# **Tibetan Architecture within the Diaspora in India**

**Contemporary Architecture within the Tibetan Diaspora in India** 

An Urban Development Strategy for New Aruna Nagar

# **Backround: Vernacular Tibetan Architecture**

nomadic architecture: the black tent

rural architecture: villages in Yushu

urban architecture: town house in Lhasa



#### nomadic architecture: the black tent <sup>1</sup>

tent only open to the south

prayer space in the most remote corner

long table as central element women right, men left



#### rural architecture: villages in Yushu

village scale: <sup>2, 3, 4</sup> usually less than 100 people

on a slope facing south maximum solar exposure shifted street axises direction of water

compact, closed buildings private yards



## rural architecture: villages in Yushu

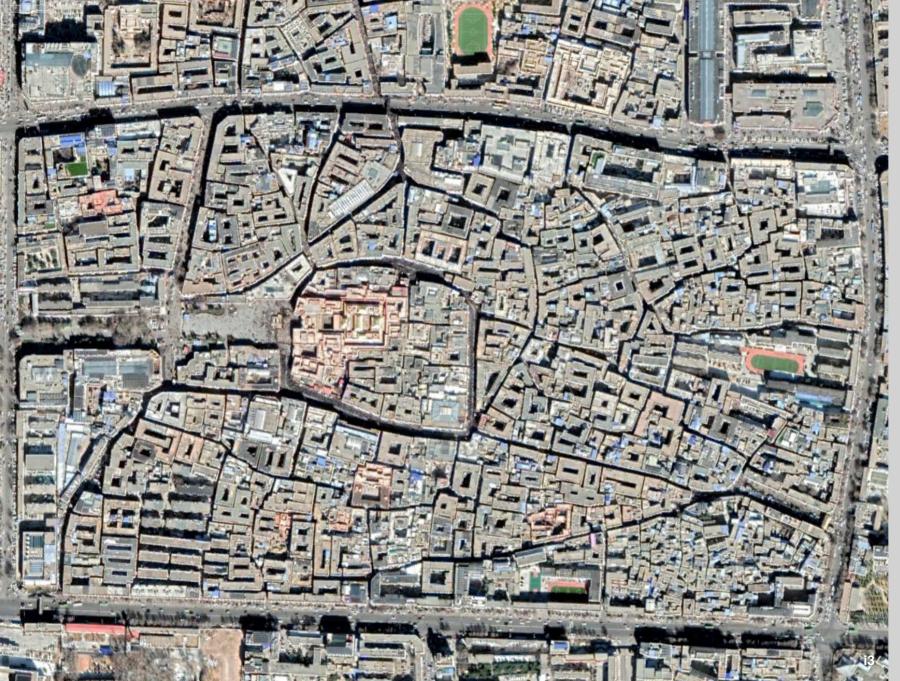
village scale: <sup>2, 3, 4</sup>

privacy through level difference



## rural architecture: villages in Yushu

building scale: <sup>2, 3, 4</sup> introverted - courtyards sequences of dark & bright spaces sophisticated wooden handcraft



#### urban architecture: Lhasa

urban scale: 5, 6, 7

growth around sacral spaces circumambulation

narrow streets, pocket spaces

# 

## Labrang Nyingba: 5, 6, 7

17th century

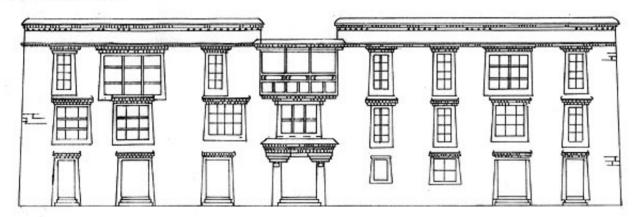
little typological development no styles or periods

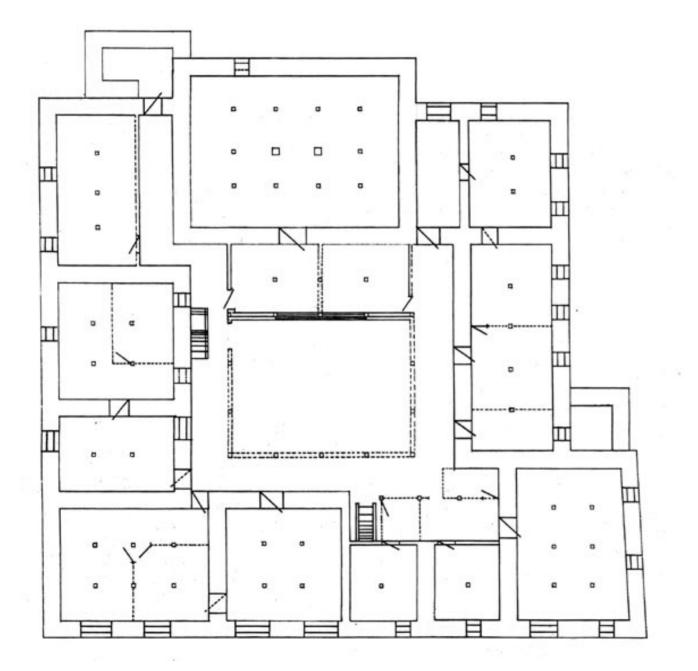
#### Labrang Nyingba: 5, 6, 7

roughly symmetrical cemtral living space, large window (Rabsel)

complex wooden overhangs symbolic meaning

CABRANG WYINGER TACADE





## Labrang Nyingba: 5, 6, 7

ntrovert courtyard house central living rooms

remote prayer space

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

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

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

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

# **Tibetan Architecture within the Diaspora in India**

Bylakuppe, Karnataka

Mc Leod Ganj, Himachal Pradesh

New Aruna Nagar, Majnu Ka Tilla, Delhi



## Bylakuppe: 9, 10, 13, 14, 15, 16

isolated

emporary solution 0 people per village

subsistence farming

few facilities, mostly schools

shops, restaurants

few tourists

overpopulated, sattelite camps



## Bylakuppe: 9, 10, 13, 14, 15, 16

some old buildings:

courtyards central living rooms remote prayer rooms



## Bylakuppe: 9, 10, 13, 14, 15, 16

few Tibetan characteristics within the architecture

new buildings large hall Indian style



## **Dharamsala** 9, 10, 20, 21

urban scale:

growth around sacral spaces

circumambulation

wide streets as public spaces



#### **Dharamsala** 9, 10, 20, 21

building scale:

symmetrical central entrance, large window

wooden lattices

fabrics above windows and doors

courtyard houses

white-washed stone walls



## Dharamsala 9, 10, 20, 21

building scale:

most modern buildings: no Tibetan characteristics



## New Aruna Nagar, Majnu Ka Tilla <sup>9, 10, 17, 18, 19</sup>

infomal settlement in the north of Delhi



## New Aruna Nagar, Majnu Ka Tilla (south) <sup>9, 10, 17, 18, 19</sup>

urban scale:

ircumambulation

narrow street network

pocket spaces

sequences of dark & bright spaces



## New Aruna Nagar, Majnu Ka Tilla (north) <sup>9, 10, 17, 18, 19</sup>

#### building scale:

#### introvert

harsh borders between in- and outside

dark rooms

traditional spatial configuration disappeared

no aesthetic Tibetan features

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

The deliberate isolation of the Tibetan exile community in settlements impedes a continuation of Tibetan architecture practice.

The sence of belonging and its expression in architecture has rather sharpened in those settlements that grew naturally and developed in confrontation with Indian society. Which social problems does the lack of cultural sensibility within architecture create for Tibetans?

Most buildings and settlements in India keep Tibetans from practicing their tradition, impede any culturally sensible modernization and hinder the intersection with other cultures as well as social mixture within the diaspora How does contemporary Tibetan architecture 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.

Institutions tend to aesthetically replicate Tibetan buildings, individual people rather reinterprete typologies based on values.

Urban architecture in India and Tibet resembles more than rural one, as urban architecture evolved more from cultural habits and rural architecture is rather influenced by climatical circumstances. To which extend can architecture stimulate a sense of belonging and how do Tibetans uprooted in different settlements reconstruct and individualize space?

In master-planned settlements, Tibetans largely individualize their space through aesthetic and nostalgic features.

In organically grown settlements,

architecture facilitates a continuation of practices and culture rather than a preservation It stimulates a sense of belonging within the dispora more than relating back to geopraphic Tibet.

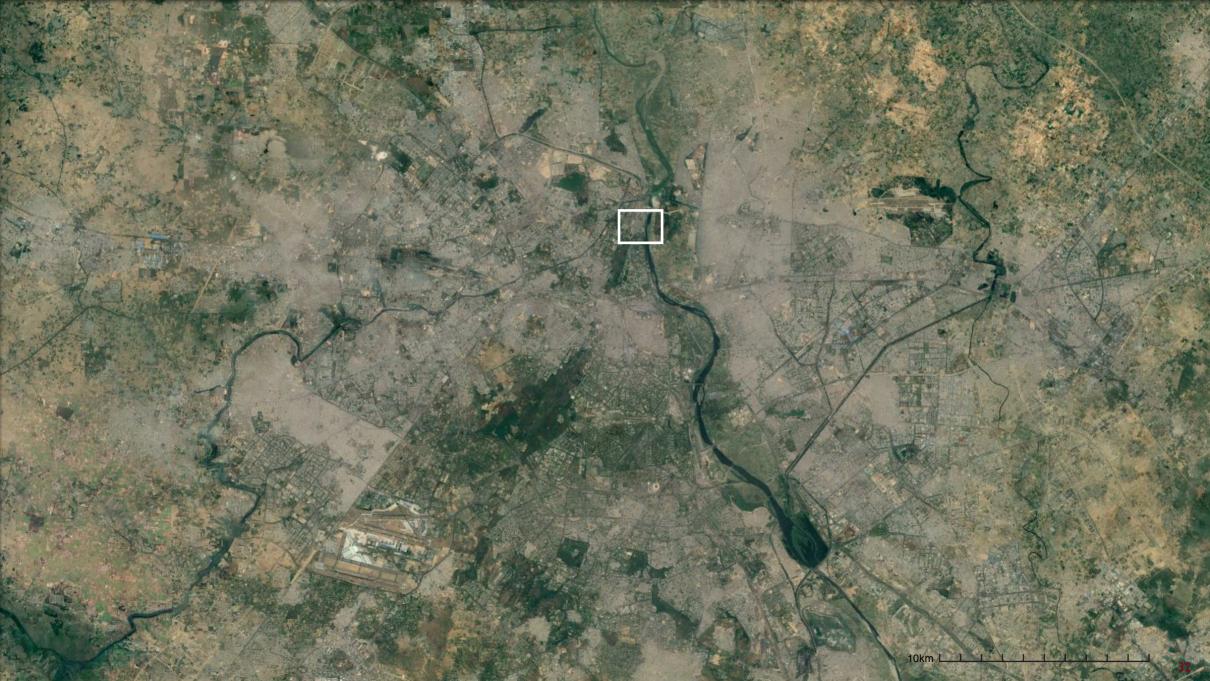
## **Objectives:**

stimulate more interaction and empathy among Indians and Tibetans and between Tibetans

promote awareness of heritage, facilitate traditional habits stimulate culturally sensible, value-based modernization

provide a means of identification and space to individualize

New Aruna Nagar







## Old Chandrawal Village

developed around 1900

emporary accomodation for construction workers



## Aruna Nagar

developed in 1958

resettlement of people from the centre



## New Aruna Nagar

developed after 1959

government tolerates Tibetans



connectivity



38,925 m<sup>2</sup>

ca. 5,000 inhabitants

128,452 inh/km<sup>2</sup>

Delhi: 11,297 inh/km<sup>2</sup>



1959 first developments between temple square and the bridge



1970's boys' prison



### 1982

road extension for Asian games people get resettled from the west to the north



connectivity





network south



100m L L L L L L L L L L L



south - circumambulation





public spaces







surrounding areas









daylight

natural ventilation

fire risk





daylight

natural ventilation

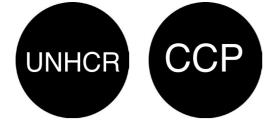
fire risk







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 responsable for education

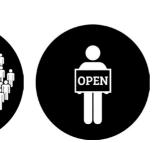
RWA

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



interested in having a say in any political decision





business owners:

legalization of commercial activities

residents:

want a place worth living seek for more interaction with Indians

### New Aruna Nagar

legal insecurity:

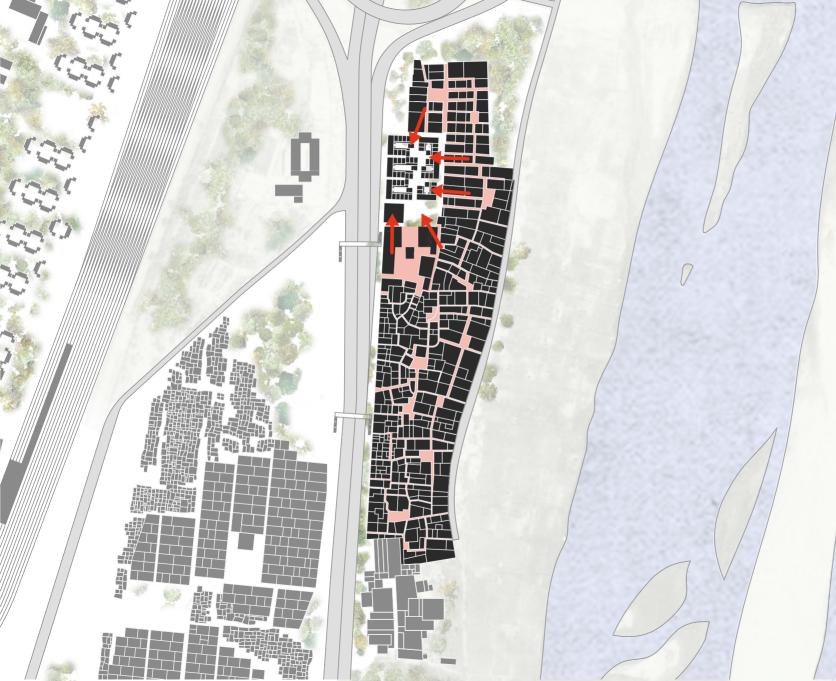
no security of tenure

no land trust community

# Intervention



develop a new residential block on the site of the prison



1)

develop a new residential block on the site of the prison

2) structurally upgrade the existing neighbourhood



### 1)

develop a new residential block on the site of the prison

### 2)

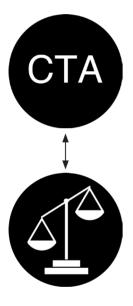
. structurally upgrade the existing neighbourhood

### 3)

establish secular public institutions throughout the neighbourhood

# **Stakeholders, Timeline & Finances**

**Stakeholders** 



### Central Tibetan Administration:

negotiates about land and legalization with the Indian government

takes the legal responsability for the urban upgrading

### Indian government:

relocates the prison and sells the land to CTA & RWA

legalizes the existing neighbourhood and people's commercial activities

**Stakeholders** 



### Central Tibetan Administration:

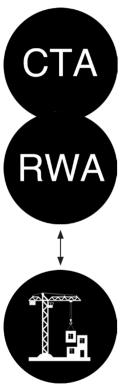
communicates with the RWA about the inhabitant's needs directs order of local impact to the RWA

Residents's Welfare Association:

mediates between NAN's inhabitants and the CTA

takes care of the eviction and resettlements processes

**Stakeholders** 



### Central Tibetan Administration:

work as purchaser

is the building owner and takes care of financial processes

Resident's Welfare Association:

functions as construction inspector and supervisor

mediates between CTA and the construction cooperative

### construction cooperative:

executes the urban upgrading

employs Tibetan and Indian workers

2020		2025	2030	2035	2040	Proposal
	u ا البلہ اللہ اللہ اللہ اللہ اللہ اللہ اللہ	•		The new Secular Public Institutions will be established step by step		Timeline
	The RWA establishes contact with people willing to move in favor of the urban upgrading	new street network and the technical measures will be graduadually implemented The respective people move to the New Rsedential Neighbourhood				

	prison sit	e in Majnu Ka Tilla:		ateforum.com)	5,000 Rs - 10,000 4,424 m² 33,180,000 Rs	Rs / m²					
	building of built area	construction cost (average qualir a on the prison site d building cost: om naredco.in, ramcoc	2:		12,000 Rs / m² 10,248 m² 122,976,000 Rs						
	total pric	e of new residentia	al neighborhood:		156,156,000 Rs						
	demolitic	<b>urban renewal</b> on of 1,500 m2: 5 public amenities			36,000,000 Rs 60,000,000 Rs						
		people	urban area	built area	floor area	urban density	floor area pp				
New Aruna Nagar:		5000	38,925 m <sup>2</sup>	34,387 m² GSI: 88.3%	138,962,25 m² FSI: 357% (exclu	I,285 ppl / ha Iding commercial s	19,85 m² spaces)				
eviction (urban upgrac	ling):	192		1,500 m <sup>2</sup>	3,750m <sup>2</sup>						
neighbourhood (priso	n site):	386	3,058m <sup>2</sup>	2,535 m <sup>2</sup> GSI: 82.9%	9,198m² 301% (+1,050m² acces	1,262 ppl / ha s)	23,8 m <sup>2</sup>				
After the relocation of the evicted people, there is space for approximately 194 people left, equalling roughly 4575 m <sup>2.</sup>											
rental price for middle income apartments in Majnu Ka Tilla: 250 Rs / m² / month											
(makaan.in, 99acres.com, houing.com) possible monthly rental income:			1,143,	I,I43,750 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, houing.com)640,500,000 Rspossible turnover:640,500,000 Rs

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

**Proposal** 

### CHRONOLOGICAL ORDER

develop a new residential blo on the site of the prison

2) structurally upgrade the existing neighbourhood

3)

establish secular public institutions throughout the neighbourhood

### **ORDER OF PRESENTATION**

1) urban strategy

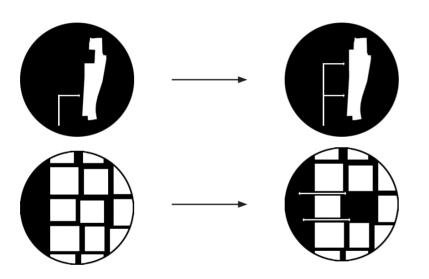
2) a library and cultural space

3) new residential block

# **Urban Strategy**

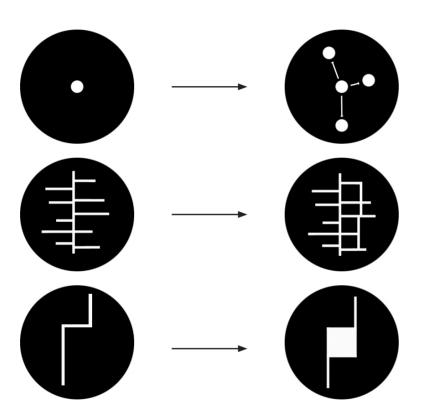
- increase urban quality for people that live in the neighborhood already

- open commercial and public areas to people from outside
- preserve privacy within the blocks
- create spaces to rest, to decelerate
- facilitate traditional habits



new points of acces towards the city of Delhi

acces point leading onto public squares



### decentralization of points of interest

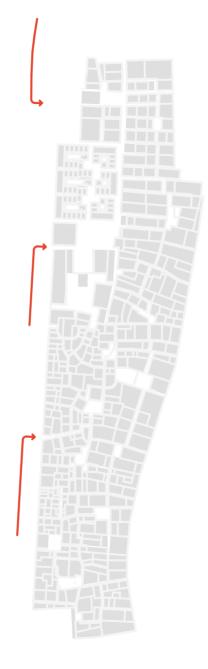
### loops and circumambulation

### small pocket spaces

65





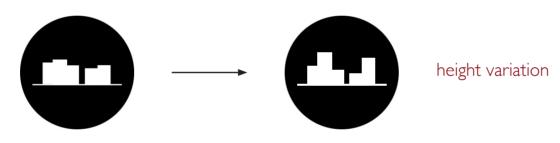








# **Urban strategy**





## Urban strategy

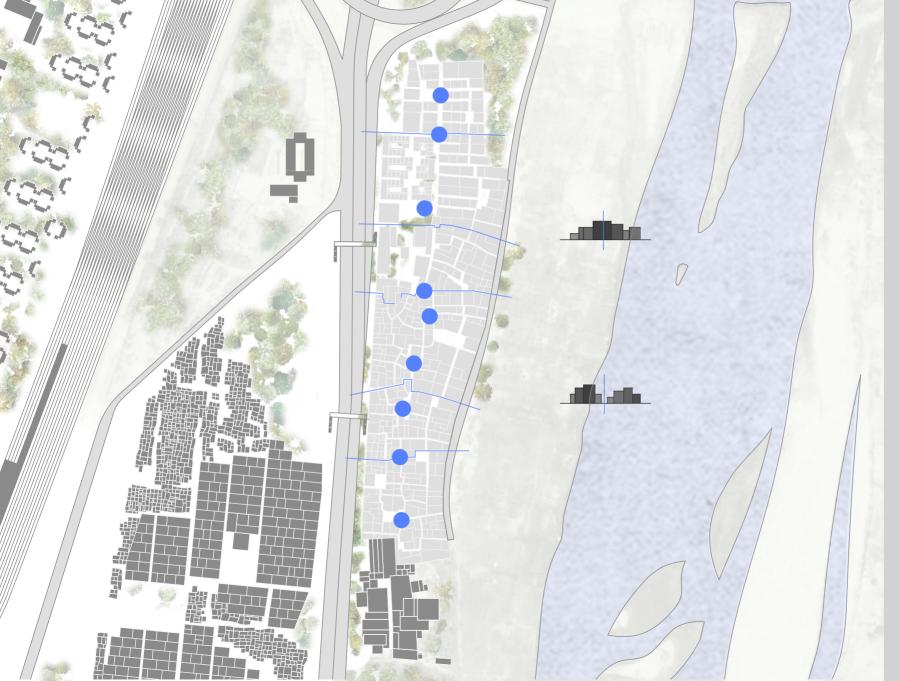
ventilation & daylight

private outside spaces



### **Urban strategy**

fire safety



### **Urban strategy**

fire safety



Secular Public Facilities A Library & Cultural Space



public goods: knowledge, interaction, communication

towards the outside:

object of attention

transfer point between neighbourhood and street

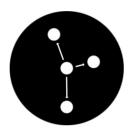
owards the inside:

object of identification

place for deceleration



point of interaction Institution to promote heritage and facilitate education

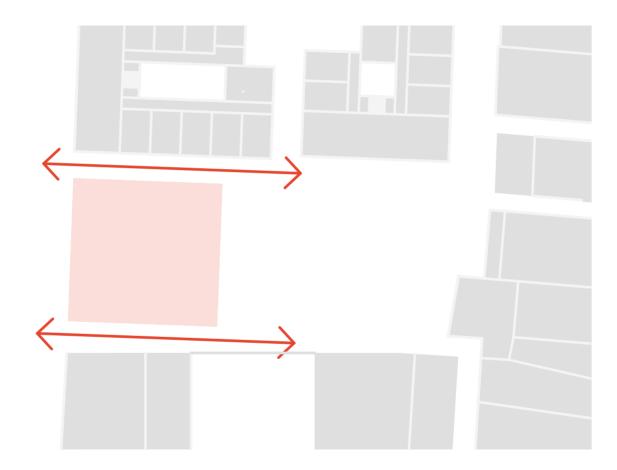


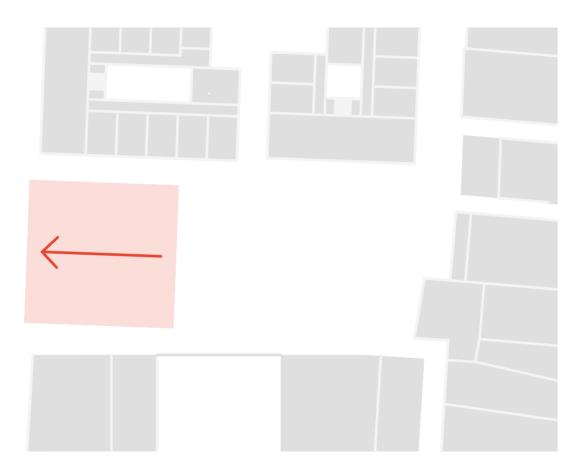
Allocated decentrally in the neighbourhood to enliven all areas

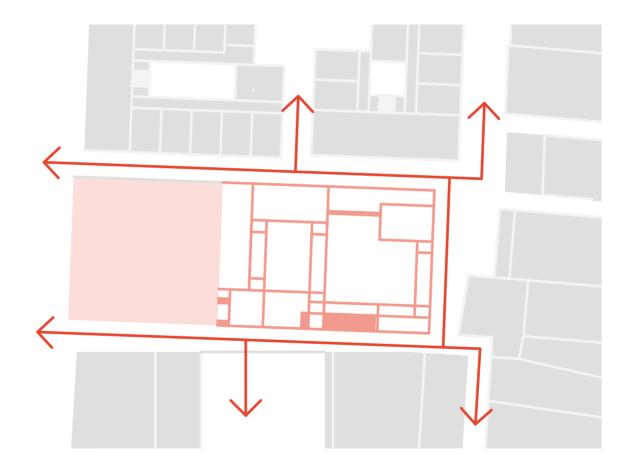
secular public facilities as points of acces

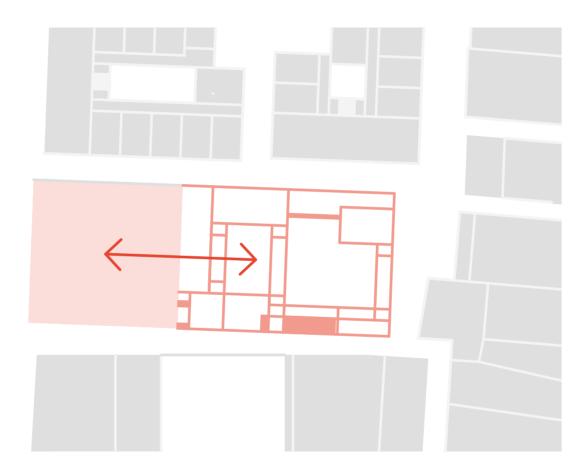


seperate commuting and resting









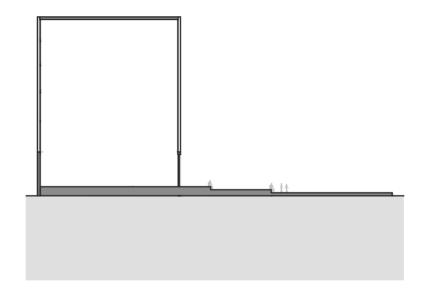


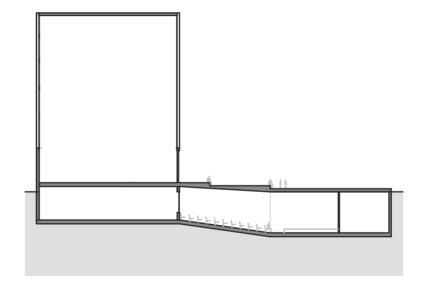


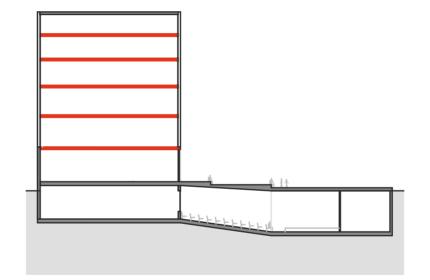
gradual transition from outside to inside, from public to private

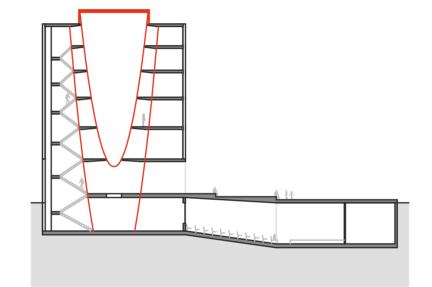


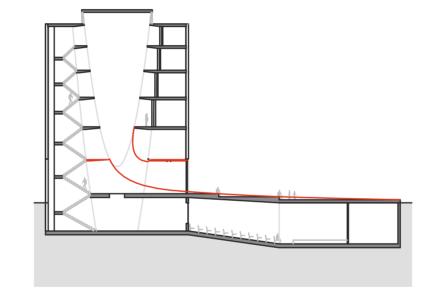
iconic that stimulates sense of identity





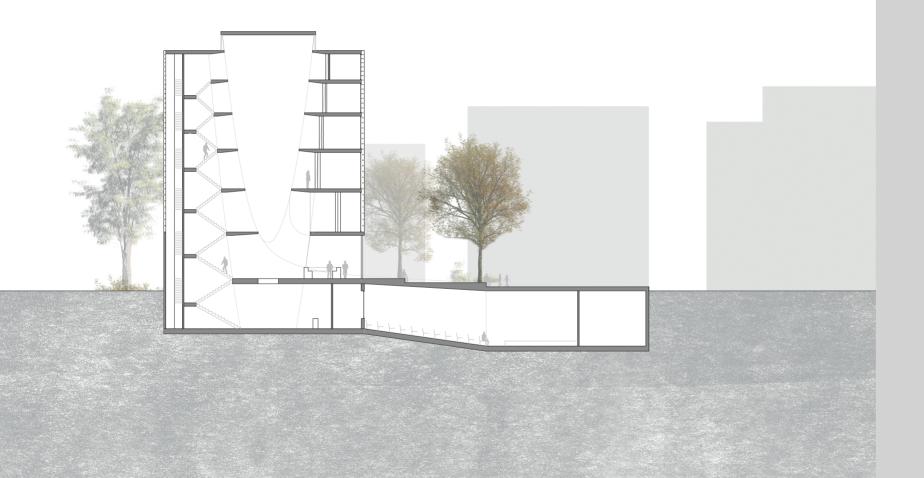




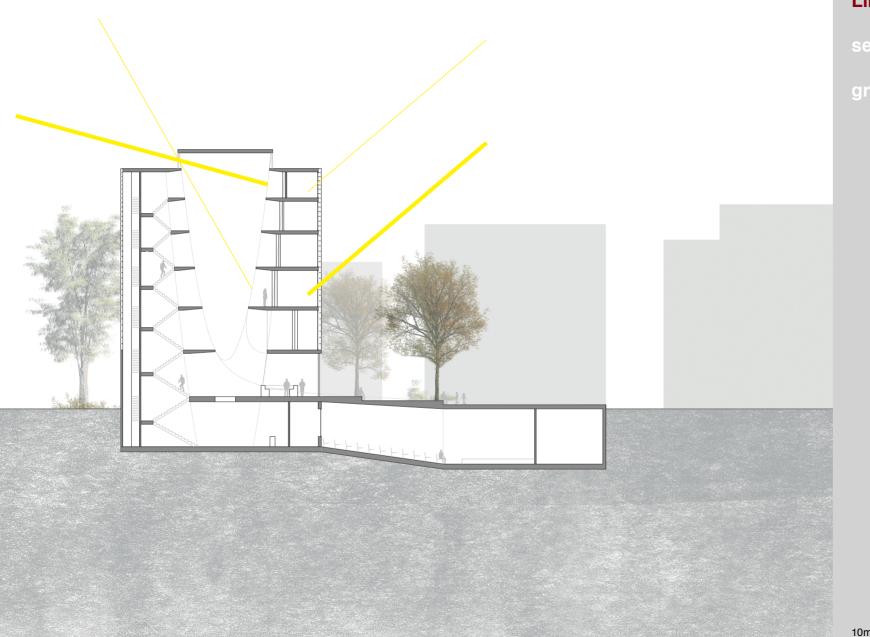


section west - east

axial- / point-symmetric



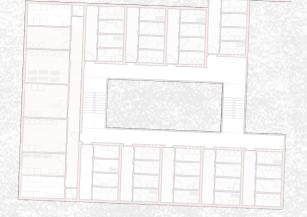
10m LLLLLL

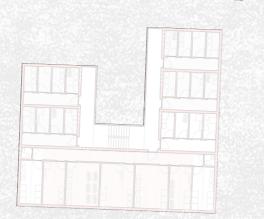


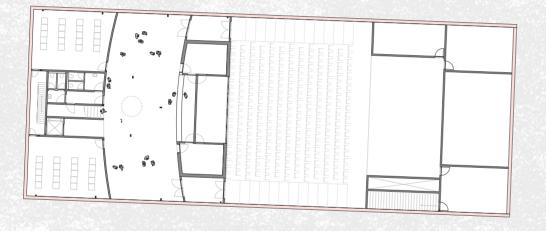
section west - east

gradient through light









underground floor:

foyer

cultural events

arger meetings

archive and storage

technical areas





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## Library & Cultural Space

ground floor:

entrance & reception

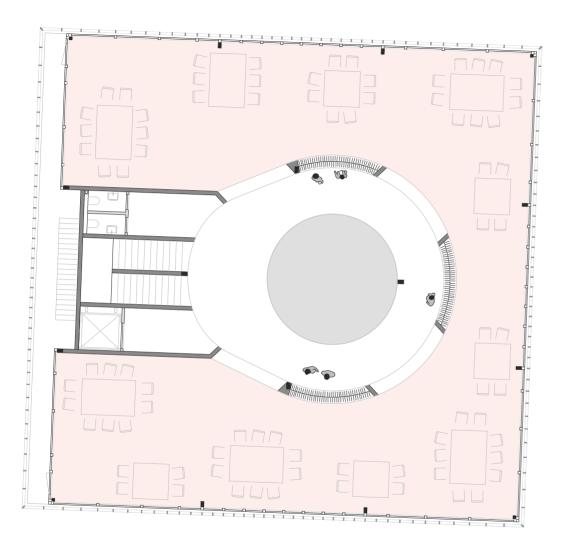
exhibition space

administration

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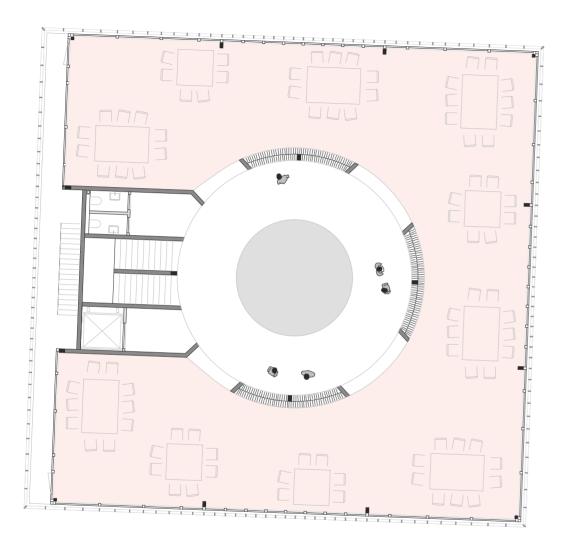
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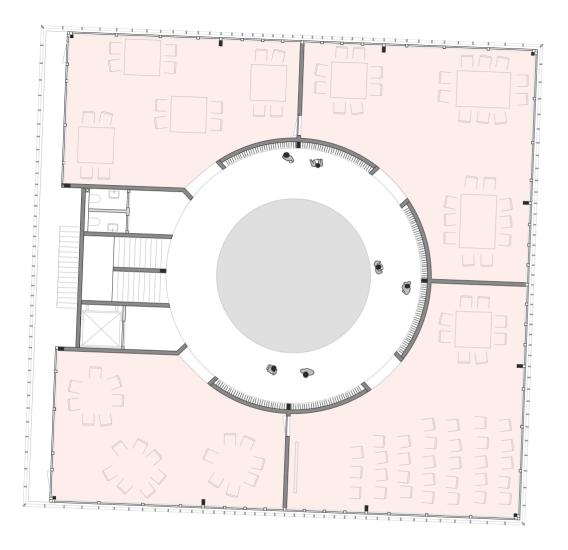
**1st floor:** 

open area, parlatorium



2nd floor:

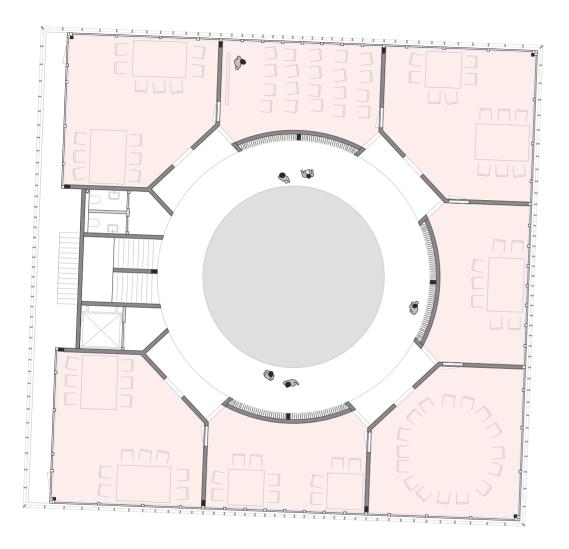
#### open area, parlatorium



**3rd floor:** 

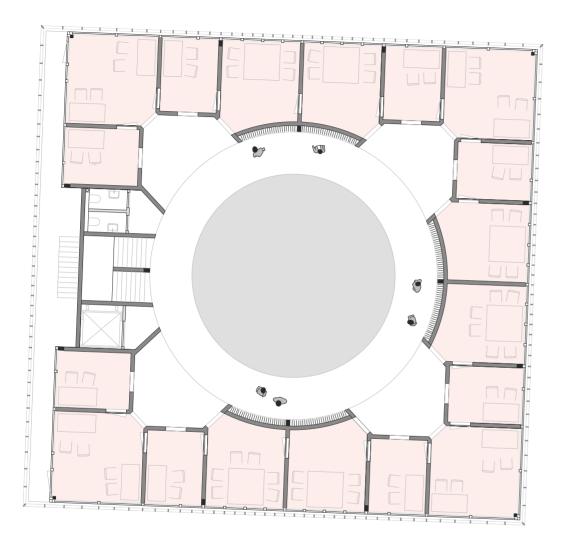
seminar spaces

ecture & presentation rooms



4th floor:

#### group working spaces



**5th floor:** 

#### small working units





# **A New Residential Block**

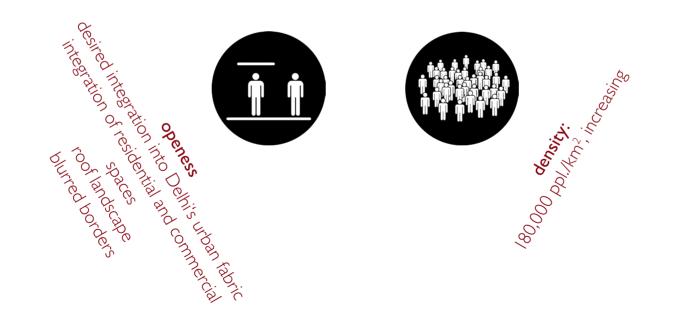


- evicted people
- voluntary movers inside New Aruna Nagar
- newcomers

#### privacy

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

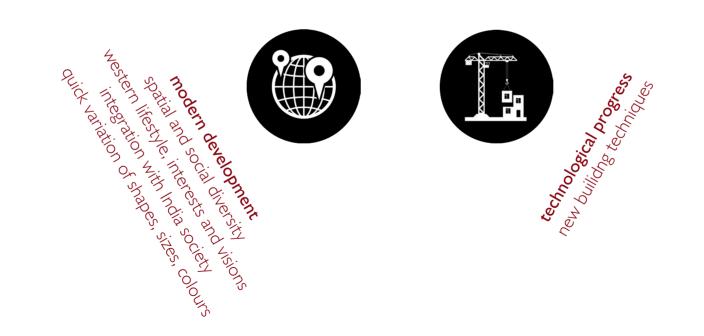




#### religious values

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







Interactive within the block, strict border towards outside

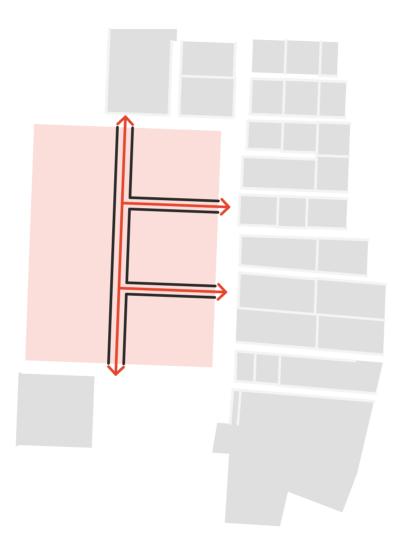


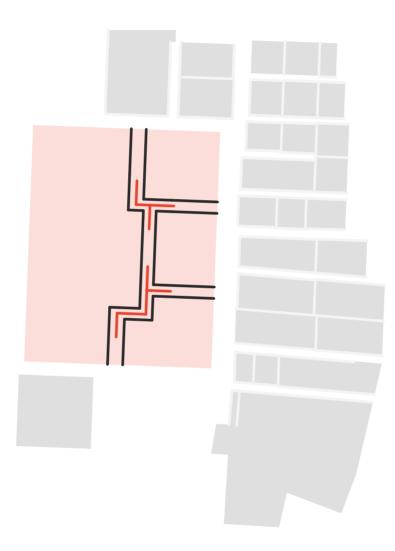
Meandering street network

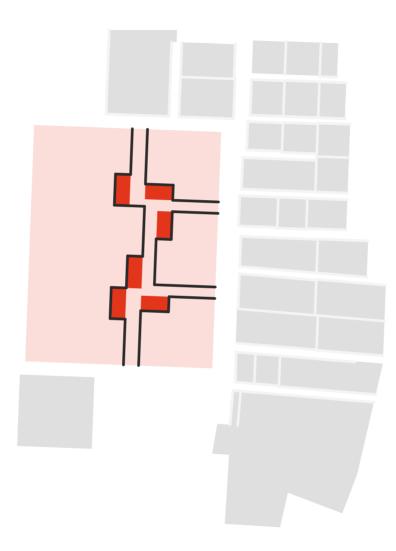
Interactive pocket spaces

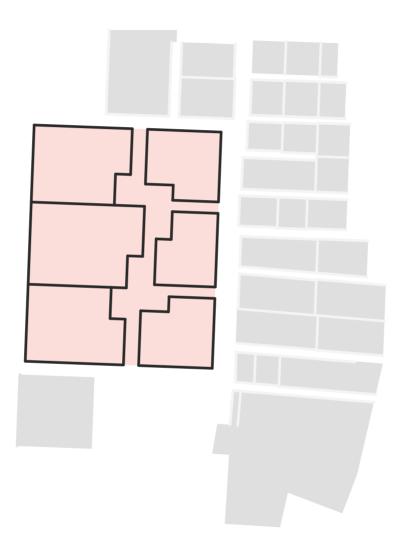


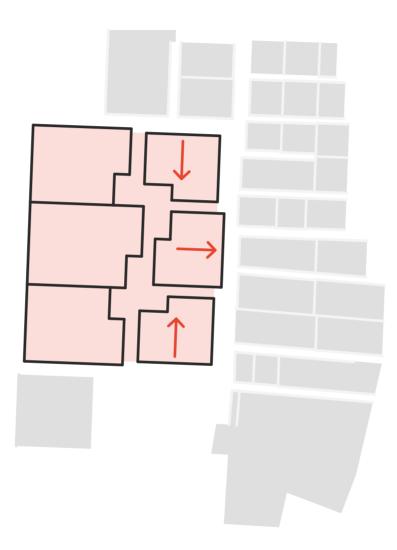
Height variation

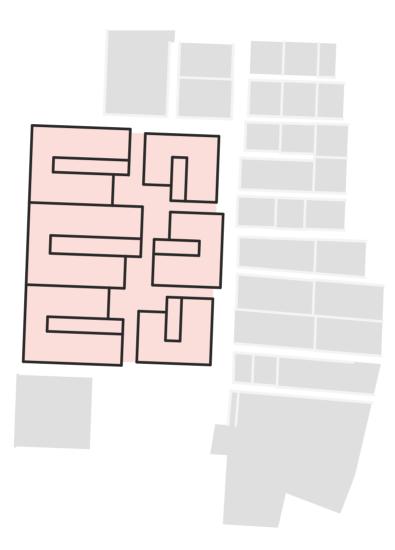


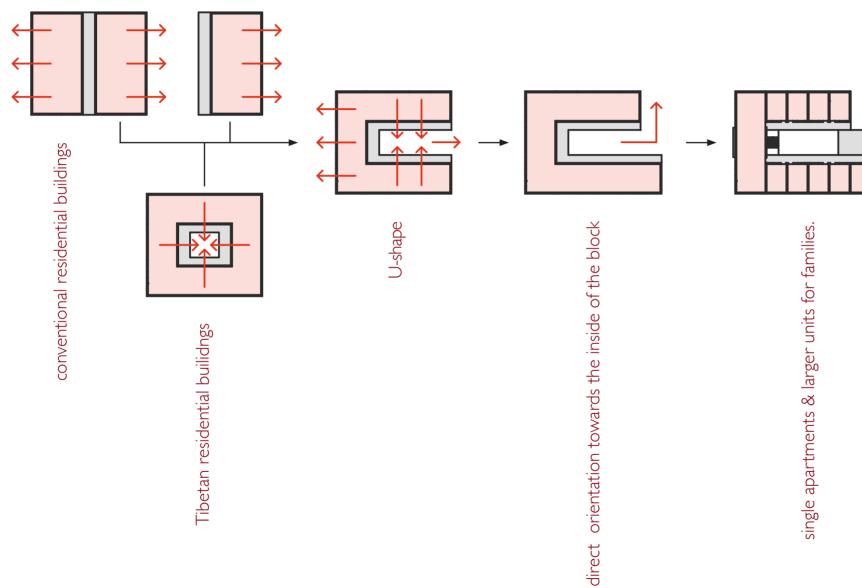


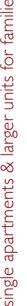














20m L L L L L L L L L L



1st floor:

public area above the entrance for all residents of a building

20m L L L L L L L L L



2nd floor:

errasses shared space per floor

acces balconies with private pockets

private units



**3rd floor:** 



4th floor:



**5th floor:** 

roof landscape point of interaction with neighbors outside of the block

traditionally: roff terasses above central living rooms







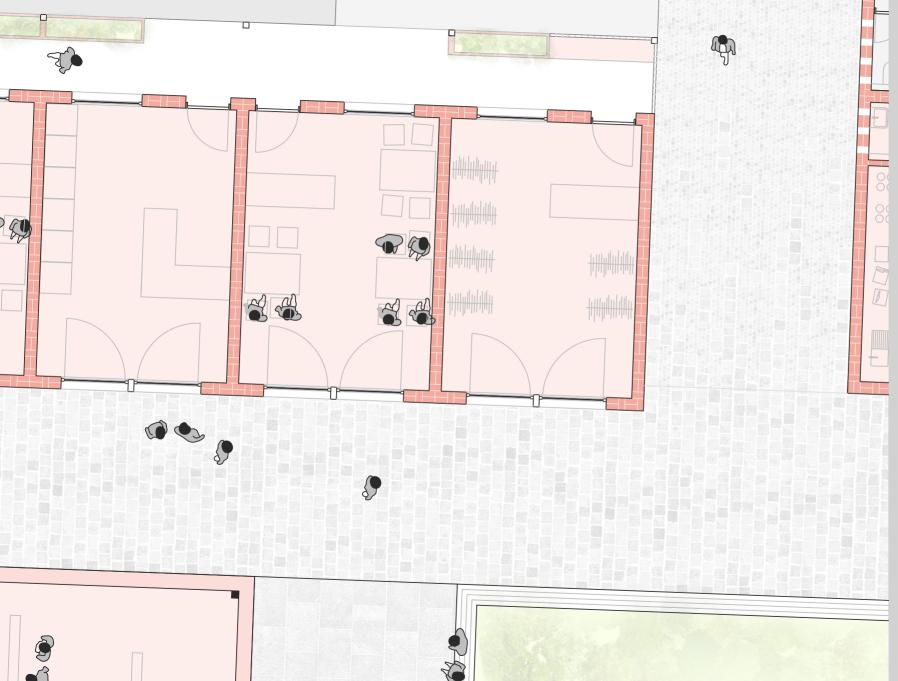
#### ground floor

ront entrance: evel difference - ramps

back entrance: stairs leading to the platforms garbage bins bicycle stands

commercial units (and shared kitchen) towards the outside

residential units half a floor higher



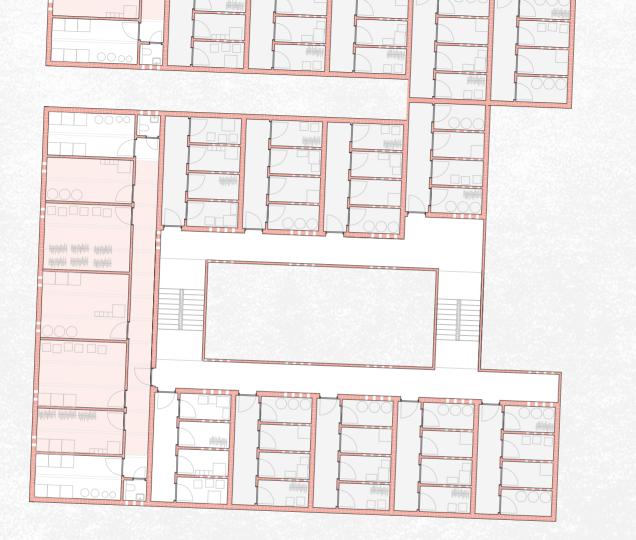
ground floor

ront entrance: evel difference - ramps

back entrance: stairs leading to the platforms garbage bins bicycle stands

commercial units (and shared kitchen) towards the outside

residential units half a floor higher







underground floor

storage and toilet for commercial units

storage for residential units

GWE rooms







1st floor

public area above the entrance







2nd floor

THE

platforms start to jump back

greenery in the corridors: visual privacy and shading within the units

niches on the corridors belonging to the units







3rd floor

activities on the platforms

prevent from people privatly enchroaching the platforms







4th floor

activities on the platforms

prevent from people privatly enchroaching the platforms







# **The Residential Units**



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



average families unit for 3 - 4 people



single people - youth hostel culture single apartments



2nd floor

single units:

gradually more privacy towards the back of the units

cross-ventilation through interrupted brick pattern



2nd floor:

familiy units:

buffer space next to the entrance

central doubly floor living room with private terrase

attached kitchen

2 master bedrooms

2 bedrooms

service room

remote prayer room

study room



**3rd floor:** 

familiy units:

buffer space next to the entrance

central doubly floor living room with private terrase

attached kitchen

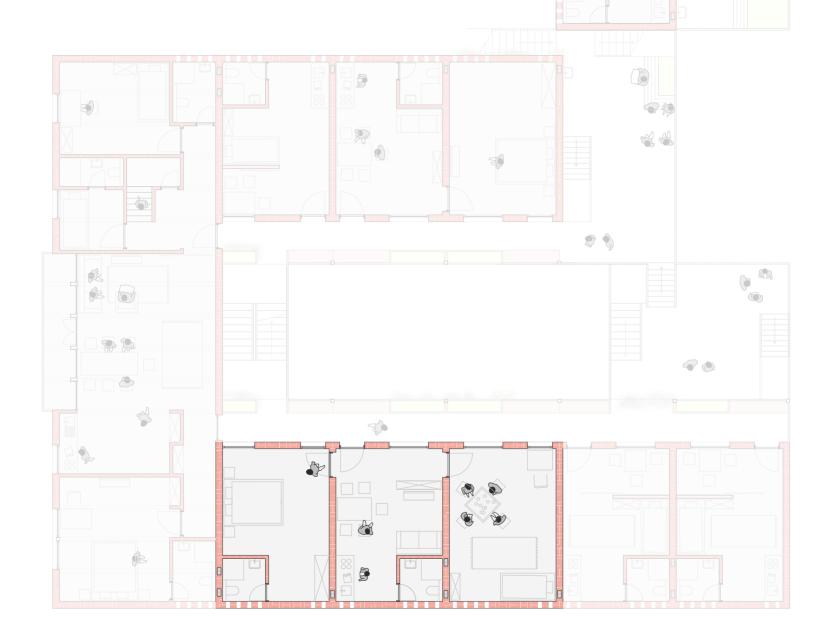
2 master bedrooms

2 bedrooms

service room

remote prayer room

study room



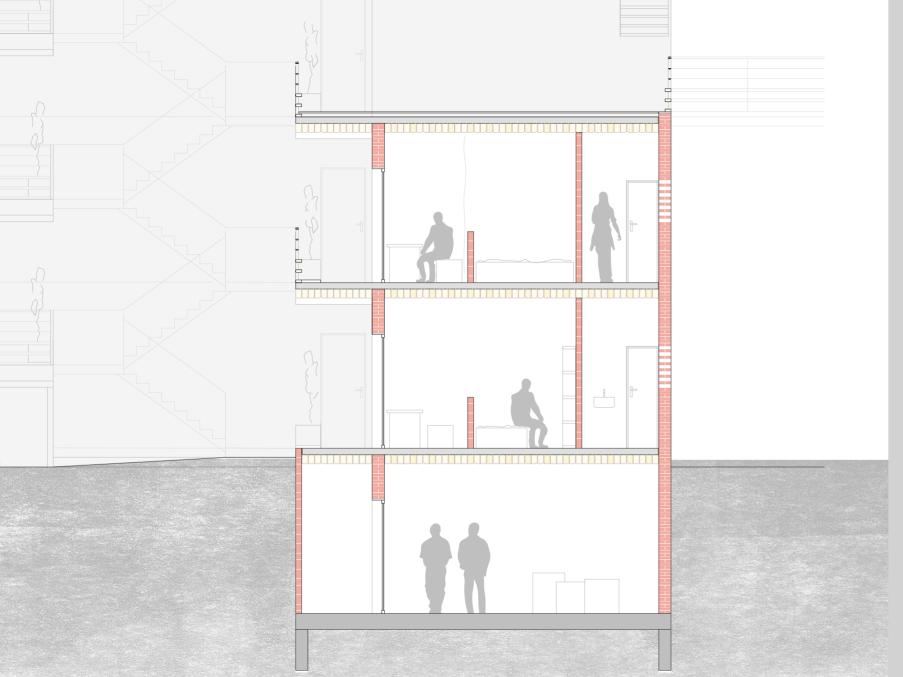
2nd floor - in 10 years

single units:

free-span ceiling

intels for openings between units

brick walls within the units detached from load-bearing walls



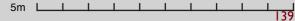
### 2nd floor - in 10 years

single units:

free-span ceiling

intels for openings between units

brick walls within the units detached from load-bearing walls





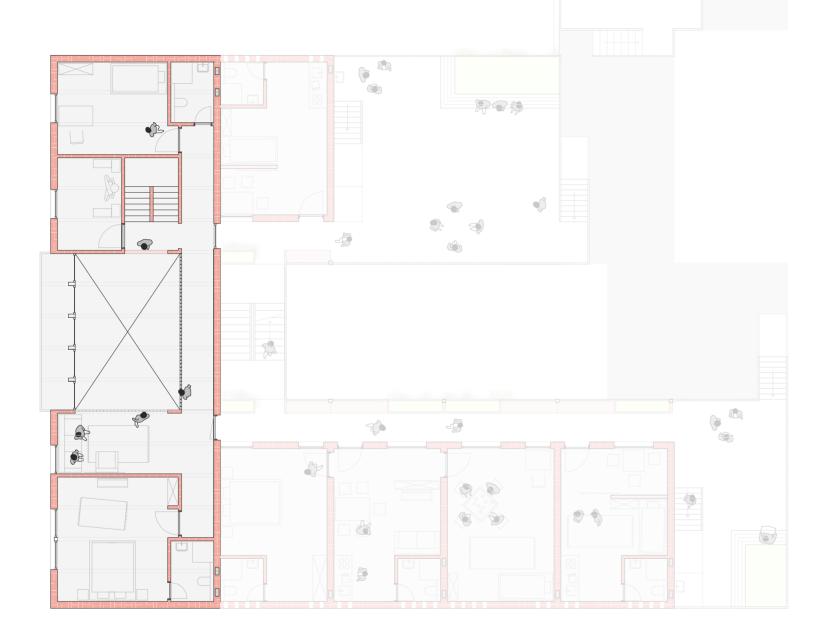
2nd floor - in 10 years

family units:

beam grid

brick walls within the units detached from load-bearing walls

simple displacement of walls and doors



3rd floor - in 10 years

family units:

beam grid

brick walls within the units detached from load-bearing walls

simple displacement of walls and doors



3rd floor - in 10 years

family units

beam grid

brick walls within the units detached from load-bearing walls

simple displacement of walls and doors

# **Fassade and Detailing**



Merge Indian and Tibetan building



Stimulate individualisation and variety



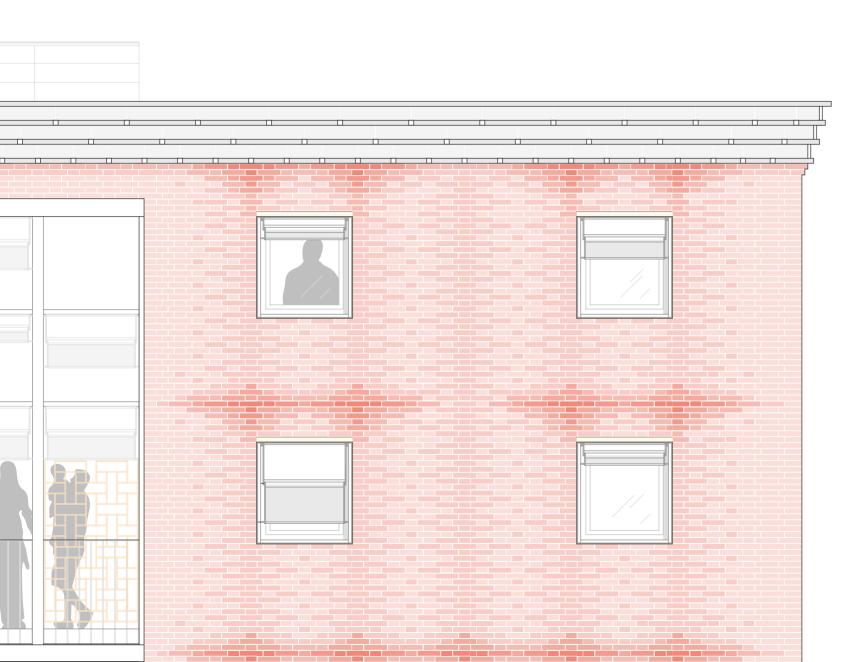
Simple, affordable and sustainable construction materials



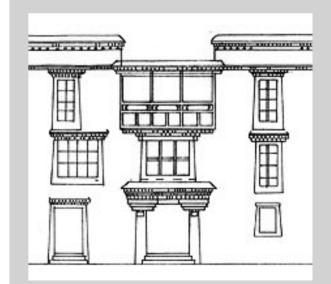
main "face" towards the public

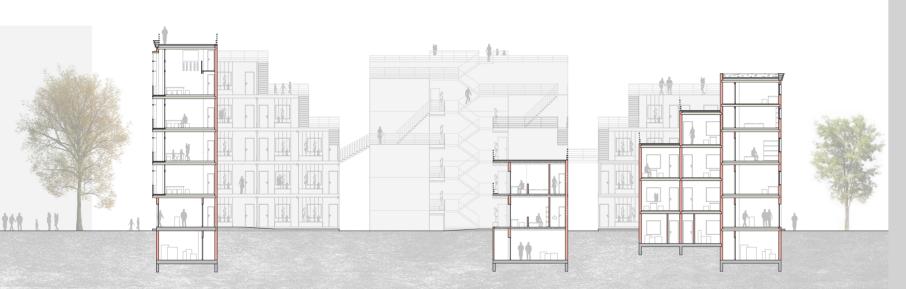
continuation of urban scale





abstraction of Tibetan features large lintels, frieze

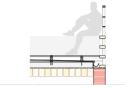


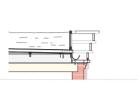


section:

height variation within the units

roof terrasses





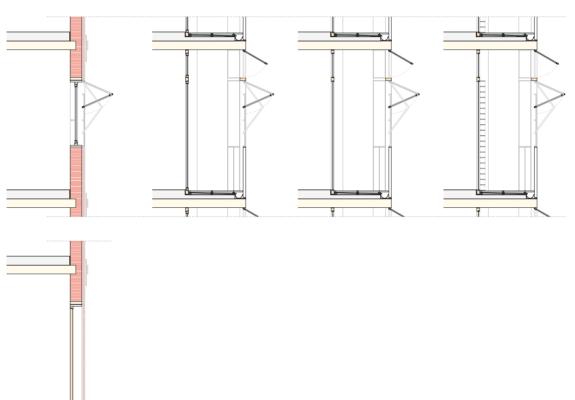


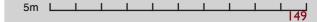
details towards the street:

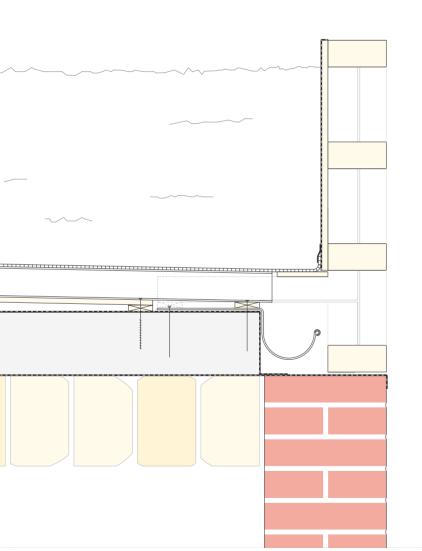
Tibetan frieze

middle floor

contact with the ground









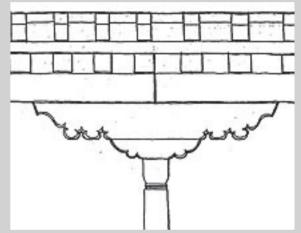


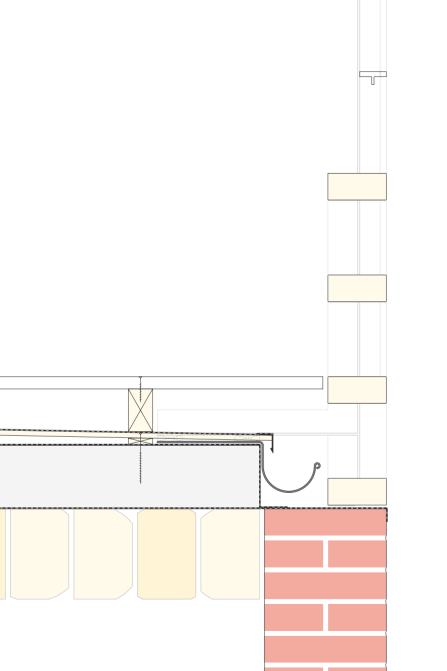




Tibetan frieze

greenery

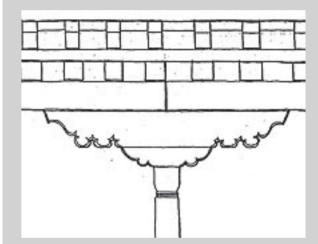






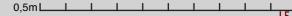
**Tibetan frieze** 

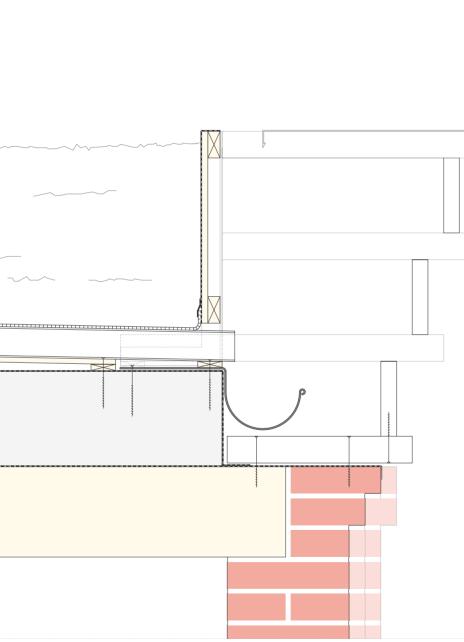
terrasse













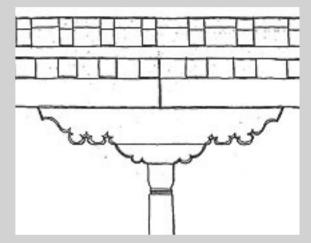


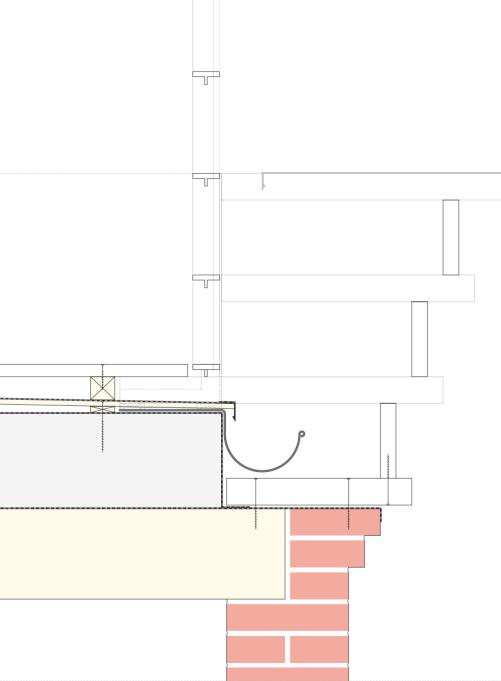


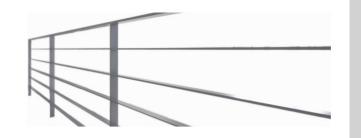


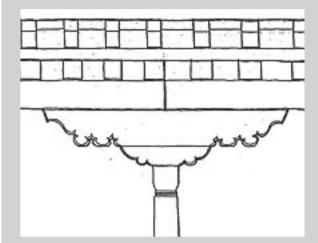
Tibetan frieze

greenery













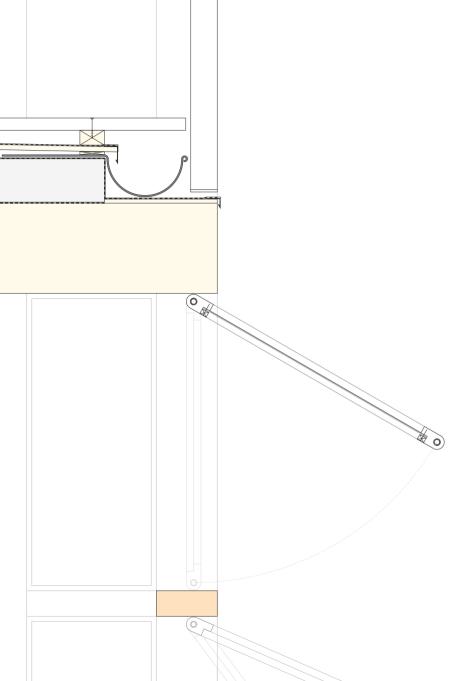
0,5mLIIII



middle floor

### window with exchangable blind

0,5ml







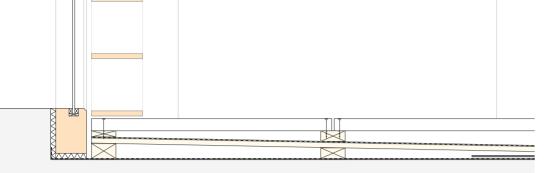






middle floor

balcony with exchangable blind





middle floor

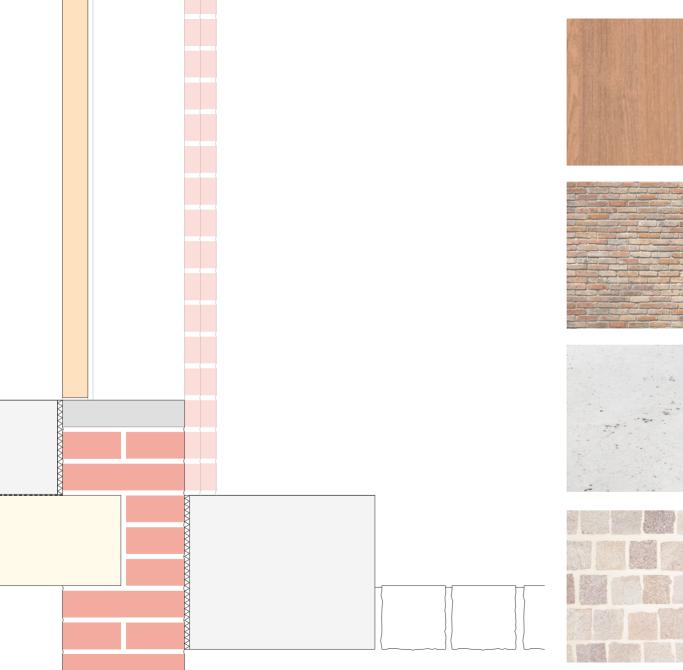
0,5m∟

- 1

156

wooden lattice to seperate the balcony from the inside









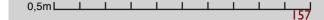




contact with the ground:

steps to prevent from water and create threshold

bricks below the entrance to emphazise monolithic volume



# **Sources**

Text:

#### Images:

i1: Jakob Schmitt i2: https://www.norlha.com/blogs/life-at-norlha-blog/the-tibetan-tent i3: Google Earth Pro i4: Tibet Heritage Fund i5: Human Rights Watch





