by the Dalai Lama in 1959

RWA:

Resident's Welfare Association – a political instance representing the inhabitants of New Aruna Nagar

Tibet:

A state with vaguely defined borders on the Himalayan plateau, that legally existed until 1949

PRC:

People's Republic of China – the communist state called out by Mao Zedong in 1949

TAR:

Tibet Autonomous Region - a Chinese province that roughly covers the area of former Ü-Tsang

TCR:

Tibet Cultural Region – those areas that are home to Tibetan culture and people

TAP:

Tibet Autonomous Prefecture - prefectures within the PRC that are culturally Tibetan and enjoy more autonomy

CCP:

Chinese Communist Party – China's only and ever-ruling political party

NAN:

New Aruna Nagar - the Tibetan Neighbourhood in Majnu Ka Tilla, Delhi

Abstract

This project is an architectural reaction on the sociopolitical circumstances, which the Tibetan diasporic community in India is currently exposed to. Based on a profound investigation of the cultural, political and economic situation and an architectural endeavour to three places within the Tibetan diaspora in India and two places in Tibet, the architectural intervention presented in this report tries to develop an architectural language that mediates between the different social and thereby spatial conflicts identified.

Designing in this highly sensible cultural context implies a strategy for sensible, historically informed preservation and continuation of Tibetan building culture on the one hand, but on the other hand also an attempt to address the needs of a modernized, cosmopolitical young generation.

The location chosen for the intervention, New Aruna Nagar, Majnu Ka Tilla, Delhi, is interesting in many ways. First and foremost, it is the central point of intersection for the Tibetan diasporic community, being spread to the entire world. Furthermore, it is located in the north of Delhi, a modern, vibrant and busy metropolis, which creates a lot of friction considering that traditionally, Tibetans were a largely rural and even nomadic as well as a highly religious people. Third, it is one of the few settlements in the Tibetan diaspora in India that organically grew in confrontation with Indian culture, whereas most of the initial refugee settlements were intentionally meant to keep the Tibetan exile community isolated from the Indian host society. Therefore I believe, many major transformations within the Tibetan diaspora have their roots in New Aruna Nagar.

Keywords:

Tibetan diaspora

vernacular building culture and identity

migratory architecture

reinterpretation, assimilation and modernisation

New Aruna Nagar, Majnu Ka Tilla

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Introduction

In times of globalization, massive migration and acceleration of political and cultural changes, it seems interesting to analyse more deeply, how and to which extent those processes are reflected in the built environment. Accepting architecture as the most direct physical embodiment of social and political circumstances, at the same time being a major tool to implement and express ideology, its role within any process of transformation cannot be underestimated.

Considering the issues of globalization and migration, the development of Tibetan architecture over the past 60 years is a particularly interesting case. Tibet was almost entirely isolated from the outside world until 1949 and therefore developed unique, easy-to-recognize architectural typologies. However, after the Chinese invasion to Tibet in 1949 and the subsequent first migration wave to India, Tibetan architecture couldn't develop as independently anymore. Tibetans remaining in China were subject to enormous political pressure. Accordingly, the expression of Tibetan nationalist or Buddhist values through architecture became strictly prohibited. More and more, Chinese architectural tradition was projected on Tibetan building culture. In India, on the other hand, their main destiny of exile where around 80 per cent of the Tibetan diaspora live, Tibetans became exposed to an entirely new cultural, economic and natural environment.

The diaspora is unique in many ways. Tibetans were a tremendously religious and conservative people that, in exile, has undergone significant social changes and became a modern, western-oriented society within a comparably short period of 60 years. Besides that, it has the second oldest government in exile and is one of the best-organized diasporic communities in the world.

This project addresses the current living conditions of the Tibetan exile community in India and tries to develop an architectural language that mediates between different spatial conflicts - traditionally very introverted architectural typologies versus the aim of the project being to stimulate further integration of the Tibetan exile community with the Indian host society - hardliners within the diaspora that intend to pursue a traditional Tibetan life versus the other extreme, the modern, so-called „Youth Hostel Culture“ - young, westernized Tibetans living in communities nearby Indian cities, that intend to pursue a lifestyle allocated somewhere in between Tibetan, Indian and Western culture. And last but not least the never-ending question, to which extent any piece of modern architecture should refer to its cultural roots and to which extent and in which way the replication of traditional typology, form language and aesthetic features is a legitimate tool to create a certain sense of community and belonging.

The development of Tibetan architectural culture over the last 60 years, since the situation of 150,000 Tibetans in exile and 6,000,000 remaining in China constantly changes due to political circumstances, is barely discussed in academia up to now. Especially secular architecture in both the Tibetan diaspora and in China is rarely addressed. International attention on Tibet is mostly of religious and spiritual nature. According to Yeshe Choedon, professor at New Delhi's Jawaharlal Nehru University, „hardly anything about the Tibetan refugee community has been documented so far. Most times, the focus is only on the political struggle.“ (Purohit, 2019)

This design for the Tibetan exile community in New Aruna Nagar, Majnu Ka Tilla, Delhi is based on a thorough investigation of the development of secular Tibetan architecture over the past 60 years and how the specific socio-political circumstances have affected the preservation and transformation of vernacular form and material. It was done in support of an architectural endeavour to three places within the Tibetan diaspora in India and two places in Tibet, during which I developed a deeper understanding of the essential elements of Tibetan architecture and their transformation in the last 60 years. The objective is not to recreate, imitate or reconstruct Tibetan architecture, but to explore how architectural form and identity intertwine, change, and transform, and how these elements can inform new architectural interventions that are culturally sensitive and historically informed.

In the first part of this report, I will briefly conjure the outcomes of my research up, which largely informed my design decisions.

Later on, I will continue with an introduction to the location, New Aruna Nagar in Majnu Ka Tilla and Delhi, that I considered the most suitable location to address the problems identified in course of my research.

As third and major part, I will explain the three spatial interventions I consider necessary, as reaction to the socio-political circumstance encountered during my investigation.

Research Conclusions from Vol. 1

Does the deliberate isolation of the Tibetan exile community in settlements facilitate the maintenance and continuation of Tibetan architectural practice and thereby create a sense of belonging within the diaspora?

After visiting Bylakuppe in Karnataka state - which has been subject to the aim of the CTA and the Indian government to deliberately isolate Tibetan people from Indian society – as well as New Aruna Nagar, Majnu Ka Tilla in Delhi and McLeod Ganj, Dharamsala in Himachal Pradesh - that have gradually developed and where Tibetans have always been intersecting with the Indian society - I can conclude, that the deliberate isolation of the Tibetan exile community in settlements rather impedes a continuation of Tibetan architectural practice. On an architectural level, the goal to preserve Tibetan culture by isolating people has failed.

The sense of belonging of Tibetans to the Tibetan community, and its expression in architecture through creating space that reflects this feeling of affiliation, have rather sharpened in those settlements that grew naturally and developed in confrontation with Indian society. I believe that in case of the Tibetan diaspora, being exposed to another culture stimulates an awareness of why and how people ended up here. This, subsequently, evokes a nostalgic feeling and the urge to cherish one's place and culture of origin. In contrast to that, if people, like in the official settlements, still live in a similar cultural environment as they did before, the awareness of the fact that Tibetan culture, of architectural or whatever kind, is in danger might be lower and thereby result in less effort to maintain it.

Which social problems does the lack of cultural sensibility within architecture create for Tibetans?

Most structures in both India and China keep Tibetans from practising their tradition, impede any culturally sensible modernization and hinder the intersection with other cultures. Especially those settlements that were master-planned and enforced on people tend to not reflect the needs, habits and traditions practised in everyday life.

To answer this question more precisely, we should differentiate between different generations within the Tibetans community.

Older people, first-generation migrants in India, tend to feel that the architectural and urban configuration of space in most places does not facilitate the way they would like to practice tradition.

Younger Tibetans in India, who are by trend relatively liberal and international, also don't feel their modern, liberal needs in the diasporic architecture to be facilitated.

In China, on the other hand, older Tibetans that tend to practice Tibetan culture and lifestyle in a relatively traditional way can't do so due to political repressions and pseudo-Tibetan facade-architecture, that is enforced onto them regardless of any values that used to be expressed through architecture.

Again, the younger generation here tends to be relatively liberal and international, but is urged to feel Chinese through a fusion of Chinese and Tibetan architecture and therefore lacks a sense belonging to the Tibetan community.

How does contemporary Tibetan architecture in India relate to vernacular architecture and is this tradition rather preserved or continued?

While in the early years of exile, vernacular typologies - especially on an urban scale - were reinterpreted and assimilated to the new environment, this tradition gradually vanished. Especially in organically grown settlements such as New Aruna Nagar, Majnu Ka Tilla or McLeod Ganj, Dharamsala, one can observe the gradual change from more traditional typologies to more western-influenced architecture - not only in an aesthetic sense but also concerning the spatial arrangement. I assume, this change again happens in accordance with people's decreasing awareness of their place of origin. Within the young generation, as explained in the introduction, Tibetans barely identify themselves with Tibetan culture and religion but rather pursue western life-styles.

While individual people rather reinterpret typologies based on values and thereby rather maintain and continue

Tibetan tradition – like in New Aruna Nagar or McLeod Ganj - monastic institutions tend to aesthetically replicate Tibetan buildings very closely, and thereby rather preserve tradition and facilitate a very traditional sense of belonging. In those cases, however, the spatial configuration of buildings and the values those reflect do not go along with the rapid social change within the Tibetan diaspora.

It remains questionable, whether this practice of reproducing architecture is on the long run healthy for the culturally sensible development of Tibetan architecture and its purpose to facilitate people's life-style. Also, assuming that the intention behind reproducing archetypes is to preserve culture, one should ask whether the value of culture is of conservative nature or whether the actual beauty of cultures lies in its flexibility and adjustability.

Another observation during my fieldwork was, that urban architecture in India and Tibet resembles more than rural architecture. While I could especially find many parallels on an urban scale between Lhasa, McLeod Ganj and New Aruna Nagar; the similarities between villages in Yushu and the settlement of Bylakuppe were minimal. I see the main reason for this in the fact, that urban architecture evolved more from cultural habits, Buddhist traditions and is based on comparably complex sociological values and patterns, that people could „migrate to India, while rural architecture is rather influenced by climatic and natural circumstances – the latter obviously differ largely between India and Tibet.

To which extend can architecture stimulate a sense of belonging and how do Tibetans, uprooted in different settlements, reconstruct and individualize space?

To answer this question, we should differentiate between organically grown settlements such as Majnu Ka Tilla and McLeod Ganj in India and Yushu town in China on the one hand and master-planned settlements such as Bylakuppe in India or Drupshe in China on the other hand.

In organically grown settlements, architecture facilitates a continuation of practices and culture rather than preservation. This concerns mostly the urban scale of the settlements. Therefore, the continuation of architectural and cultural practice is something that people share and thereby also stimulates a sense of belonging within the diaspora - more than relating to geographic Tibet. On an individual, interior scale however, in organically grown settlements, spaces rather resemble western architecture than Tibetan buildings.

In master-planned settlements, however, Tibetans largely individualize their own private spaces through aesthetic and nostalgic features. As the urban spatial configuration does not allow people to express themselves, which is, in the case of China, even politically prohibited, individualization and cultural expression rather take place in the interior. Therefore, the relation back to Tibet remains a largely individual thing and is nothing practised together in a community.

How has Tibetan building culture diverged in India and China in relation to the sociopolitical circumstances?

In India, Tibetan characteristics that influence public life and traditional practices can be observed - majorly urban patterns. As explained answering the previous question, Tibetan nostalgia, political and religious beliefs can be much more publicly expressed in India than in geographic Tibet, which is why Tibetan characteristics on an urban scale can exist here.

In China, the political influence of the Chinese Communist Party impedes any traditional Tibetan architectural development. Due to political restrictions concerning the public expression of religious or political opinions, Tibetan villages barely differ from any villages in China. The focus of individualization and expression of personal religious or political values and ideas lies mostly in interior patterns.

Goals of the Intervention

The deliberate separation of Indian and Tibetan people was justifiable considering that Tibetans initially intended staying in exile for a short period. In that case, one could argue that the separation of the two societies saves massive efforts of integration and encourages Tibetans to continue a similar life to what they had before and have an easy time returning to Tibet.

However, history went on a different path. The chance that Tibetans in exile will return to Tibet soon is very small. While an independent „Free Tibet“ is completely unrealistic, also the so-called middle-way approach currently seems to have no political perspective. Even if the political climate dramatically changed and China's modern, liberal, open-minded young generation manages to initiate some dialogue with Tibetans inside and outside of China, young people in exile are not likely to move back. Therefore, in the eyes of many academics, the deliberate separation of Indian and Tibetan society is by no means justified in these days. As concluded in my research, the goal of cultural preservation has failed anyway. But also the idea of ethnic preservation does not seem strong anymore in times of globalization. In the early 1960s, when Tibetans first migrated, countries and economies functioned much more autonomously. It was normal, that countries, regions and borders represented cultures to a certain degree. However, in today's globalized, internationalized world, it seems wrong to forcefully isolate a people for the sake of ethnic preservation – especially concerning that it is largely against the will of young Tibetans in the diaspora. Identity is fluid. How can one assume that 2nd or 3rd generation Tibetans in exile still have similar values as their parents and grandparents? Cultures intersect everywhere in the world, borders are weakening, and by trend, a sense of identity or belonging is globally less and less based on ethnicity and nationality. The intersection of cultures is not an unnatural phenomenon anymore like it was in the 1950s. 2nd and 3rd generation migrants have barely been to their homeland and feel themselves belonging to, as Charlotte Pehrson calls it, a third space somewhere between Indian, western and Tibetan culture. (Pehrson, 2003) Young Tibetans are largely willing to integrate into Indian society but the spatial configuration barely facilitates that.

The major aim of my architectural intervention is, therefore, to stimulate more interaction and empathy among Indians and Tibetans, as well as between Tibetans in exile themselves. Therefore, creating spatial conditions that allow and even stimulate this interaction are needed within the diaspora.

First, the current spatial configuration of residential buildings barely does so. As in traditional Tibetan architecture, most Tibetan buildings within the diaspora are very introvert and designed around private spaces. While it seems relevant and important to preserve these characteristics, a typology shall be found that stimulates integration and at the same time respects the traditional sense of privacy among Tibetan people.

In order to particularly address the interaction between Tibetans and Indian, more profane institutions should be established, facilitating education and addressing the mutual lack of knowledge about each other as well as stimulating innovation and a culturally sensible modernization, as a reaction on the still-present conservatism in Tibetan society.

I consider New Aruna Nagar the right place for these kinds of intervention. New Aruna Nagar is the melting pot within the Tibetan diaspora, the most vital, interactive place where Tibetans go to meet, to intersect with other cultures, to start something new. My idea is to create some *Pars Pro Toto* reflecting my future vision for the Tibetan diaspora that serves as a catalyser and as inspiration for the further development of the diaspora. It should repatriate cultural, identity-giving memories, that got lost over the generations in exile, and at the same time give respect to modern, open-minded values in the Tibetan diaspora. How can design bridge the gap between the idea of social integration of Tibetans into local Indian society and Tibetans maintaining their culture and tradition?

In the case of New Aruna Nagar in Delhi, this would mean to carefully make an assumption about the future development of the neighbourhood. Which direction will the Tibetan community go and how can architecture facilitate better integration of new Aruna Nagar's inhabitants into Indian society? As identification with the built environment is less and less stimulated through ethnic or local characteristics, which architectural traits should give the architectural intervention its shape? To which extent should we try to preserve and bring Tibetan culture back? How important do Tibetans themselves actually consider the preservation of their own architectural identity? Do preservation ideas correlate with local people's needs and how compatible are they with modern policies in Indian neighbourhoods? (Lundrup, 2007)

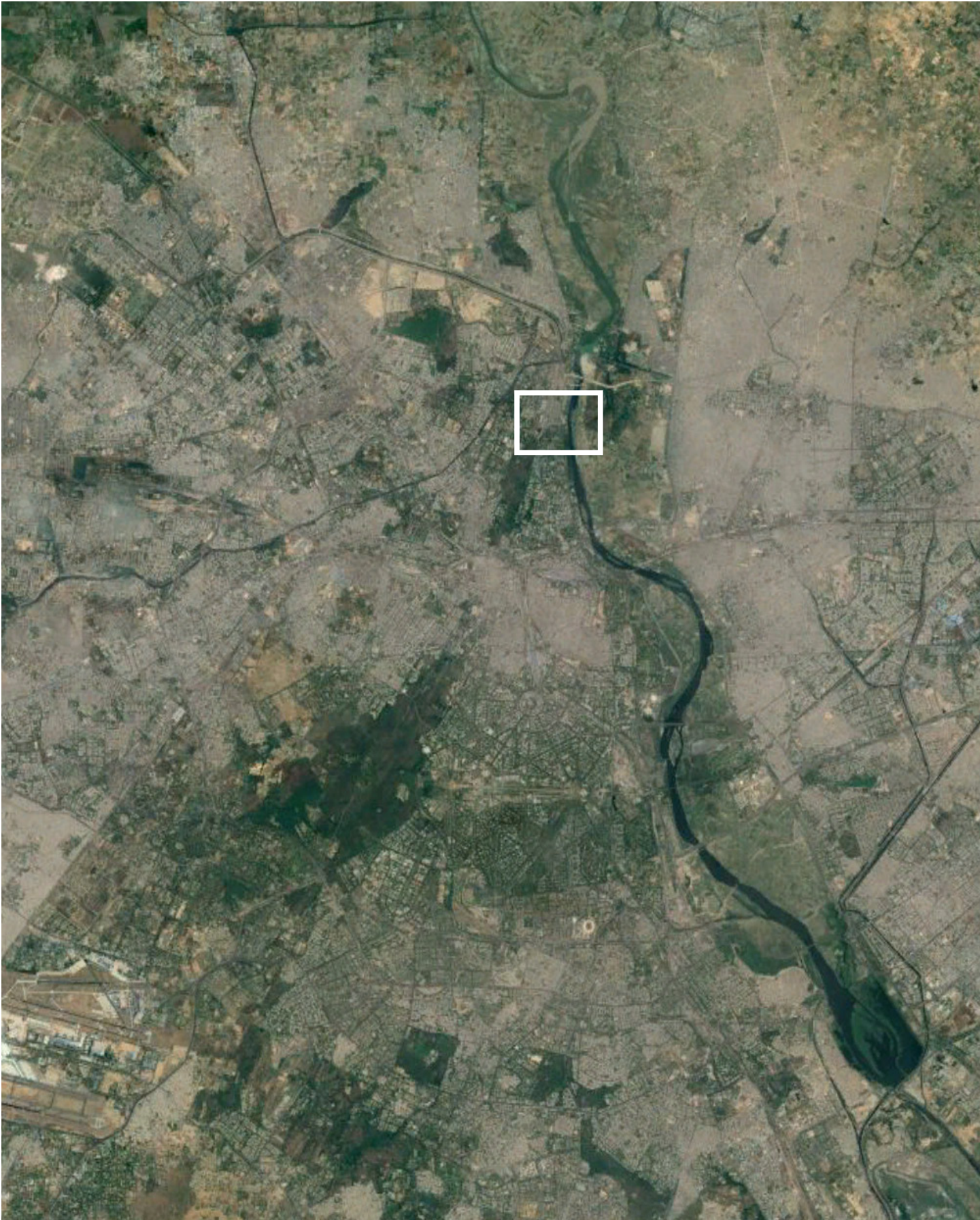
Some scholars argue that ongoing modernization endangers society's stability: „Cities start to resemble each other worldwide. Integration does not work through existing norms but universalistic values. This leads to social and cultural destabilization.“ (Herrle, 1983, S. 101) How can we then stimulate a Tibetan sense of belonging in modern architecture? Prof. Peter Herrle argued in his dissertation „Vom Mandala zum Flächennutzungsplan“ that „the only chance to preserve more than facades and constructed memories consists in preventing the existing local culture from being used as a substitute for lost cultural identity in the global industrialized civilisation. (...) Not a naive re-traditionalisation, but instead the innovative discourse about traditional structures, whose essential advantage consists in its integrative power, is needed.“(Herrle, 1983, S. 611–612)

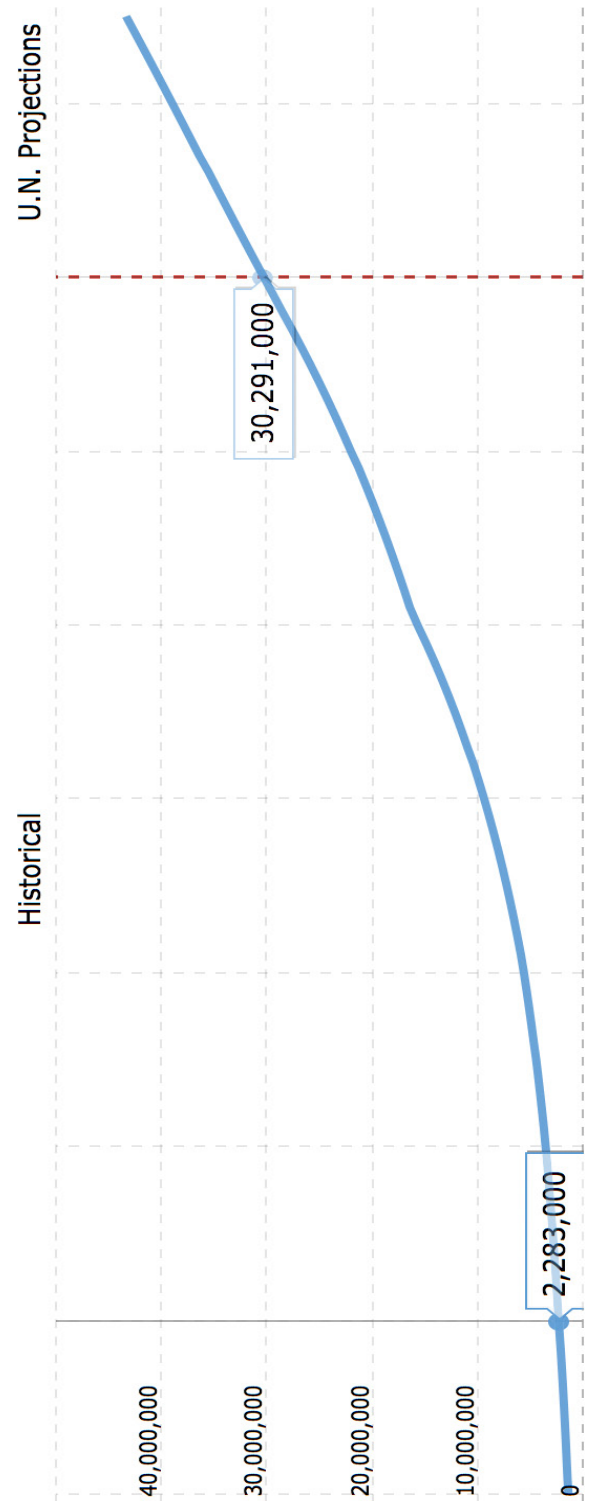
What role can a western architect play in this process? Engagement of westerners in development processes in the global south quickly has the connotation of privileged people trying to project their values on different cultures but having only a limited sensibility for local values and habits. Nevertheless, in the case of an architectural intervention that shall mediate between different parties, I believe a neutral, unpredestined, rational point of view is very important. I, in my position as a German architect, can't solve other parties' conflicts but stimulate interaction and exchange of knowledge.

I believe that architecture is the major spatial manifestation of socio-political circumstances. Planners accordingly have the responsibility to stimulate certain developments. My intervention is not intended to solve all the problems addressed through one single project but rather function as a „Pars pro Toto“, the first brick in the wall, an example that serves as inspiration for further development and negotiation of vernacular building culture and identity.

Accordingly, the design presented in this booklet is not meant to be understood as final, concrete design but as subject of negotiation that can be assimilated together with local authorities and governments as well as the residents and civic institutions in New Aruna Nagar.

New Aruna Nagar - Urban Context





New Aruna Nagar, Majnu Ka Tilla is located roughly five kilometres north of Delhi's city centre, next to Yamuna River. Delhi's population having risen from 2,283,000 in 1960 to 30,291,000 in 2020, (United Nations, 2020) at its time of development, it was placed in the very outskirts of the city, while now it is located in a relatively central part of the urban fabric.

figure 1: satellite view of Delhi

1:100,000

Majnu Ka Tilla (the area between the freight train station and Yamuna river) consists of three parts:

Old Chandrawal Village (the southernmost block of Majnu Ka Tilla, next to the water purification plant) was developed in the beginning of the 20th century in order to accommodate Indian workers involved into the construction of New Delhi and the new governmental complex in course of the relocation of India's capital from Kalkutta to Delhi under the rule of the British Empire from 1911 onwards. Old Chandrawal Village is a rather low income neighborhood populated mostly by workers travelling to the centre of Delhi day by day.

Aruna Nagar (the largest block of Majnu Ka Tilla, in the centre, east of the freight train station) was master-planned and built after 1958 in order to relieve the high density in the urban centre of Delhi. Unlike Old Chandrawal Village, Aruna Nagar majorly accommodates middle-income people, has its own commercial facilities and is in a reasonably good structural and technical shape.

New Aruna Nagar, the Tibetan neighborhood (located in the north-east of Majnu Ka Tilla between the motorway and Yamuna river) has gradually grown from 1959 onwards.



1:5,000

figure 2: satellite view Majnu Ka Tilla

Majnu Ka Tilla



Majnu Ka Tilla and its urban surrounding are characterized by very heterogeneous housing developments reaching from extremely dense, slum-like informal settlements to master-planned middle- and high-income estates. There is principally a lot of open and green space between the different housing areas. However, due to the fragmentization of the area through the railway tracks, the freight train station (not being open to public), large streets and even a motorway as well as Yamuna river, the spatial interconnection between the different neighbourhoods in the area - and as result the interaction of its inhabitants - as well as the connection of the residential areas to the surrounding green areas remain very limited.

New Aruna Nagar, the Tibetan neighborhood (in black) is enclosed between the motorway junction in the north, Yamuna river and agricultural wetlands (maintained by Indians from Old Chandrawal Village) in the east, a Sikh temple complex (which is spatially as well as socially completely disconnected from the Tibetan neighborhood in the south) and a six-lane-motorways, only crossable via a single bridge in the north. The interaction between residents of New Aruna Nagar on the one and of Aruna Nagar on the other side of the motorway is, partly caused by the spatial separation, very little.



1:5.000

Majnu Ka Tilla



A metro station (marked in the south-west of the map) is the main infrastructural connection of New Aruna Nagar to the city of Delhi. From there, most Tibetans as well as Indians going to New Aruna Nagar take Bajajs, get dropped off at the west side of the pedestrian bridge, cross it and enter the neighborhood through the main gate leading directly to Temple square. The motorway can not be crossed on foot. The bridge is therefore the major point of connection between New Aruna Nagar and the city of Delhi - and despite its loveless design of iconic value within the Tibetan diaspora in India.

For people leaving New Aruna Nagar towards the city, there are two major exit points: the main gate next to Temple square, forming also the main entrance point, and the corridor between the school complex in the south and the prison site in the north. The latter, however, due to the orientation and the width of the streets is only for leaving the neighborhood.

In the north of New Aruna Nagar, there is a small car park as well as a station for long-distance busses, mainly connecting New Aruna Nagar with the Tibetan settlements in the Himalayan regions, foremost McLeod Ganj in Dharamala, Himachal Pradesh, seat of the CTA and residence of his Holiness the 14th Dalai Lama.



1:5,000

Majnu Ka Tilla



Growth & Density



New Aruna Nagar



New Aruna Nagar is an extremely dense neighborhood. Currently there are around 5,000 permanent residents living in the neighbourhood, plus space in hotels and guesthouses for roughly 2,000 tourists and visitors. (Karma, 2020)

Considering the footprint of 38,925m², this accounts for 128,452 inh/km², calculating only the permanent residents, and for 179,833inh/km², considering also the maximum capacity of visitors that the neighbourhood can handle.

The GSI is at 88.3% the FSI at 357%.

Delhi overall has a density of 11,297 inh/km², however, the calculations for New Aruna Nagar do not take the open spaces and green areas around the neighbourhood into consideration.

figure 3: satellite view of New Aruna Nagar

1:2.000



New Aruna Nagar



1:2,000

This map roughly shows the spread of the neighborhood in 1970. The neighborhood had initially grown around Temple Square next to the bridge and then gradually extended towards all direction.

Back then, Tibetans in exile were not as economically wealthy as they are nowadays, accordingly the residential units were much smaller and more fragmented then they are today. On neither of the sides of the neighborhood, there was a clearly defined border. The bank towards the river in the east side did not exist, neither did the street in the west side have the width as it has today.



New Aruna Nagar



This map roughly shows the spread of the neighborhood today, in 2020.

In the 1970's, the Indian prison (marked in grey, north of the school compound) was built. Back then, it was allocated north of the neighbourhood and therefore spatially didn't conflict with the neighborhood a lot.

In 1982, in course of the Asian games being held in Delhi, the motoway was widened and the bank towards the river was built. About 25% of New Aruna Nagar's population, that obviously had no say in the process, had to be resettled to the land east and north of the prison site, which in exchange for the land lost had been provided to the Tibetan people.

The north half of New Aruna Nagar is therefore more rigidly master-planned and much denser, also concerning the building height.

Since the prison - intrinsically being an isolated object - is now in midst of the Tibetan neighborhood, it strengthens the separation of New Aruna Nagar into two halves, which is already given through the infrastructural configuration - the north half of the block catering more for Tibetans transferring from the Himalayan Tibetan settlements to somewhere else in or outside of India, the south of the neighborhood, catering for visitors, Tibetans as well as Indians, coming from the city of Delhi. The intersection of these two halves of the neighbourhood and the respective groups of people is slightly weak.

1:2.000

Connectivity



New Aruna Nagar



1:2,000

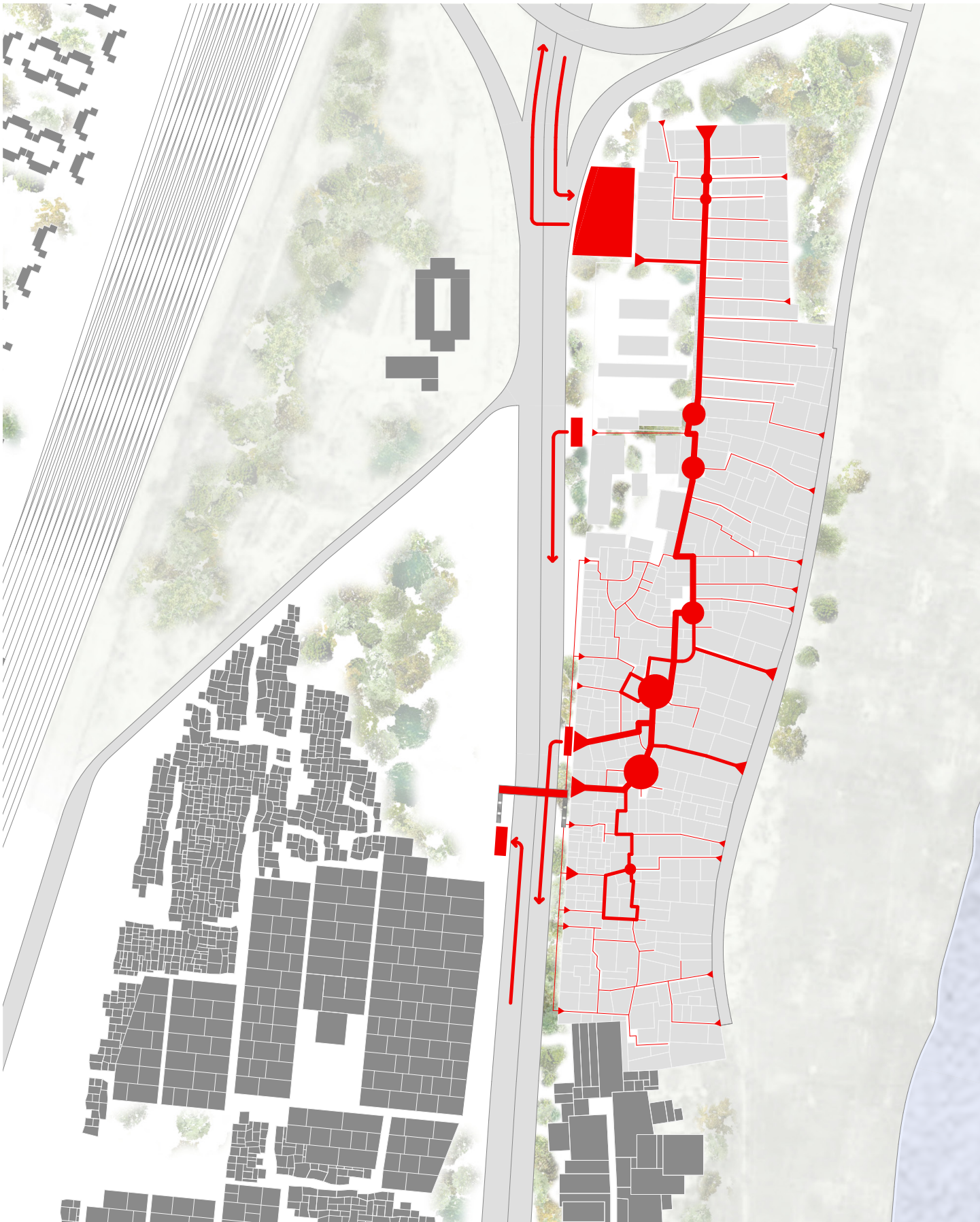


As explained on pages 22/23, there are three main access points to the neighborhood: the bridge leading more or less directly to Temple Square, the corridor between the school compound in the north and the prison site in the south and the car park and bus stop in the very north.

Most access points to the neighborhood appear very uninviting from the outside. Small corridors with little daylight lead from the outside towards the main spine. This gradual development of light and openness of the neighbourhood's spatial configuration to a certain extent correlates with the traditional Tibetan value of introversion and openness towards the inside. However, besides being climatically problematic, it doesn't have a positive impact onto the amount of interaction between the Indians from outside and Tibetans living inside New Aruna Nagar.

Only four of the access points to the neighborhood are open during the night: the three major access points mentioned before, plus the entrance in the very north, where the main spine leads into the park. This gives New Aruna Nagar even more the appearance of a semi-gated, introverted community not aiming for interaction with the outside world.

Network & Urban Fabric



New Aruna Nagar



1:2,000



The street network differs significantly between the gradually grown south and the master-planned north of New Aruna Nagar.

In the south, the street network is largely irregular, consisting of either two, three or four blocks over the width (east-west) of the neighbourhood. Major access points, particularly the one next to the bridge, lead to the small squares within the neighborhood, from there the network further divides.

The irregularity of the network is something we could also observe in the urban network of Lhasa before, not resulting from a lack of a central planning authority, but from allowing only short visual axes, that, subsequently, create a certain level of visual privacy within the urban fabric.

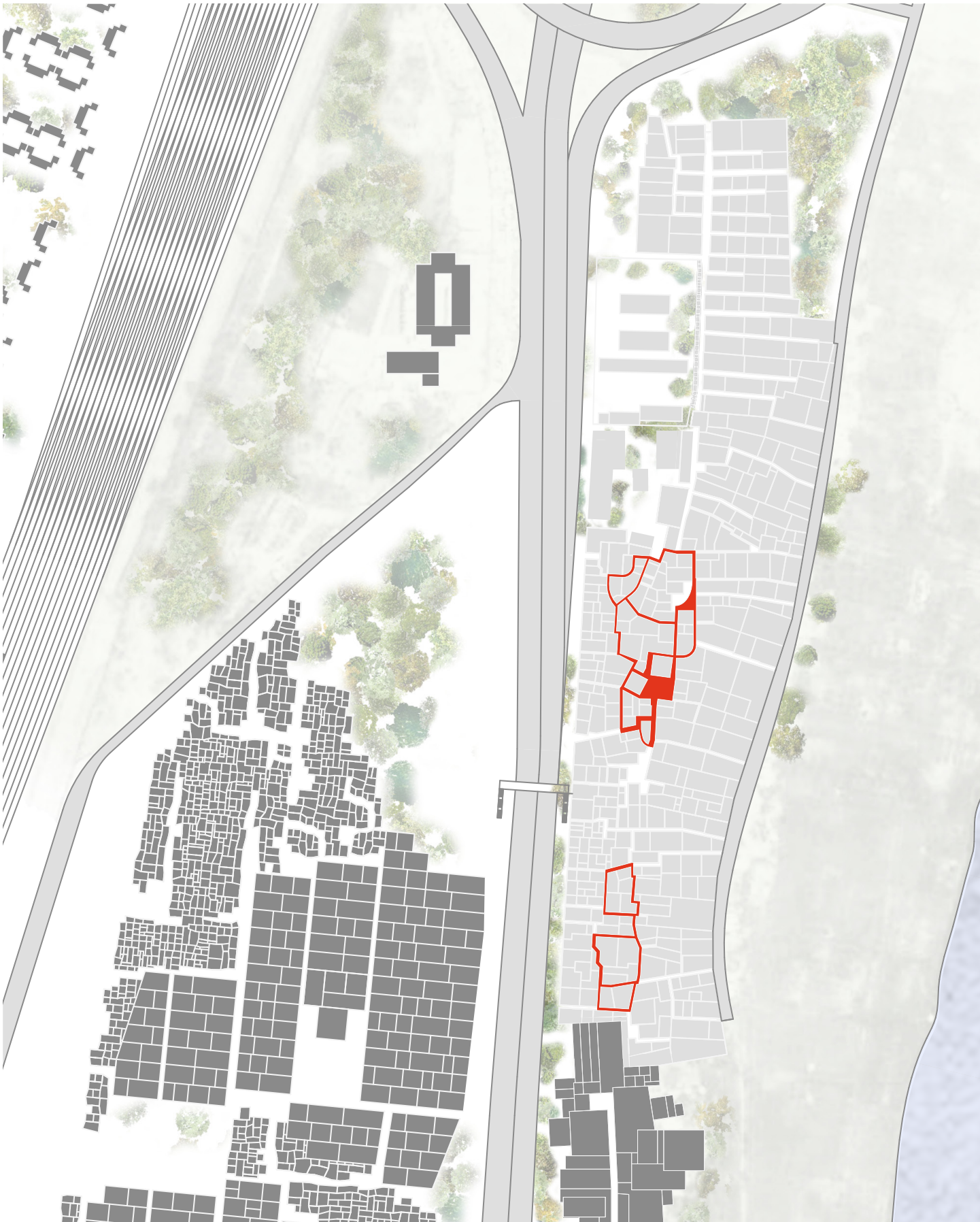
The irregularity and diversity of the build volume, on top of that, also correlates with the social diversity that the New Aruna Nagar's population is characterized by.

The street network within the north half of the neighborhood, however, is entirely oriented towards the one central spine. From this spine, very narrow corridors between the five to seven storey buildings lead to the individual entrances.

As the majority of the corridors are dead-end roads, the inhabitants using these corridors have in many cases privately encroached the space with small shelters, storage spaces and toilet houses. Generally, the dead-end streets are not maintained well and often considered semi-private.

The street network is principally very dense and the houses very high. The width of the main spine varies between three and six metres, the width of the side roads barely exceeds three metres and can go down to 50 centimetres.

In most parts of the neighborhood, the building height varies between four and seven storeys, only in the very south east of New Aruna Nagar, some of the old one- to two-floor houses still exist.



New Aruna Nagar



1:2,000



As identified in Volume I, an urban feature that has been recreated anywhere in the Tibetan diaspora are the circumambulation paths around sacral spaces. Also in New Aruna Nagar, still exist and are still frequented and used by pilgrims as well as the inhabitants of the neighborhood on an everyday base.

However, also this feature is only preserved in the organically-grown south of the New Aruna Nagar and has disappeared in course of the planning of the north.

Public Space



New Aruna Nagar



1:2.000



Temple Square, in the very centre of New Aruna Nagar's gradually developed south half, is the main public space in the neighborhood. It is roughly 100m² in size, faced by two temples and besides that also infrastructurally a major node point in the neighborhood.

All official events are held there. Through a system of loudspeakers, important announcements or prayer sessions can even be acoustically transmitted from the Temple Square to the rest of the neighborhood.

Besides that, within the very dense urban street network, there are no major squares but some niches and pocket space that allow people to decelerate, sit down and interact. The biggest of those is what people in the neighborhood call „Yellow House Square“ (above), faced by some restaurants and the neighbourhood's most renowned guesthouse. However, again, these pocket spaces can solely be found in the south of the neighborhood.

In the north half, shops and restaurants are mostly located on the main spine, but there is no space to rest and stay, not space to interact.



New Aruna Nagar



1:2,000

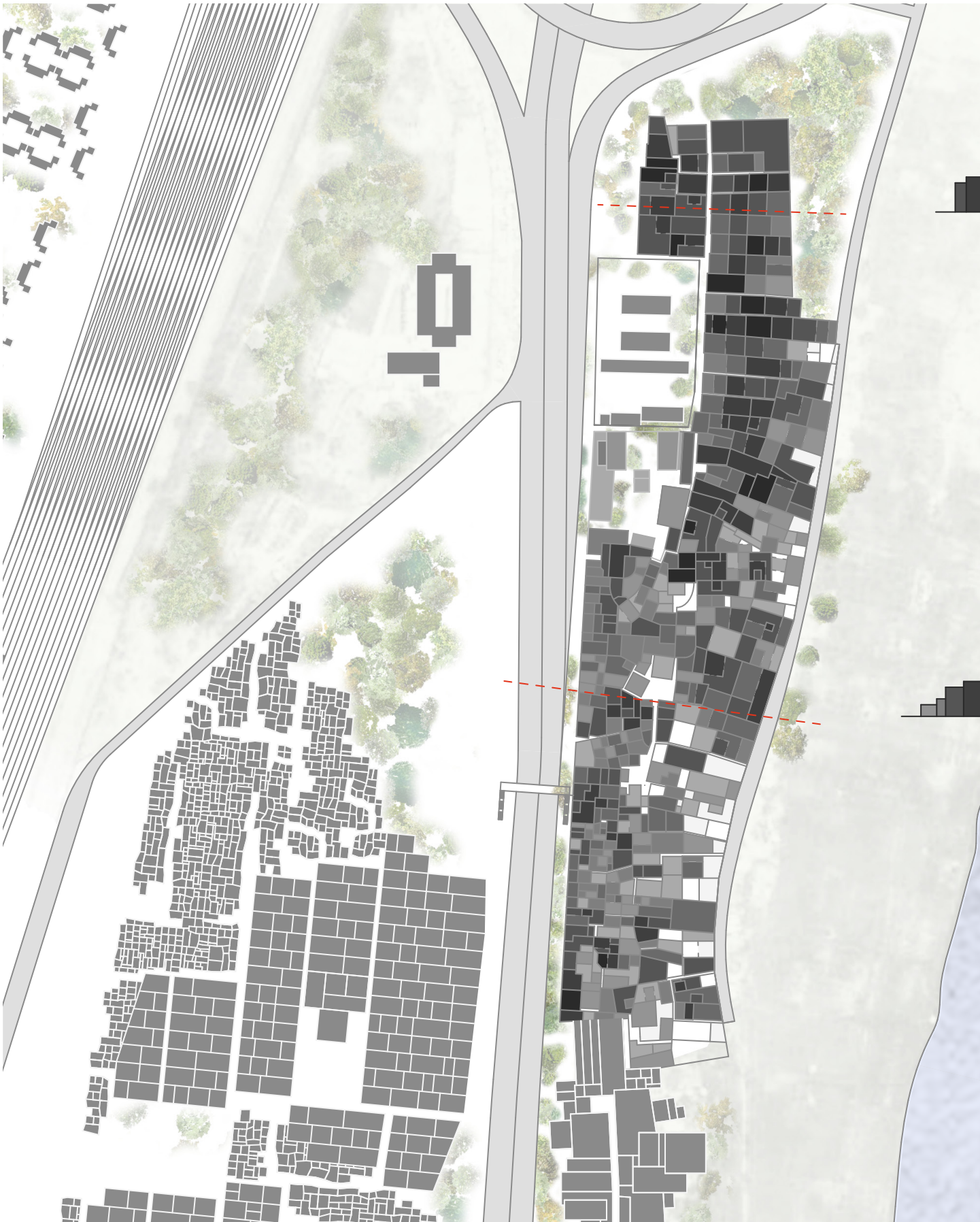


Besides the few public spaces within the urban fabric of New Aruna Nagar, there are two main areas that serve for people to interact: The park in between the neighbourhood and the motorway intersection in the north and some spots on the river bank in the east.

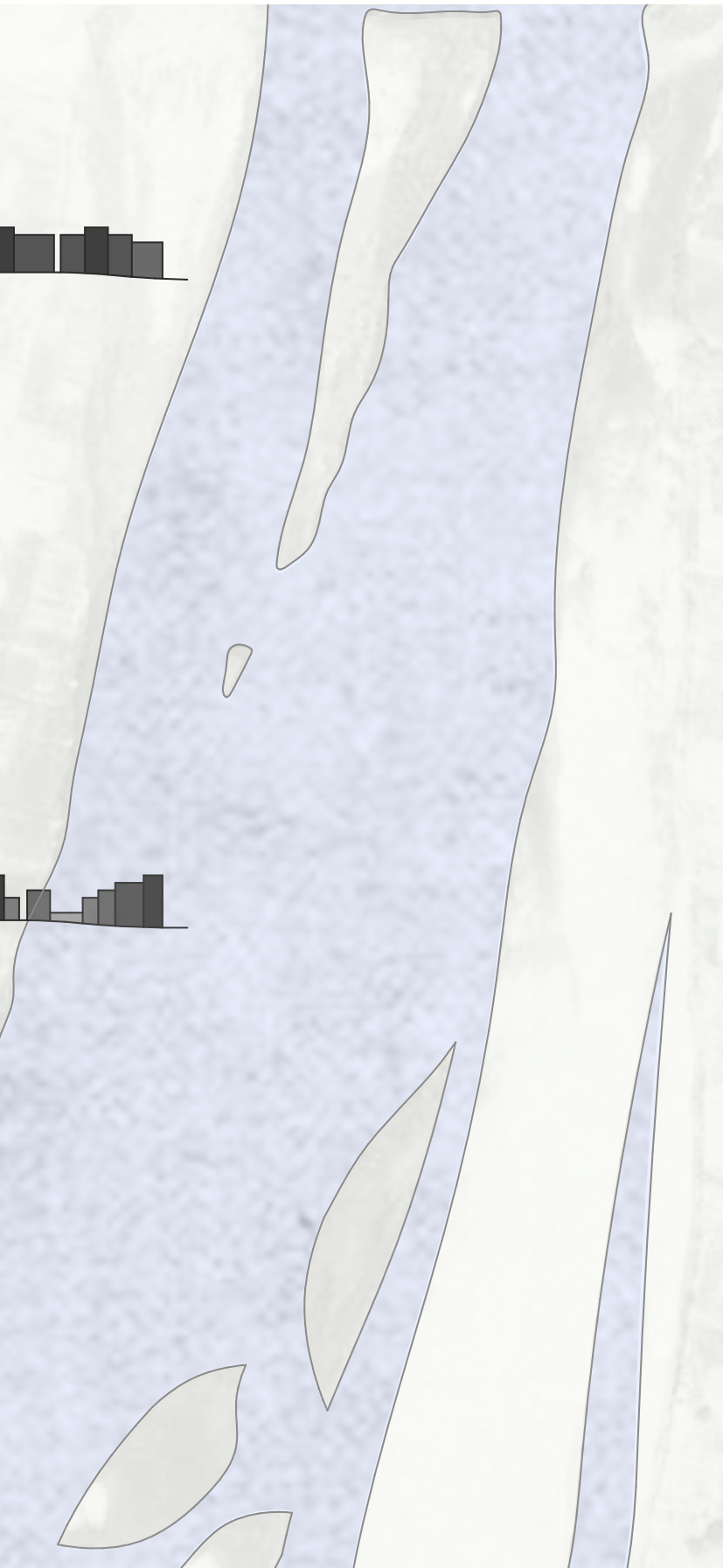
The park in the north is partly reasonably well maintained, especially those areas that connect the neighborhood with the bust stop. However, in large parts - the north east and the east - it is a big garbage dump. Principally, the park is not as frequented as the density of the neighborhood would suggest it.

The seating areas on the river bank in the east are mostly used by restaurants and hotels facing the river and especially busy at night.

Daylight, Natural Ventilation & Fire Risk



New Aruna Nagar



The extreme density of the neighborhood causes major problems concerning daylight, natural ventilation and the fire risk in the neighborhood.

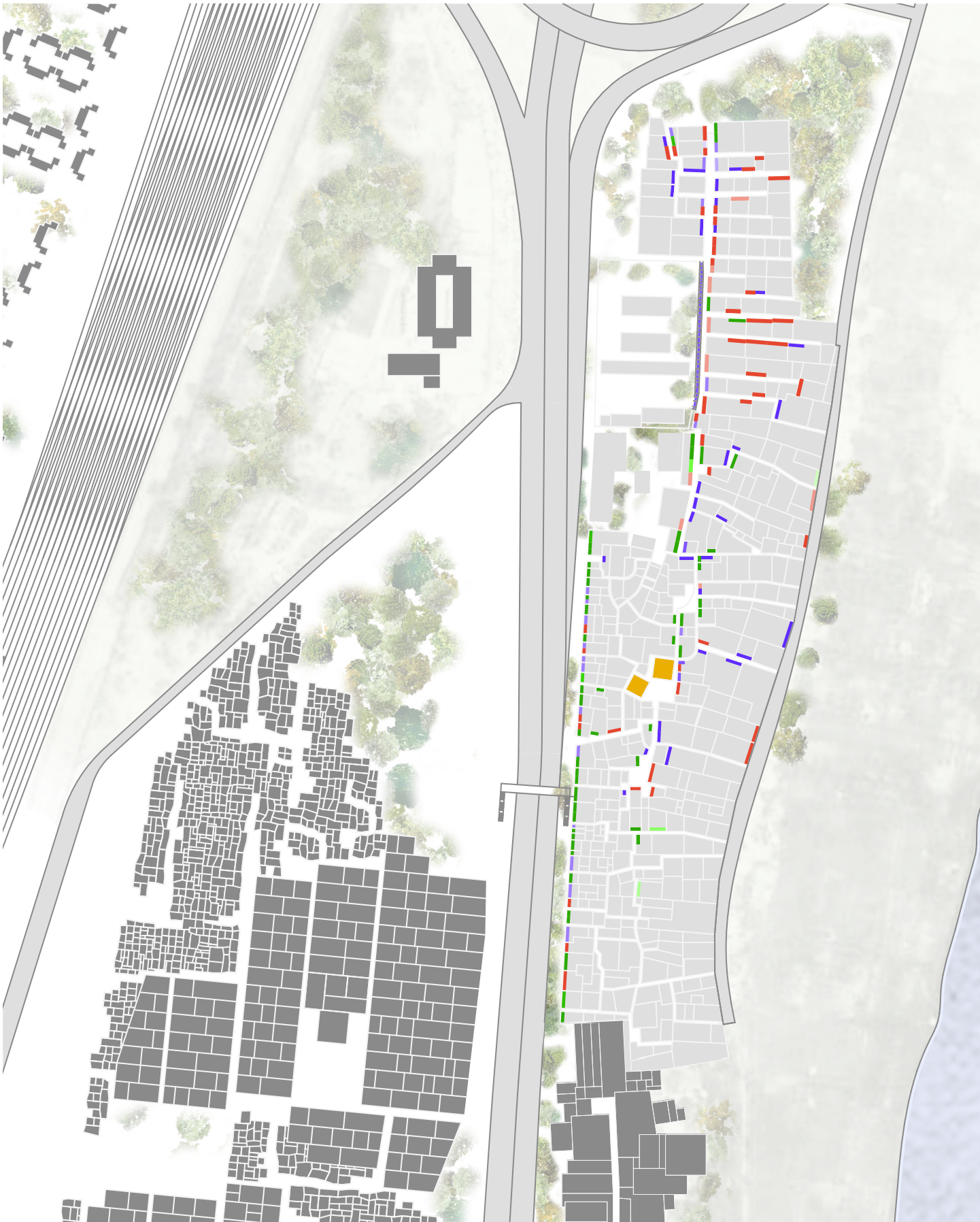
Mutual shading is important concerning the climatical conditions in Delhi, direct sunlight should be avoided. However, most of the rooms in New Aruna Nagar's buildings are dependent on artificial lightning due to their extreme proximity to the neighbouring buildings.

Also concerning the ventilation of the buildings, the urban network is too dense. Most rooms within the buildings, particularly the kitchens and bathrooms, do have direct access to the outside, however, due to the extreme proximity of the buildings, the air can not fluctuate quickly enough anymore and becomes very stifling. As result, many people install air-condition systems on the outside walls of their buildings, which then again negatively affects the amount of daylight as well as the air quality in the streets.

Third, the extreme density in the neighbourhood also affects the fire danger. None of the streets is wide enough to protect from fire flashing over, none of the walls between the buildings are fireproof. There is no system of hydrants on the neighborhood.

1:2.000

Functions



New Aruna Nagar



The commercial activities in the neighborhood can be classified into three sectors:

Food and gastronomy:

A big part of the commercial activities in the neighborhood consists in restaurants and cafés - which is interesting in a way that gastronomy or even any kind of street food traditionally had barely existed in Tibet before 1959. Due to the lack of public open space, however, all restaurants and cafes are inside and have no outside seating areas or terrasses. This impedes a degree of social interaction within the gastronomy sector that could easily stimulate a nice atmosphere within the neighbourhood.

Tourism-related businesses:

Hotels and guesthouses in the neighborhood accounts for more than ten percent of the entire floor area. Besides that, there are several travel agencies, tourist shops or money exchange places.

Inhabitant's facilities:

Those businesses that actually serve New Aruna Nagar's inhabitant's needs, only account for a small part of the commercial facilities. There are all kinds of stores and shops, banks, barbers, art galleries, pharmacies, carpenters, gaming halls or spas. However, the majority of these facilities don't serve any kind of interaction between people, such as for example cultural institutions or libraries would.

- restaurant
- café
- guesthouse
- travel agency
- tourist shop
- money exchange
- shop
- bank
- barber
- art gallery
- pharmacy
- carpenter
- gaming hall
- spa

1:2.000

Legal Circumstances

The Legal Circumstances for the Diasporic Community in New Aruna Nagar form a major problem concerning the neighbourhood's maintenance and its spatial development over time.

Since the neighbourhood has developed in the 1960's, it has never been legalized. The Indian government tolerates the Tibetan exile community on the lands and even provided new lands to those people evicted in course of the construction of the river bank and the widening of the motorway in 1982. Nevertheless, neither does the land that New Aruna Nagar is built on belong to the CTA or even the people privately, nor are any commercial activities on the area registered or officially legalized.

Besides the unclear situation of ownership in New Aruna Nagar, there is also nothing such as security of tenure or even a land trust community.

As result, the neighbourhood's inhabitants only take very limited responsibilities concerning the maintenance of the neighbourhood. Any investment could be declared worthless by the Indian government, and without any legal security for the people. People that inherited buildings or financed its constructions do not see a security in that, as noone owns the land and therefore has the right to properly „own a building“. Accordingly, people can not take loans on buildings and further invest.

Same counts for commercial activities. Any shop or business could be worthless once the space is asked back by the Indian government. Therefore, business owners do not dare to further invest, there is no legal security.

Inofficially, the RWA (Resident's Welfare Association) administrates the neighborhood, mediates between New Aruna Nagar's inhabitants and for example takes the responsibility for distributing and trading the land in the neighborhood. However, the RWA is not an official legal instance, and has no official political power.

The struggle of the Indian governments to legalize the neighbourhood on the one hand derives from the UN's refusal to grant Tibetans the status as official refugees. Thus, the legalisation of New Arunua Nagar and its inhabitants as land owners and shop owners would imply to conditionlessly grant Tibetans Indian citizenship. Secondly, the Chinese government increasingly exerts pressure on the Indian government and any bilateral agreement comes with many strings concerning the treatment of the Tibetan diaspora attached. Recently, Tibetan yearly events that have legally taken place have been forbidden without any official reason.

UN High Commissioner for Refugees:
does not grant Tibetans refugee status



Chinese Communist Party:
puts political pressure on India



Indian government:
does not legalize New Aruna Nagar
does not legalize Tibetan' businesses
forbids Tibetan official events



Central Tibetan Administration:
legal affairs within the Tibetan diaspora
financial capacity
responsible for education



Resident's Welfare Association:
in close contact with NAN's inhabitants
mediation between different parties
no legal or political rights

NGO's
interested in having a
say in any kind of
political decisions

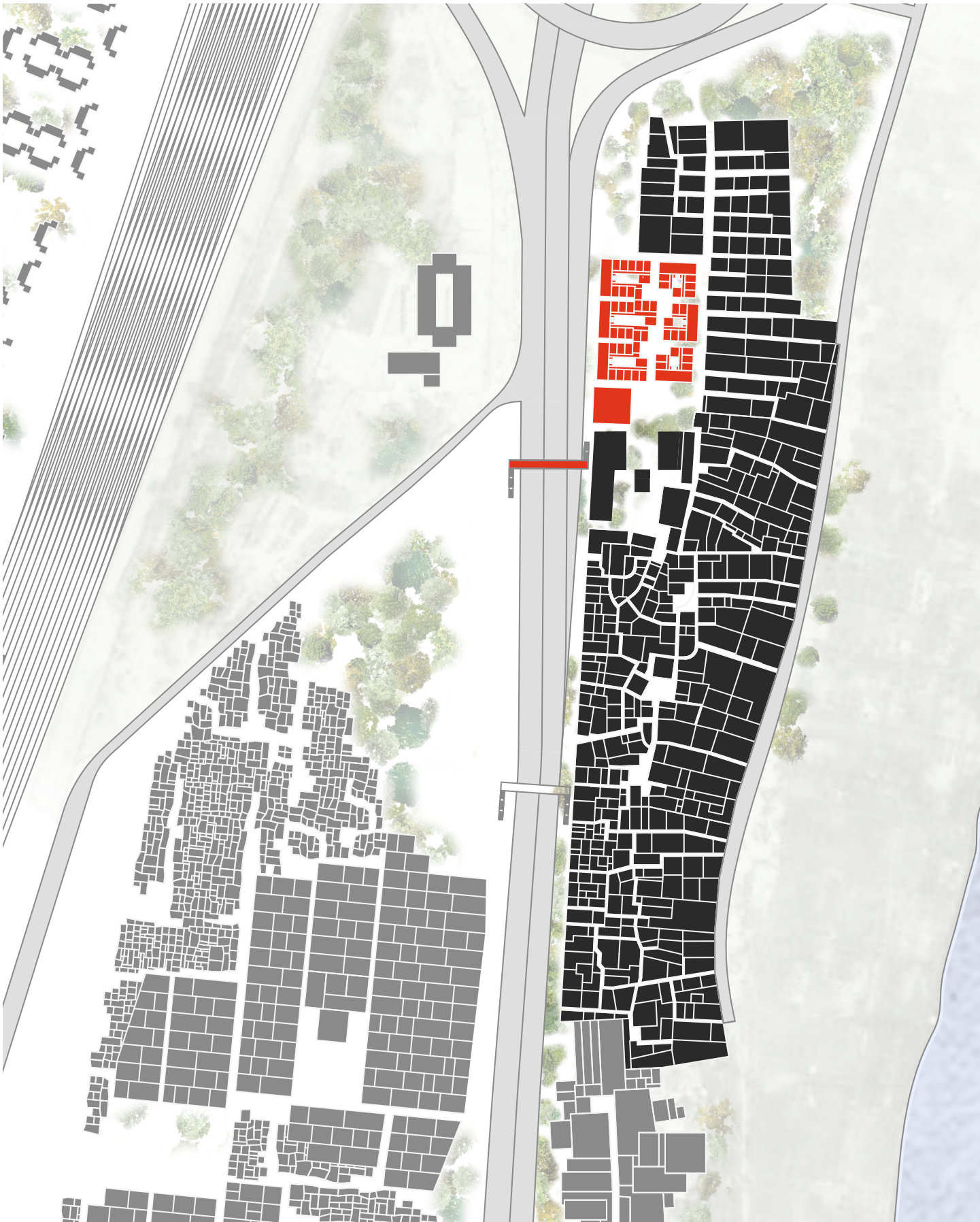


business owners:
interested in
legalization of
commercial activities

residents:

want New Aruna Nagar to be a place worth living
seek for more interaction with Indians
modern , westernized vs. traditional values

Proposal



New Aruna Nagar



1:2,000

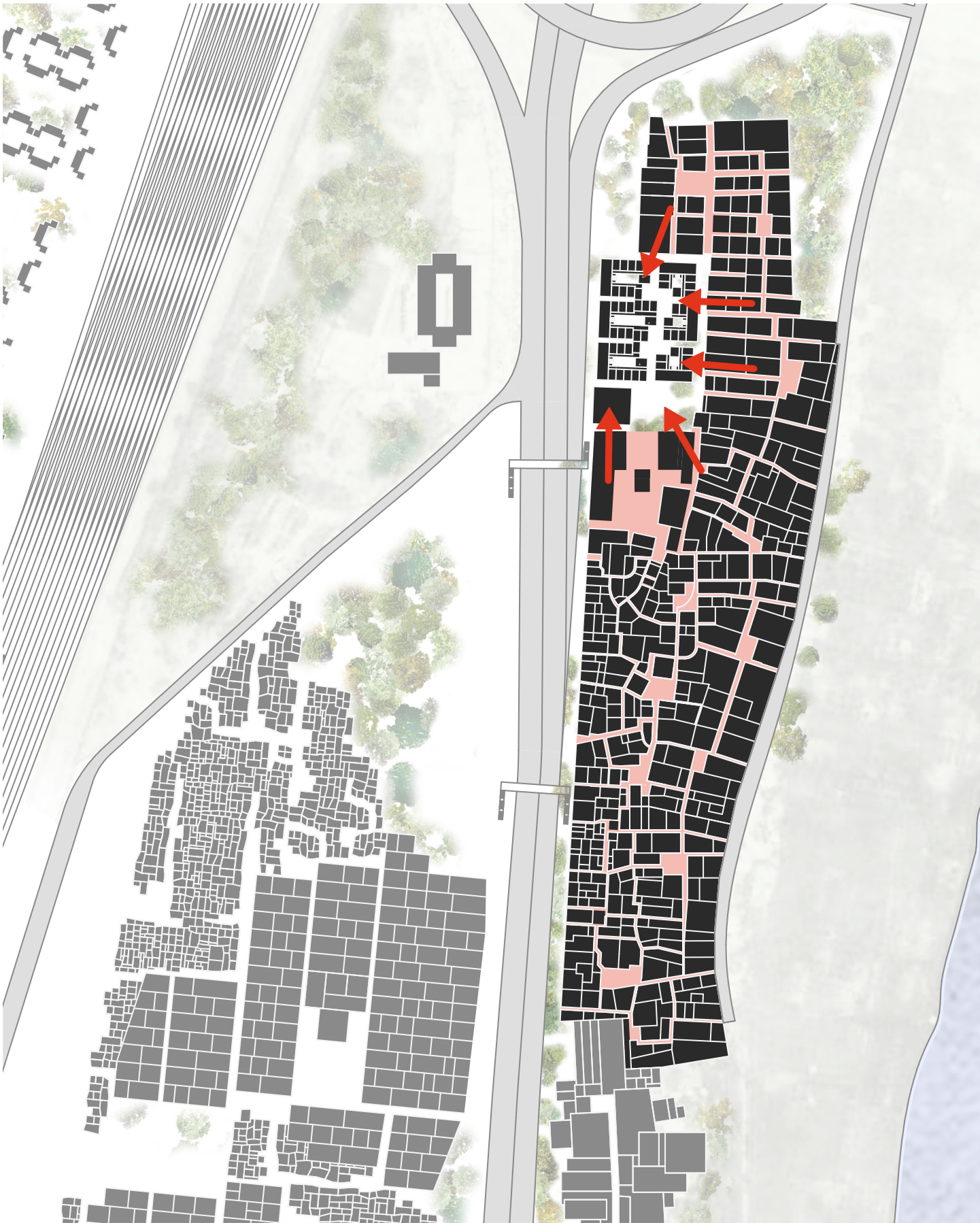
1st step:
A New Residential Block -
Integrated Living

As first step, a new residential block shall be developed on the former site of the prison. The residential block will provide space for almost 400 people.

Foremost, those people evicted in the course of the urban upgrading (roughly 190) shall be accommodated in the new residential block. Besides that, voluntary movers within New Aruna Nagar, as well as newcomers to the neighbourhood, could find space to live here.

2nd step:
Urban Strategy -
A Structural Upgrade of the Existing Neighbourhood

3rd step:
Secular Public Facilities -
A Library and Cultural Space



New Aruna Nagar



1st step:
A New Residential Block -
Integrated Living

2nd step:
Urban Strategy -
A Structural Upgrade of the Existing Neighbourhood

As second step, the structure of the existing street network, as well as its points of contact to the outside should be improved.

This shall not happen by forced eviction but instead by incentivisation through financial aid improved living conditions in the New Residential Block.

3rd step:
Secular Public Facilities -
A Library and Cultural Space

1:2.000



New Aruna Nagar



1st step:
A New Residential Block -
Integrated Living

2nd step:
Urban Strategy -
A Structural Upgrade of the Existing Neighbourhood

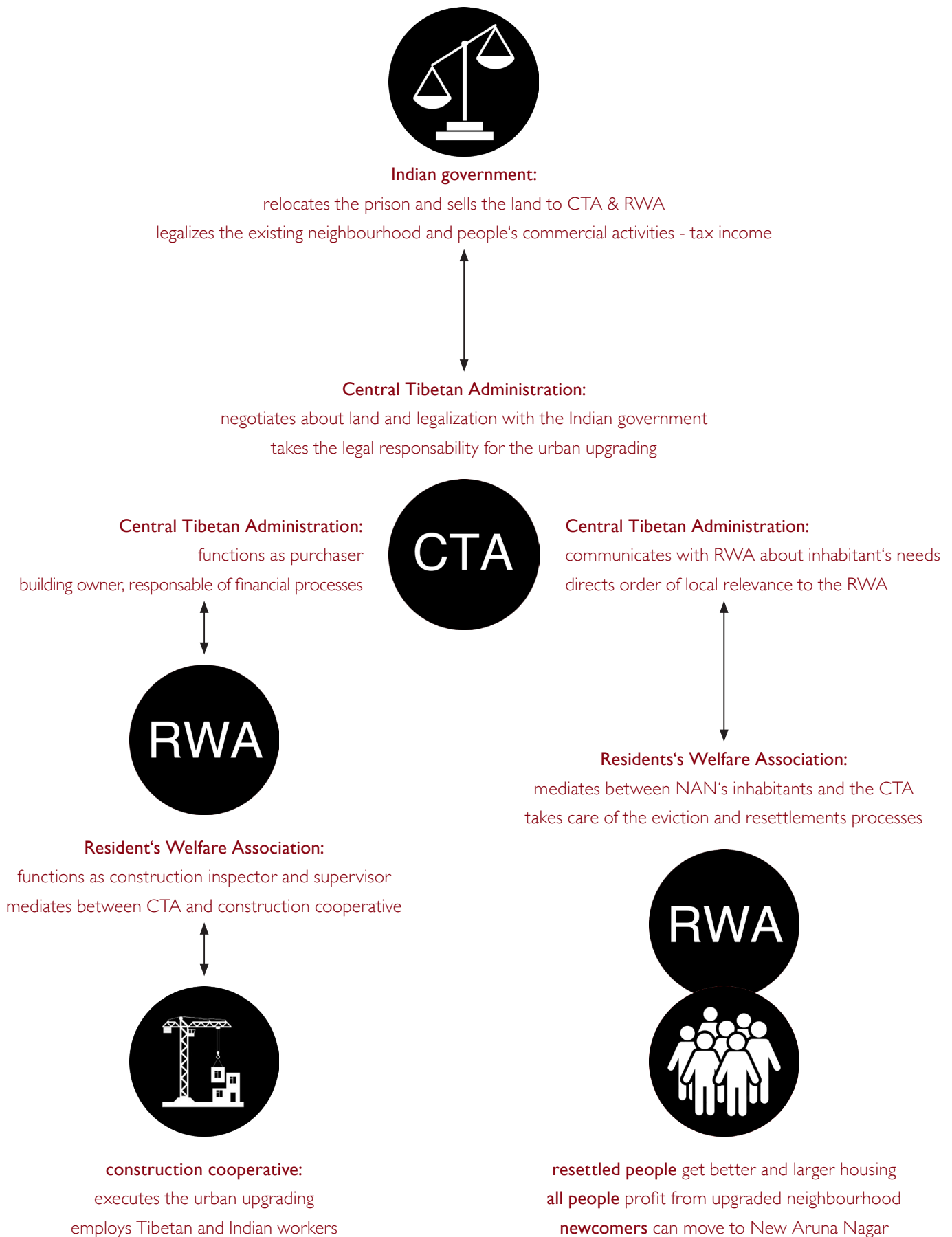
3rd step:
Secular Public Facilities -
A Library and Cultural Space

As third step, decentral secular public facilities should be allocated within the neighbourhood.

A major problem in the New Aruna Nagar is the lack of space for people to meet, decelerate and interact. Besides that, the lack of knowledge about each other creates a big imbalance between Tibetans and Indians as well as within the Tibetan diasporic community. Therefore, as an example of such a secular public facility, I designed a library and cultural space next to the New Residential Neighbourhood.

1:2.000

Stakeholders





Resident's Welfare Association:

in close contact with NAN's inhabitants
mediation between different parties, brings people's ideas together
no legal or political rights



business owners:

have the chance to legalize their businesses
get more and better space for businesses
benefit from more public activities in the neighbourhood



NGO's:

can get involved into the planning processes of the urban development
benefit from more public activities in the neighbourhood



traditional, larger families with grandparents:

benefit from urban upgrading and culturally as well as climatically more suitable flats



average families:

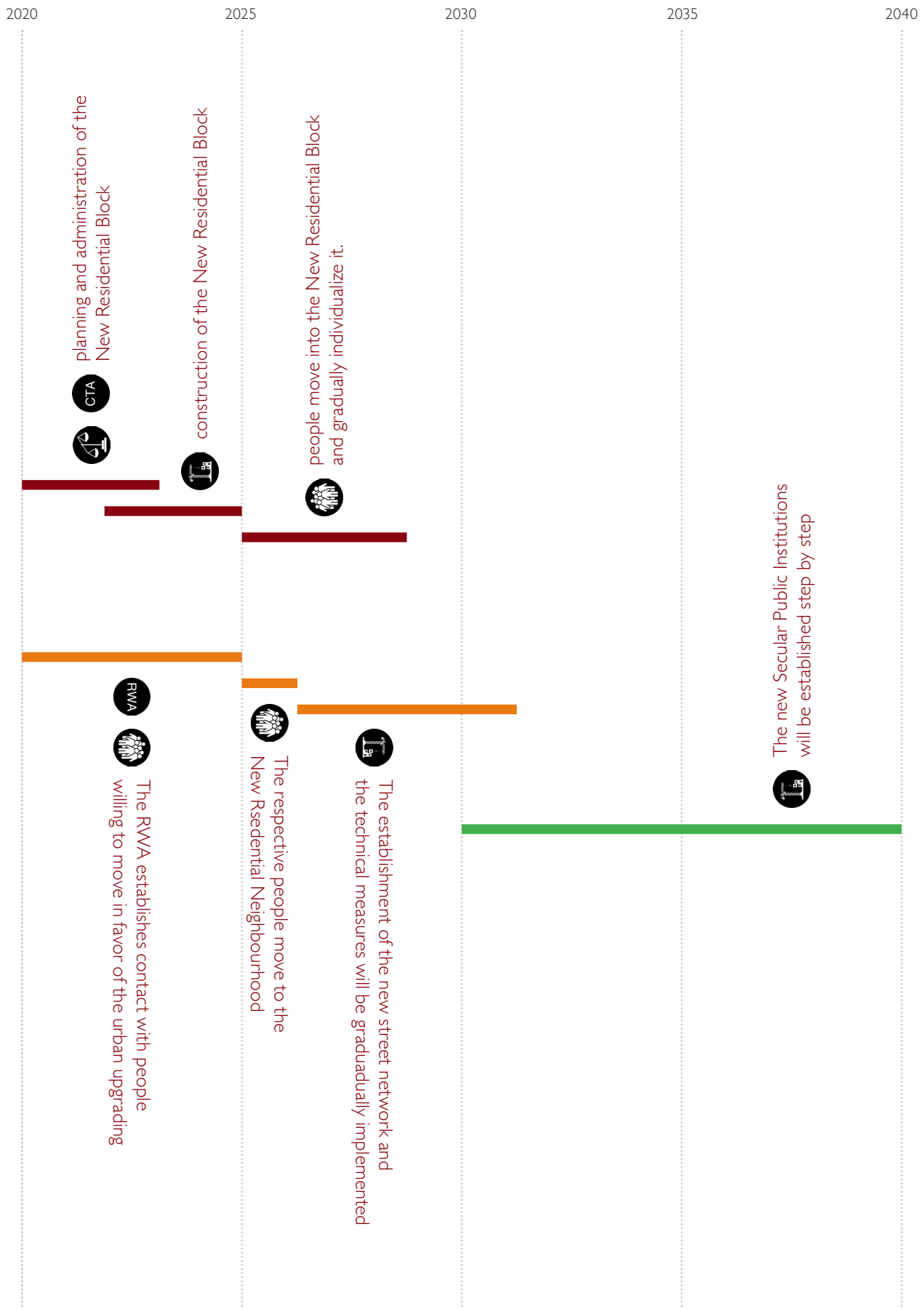
benefit from urban upgrading and culturally as well as climatically more suitable flats



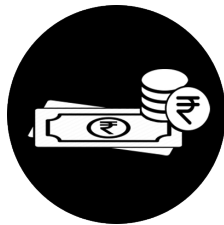
- single people - youth hostel culture:

isolated communities of young Tibetans living next to Indian cities to study or work
get space to integrate with Indians and other Tibetan communities

Timeline



Financial Model



price for the site

landprice in Majnu Ka Tilla:

5,000 Rs - 10,000 Rs / m²

prison site:

4,424 m²

estimated price for the prison site:

33,180,000 Rs

(average from ramcocements.in, naredco.in, indiaraestateforum.com)

price for construction

building cost (average quality housing):

12,000 Rs / m²

built area on the prison site:

10,248 m²

estimated building cost:

122,976,000 Rs

(average from naredco.in, ramcocements.in, makaan.in)

total price of new residential neighborhood:

156,156,000 Rs

price for urban renewal

demolition of 1,500 m²:

36,000,000 Rs

build 4 - 5 public amenities

60,000,000 Rs

	people	urban area	built area	floor area	urban density	floor area pp
New Aruna Nagar:	5000	38,925 m ²	34,387 m ² GSI: 88.3%	138,962,25 m ² FSI: 357% (excluding commercial spaces)	1,285 ppl / ha	19,85 m ²
eviction: (urban upgrading)	192		1,500 m ²	3,750m ²		
neighbourhood: (prison site)	386	3,058m ²	2,535 m ² GSI: 82.9%	9,198m ² 301% (+1,050m ² access)	1,262 ppl / ha	23,8 m ²

After the relocation of those people evicted in course of the urban upgrading, there is space for approximately 194 people left, equalling roughly 4575 m².

rental price for middle income apartments in Majnu Ka Tilla: 250 Rs / m² / month

(makaan.in, 99acres.com, housing.com)

possible monthly rental income:

1,143,750 Rs

...after 17,5 years, the CTA would benefit from rental incomes.

selling price for middle income apartments in Majnu Ka Tilla: 140.000 Rs / m²

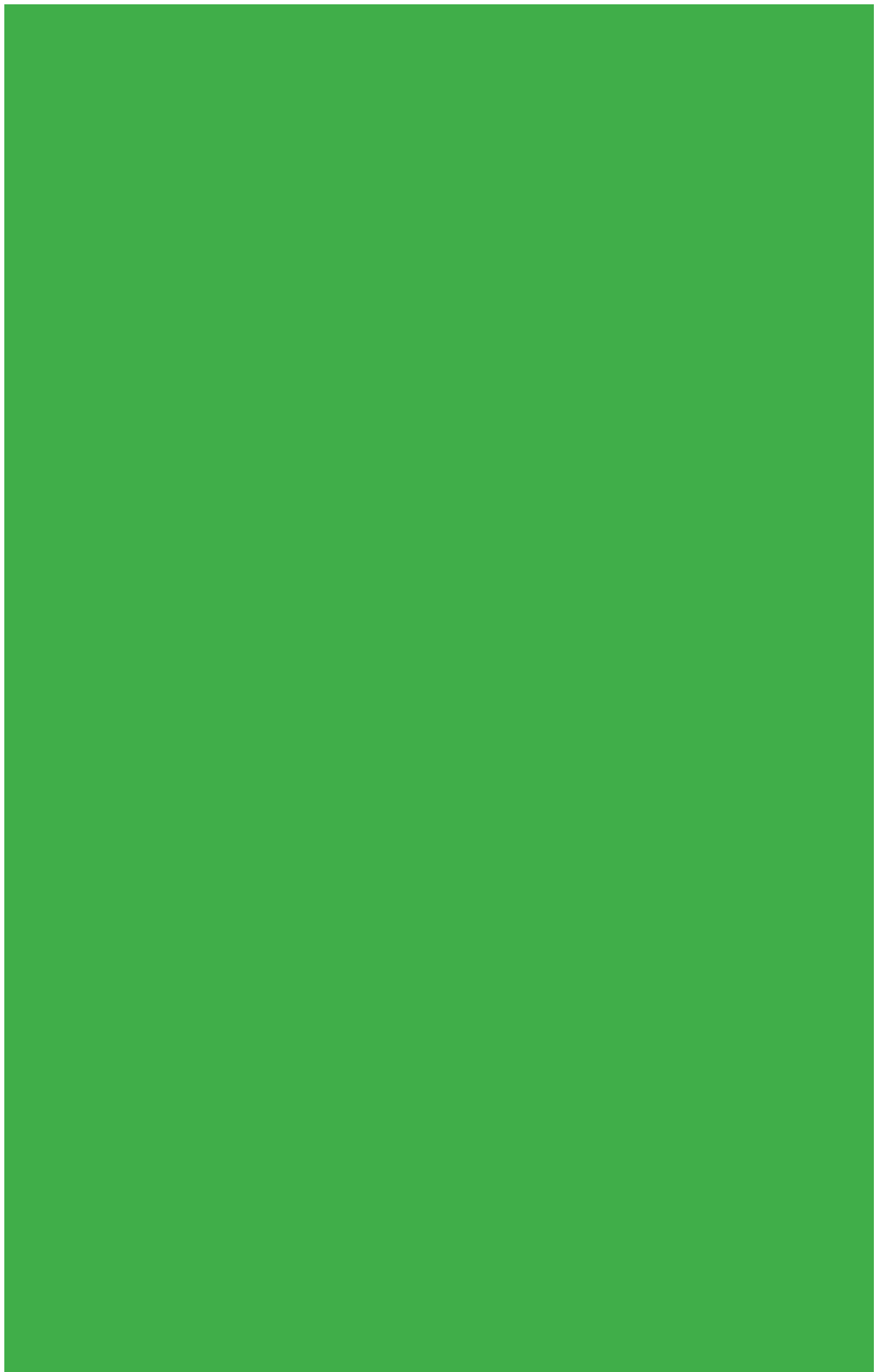
(makaan.in, 99acres.com, housing.com)

possible turnover:

640,500,000 Rs

...388,344,000 would remain as income for the CTA.

Concerning the intended mixture of rental and selling within the New Residential Block, due to the unknown ratio of required family units and single units for the evicted people, the exact number can not be further determined but will lie in between the rental and the selling model.

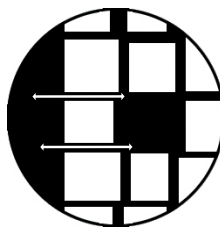
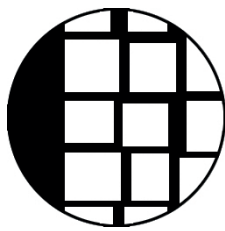


Urban Strategy

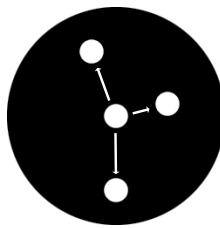
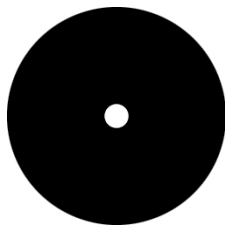
A Structural Upgrade of the Existing Neighbourhood



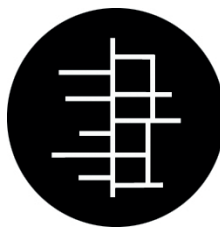
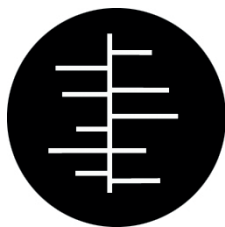
Further access points to New Aruna Nagar in order to stimulate better integration with Delhi



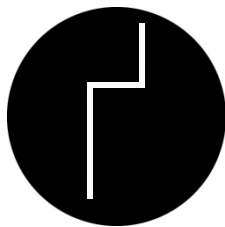
New access points leading onto public spaces that don't affect the introverted appearance of NAN but preserve privacy within the blocks



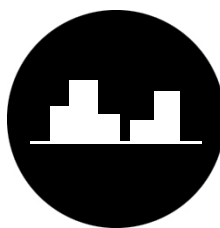
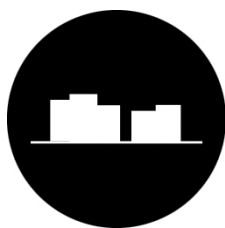
Decentralization of points of interest to equally upgrade all areas of New Aruna Nagar



Circumambulation paths for religious practice and loops to upgrade the dead-end streets

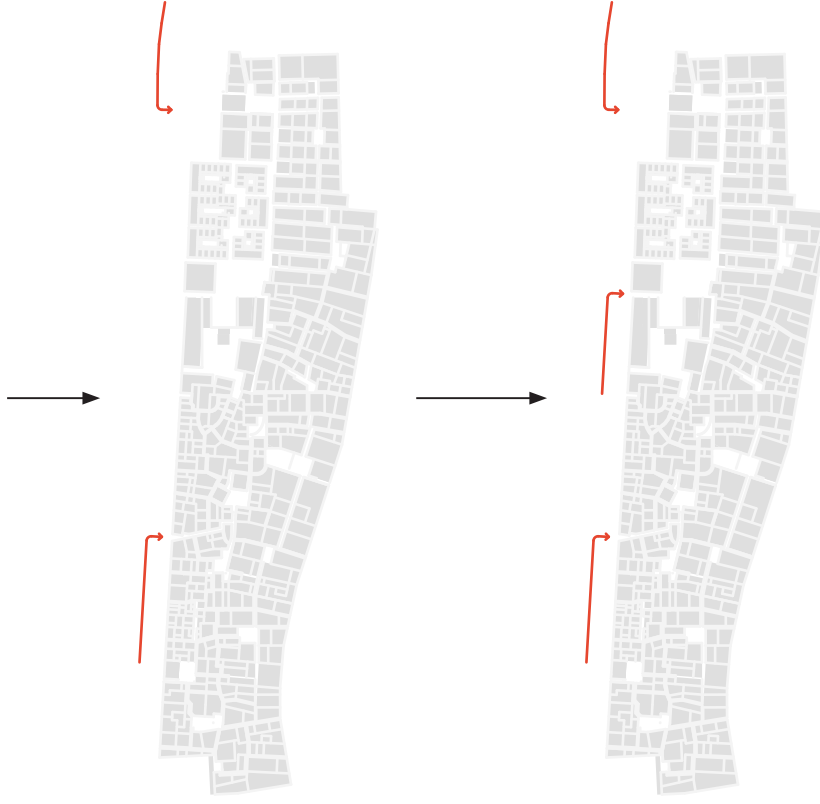
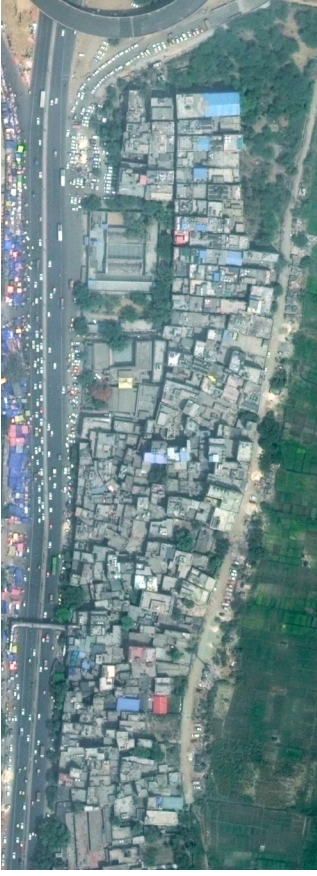


Pocket spaces, interactive public areas to rest and decelerate



More extreme height development to achieve better natural ventilation, daylight distribution and create more private outside spaces for people

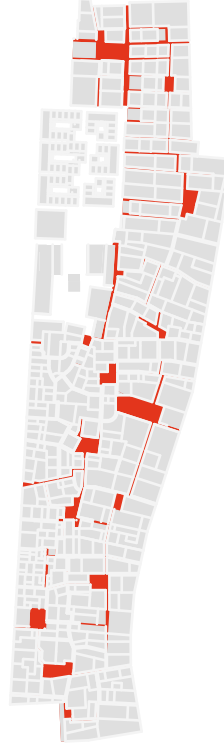
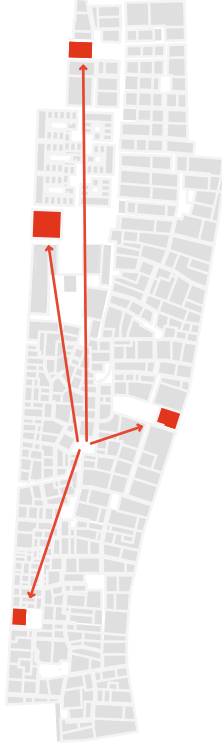
sattelite image of New Aruna Nagar, 2018



current situation of access point to New Aruna Nagar:
People from Delhi can solely access New Aruna Nagar via the bridge in the south.
The bus stop in the north connects New Aruna Nagar
with the Himalayan Tibetan settlements.

A second acces point - another bridge - shall be established between
the school and the New Residential Block on the former prison site
in order to open up more towards Delhi and to balance
the points of acces more equally within the neighbourhood.

Points of interest shall be allocated decentrally throughout the neighbourhood, especially to locations that are yet less frequented.



circumambulation paths for religious practice and loops to upgrade the dead-end streets, as well as pocket spaces as interactive public areas will be carved into the existing urban fabric.

A more extreme height development shall be triggered by offering benefits to achieve better natural ventilation, daylight distribution and create more private outside spaces for people.



New Aruna Nagar



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In course of the structural upgrade of the existing neighbourhood, it shall be better connected to the centre of Delhi. A second bridge will lead to the access point between the school compound and the New Residential Block.

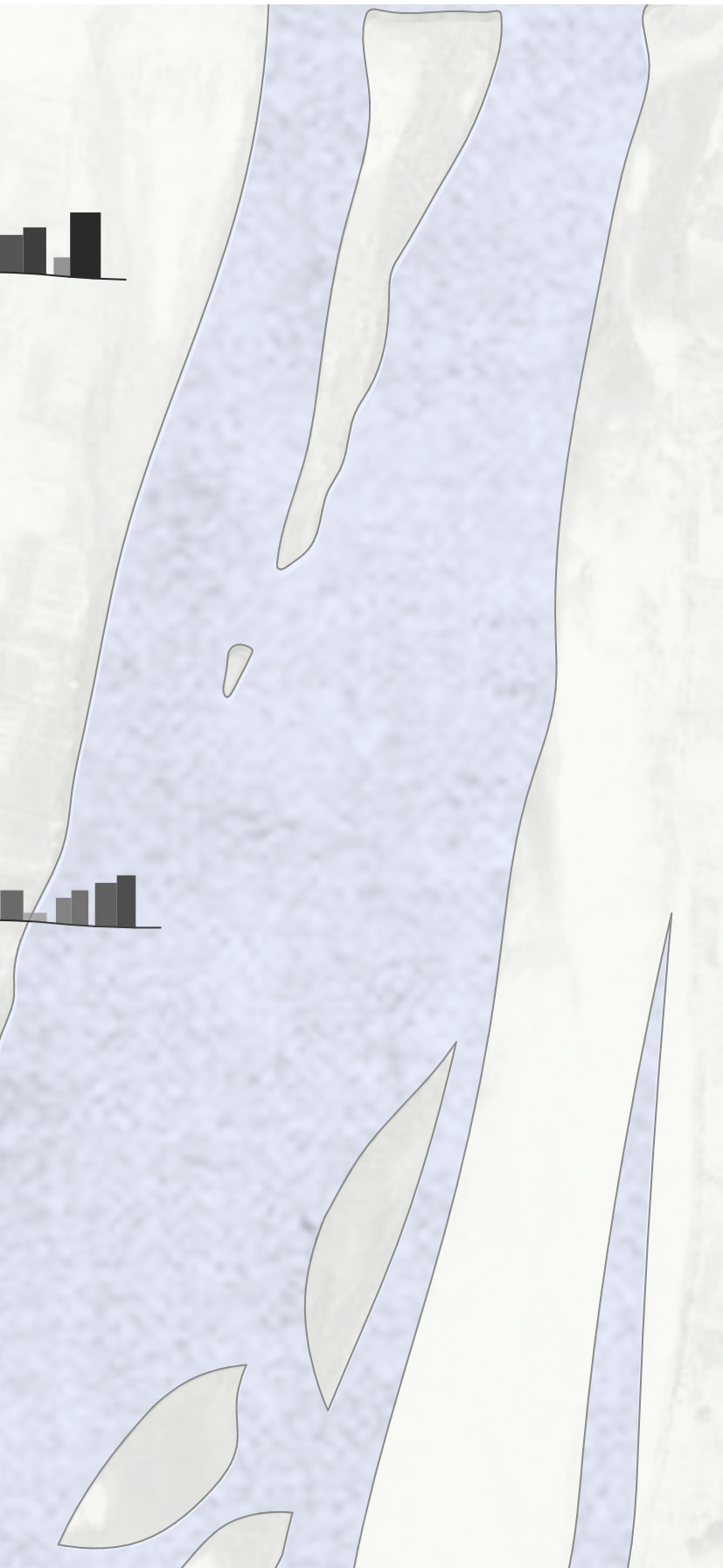
The street network inside the neighbourhood shall be extended to facilitate the traditional habit of circumambulation around sacral spaces as well as to upgrade the dead-end street in the north of New Aruna Nagar and vitalize them.

The new Secular Public Facilities are allocated throughout the neighbourhood in order to vitalize all the areas of New Aruna Nagar. Squares in front of these serve as access points to the neighbourhoods and as infrastructural nodes.

Small pocket spaces to decelerate and rest shall interrupt the narrow street network. These spaces also stimulate better ventilation within the neighbourhood.



New Aruna Nagar



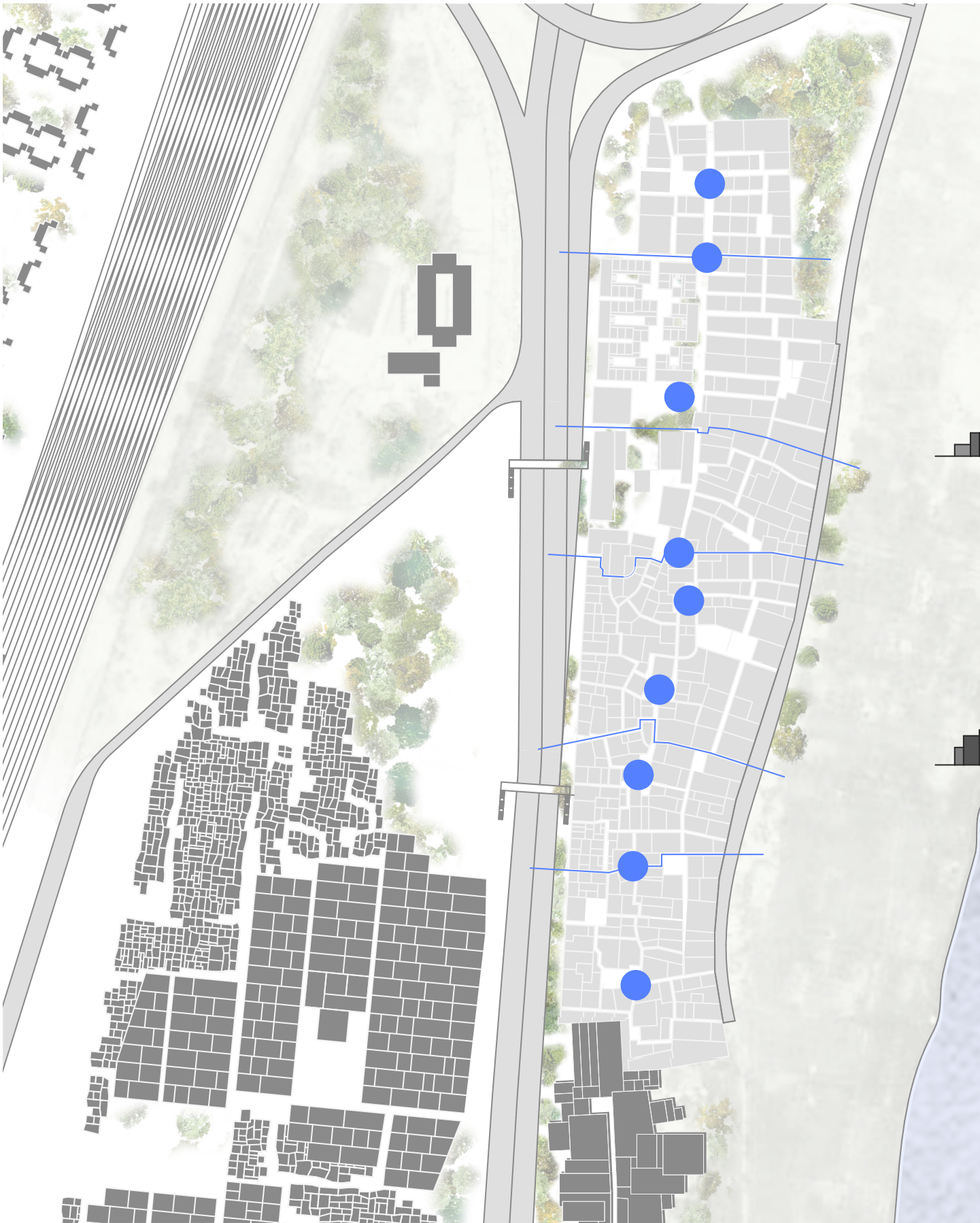
Concerning the height development within the neighbourhood, a more extreme and varied height development of the neighbourhood - thus more height variation between the buildings - would preserve the advantage of the buildings mutually shading each other from direct sunlight, however, would also allow more indirect daylight into the rooms to minimize peoples dependence on electric light.

Besides that, air could fluctuate more quickly in between the buildings, the neighbourhood would become less stiffly. Consequently, the dependence on air-conditioning systems would shrink, which then again positively affects the climate within the neighbourhood.

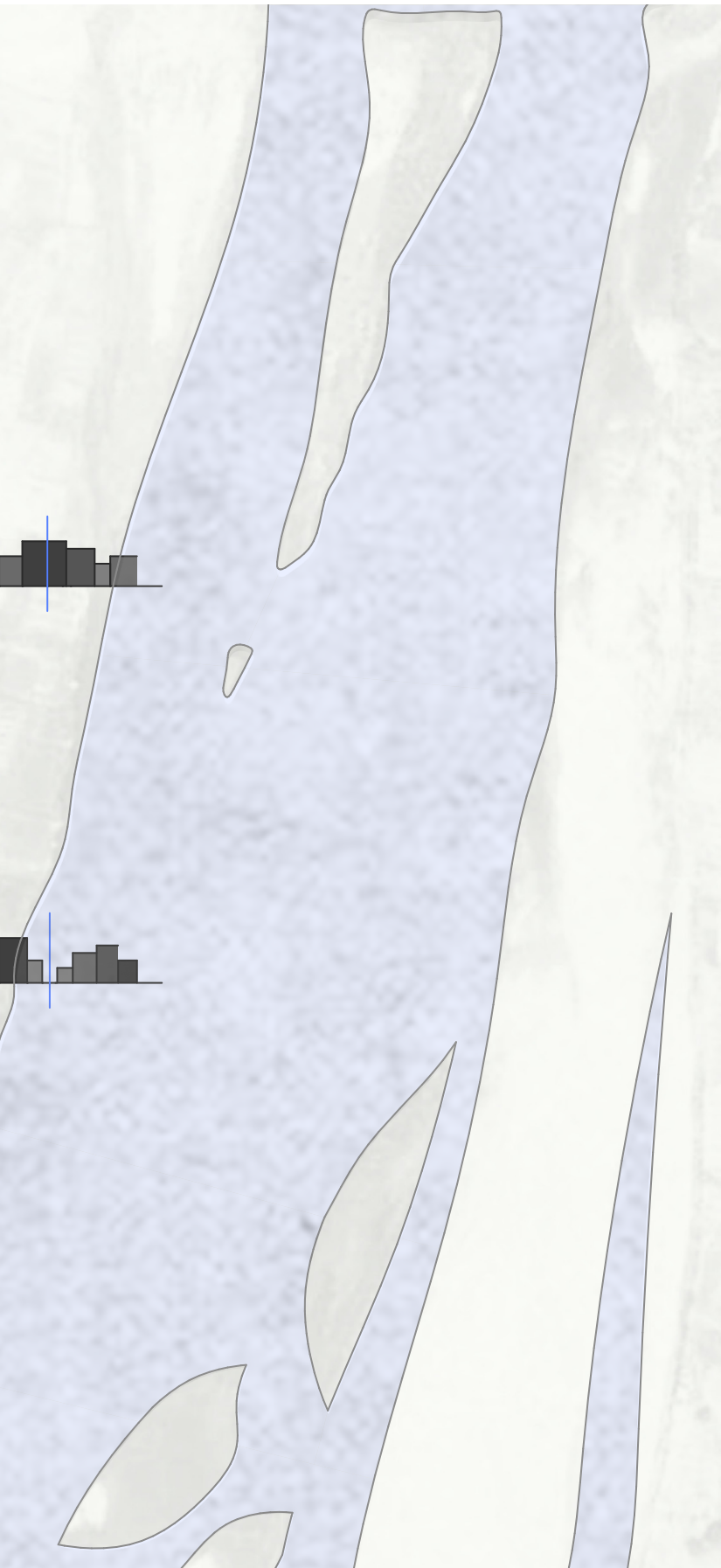
Besides technical aspects, more height variation between the buildings would allow the inhabitants to have more private outside space - something that has been recreated in most places within the Tibetan diaspora, but, due to the spatial density, not in New Aruna Nagar so far.

All those changes should, as explained above, be stimulated through incentives rather than enforced and will therefore gradually develop.

1:2.000



New Aruna Nagar



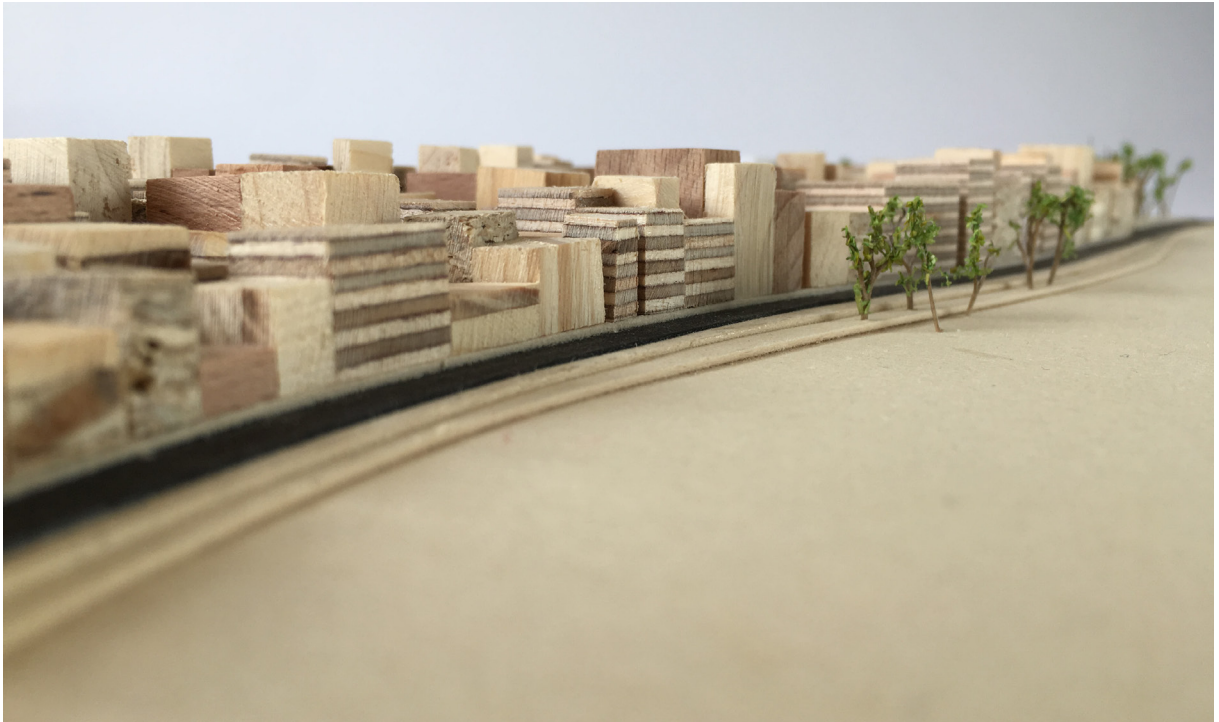
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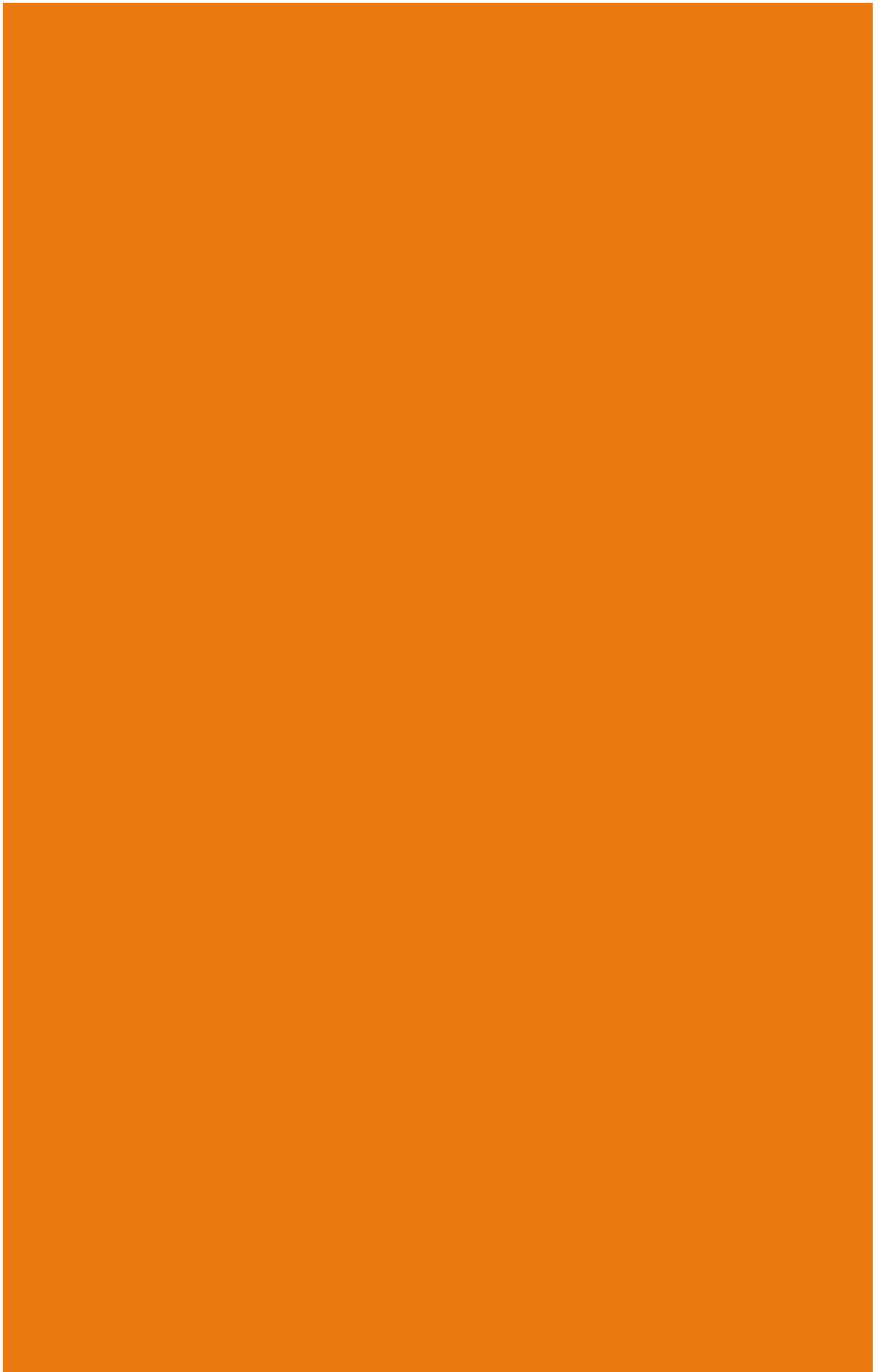
More fire safety in the neighbourhood shall be guaranteed by two measures:

First, New Aruna Nagar shall be divided into six blocks that are isolated from the other blocks either through fire protection walls or through streets in between, that are wide enough to prevent from fire flashing over. Over time, the amount of these blocks could be increased, the network of fire protection walls and fire protection streets densified.

As second step, a network of hydrants has to be established in New Aruna Nagar. As the neighbourhood is far too dense to let any fire brigade car in, this network has to be dense enough to reach every building in the neighbourhood with enough water pressure.





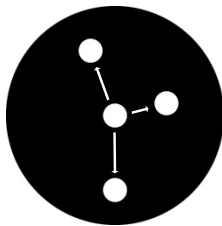


Secular Public Facilities - A Library and Cultural Space

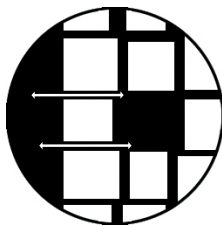


Point of interaction

Institution to promote heritage and facilitate education



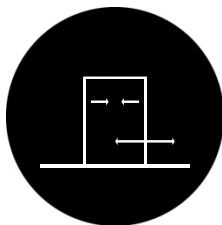
Allocated decentrally in the neighbourhood to enliven all areas



Use secular public facilities as points of access to New Aruna Nagar and as point of attraction from the outside of the neighbourhood



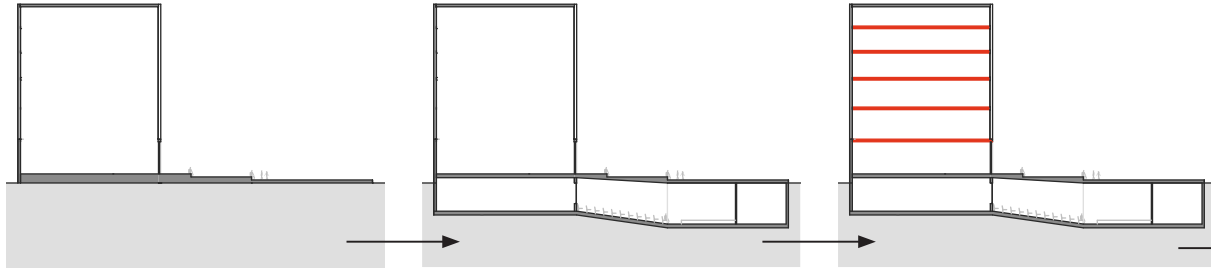
Make the squares central commuting points within the neighbourhood but also preserve them as places to rest and decelerate



Emphasize the gradual transition from outside to inside, from very public to very private



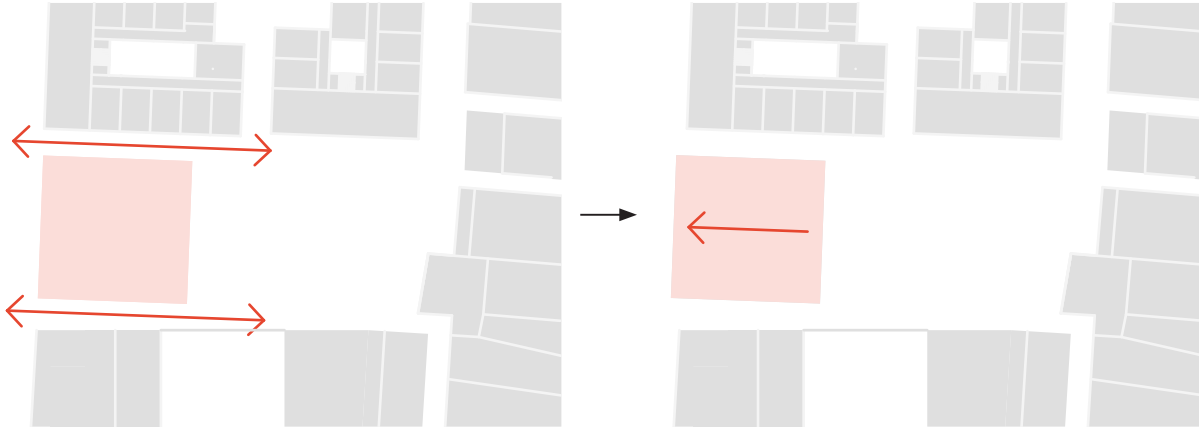
Create an iconic building that stimulates a sense of identity among the residents of New Aruna Nagar



In order to emphasize the Library's function as iconic building in the neighbourhood, its main access will be via the system of ramps and stairs.

The space below the square is used as large auditorium for any kind of cultural event.

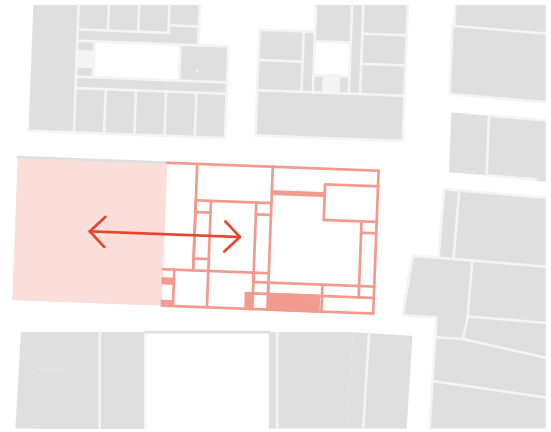
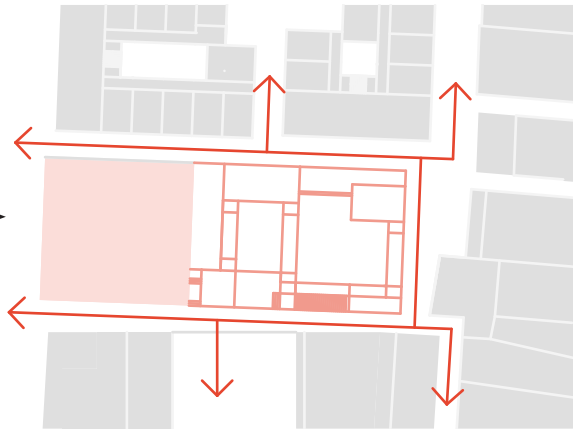
To emphasize the gradual transition from inside to outside, from public to private, the ceiling height decreases towards the upper floors of the building.



The Library and Cultural Space serves as a new main point of access to the neighbourhood. In order to emphasize the introverted spatial appearance of New Aruna Nagar as a whole, however, visitors enter the neighbourhood through relatively narrow streets and then arrive at a larger square in the inside of the neighbourhood.

In order to strengthen its function as landmark and point of attraction towards the outside, the Library and Cultural Space shall stick out one metre from the existing line of facades.

A technical architectural section drawing of a building. The drawing shows a vertical wall on the left with a series of diagonal structural members. A red line traces a curved path from the wall, moving horizontally and then slightly downward. The building has a flat roof and a series of windows or openings along the right side. A black arrow points to the right at the bottom left corner.



The building itself shall clearly be oriented towards the inside of the neighbourhood





The Library and Cultural Space is located in the south of the former prison site, north of the school compound. This location is currently one of the three major exit points of the neighbourhood. A new bridge over the motorways leading from the very north of the neighbouring Aruna Nagar to the passway between the Library and Cultural Space and the school compound will intensify the connection of the two neighbourhoods and makes the Library and Cultural Space a third major access point.

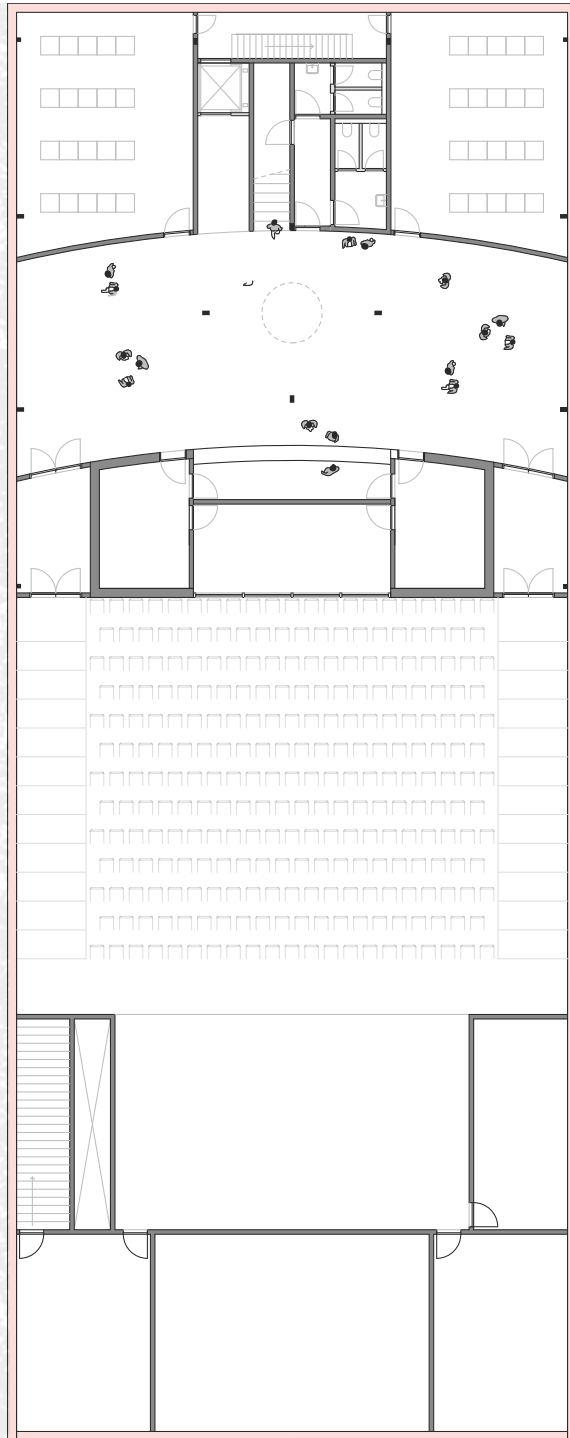
As explained before, while visually, this introverted appearance of the neighbourhood shall be preserved and no major public areas shall be located right next to the street, quickly after entering the neighbourhood, visitors shall reach a point of interaction that also serves as infrastructural node point. That is why, east of the Library and Cultural Space, there will be a new square.

Towards the street and the outside of the neighbourhood, the Library and Cultural Space shall mostly function as object of attention and attraction, towards the inside, it should rather serve as a new object of identification among the residents of New Aruna Nagar.

Considering its location within the New Aruna Nagar, the Library and Cultural Space, besides its function to simulate interaction, support local culture, facilitate knowledge and awareness of tradition and heritage, also will serve as a new point of mediation between the north and the south of the neighbourhood, as these two halves had previously been rather divided. This will then intrinsically stimulate further social mixture and interaction.



1:250



ground floor (left page):

Again, in order to preserve the introverted character of the neighbourhood as a whole, the layout of the Library and Cultural Space's groundfloor is oriented eastwards, towards the inside and the main spine of New Aruna Nagar. However, directly after entering the neighbourhood through relatively slim paths next to the building, you enter a large square, that serves as point of distribution to the rest of the neighbourhood on the one hand, as point of deceleration and interaction on the other.

In order to not intersect up the infrastructural and commuting activities on the square with the decelerating and resting areas too much, the square is divided into several terraces to lead commuters via the outer sides of the square. Besides that, these terraces form benches to sit down and rest, the system of stairs and ramps creates a Promenade Architectural and area of transition from the busy neighbourhood into the Library and Cultural Space. Thirdly, the terraces also highlight the Library and Cultural Space visually as an object of identification for New Aruna Nagar's residents.

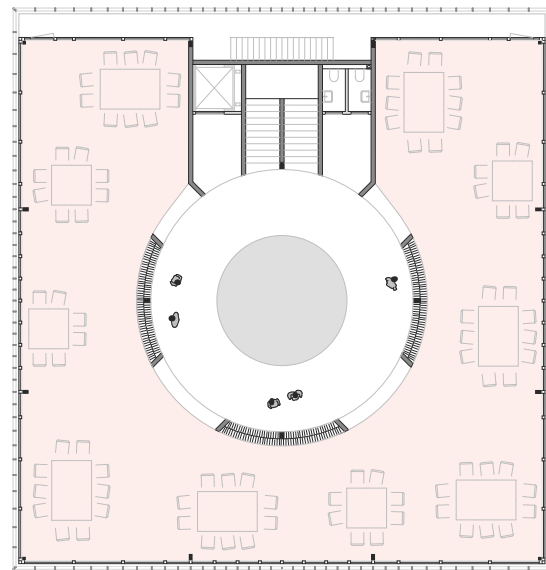
The water pond in the east of the neighbourhood adiabatically cools down the climate on the square. The greenery patches in the north and south side of the square serve as buffer zones for those people coming from the New Residential Neighbourhood in the north and the school compound in the south.

basement floor (left):

The basement floor of the Library and Cultural Space accommodates the library's archive in the west, being also connected to the back stairs as well as the Culture and Event Space in the east, extending below the square. Coming from the stairs, one first reaches the foyer. Between the foyer and the auditorium room, there is a block with a catering and bar service towards the foyer and a technical room towards the auditorium. The auditorium itself can host up to 200 people. In the back of the stage, there is further storage and backstage space as well as a light well and an emergency staircase.

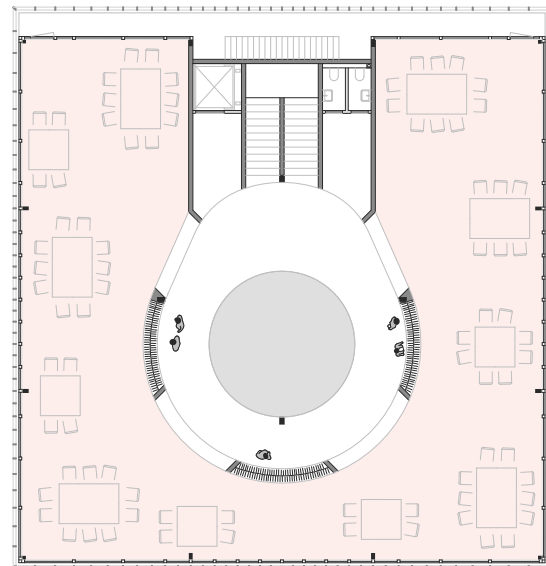
The second floor is another large open parlatorium area with a book's yard in the centre.

However, the second floor is point symmetric, and thereby more introvert than the lower floors. The further one goes up in the library, the more the spaces are oriented towards the yard and less towards the outside.



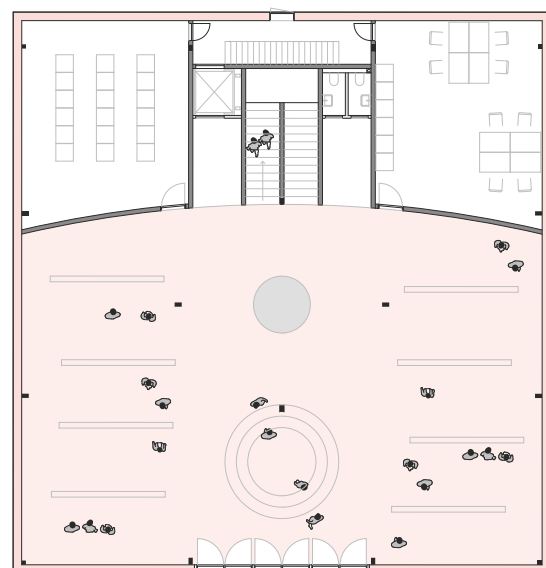
The first floor is a large open parlatorium area with a book's yard in the centre.

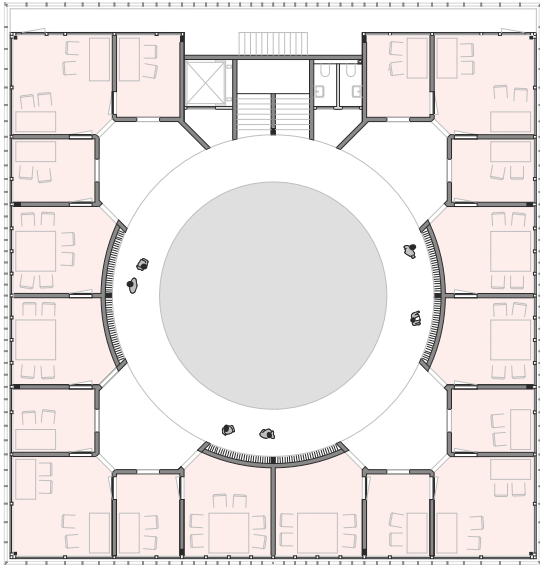
It is the point of mediation between the open, interactive ground floor, axial symmetrically oriented towards the square, and the introverted, point-symmetric, Mandala-based upper floors, that provide increasingly private spaces.



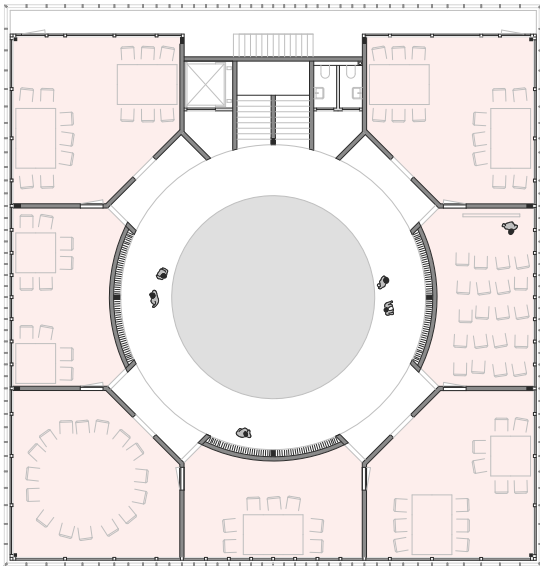
The ground floor of the Library and Cultural Space accommodates a large open space with a reception desk and space for small temporary exhibitions, galleries or minor events facing the square. In the back of the ground floor, besides the staircase, the elevator and the restrooms, there is a back-office for the administration of the library as well as a cloak- and locker-room.

Seen from the square, the Library and Cultural Centre's ground and basement floor are designed axial-symmetrically, which emphasise its openness towards the square.

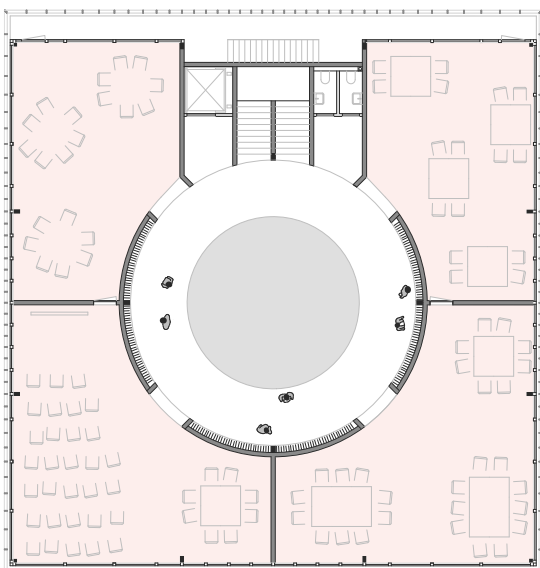




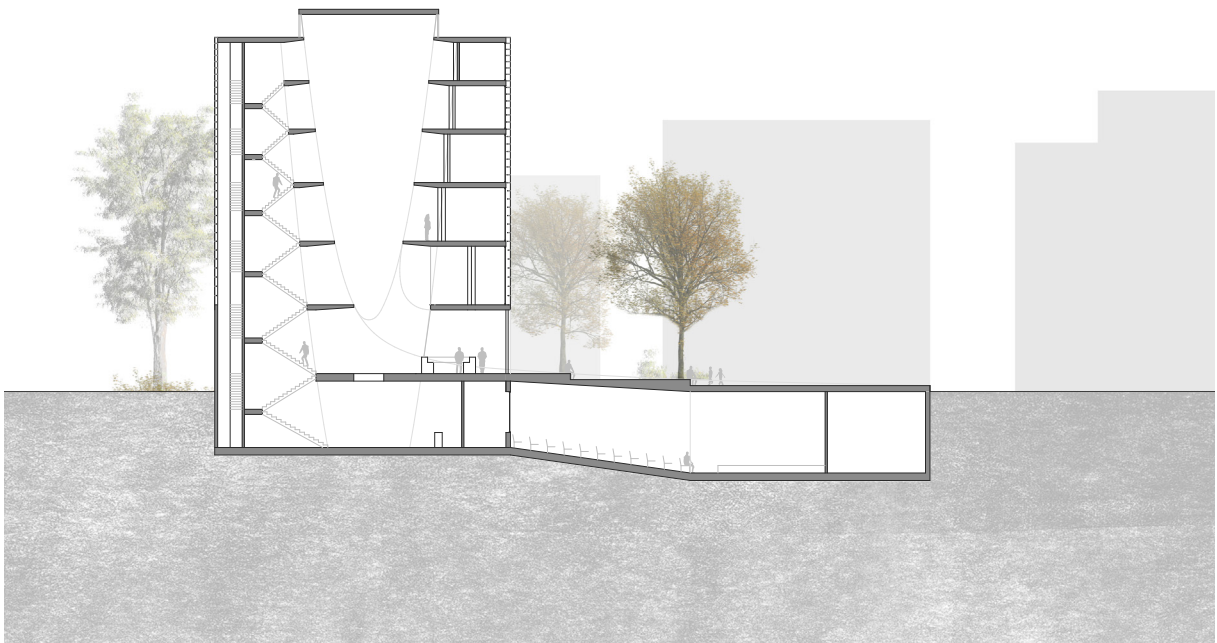
The fifth floor provides the smallest units - quiet spaces with a completely introverted working atmosphere.



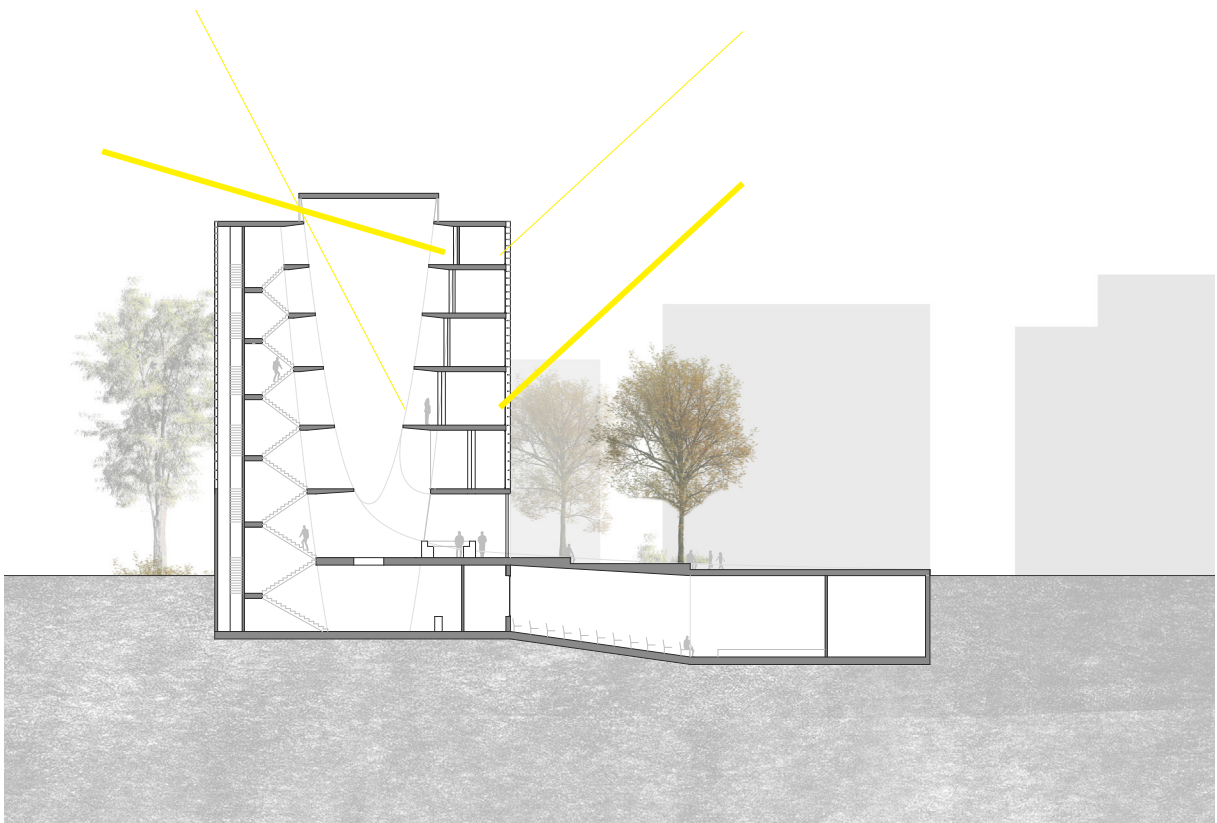
The fourth floor provides even smaller units that mostly serve for small group works as well as minor group activities.



In the third storey, the floor space starts to divide up. These rooms of 50m² to 60 m² could be used as reading rooms, small conference rooms, presentation spaces or more private discussion areas.



1:500



1:500

section west-east (left):

The basement floor accommodates the Culture and Event Space. The auditorium is allocated below the terracing in the square and correlates with the slope.

In the section, one can observe, how the ground floor is directed towards the square while the first floor is the point of mediation between the interactive, open-to-the-square ground floor and the introverted, point symmetric upper floors. The book's courtyard widens towards the top of the buildings and emphasises the increasing introvertness of the upper floors.



figure 4: courtyard of Rongda House, Lhasa

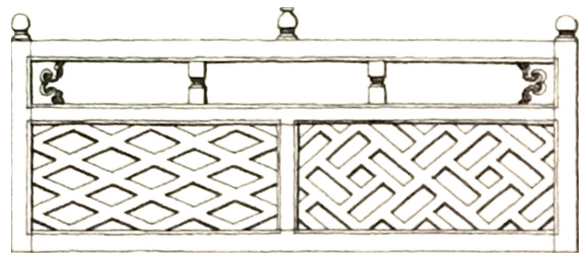
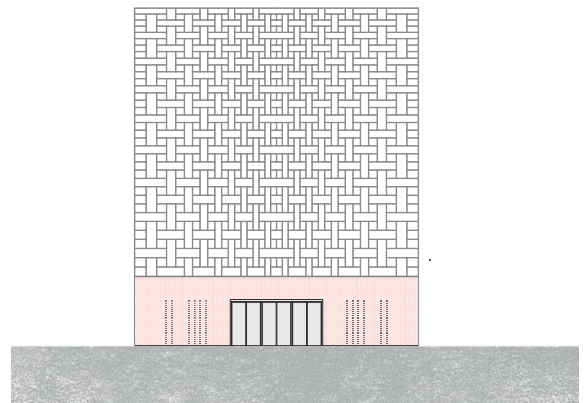


figure 5: handrail in Rongda House, Lhasa



daylight (left):

The orientation and direction of daylight also emphasises the gradually increasing introvertness towards the upper floors of the Library.

In the 2nd floor, for example, a major part of the daylight comes through the outer facade - the depth of the wooden lattice shading the glass facade increases towards the upper floors, while due to the infalling angle and the relatively small width of the courtyard, in that floor, the amount of daylight reaching the 2nd floor through the courtyard is relatively small.

In the 5th floor, however, the wooden lattice shading the glass facade is fairly thick and allows less light into the rooms. The infalling angle of daylight through the courtyard, on the other hand, allows a lot of daylight reaching the 5th floor from the inside.

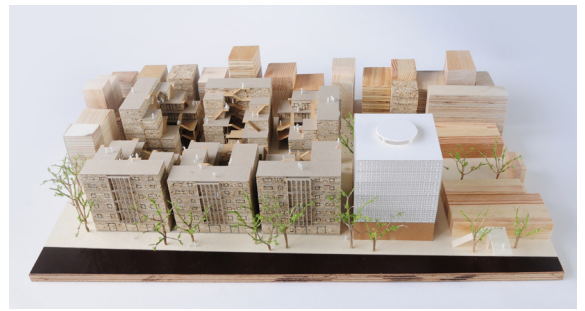
facade:

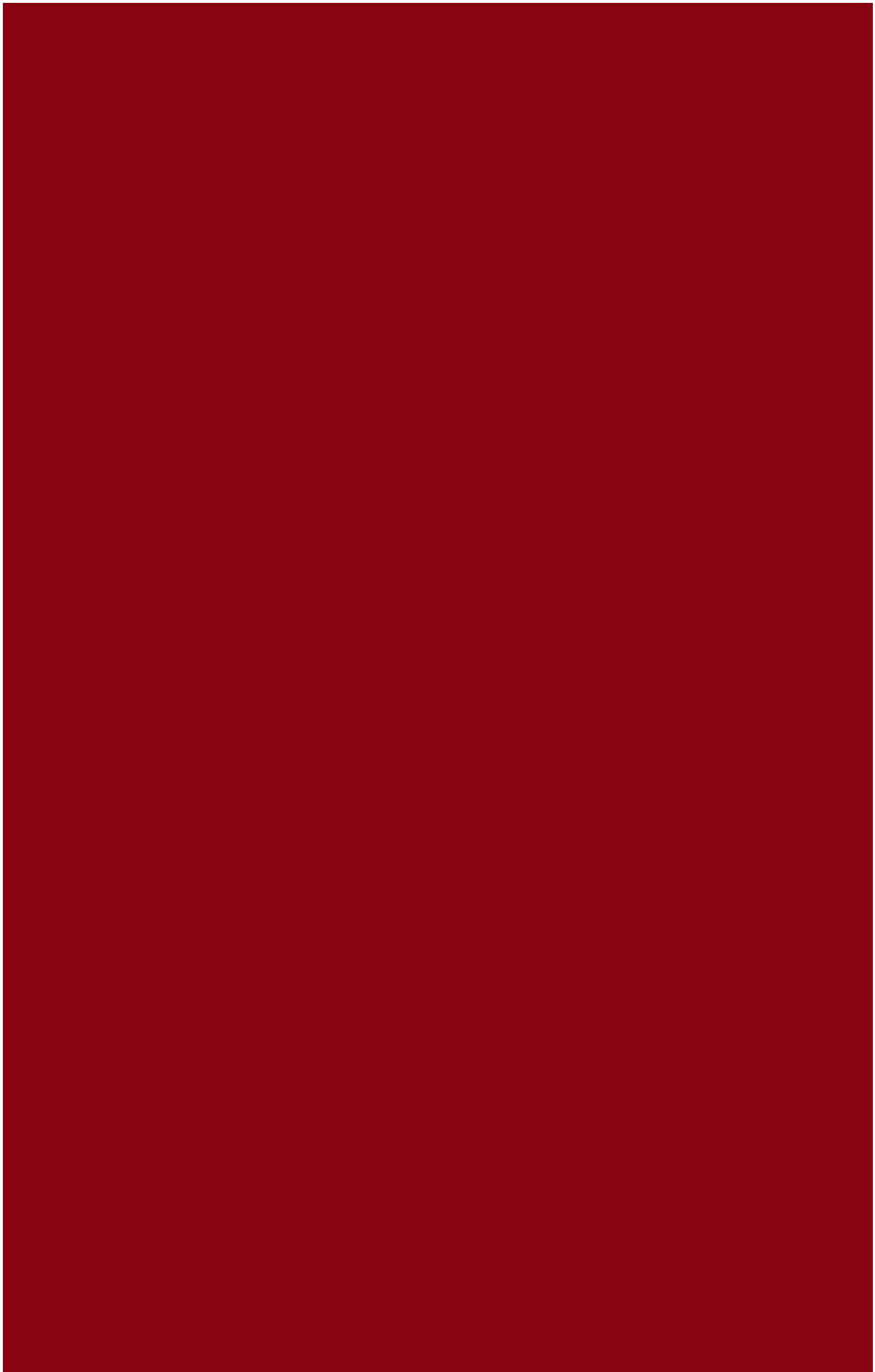
In terms of its aesthetic appearance, the library forms an interpretation of traditional Tibetan architecture first through its mediation between a massive, monolithic plinth and a lighter top of the buildings but mostly through the wooden lattice shading the glass facade. The lattice in its pure shape is based on a pattern taken from traditional window blinds and wooden railing in Lhasa houses. Lattices used to be a major representative element in traditional architecture. Besides resembling traditional ornamentation, through its variation in width and height, the lattice also indicates the gradual change of the floor height and projects the mediation between round shapes - the courtyard - and a square - the volume - into the facade.











A New Residential Block - Integrative Living



Who to cater for:

people evicted in course of the urban upgrading
voluntary movers inside New Aruna Nagar
newcomer (Indians and Tibetans)

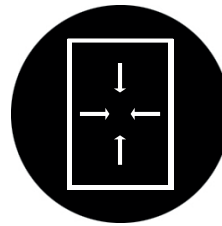


Density:

New Aruna Nagar: 179,833inh/km²
New Residential Block: 108,204inh/km²



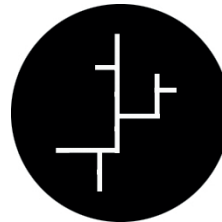
Stimulate interaction between
different residents -
generations, ideologies



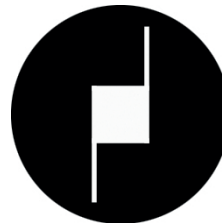
Interactive within the block,
strict border towards outside



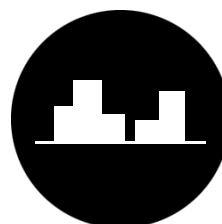
Provide private space in
accordance with the traditional
sense of privatsphere



Meandering street network



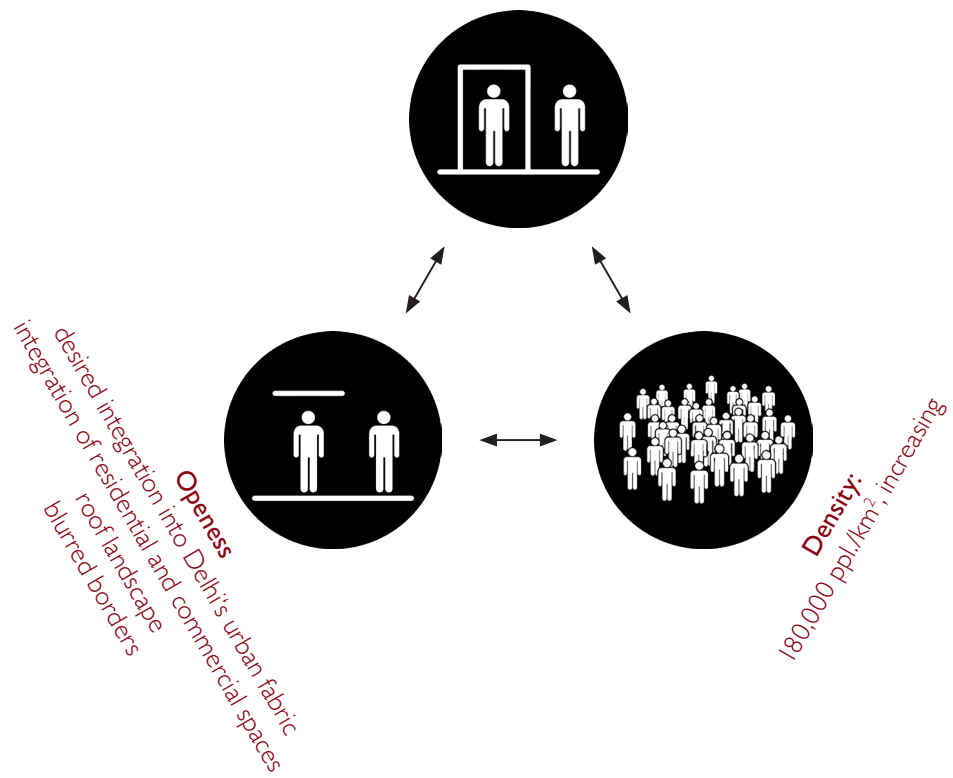
Interactive pocket spaces



Height variation

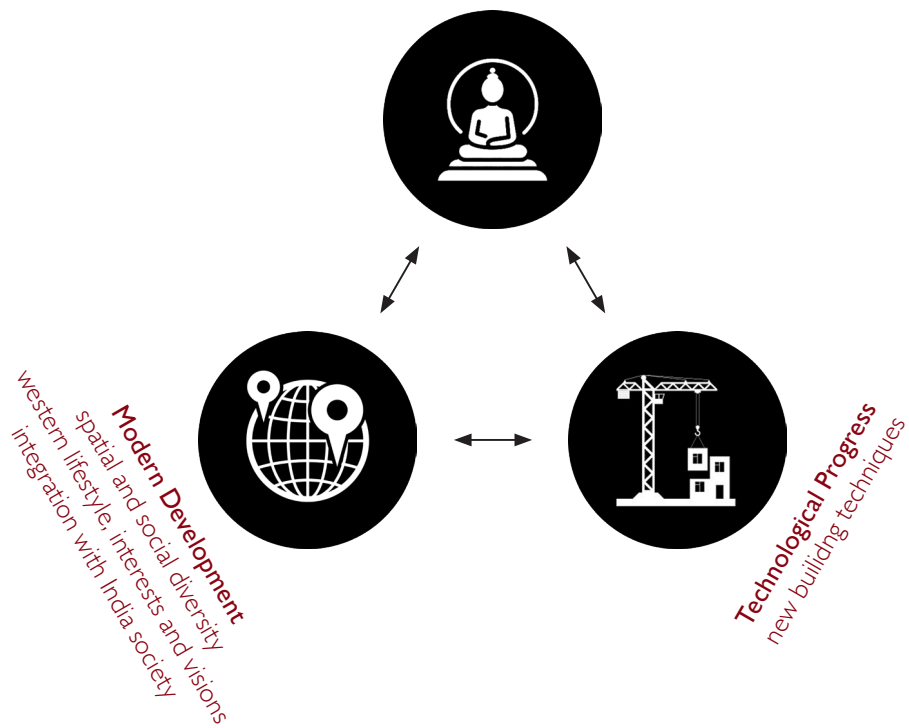
Privacy

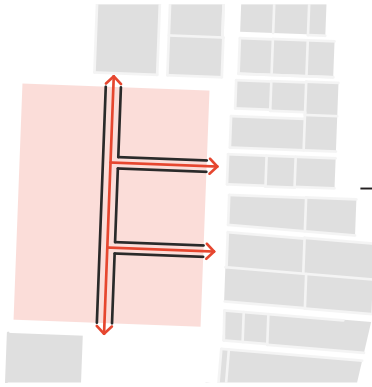
introverted buildings, windowless walls, courtyards
private outside spaces, visually disconnected
narrow, intransparent street network, orientation towards a centre



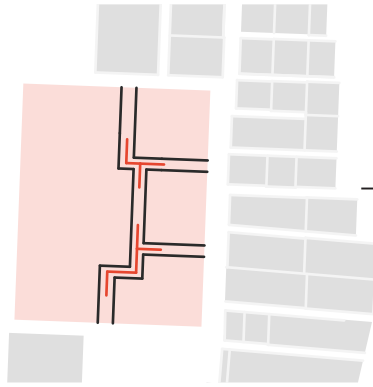
Religious Values

monofunctionality, no secular institutions
preservation of cultural habits, traditional means of identification
sequences of dark and bright spaces, level differences and hierarchy, circumambulation

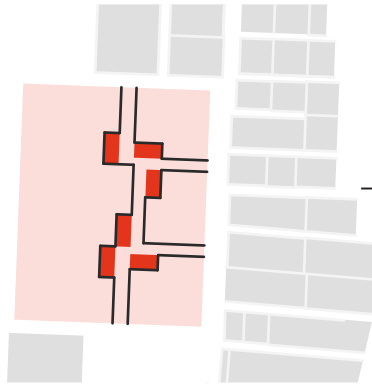




The main points of access to the New Residential Block will be allocated towards the inside of New Aruna Nagar.

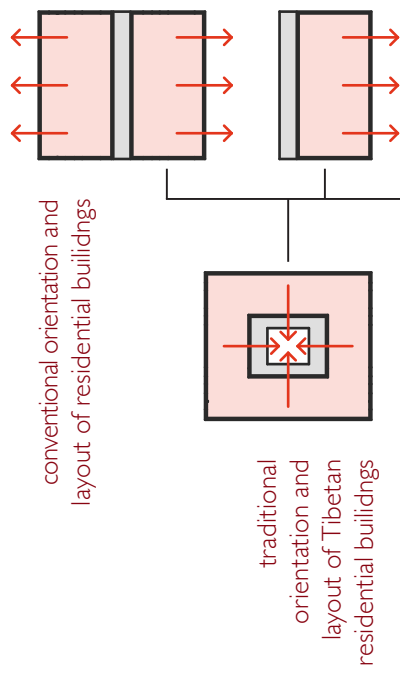


In order to serve the desired level of visual privacy also on an urban scale, the street network shall meander:



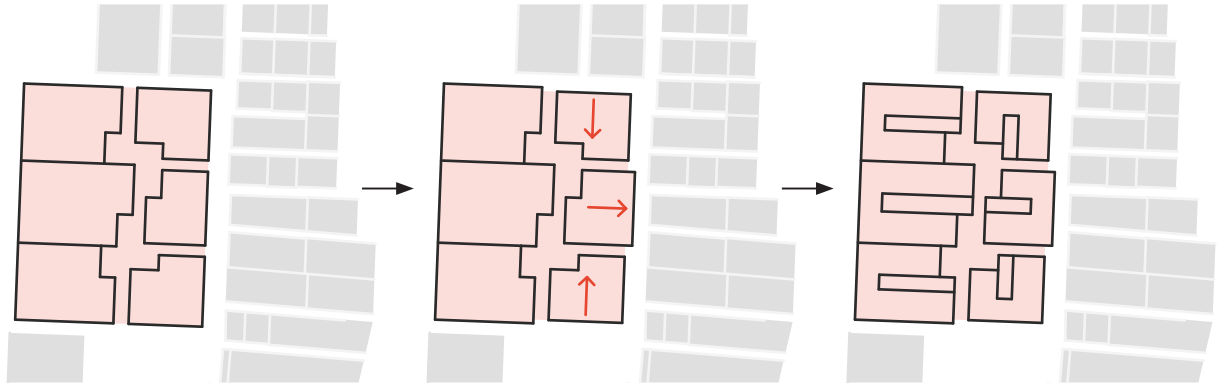
Small pocket spaces within the street network facilitate interaction and serve as entrance niches to the buildings.





in order to direct each buildings' orientation towards the inside of the block, one of the „arms“ is longer that the other

The „arms“ of the U-shaped buildings accomodate single apartments, the „bottoms“ - as the most private area within the buildings - larger units for families.



Six L-shaped builings with their cut-outs towards the inside of the block emphasize the introvertness of the buildings and the block as a whole.

In order to strengthen the orientation of the block towards the existing urban fabric, the north-east and the south-east buildings are offset towards the new block while the east building is offset towards the street. The block as a whole thereby appears more fragmented towards the inside of New Aruna Nagar than towards the motorway in the west.

As means of mediation between traditional Tibetan courtyard structures and Indian rectangular structures, the L-shaped buildings become U-shaped buildings.





ground floor:

The design is based on six U-shaped buildings that form a middle way between introverted traditional Tibetan courtyard houses and rather extroverted Indian rectangular block structures that stimulate more interaction.

The strict border towards the outside of the block creates an introverted appearance. The fragmented inside of the neighbourhood, on the other hand, creates an interactive atmosphere within the block. The buildings are arranged in a way that the meandering street network, correlating with the sense of privacy and intransparency among Tibetan people, is continued. Small pocket spaces form points of rest and stimulate interaction among the inhabitants of the block.

Each building incorporates numerous types of public areas that gradually mediate between the interactive street network and the private inside of each residential unit. In front of every building, a niche within the street network creates the first point of entry to the building.

The transition from the street into the building takes place at the roofed entrance space leading to the half-open courtyard. This entrance situation is further emphasized by level differences, a slight slope leading from the street network to the staircase.

For the whole community of the building, there is an open public space on the first floor above the entrance, that also serves as a point of communication between the building and the open street.

For the inhabitants of each floor, a platform oriented towards the inside of the neighbourhood serves as commuting area for all inhabitants but is meant as open space for the residents of the respective floor. Equally, the access balconies in front of the single units are majorly used by the inhabitants of the respective floor.

In front of the doors of each unit, a small niche space can be used as storage space of the unit's inhabitant, which is meant to weaken the border between the in- and outside of the unit. Plants on the access balconies opposite the windows of the single units visually protect the inside of the respective unit.

Towards the outside of the block, there are commercial units allocated on the ground floors. Besides entering from the front, they can be accessed either through courtyards or the sides of the buildings.

The long voids between the buildings facing the motorway in the west serve as bike storage, for garbage pick-up and for natural ventilation in the upper floors. Stairs in the voids lead from the groundfloors directly onto the platforms in the 2nd floor and serve as an extra entrance for the inhabitants of the western buildings.



basement floor:

The „wings“ of each U-shaped building accommodate storage rooms for residents. The „bottoms“ host the technical rooms and storage for the commercial units.

1:500



1st floor:

The public areas above the entrances to each building are points of interaction between the residential community of each building and people in the street.

1:500



2nd floor:

The modular single units in the „wings“ start to jump back. The platforms facing the inside of the neighbourhood stimulate interaction between different buildings.

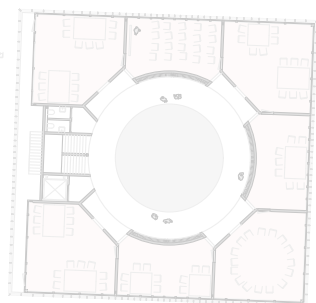
1:500



3rd floor:

The stairs connecting the platforms and the seemingly randomly distribute greenery patches give the inside of the neighbourhood a playful atmosphere.

1:500



4th floor:

The platforms on the 4th floors are - in most cases - only attached to the family units and the bottoms of the U-shaped buildings.

1:500

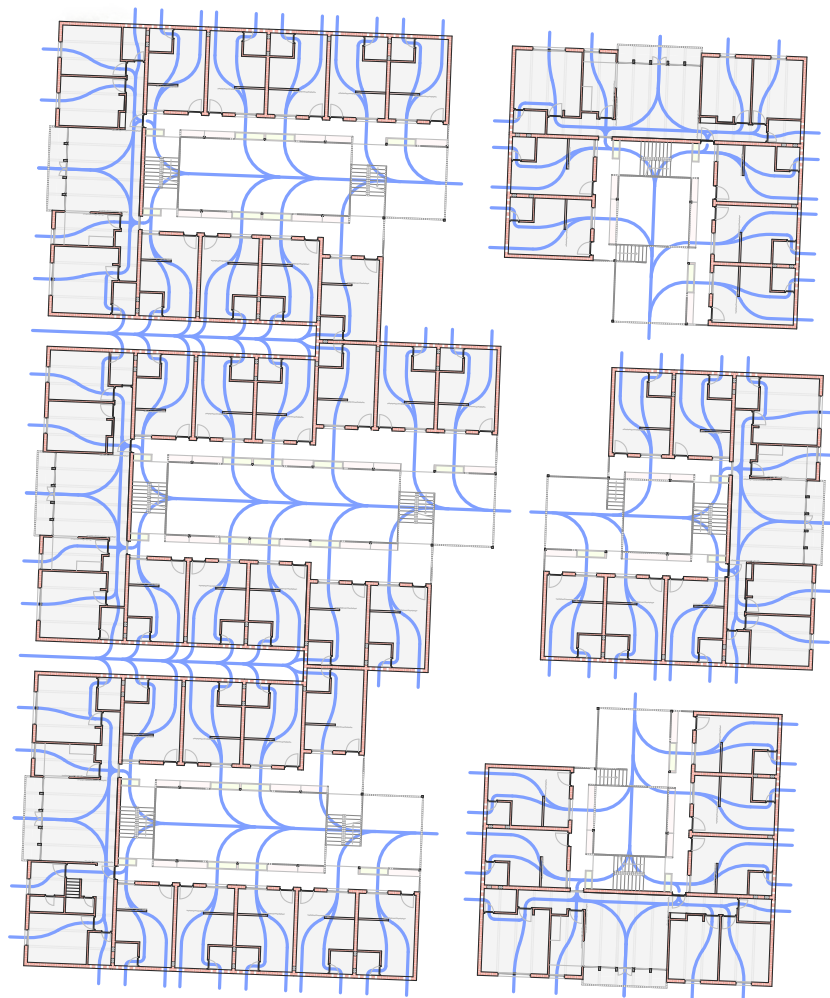


5th floor:

The roof terraces integrate into the vibrant existing roof landscape of New Aruna Nagar. Next to the commercial units on the ground floor, they form the major point of intersection between the inside and the outside of the New Residential Block.

As traditionally in Tibetan building culture, the roof terraces are allocated above the living rooms of the family units.

1:500



ventilation:

Each room within the New Residential Block is naturally ventilated. In case of the bathrooms and toilets, the brick pattern of the outer walls is being perforated and therefore allows constant air fluctuation.

In all residential units, cross ventilation can be interrupted by closing either an inside door or a window.



fire escape routes:

Besides the main staircase in the centre of each building, the stairs connecting the platforms serve as fire stairs.

In case of the three buildings facing the street, a second staircase next to the public area above the entrance leads from the platforms to the ground floor.

In case of the three buildings facing the inside of the neighbourhood, movable bridges connect the build-















1:200

ground floor:

The entrance area roofed by the community space consists of a light ramp leading to the first staircase. Another ramp in the courtyard leads to the second staircase. The ramps, on one hand, strengthen the feeling of walking into the building, and at the same time lead rainwater towards the drainage system in the streets.

The commercial units in the south and west of the block share two kitchens in the north-west and the south-west of the building. The residential units in the north wing of the U-shaped building are allocated half a floor higher than the opposite commercial units and thereby ensure a higher degree of privacy.



1:200

basement floor:

The „wings“ of each U-shaped building accommodate storage rooms for each of the residents.

Technical installations and rainwater collection tanks are placed in the north-west and the south-west corner of the building. The two toilets are for the commercial units on the ground floor. In between the technical rooms, there are storage rooms for the commercial units.



1:200

ground floor:

The entrance area roofed by the community space consists of a light ramp leading to the first staircase. Another ramp in the courtyard leads to the second staircase. The ramps, on one hand, strengthen the feeling of walking into the building, and at the same time lead rainwater towards the drainage system in the streets.

The commercial units in the south and west of the block share two kitchens in the north-west and the south-west of the building. The residential units in the north wing of the U-shaped building are allocated half a floor higher than the opposite commercial units and thereby ensure a higher degree of privacy.



1st floor:

The first floor is particularly characterized by the shared open space above the entrance to the building. Visually as well as infrastructurally, the pace is the main point of interaction between each building and the open street.



2nd floor:

In the second floor, the modular single units added in the wings of the U-shaped buildings start to jump back. The resulting platforms are tendentially associated with the inhabitants of the respective floor; however, are also part of the horizontal and vertical infrastructure.



3rd floor:

To prevent from people privately encroaching the platforms, each platform is spatially arranged in a way that every corner is associated with a particular function. In this case, for example, a greenery patch is allocated in the north-east, the stair in the south-east, the access balcony in the south-west and a water tap in the north-west. That way, the large public space can be preserved open.

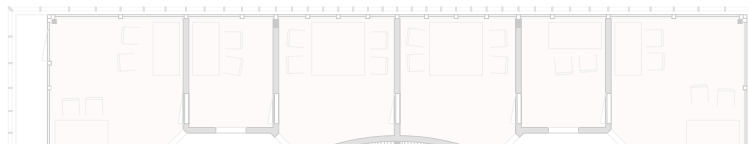
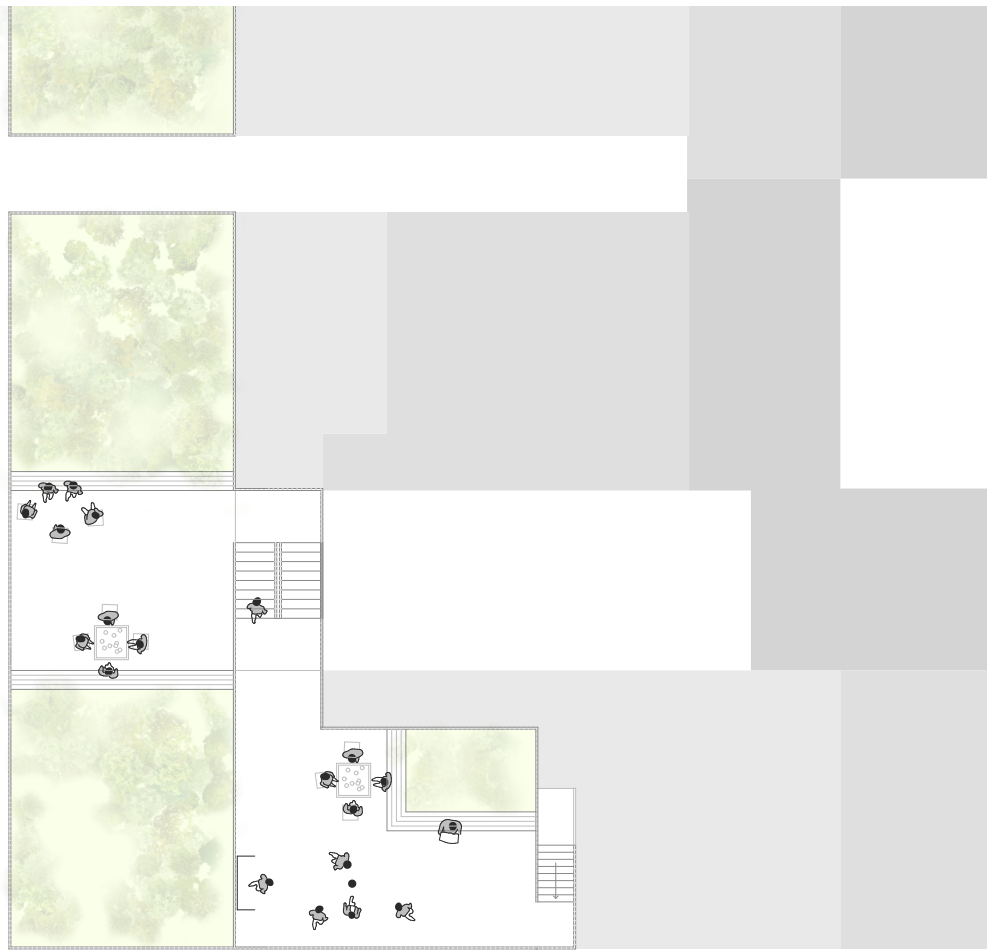


4th floor:

The stair connecting the platforms have several functions:

Having an alternative route to the main staircase in the centre of the building is necessary for fire escape but also important to prevent from forcefully integrating people. The social mixture in the housing project shall be voluntary.

Besides that, the stairs are major aesthetic elements in the block. They create a playful image and a sense of belonging among people, as in the mountains of Tibet, stairs are central elements within vernacular building culture and last but not least, Potala Palace and its iconic appearance is determined by the stairs leading to the palace.



1:200

5th floor:

As briefly mentioned before, the roof terraces integrate into the vibrant existing roof landscape of New Aruna Nagar and form the major point of intersection between the inside and the outside of the New Residential Block. They are therefore oriented orthogonally to the outer facade of the buildings.













Residential Units



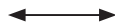
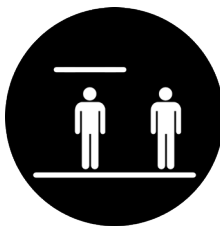
Traditional, larger families with grandparents
2-floor-units for 6 - 8 people



Average families
units for 3 - 4 people



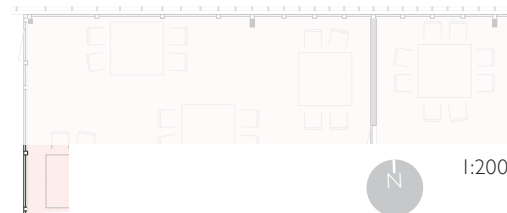
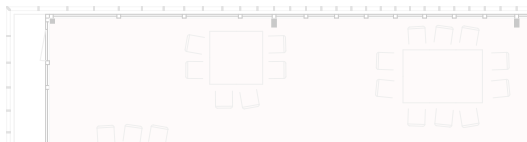
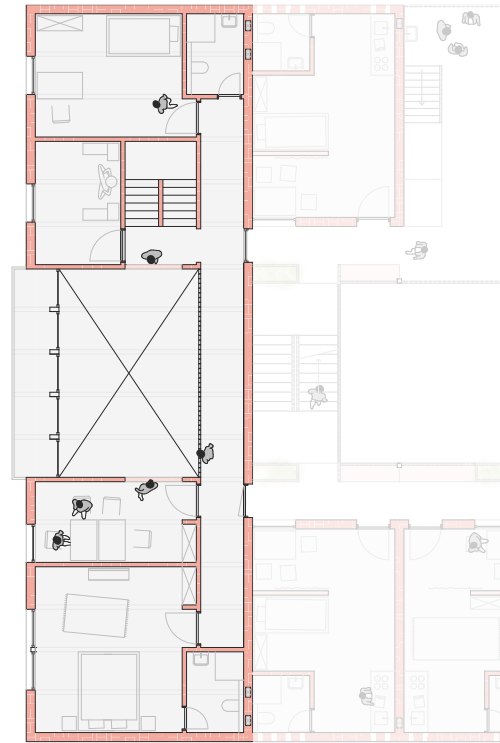
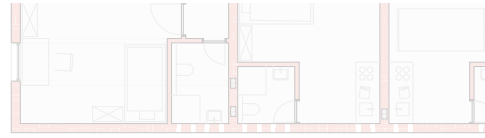
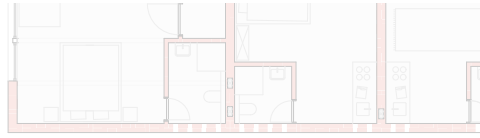
Single people - Youth Hostel Culture
single apartments



Implement a gradient of privacy levels within the building to accommodate the traditional sense of privatsphere but also stimulate integration.



Facilitate commercial activities within the New Residential Block



1:200

family units (6-8 people), 1st floor:

All family units are allocated in the bottom-parts of the U-shaped typologies.

In the whole new residential block, there are ten double-floor family units for six to eight people. The floorplan resembles traditional Tibetan townhouses with the geometrically as well as infrastructurally central living room, from where access corridors lead to the private rooms. Also the expression of hierarchy within the units through level differences, especially the double-height living rooms, and the prayer spaces being in the most remote space of the apartment relate to traditional housing typologies.

Each family unit has a small buffer space in front of their entrances.

family units (6-8 people), 2nd floor:

In the second floor of the large family units, another master bedroom, another single bedroom as well as a schooling room - a typical element of traditional Tibetan townhouses - are allocated. The interaction between the two floors is stimulated through the verandah above the living room.



1:200

family units (4-5 people):

The smaller family unit for four to five people is based on a similar layout as the larger family unit. Instead of the maid's room and the staircase, a second single bedroom is allocated next to the living room.

single units:

Also the single units, same as the family units and each building as a whole, are intended to offer a gradient of privacy levels.

A table and eating area right next to the window is the place in the unit that interacts most with the access balconies outside. The bed is allocated behind a one-metre-high wall and potentially a curtain.

In the very back of the unit, one can find the kitchen and the bathroom. As the wall that separates the bed from the window is only one metre high, the visual connection of the kitchen with the outside is still given.



1:200

adaptability family units:

The adaptability of the family units is given through a regular grid of beams as load-bearing structure that easily allows the inhabitants to demolish, displace and build walls. The interior brick walls are structurally disconnected from the load-bearing walls. All doors and windows are of the same size and can therefore easily be displaced.

In this example, for example, the kitchen has been entirely opened up towards the living room.

adaptability single units:

The modularity of the single units consists in the monolithic, free-span ceiling that allows inhabitants for example to demolish the bathroom walls and the interior walls that are structurally disconnected from the load-bearing walls. In order to be able to eventually combine two units into one, lintels will precautionarily be put into positions where breakthroughs could be made.

In these examples, two and three single units have respectively been combined to one larger unit.



1:200

adaptability family units, 2nd floor:

Also the upper floors of the larger family units are constructed flexibly.

In this example, what was the schooling room before has been opened up towards the living room and become a leisure room.

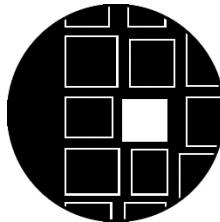
In case of, for example, a growing family, one master bedroom could easily be combined to become two smaller bedrooms.



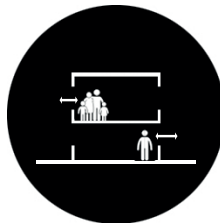
Fassade Design and Detailing



Merge both Indian and Tibetan building tradition concerning materialisation



Integrate into the urban fabric and assimilate the New Residential Block aesthetically to the existing



Stimulate individualised expression of the residents towards the outside.



Chose simple and affordable as well as socially integrative and sustainable construction materials.



1:500



1:200

facade design:

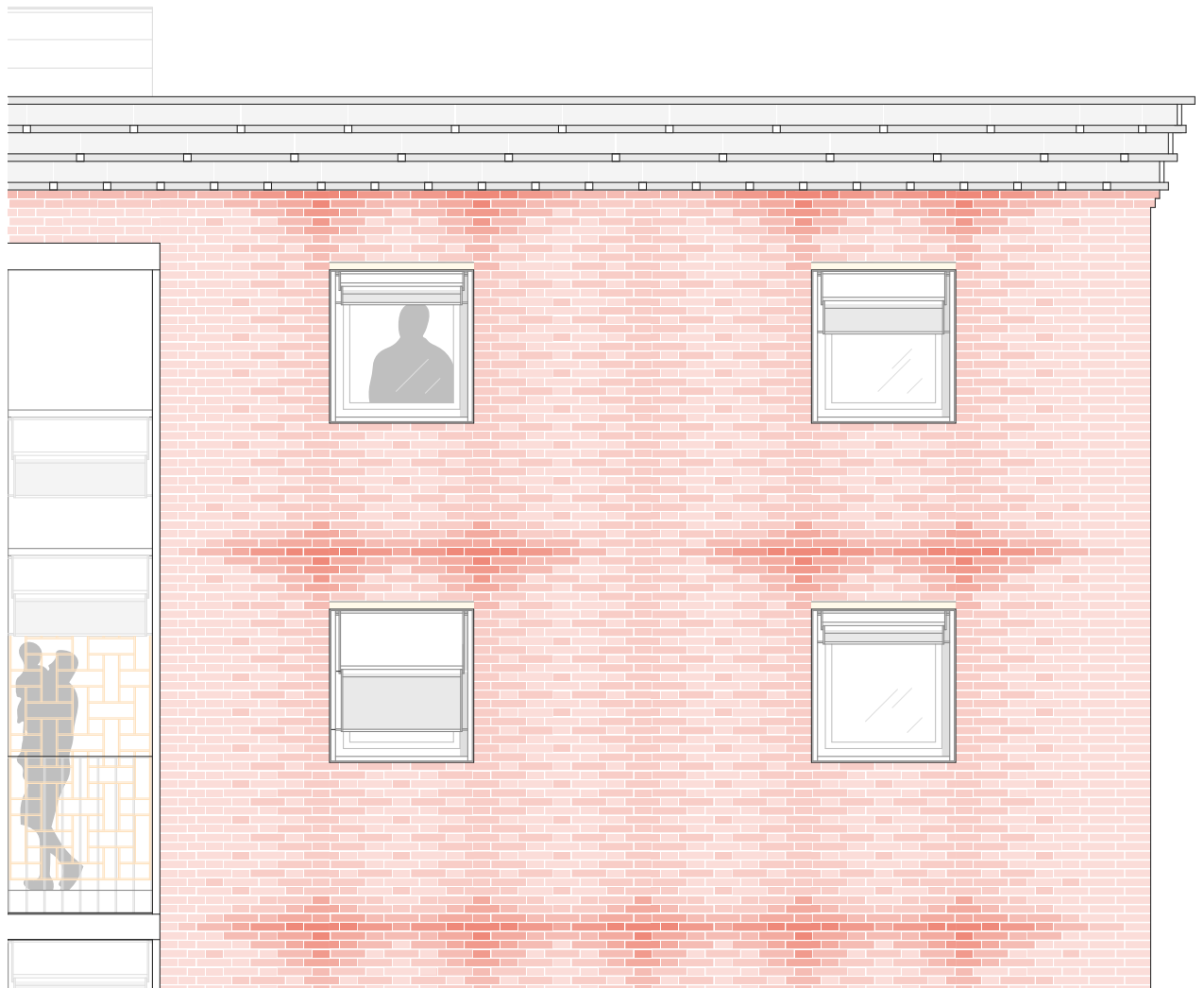
The facade design resembles many elements of traditional Tibetan architecture.

The typical „almost-symmetry“ resulting from the strict central position of the living room and the more random arrangement of further rooms around that, as well as the central window, being the biggest and most representative with a roof terrace above that, are elements in the facade, the create a sense of „Tibetaness“.

The monolithic appearance of the building resembles that of Tibetan townhouses, and a massive construction technique creates a higher heat storage capacity of the building, which, concerning the extreme temperature differences between day and night in Delhi, has a positive impact on the interior climate.

On the other hand, the inhabitants of the buildings shall be able to express a high degree of individuality - the foldable window blinds are therefore just provided as empty frames. The inhabitants can determine themselves, how they present themselves towards the outside and individually regulate the level of privacy within their apartments.





1:50



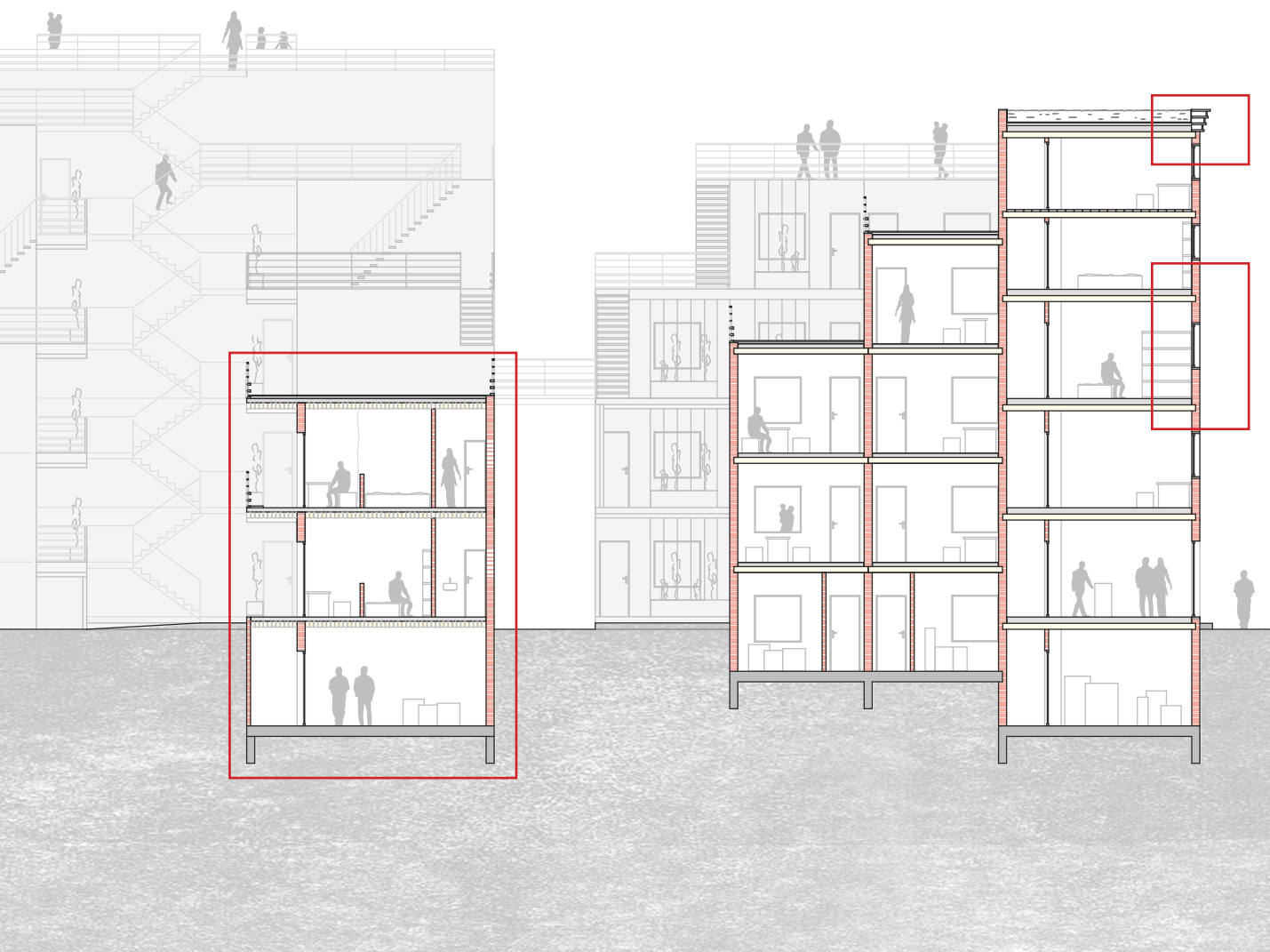
Besides that, the decorative lintels of Tibetan windows were reinterpreted as protruding brick ornamentation, that also fragmentizes the facade without implementing a second material.

The traditional Tibetan frieze, having a highly symbolic meaning in vernacular Tibetan building culture as point of mediation between earth and sky, has been abstracted to a simple wooden construction and serves as a blend for the roof construction and drainage system.

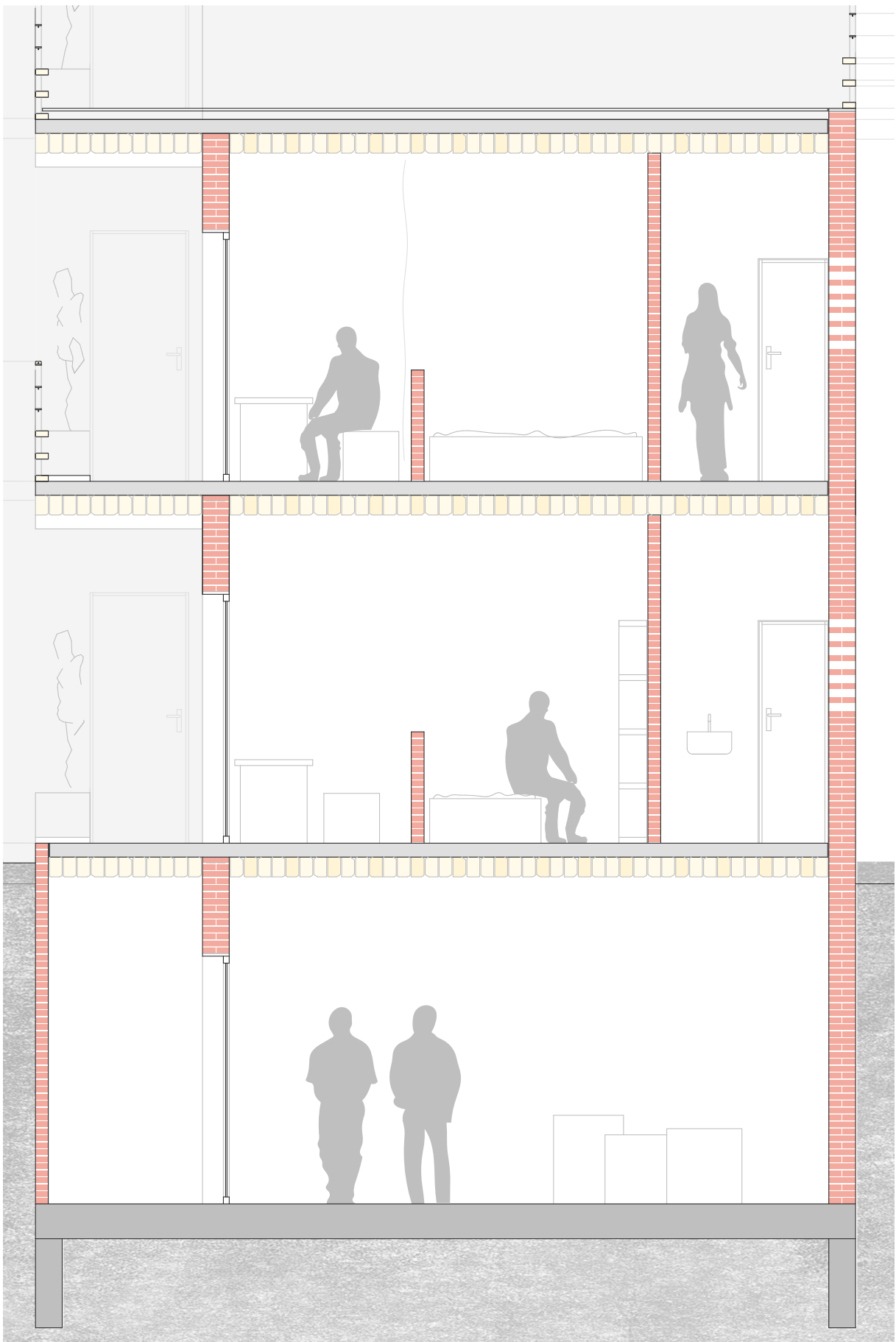


1:2,000





1:100



1:50

The platforms are floored with wooden planks. The handrail consists of three 6cm high massive wooden blocks that align in height with the greenery patches and the seating areas on the platforms as well as frieze in the top floors towards the outside of the building. On top of that, a light railing of 60 cm completes the handrails. This gradual transition from monolithic materials to light materials has its roots in the traditional Tibetan idea of the top of a building being a point of mediation between earth and sky.

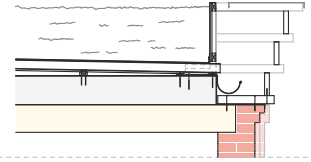
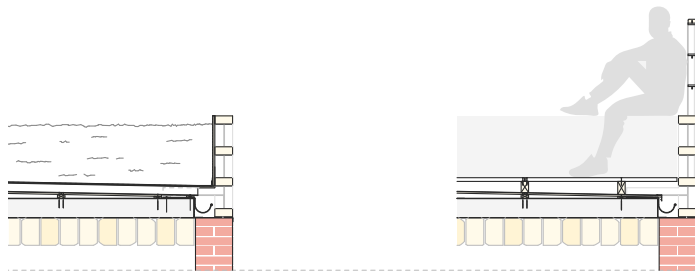
The outer walls are the load-bearing structure and consist of a 24cm NF brick structure visually exposed to both sides. The high material density creates a high heat capacity of the walls, that alleviates the large temperature-differences between day and night.

The perforated brick pattern in the outer walls ensures that natural ventilation is given for all the units.

The slabs between the units are constructed from an aligned layer of 18cm beams interlocked with 12cm of poured concrete on top. As carpet-making is a major form of art in Tibet, the concrete floors will most likely be covered with carpets by the people.

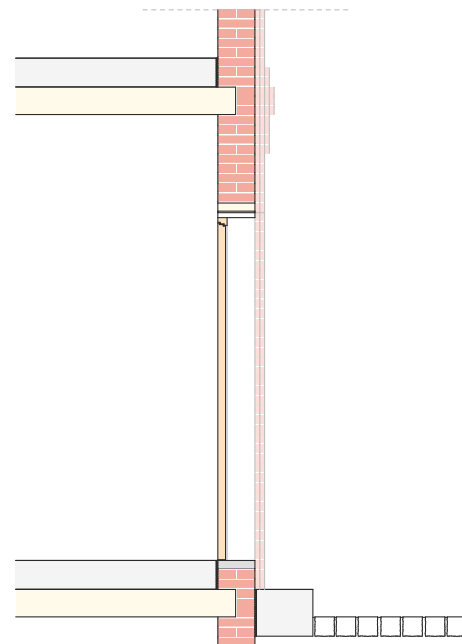
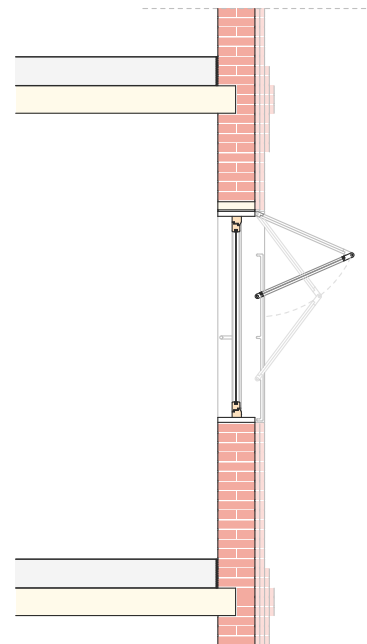
The monolithic appearance of both the ceiling and the walls correlates with the level of privacy - also acoustically - that is common in vernacular Tibetan architecture.

The basement floor slab is poured from concrete to protect the building from the relatively low groundwater level.



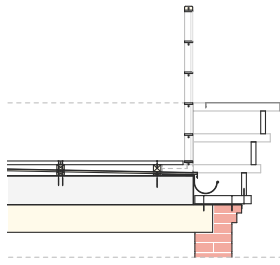
above:

Towards the inside of the block, the wooden as well as the metal elements of the handrail vertically align with the outer brick walls. Thereby, a gradual transition from monolithic volume (bricks) to a heavy element of the balustrade (wood) to a light top of the handrail (metal) mediates - as in traditional Tibetan building culture - between earth and sky.



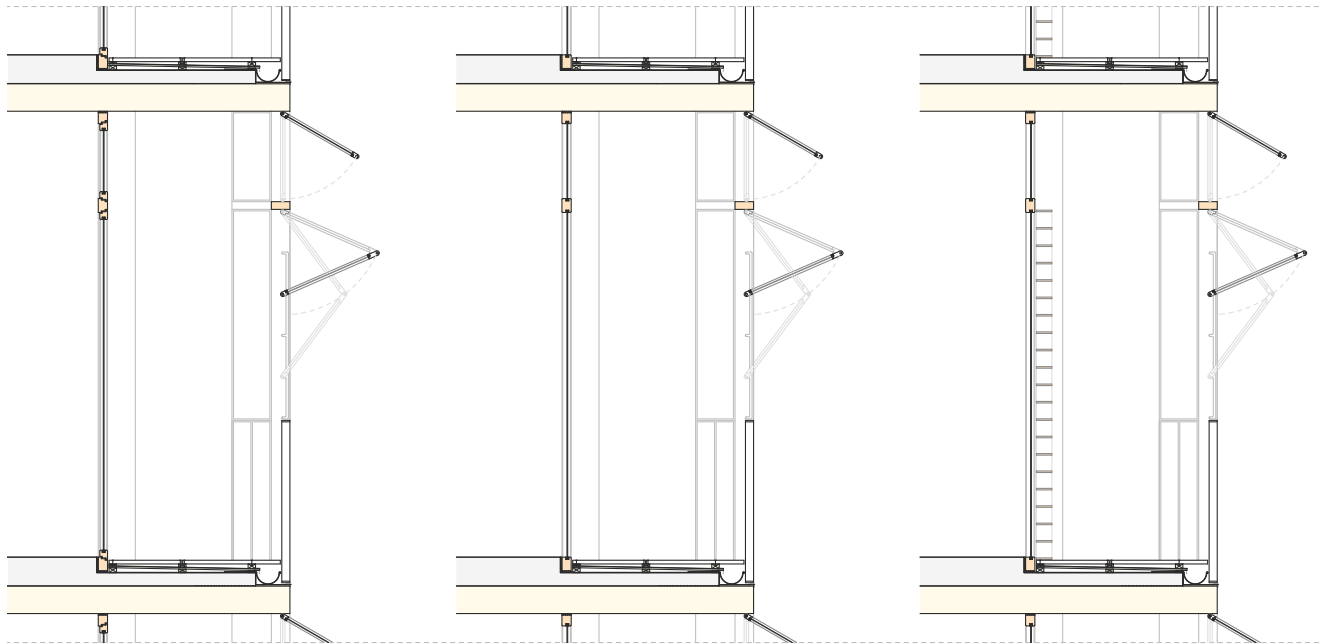
In the ground floors, the commercial units are separated from the open street through two steps. Concerning its practical use, this disconnects the commercial units a bit from the busy streets and prevents from rainwater. In terms of aesthetics, having a stripe of bricks in below the openings of the commercial units emphasises the monolithic volume of the buildings.

1:50



left:

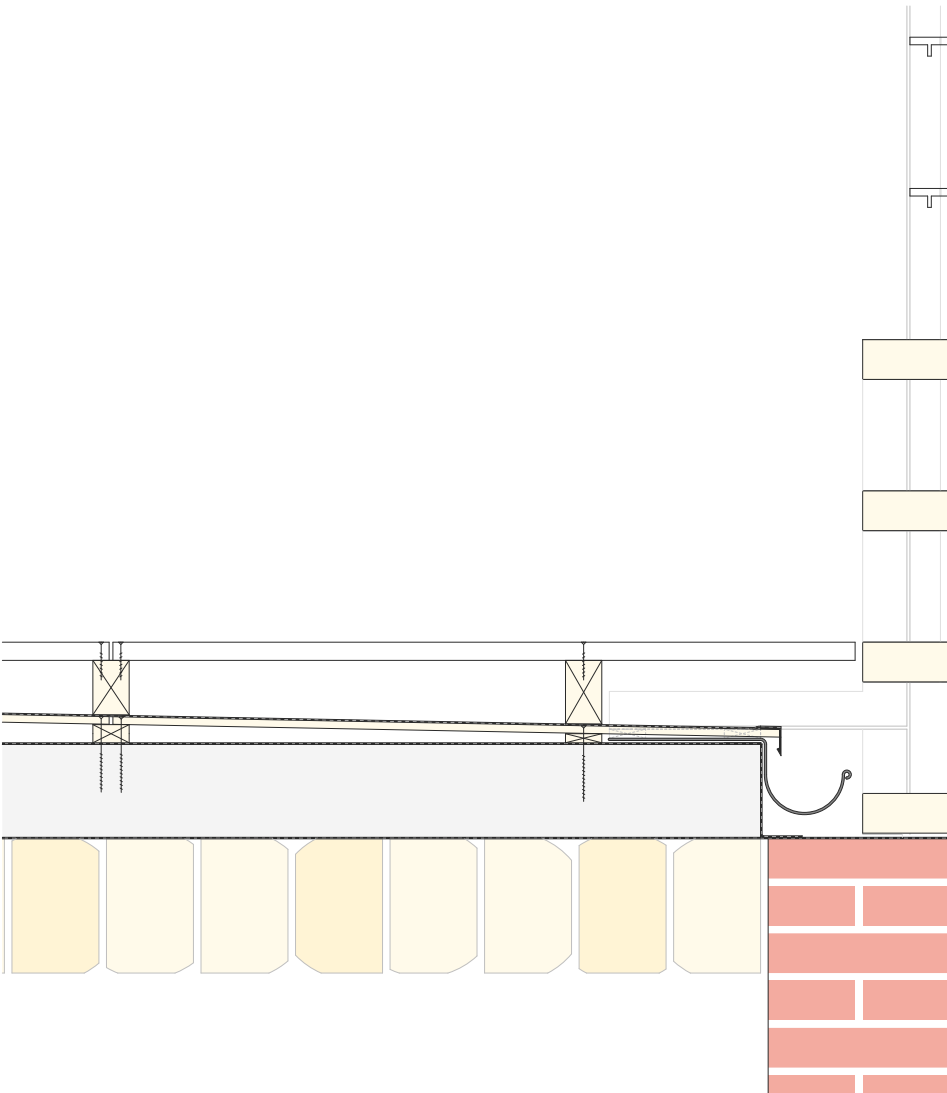
An abstracted interpretation of traditional Tibetan friezes blends the greenery patches, the ceiling construction and the connection of the handrails to the wall. Although the reinterpretation of the frieze has no constructive function, it geometrically interrelates with the other constructive elements.



The balconies in the centre of the family units as well as the windows of the small rooms in the side have window blinds for shading the interior, that people can individually fill in with papers or fabrics, the latter being a central element in traditional Tibetan art and handcraft.

1:50

For further shading, a wooden lattice is placed in front of the glass wall in the corner parts of the balcony. Thereby, those corners turn out to provide a bit more visual privacy than the rest of the balcony.



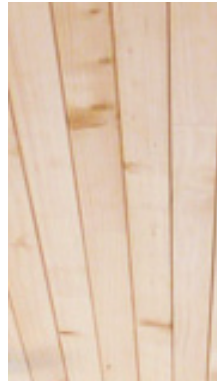
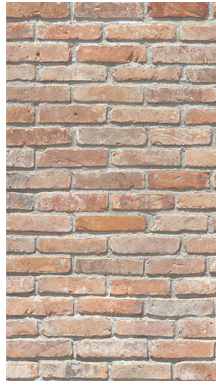
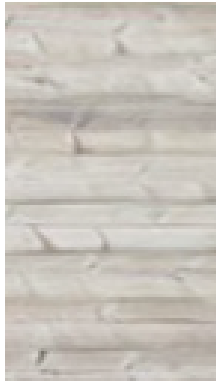
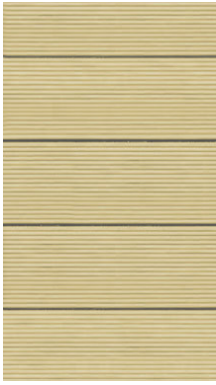
steel, T-profile

timber piling

soft wood, greyed

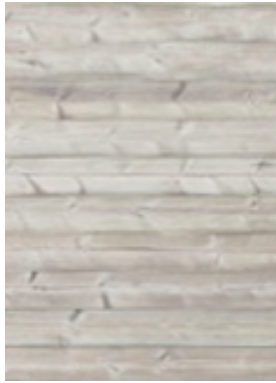
burned bricks

massive wooden slat roof





local greenery



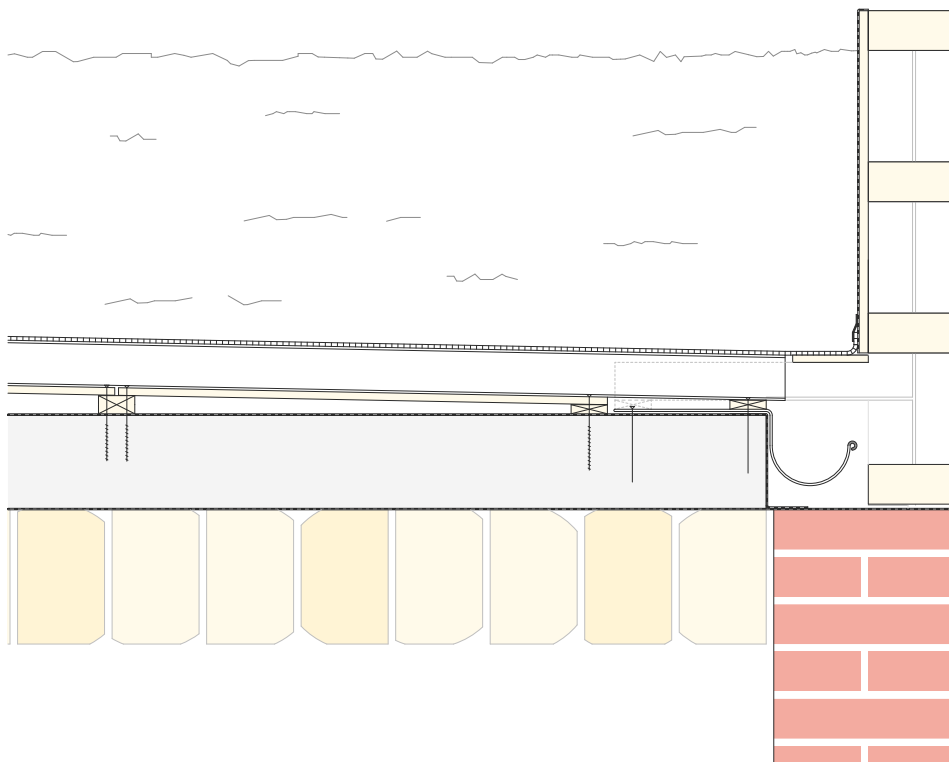
soft wood, greyed



burned bricks



massive wooden slat roof



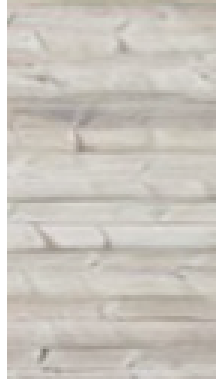
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steel, T-profile



timber piling



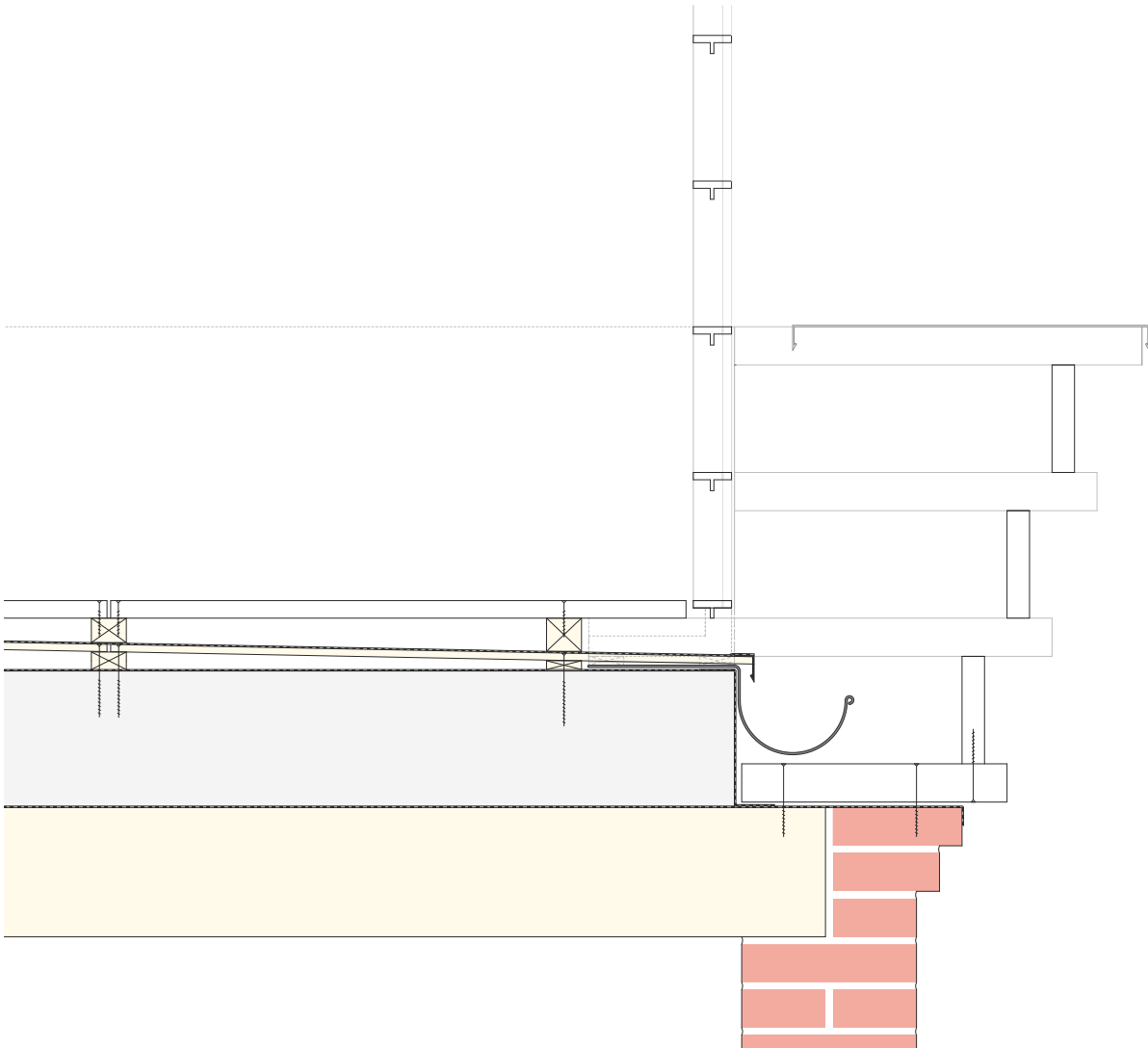
soft wood, greyed



burned bricks



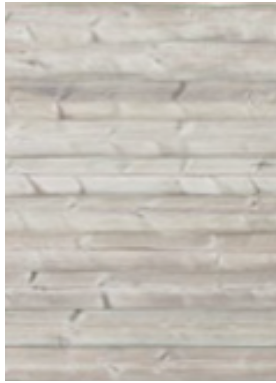
massive wooden slat roof



1:10



local greenery



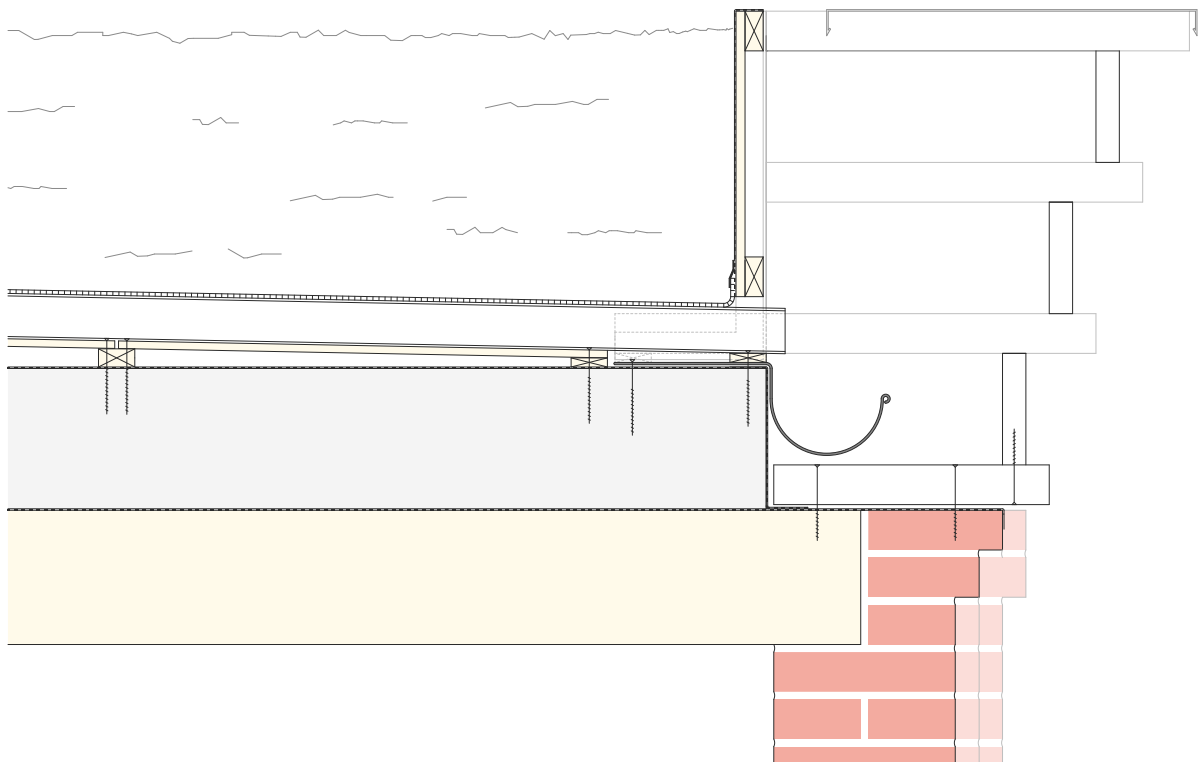
soft wood, greyed



burned bricks



massive wooden slat roof



1:10



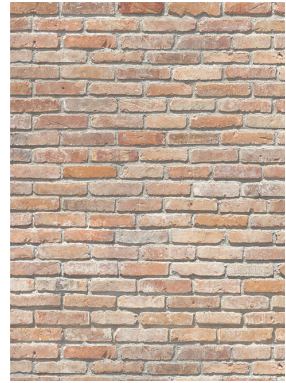
traditional Tibetan fabric



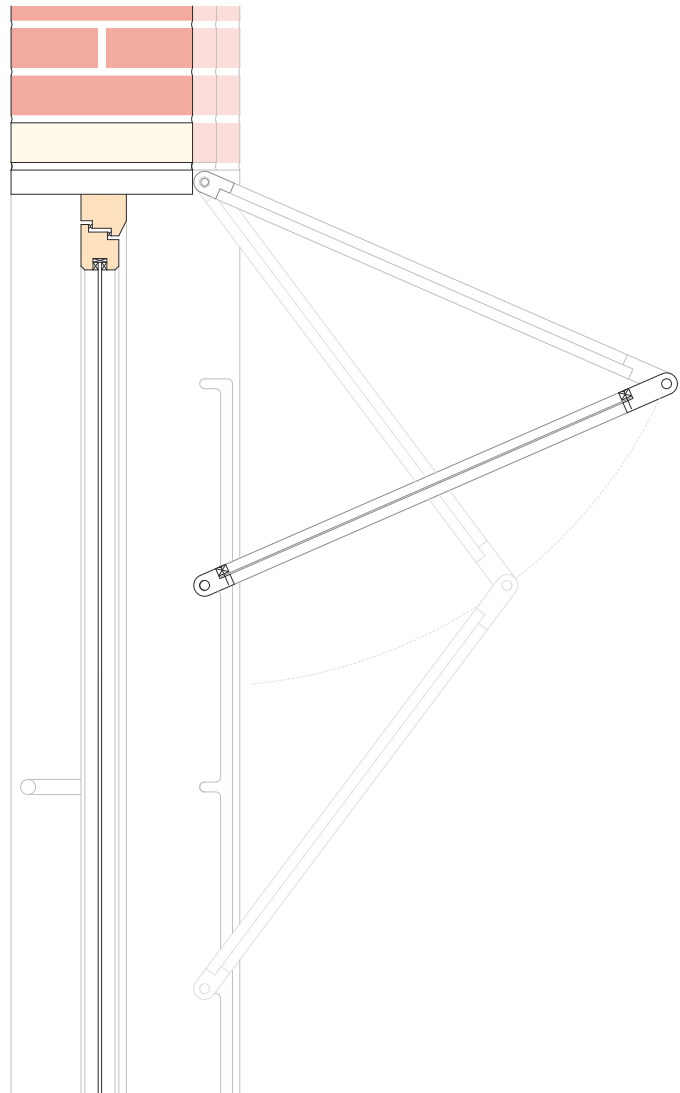
traditional Tibetan fabric



dark brown stained wood



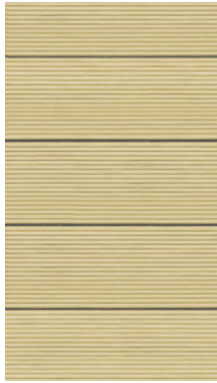
burned bricks



1:10



Tibetan wooden lattice



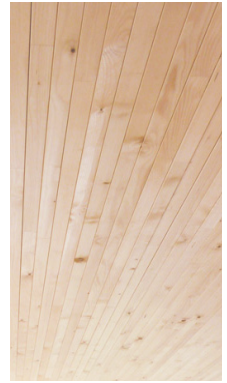
timber piling



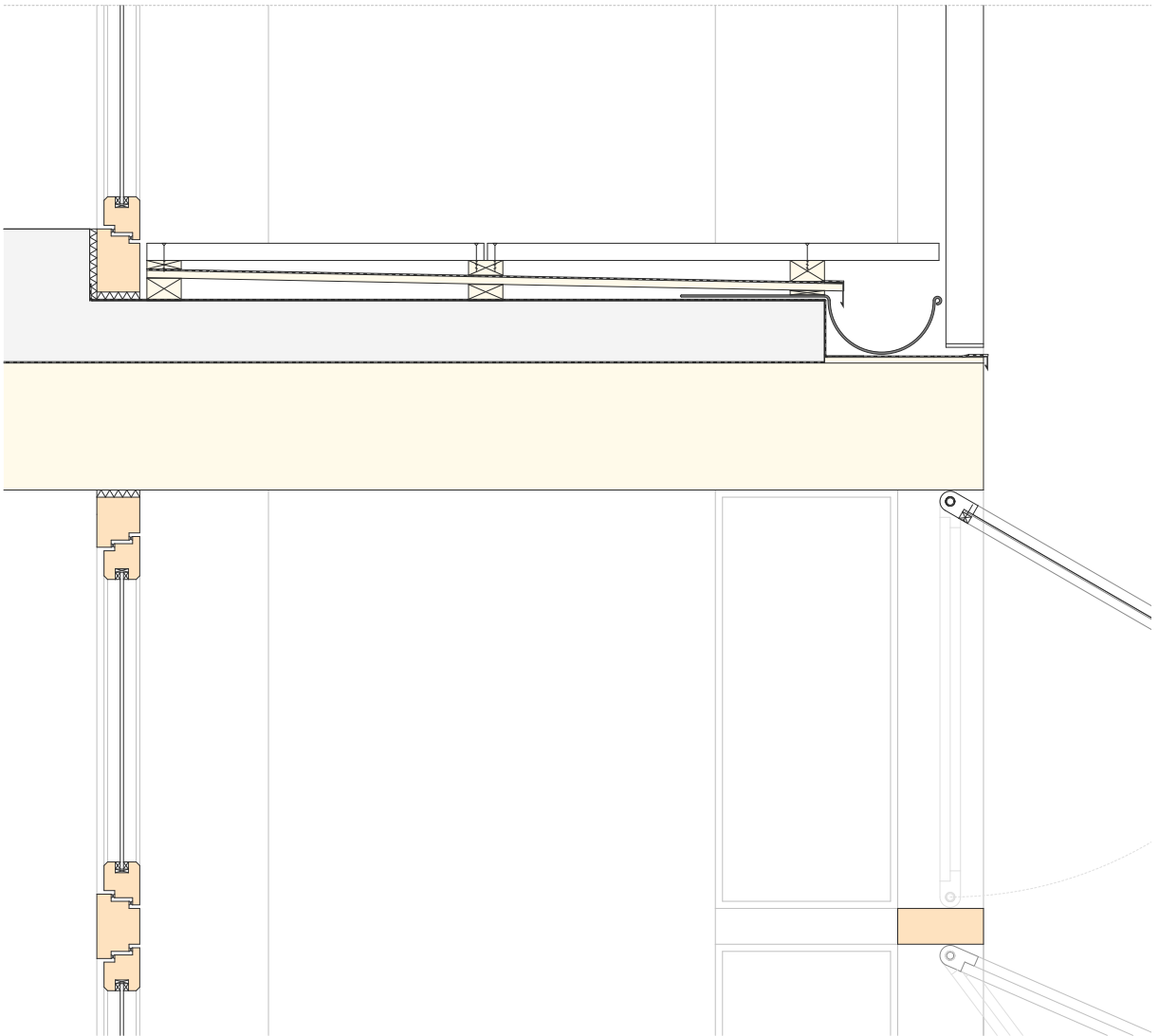
traditional Tibetan fabric



traditional Tibetan fabric



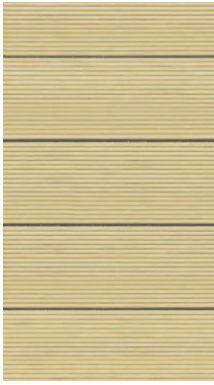
massive wooden slat roof



1:10



Tibetan wooden lattice



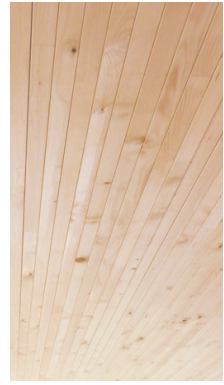
timber piling



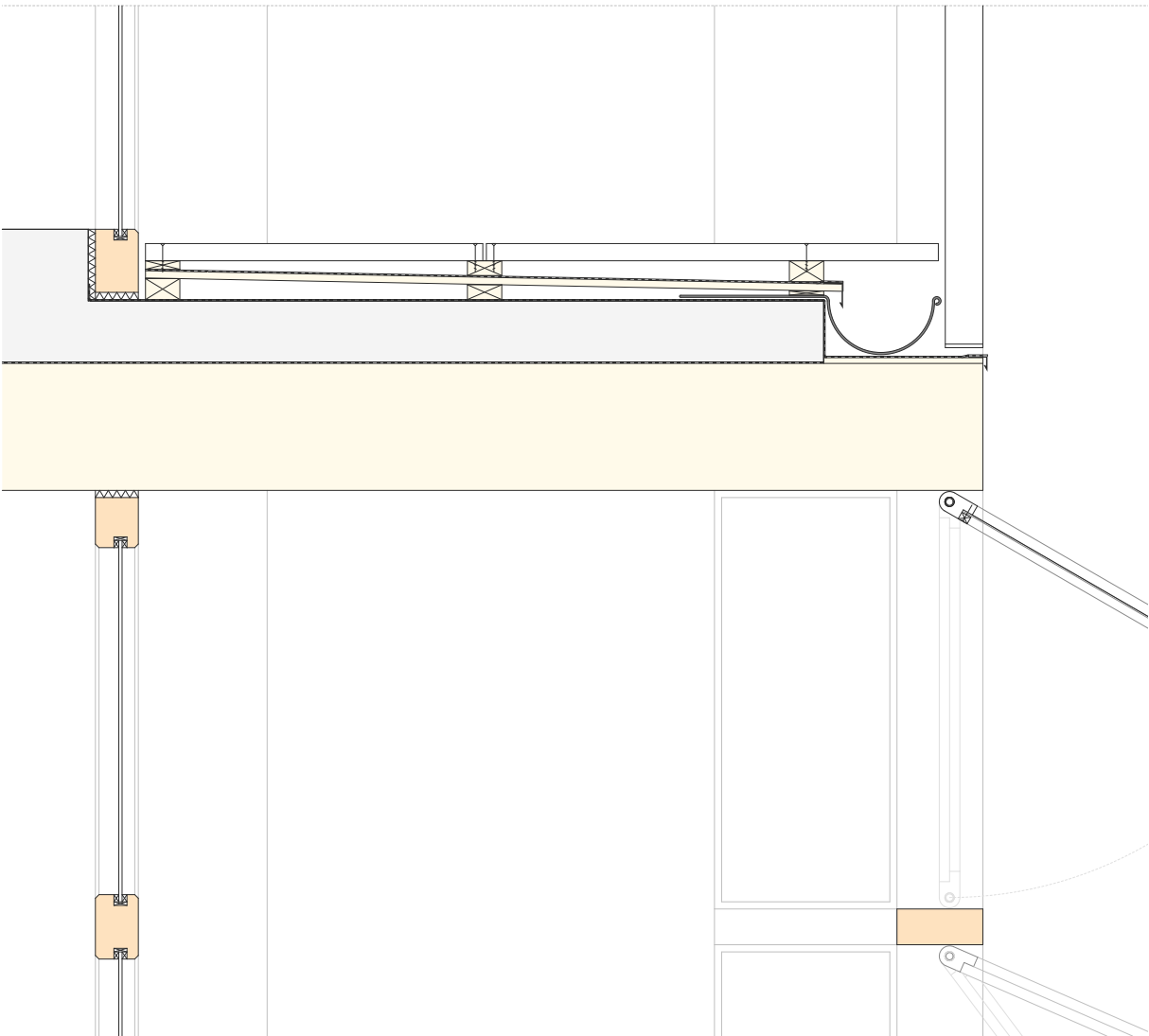
traditional Tibetan fabric



traditional Tibetan fabric



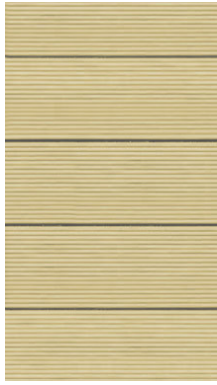
massive wooden slat roof



1:10



Tibetan wooden lattice



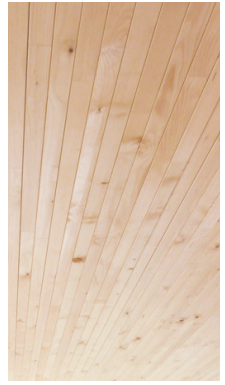
timber piling



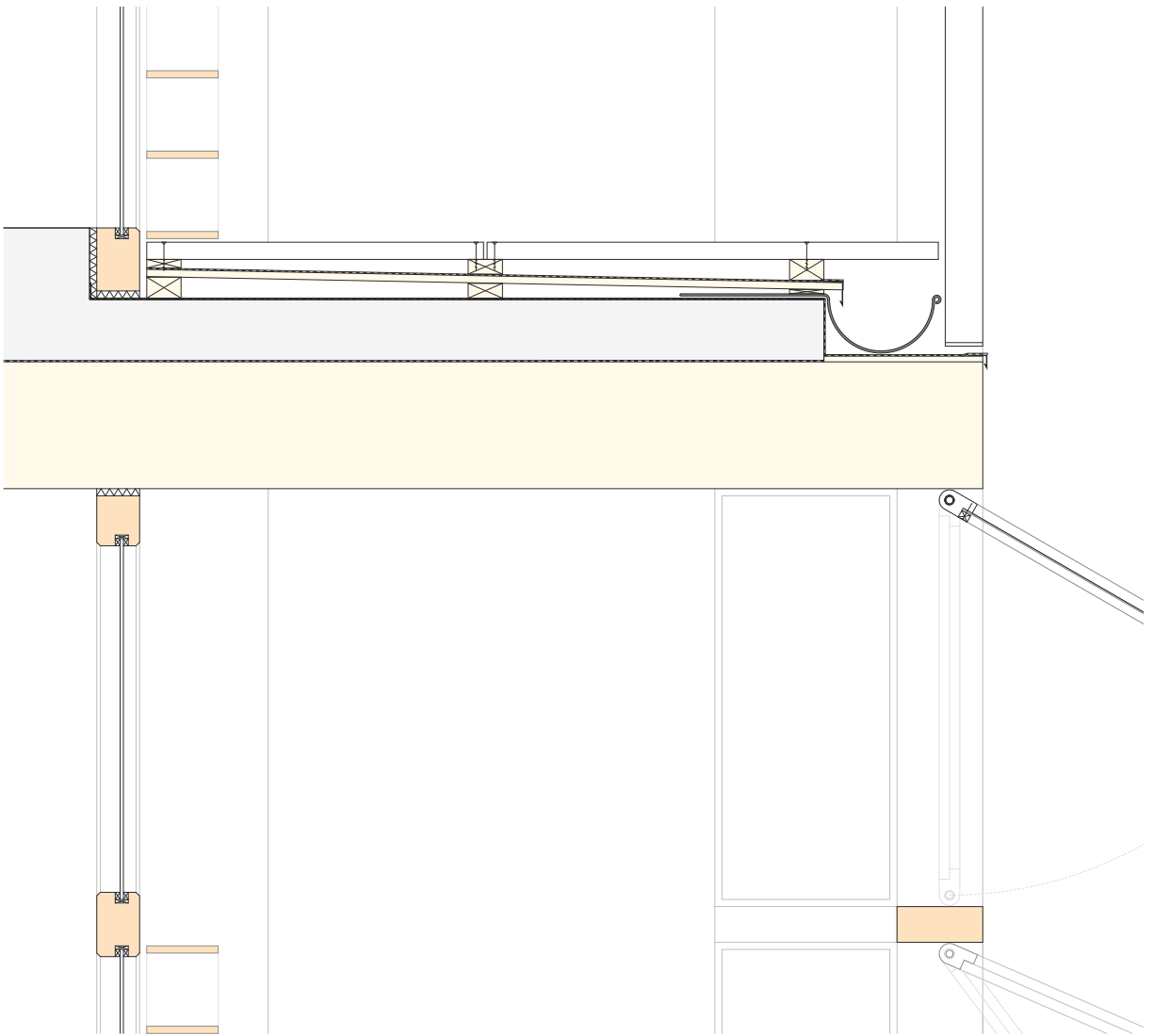
traditional Tibetan fabric



traditional Tibetan fabric



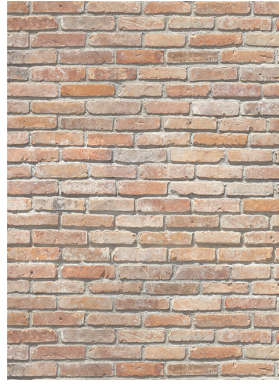
massive wooden slat roof



1:10



massive tropical hardwood



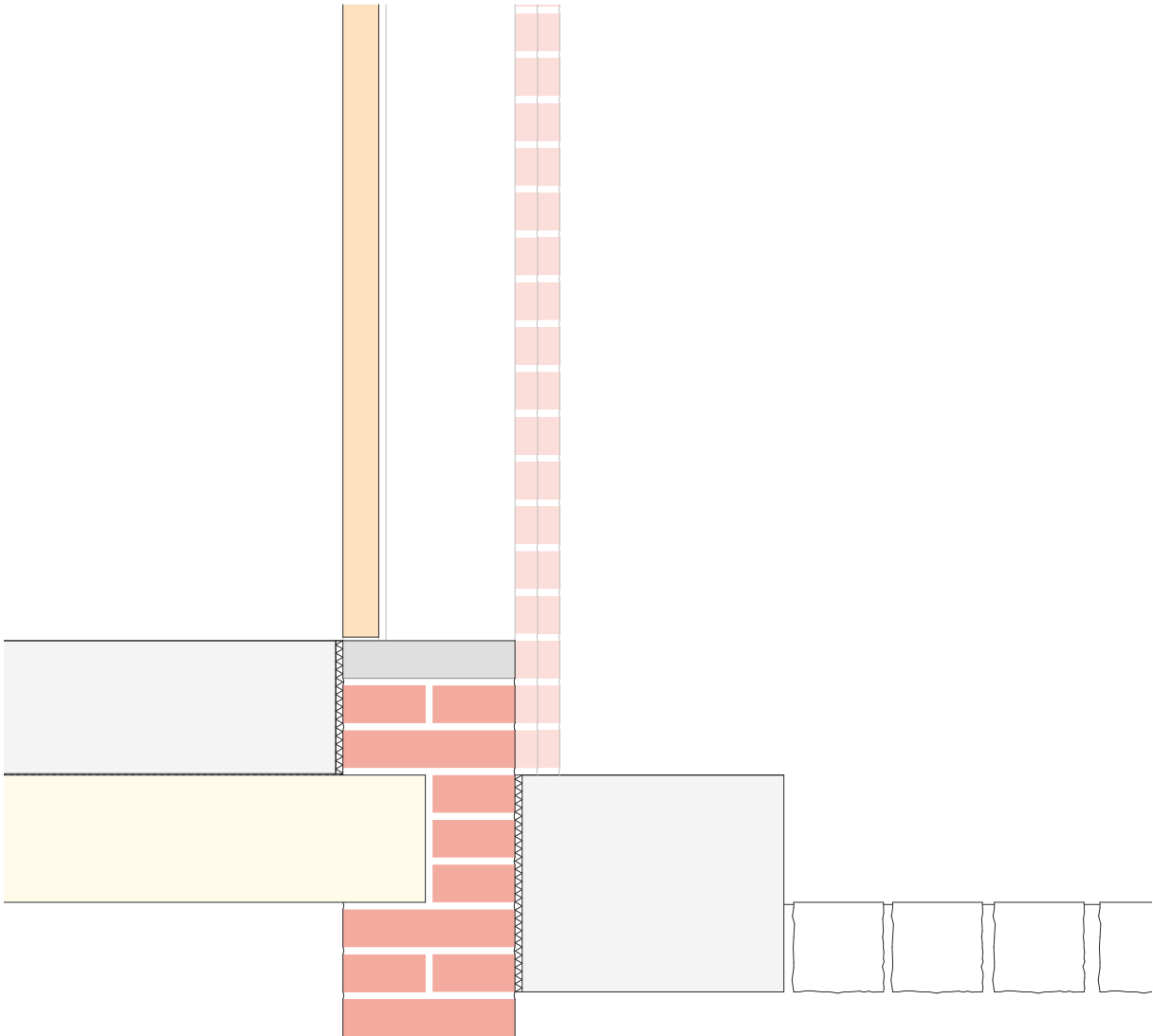
burned bricks



concrete



snad stone cobbles



1:10

Reflection

What were my goals?

My initial goal was to investigate the recent developments of secular Tibetan architecture over the past 60 years and on how the changing socio-political circumstances have influenced the preservation and transformation of vernacular spatial configuration, form and material. I intended to research this in support of an architectural endeavour, to develop a sense of the essential elements of Tibetan architecture and their transformation since the Chinese invasion to Lhasa, which then could inform an architectural intervention in a Tibetan community in exile in India. During the process of researching, the most suitable location for such an intervention turned out to be in New Aruna Nagar, Majnu Ka Tilla in the north of Delhi.

The aim was not to imitate or reconstruct Tibetan architecture but to explore how architectural form and identity are interconnected, how their relationship has gradually changed and how culturally sensible modernization could look like in a society, that had been highly isolated until 1949 and developed a very specific, easy-to-recognize architectural language which subsequently produced a high degree of regional sense of belonging among people but had never gradually modernized in the way we know it from western architectural epochs.

Did I achieve these goals?

Over the past year, I managed to develop a sensibility for Tibetan architectural culture, values and traditions, that enabled me to see and judge architectural patterns in the Tibetan diaspora differently than architecture in other cultural contexts. I believe to have managed to understand Tibetan culture, traditions and values to an extent that architectural developments, which I have observed in the diaspora, regardless of my opinion about them, seem clear and logic to me. Especially in the case of New Aruna Nagar, I have the feeling that, based on many factors such as the local climate, the location, the historical development of Majnu Ka Tilla as a whole, but also largely based on the background knowledge about traditional Tibetan architecture and the circumstances within the diaspora, I understand certain urban developments in the neighbourhood much more thoroughly than I could have before. This again enabled me to create an urban development strategy for the neighbourhood including a design for the New Residential Block and the Library and Cultural Space, that can preserve existing qualities but also improve the local conditions – not only technically but also concerning Tibetan culture and tradition.

Did my approach work well?

During the design process, my findings from the research turned out to be the main tool and decision support for every decision I had to take. On all scales, from urban planning to the detailing, my design decisions result from a try to implement certain goals that I set myself as a reaction to the outcome on my research – to stimulate more interaction and empathy among Indians and Tibetans as well as between Tibetans themselves, to promote awareness of heritage, to facilitate traditional habits and to stimulate culturally sensible, value-based modernization, to facilitate education and innovative ideas as part of the ongoing process of modernization. Besides that, more concretely, I intended to provide a means of identification and space to individualize in the neighbourhood. A major part of the predominant spatial characteristics of my design is an attempt to reach these goals and at the same time interpret traditions, cultures and values in a modern way, given the context and conditions of a low- and middle-income neighbourhood in the north of Delhi.

How was the work with my mentors?

The work with all my three mentors – Roberto Rocco for research, Nelson Mota for design and Jan van der Voort for building technology was outstanding. Every meeting was constructive and informative, after every meeting a came out with many more ideas, every critique was at the same time giving further inspiration in a way that solutions were still to be found by myself but I felt being led in the right direction. I am very thankful for the guidance through this project and will profit from their methodology and input for a long time.

How does my graduation project relate to the studio topic, my master track (Architecture), and my master program (MSc AUBS)?

I believe that my project, although it is a very specific topic, relates to its larger context in several ways. Although a studio in my case doesn't exist – as in Explore lab – I feel that my project closely relates to my mentor's fields of work and research.

First to urbanism and the topic of public goods within a society in Roberto Rocco's case, which was interesting in the sense that the Tibetan community in Delhi created a very peculiar, special type of urbanity – super dense but still very introvert, with people coming from the largely rural, very sparsely populated Tibetan highlands that moved to Delhi, one of the most densely populated cities in the world.

Secondly to global housing, Nelson Mota's field – which pushed me to see not only the Tibetan background of the community but also compare and relate New Aruna Nagar to characteristics of Indian low- and middle-income communities.

And thirdly, Jan van der Voort, who helped me to translate my ideas into surface and material. In that sense, although my graduation is not part of a larger graduation studio, it is surely embedded somehow.

Concerning the Master track (Architecture) and the master program (MSc AUBS), I believe that my approach to the relation of research and design and the idea that every design decision should somehow refer to the findings of the research, is something I was pushed onto in this faculty and that both and the master program in general and also the Master track Architecture incorporates. Therefore, I believe that my graduation project has some elements in common with most of the other graduation project of fellow students I have seen.

What have I learned this year?

The design process was full of conflicts and frictions. With the intervention's main objective to mediated between cultures – Indian and Tibetan - every design decision was first determined by the question, to which extend a certain element should refer to which tradition. Besides that, every architectural element should bring together the two cultures, respect privacy but stimulate openness, give people space to develop and individualize but on the other hand also be dense and affordable, integrate people but to create forced integration etc.

I learned, that nothing in architecture – and probably nothing in life in general - is absolute. Every decision made is a compromise created and influenced by countless factors and therefore a middle way between potentially conflicting elements. In most of my previous designs, I tendentially tried to make clear, definite, unambiguous statements that would lead to a simple, coherent architectural design. Throughout the past year I realized that this is not always the right way – that when creating diversity and integration, a middle way can be the most feasible solution.

Will I be able to apply my findings in further projects?

In the future, I hope to be able to apply my findings about Tibetan architecture in several professional projects in Tibet that I recently started working on.

One of them is a seminar space for a non-profit foundation that takes care of environmental protection near Yushu town, with an attached guesthouse for their volunteers. In this project, for example, it is very fruitful to have researched specifically about the very peculiar Tibetan sense of privacy, as private and public function in this project are mixed. How to create a strong gradient of privacy levels within the building, that allows us to have a borderless, open interior on the one hand, but on the other hand, guarantee that the residents of the guesthouse won't feel too exposed to the public areas? I believe that here, the idea of layering dark and bright spaces, for example, could be a solution to create invisible borders within the building, but the project is still in a very early stage and not developed far yet.

The second Tibetan project that is up to come next year will be a community centre in the very west of Yushu prefecture that is meant to bring people in the very sparsely populated region together by providing a shared space that the community as a whole uses but also maintains and takes the responsibility for. Herefore, the investigation of what kind of spaces Tibetans traditionally used to share and how they did so turned out to be very helpful. Indeed, interestingly, there is barely any tradition of secular shared spaces in Tibetan communities, however, there surely is within religious communities. I believe, the main task for this project will be to more thoroughly think through, how and to which extent one can apply or recreate the spatial qualities of religious shared spaces to the community centre. For both the projects, my graduation research and the process of designing the neighbourhood in Delhi have helped significantly to sharpen my sensibility for space and design in Tibetan culture.

To which extend are the project results transferable to other contexts?

In the future I would like to work in the field of architecture in developing countries, especially being confronted with different cultural circumstances. I have recently joined an Indo-European architect's collective in Bangalore, India (Rooh Studio), that also deals with projects for different low-income communities in the south of India. I believe that many of the strategies and working approaches that I have developed during my graduation period can also be applied to – for example - the projects I will do with this studio – the way I draw the line from research to design, the way how I believe vernacular building tradition should be recognizable in modern architecture, the degree to which I think globalization should impact local traditions etc. Of course, these elements vary from project to project, nevertheless, I believe within the past year, the study of the Tibetan diaspora and its architecture has sharpened my sense of what impact globalization has on the development of vernacular architecture. I start to develop a feeling of how I can judge the relation of globalization and vernacularism and to which extend I consider identity to be fluid and therefore inevitably object to modernization, globalization and loss of tradition.

Besides that, I believe many outcomes of this graduation research and project could also be relevant when thinking about architecture in China – in the context of a unique political system and the role of minorities within that system. In the case of China, forcefully indigenized Chinese modernity has often erased vernacularism and was meant to implement political ambitions. Tibetans are probably the most known Chinese minority at the moment, however, many other minorities in China have been facing oppression under the communist rule in the past 60 years and therefore not been able to pursue their architecture culture freely. The methodology on how architecture, that has never had the chance to authentically and freely modernize, could nowadays be interpreted and developed in a contemporary way, is thereby applicable in many contexts.

How does my research fit into a wider social, professional and scientific framework?

I hope that my work – the research as well as the architectural intervention - can be a piece of the puzzle on how to understand and interpret Tibetan diasporic architecture. The limitation of my research lies in the small number of cases I studied and in the fact that all cases were either in India or in Tibet. It would be very interesting to discover, how Tibetan architectural traditions have developed in other parts of the world. Especially the assumption, that a sense of belonging to the Tibetan community and its expression in architecture have particularly sharpened in those settlements that grew naturally and developed in confrontation with Indian society, suggests, that this phenomenon is even intensified in confrontation with completely different cultures, such as in ind U.S.A. or in Switzerland. More generally, it would be interesting to analyse, to which extend the findings from the Tibetan diaspora can be applied to the architecture of other communities facing migration and cultural transformation. I am personally very curious to further investigate these issues.

Acknowledgements

First and foremost, I would like to take this opportunity to thank my three amazing tutors Nelson Mota, Roberto Rocco and Jan van de Voort for many hours of discussions, critiques, and never-ending inspiration over the past half-year. I am very grateful to have the three of you as my tutors and sincerely hope we can somehow stay connected after I leave this faculty!

Working on this project has widened my horizon a lot - not only concerning my architectural development, but also my personal life. I first got in touch with Tibet through my naive affection to wide, barren landscapes and undiscovered, hard-to-reach places. However, the further I dove into the topic – through working in a Tibetan architecture studio, through making Tibetan friends – the more I got confronted with the political struggle. I experienced many restrictions myself and became a witness of surveillance and discrimination. In the position of being a privileged German citizen, this never seriously affected me, but I started feeling a strong desire to dedicate more attention to the topic. Therefore I am very thankful for having the possibility to deal with the development of Tibetan architecture in my graduation studio.

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- figure 1: Google Earth Pro 7.3.2.5776. (17.04.2016) Delhi. 28°42'03.00" N 77°13'43.20" O, elevation 40.64km., viewed 2020. <<http://www.google.com/earth/index.html>>.
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