

P2 Presentation | Degrowth Architecture
Close loop reuse in 1960's social housing renovation projects

Architectural Engineering
31 - 01 - 2025
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Fascination

Degrowth

- Reducing production & consumption
- Promote ecological & social values
- Shift from economic infinite growth

An Architecture of Degrowth

- ≠ less architecture
- Reuse existing materials
- Reuse existing buildings
- Improve social & ecological values
- Sharing



Case

Requirements

- Transformation project; need for renovation
- Lacking ecological & social values
- Representative

Klipperbuurt

- 577 dwellings across 11 blocks
- 1968
- 5 layers
- Gallery
- Plans for thorough renovation.
- Lacking social qualities

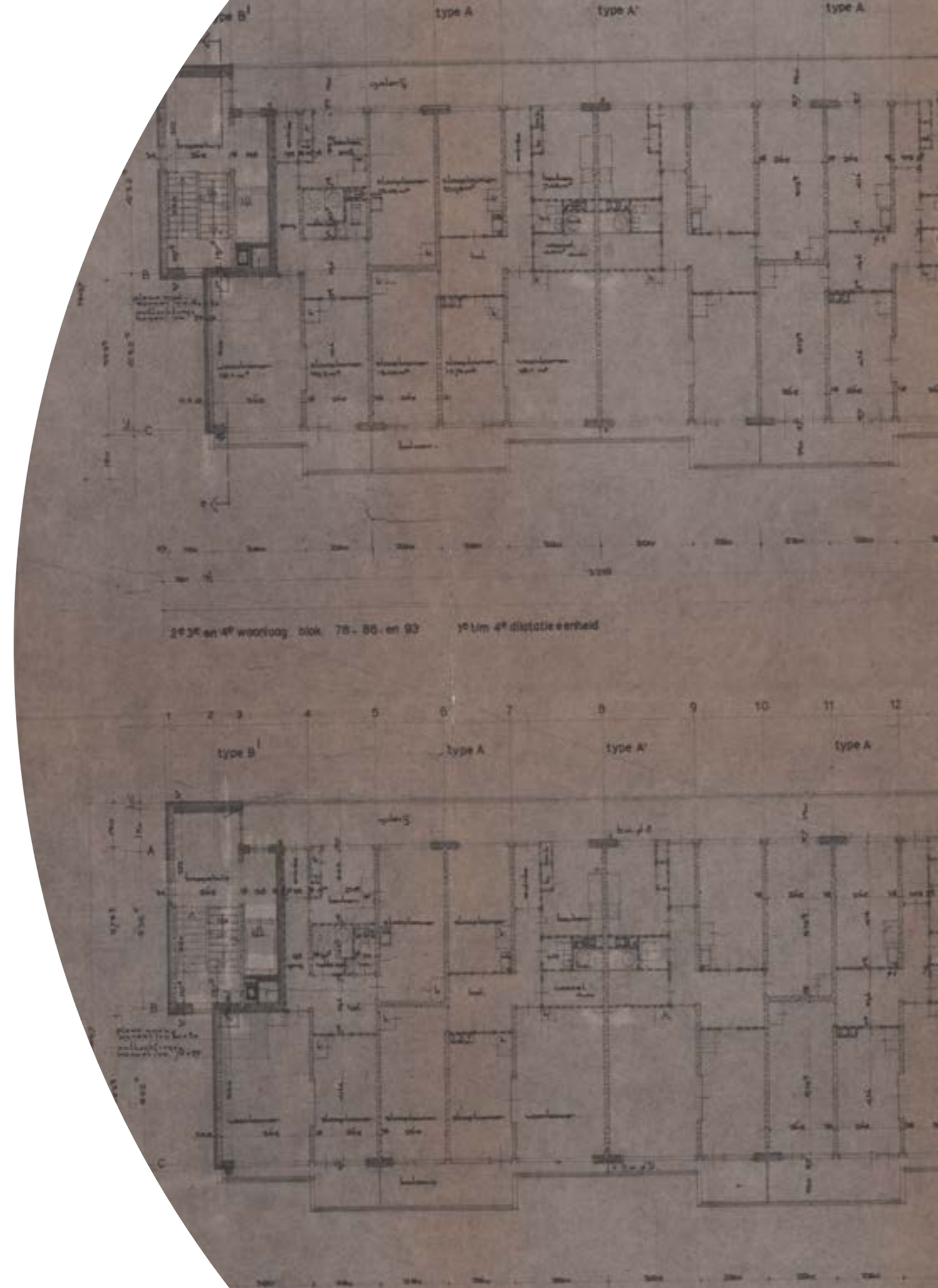
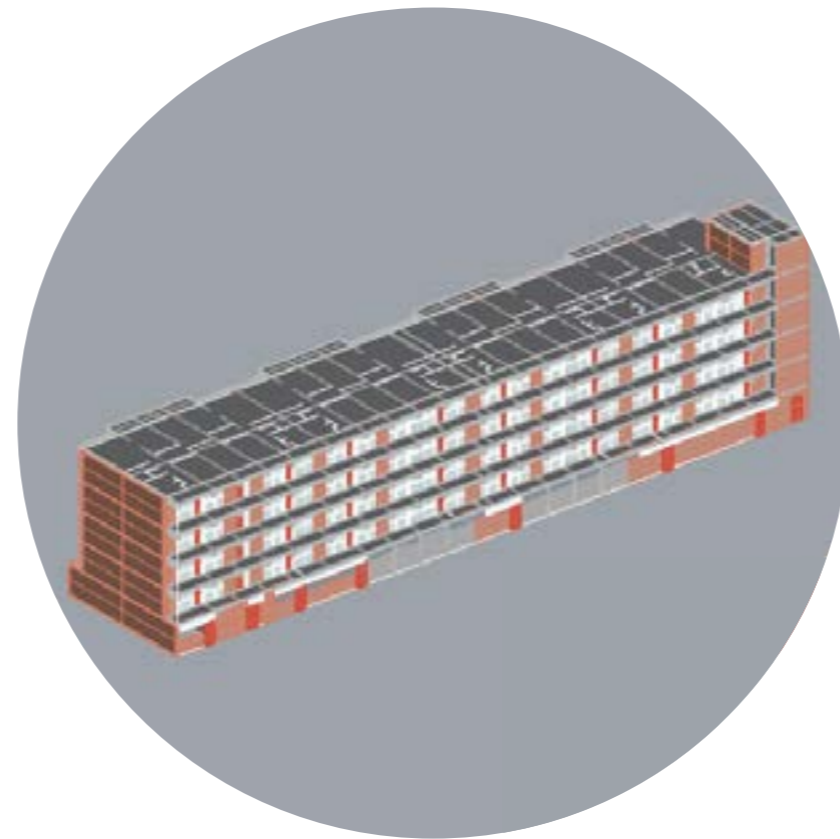


Research

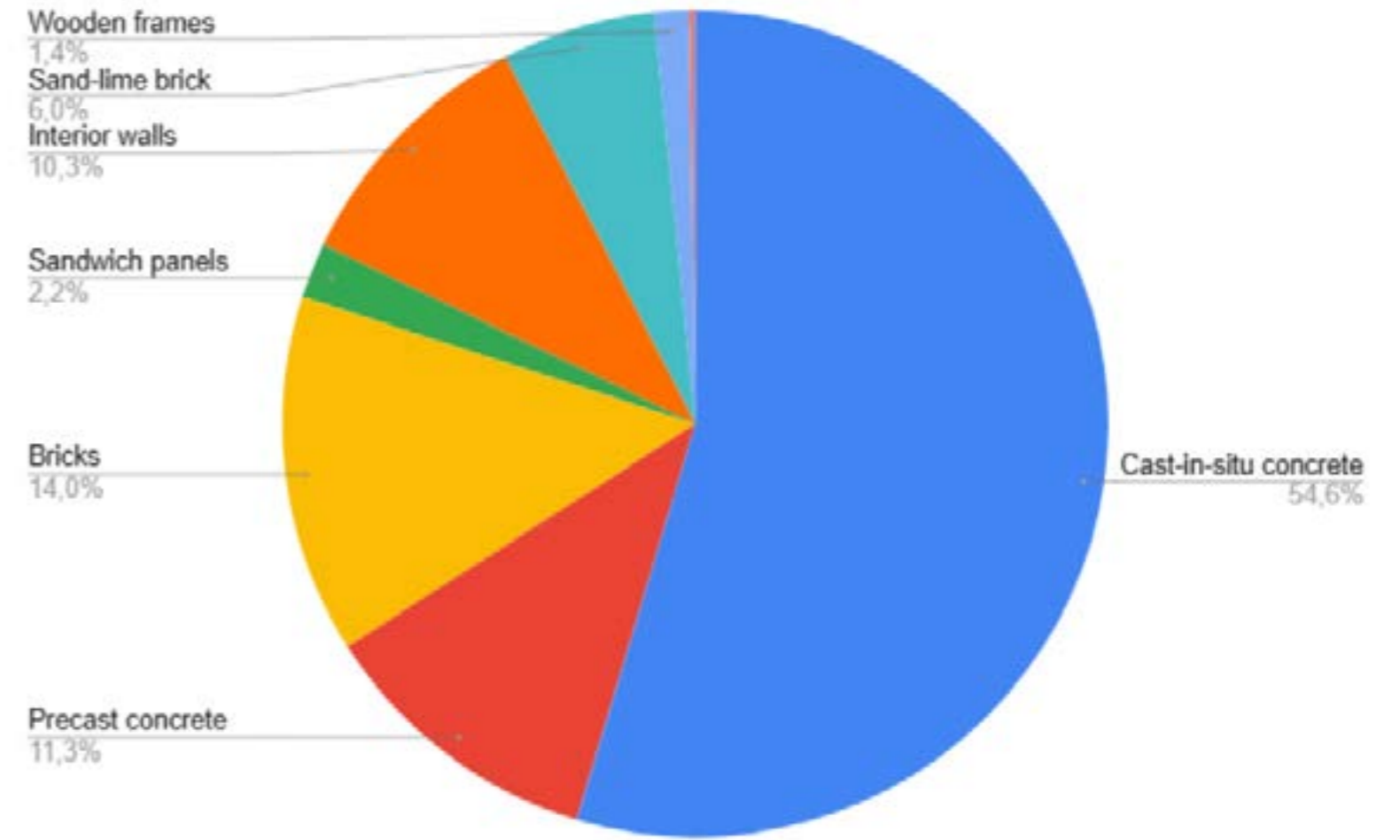
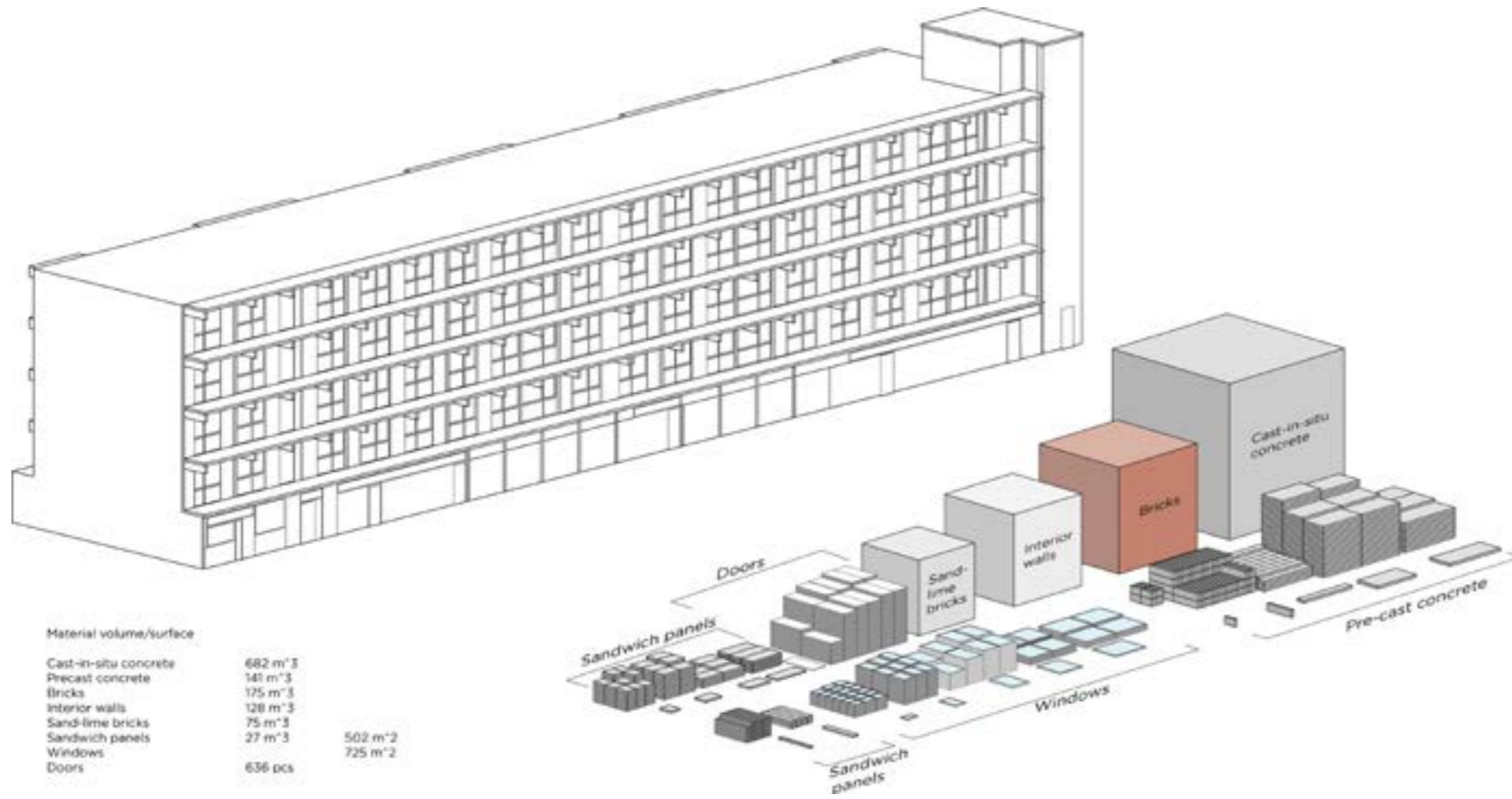
Research topic

- Potential reuse of materials of 1960s
social housing renovation projects

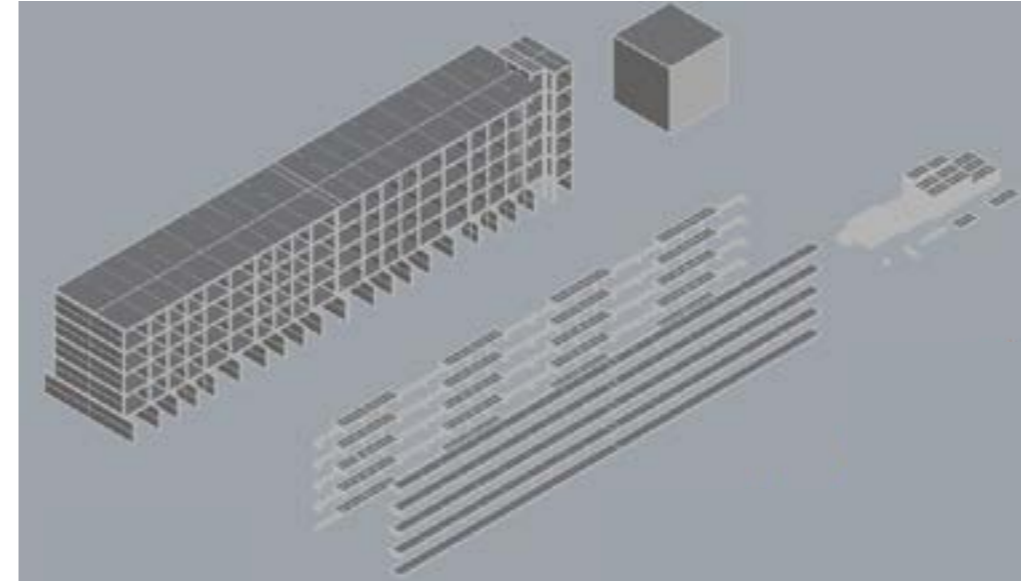
- Inventory
- Harvest
- Reuse



Material analysis



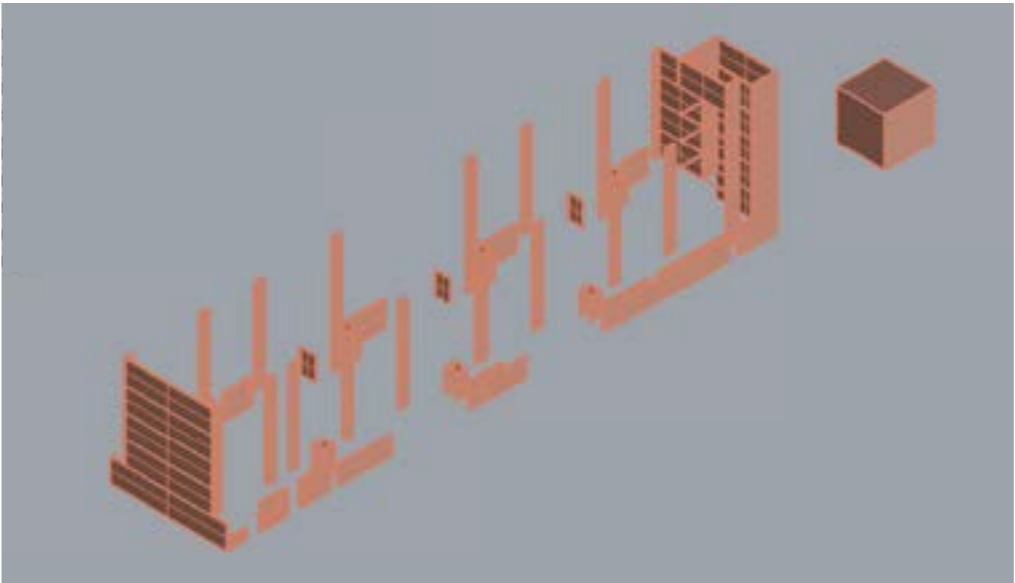
Material analysis - concrete



Cast-in-situ concrete
Precast concrete

682 m³ 54,6%
141 m³ 11,3%

Material analysis - Bricks

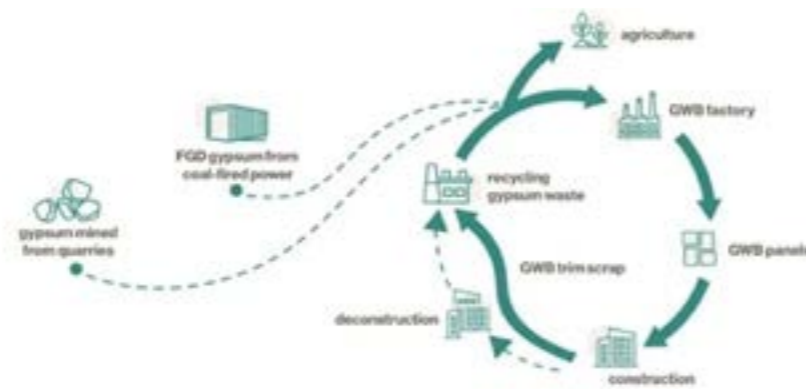
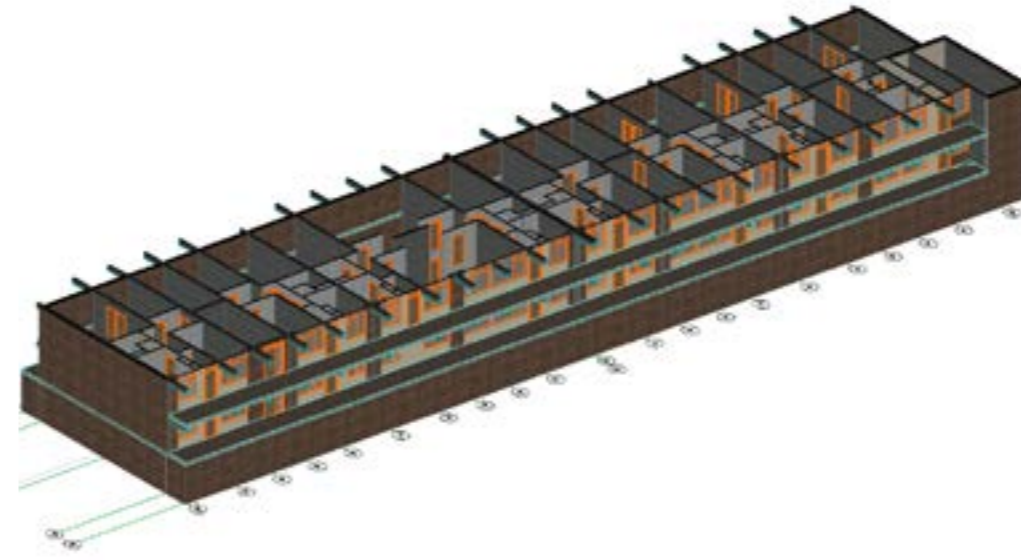


Bricks



175 m³ 14%

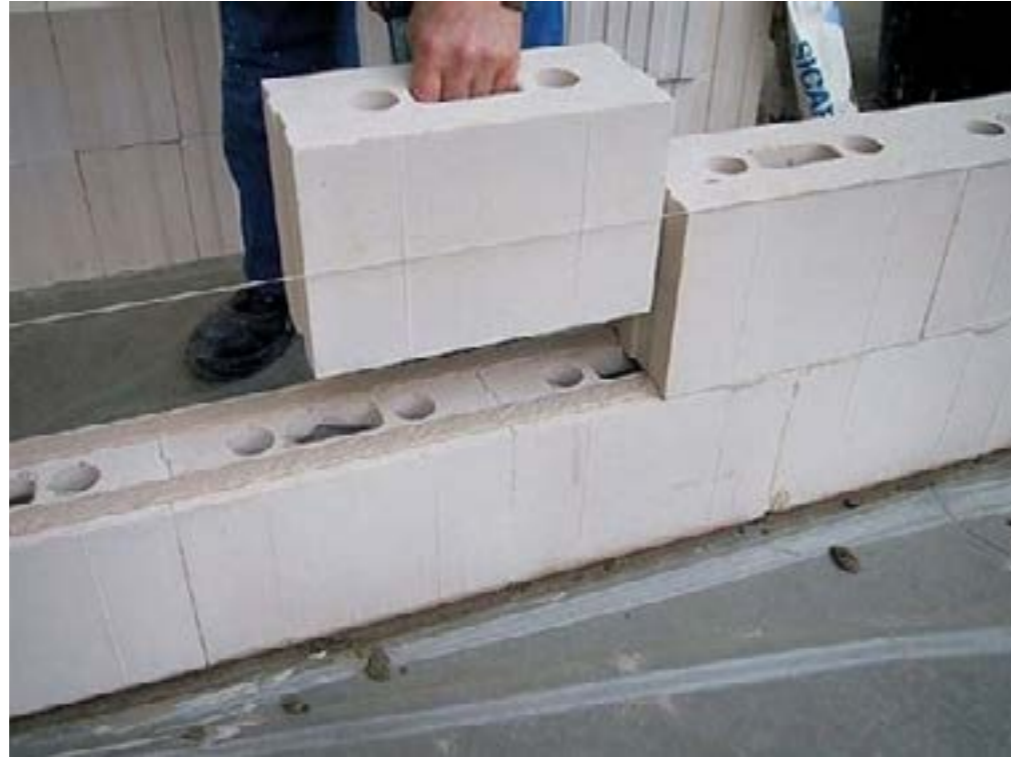
Material analysis - Interior walls



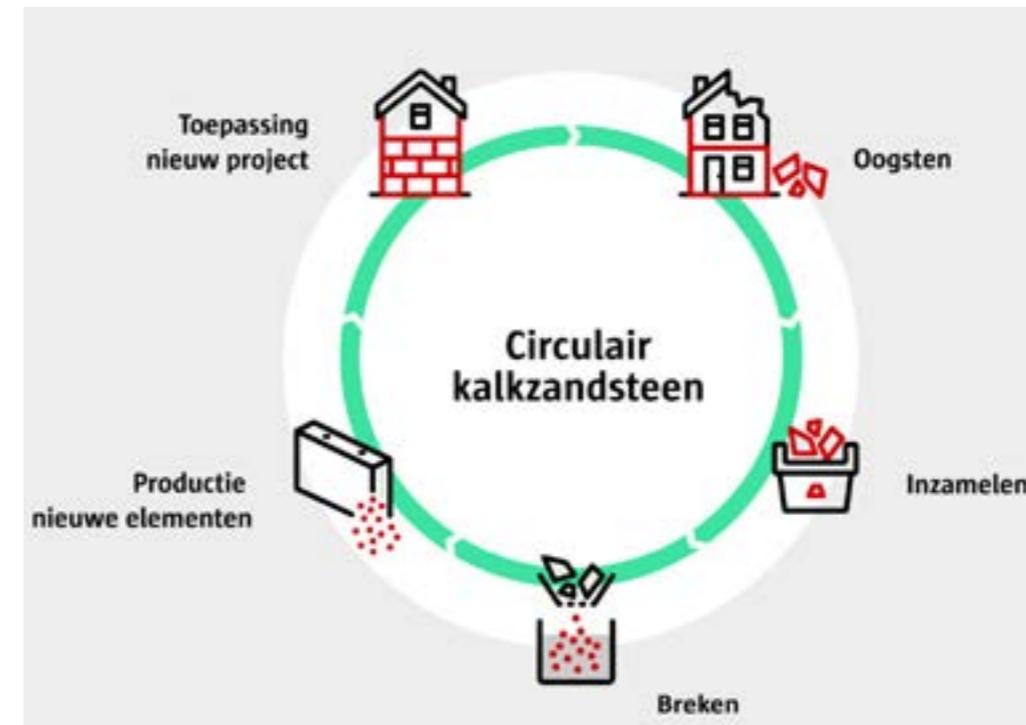
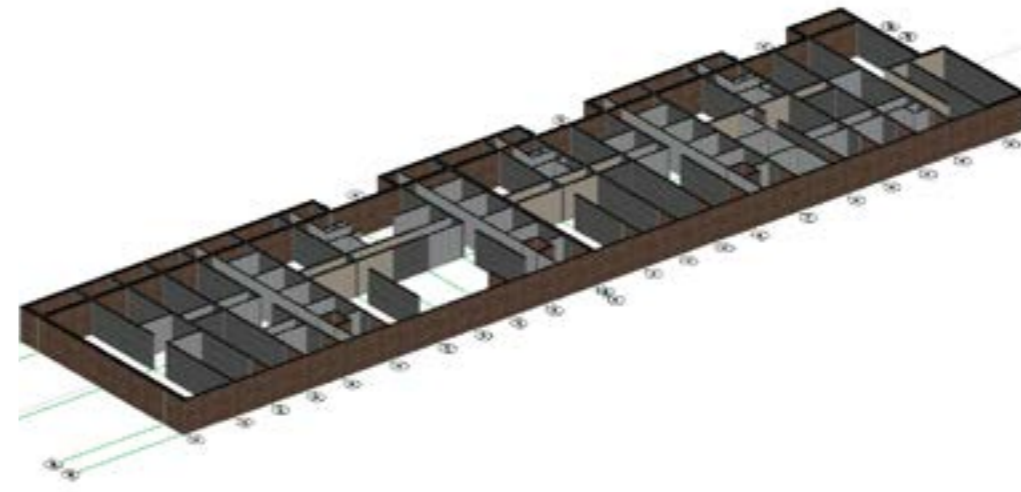
Interior walls
Gypsum

128 m³ 10,3%
42,6 m³ 3,4%

Material analysis - Interior walls



Sand-lime bricks



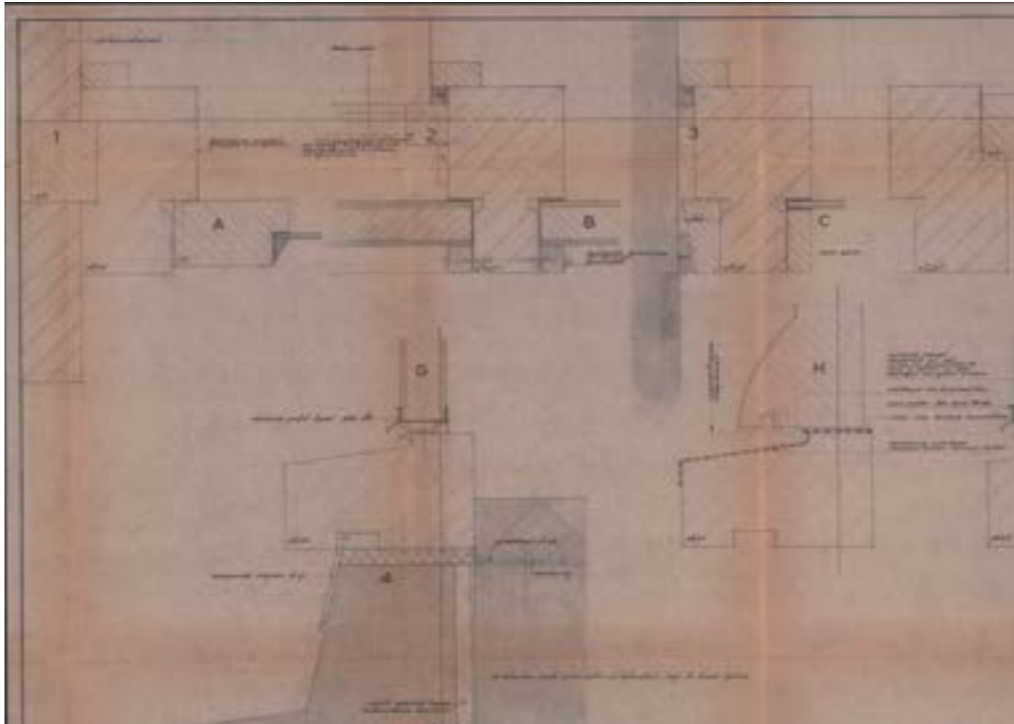
75 m³

6%

Material analysis - Frames

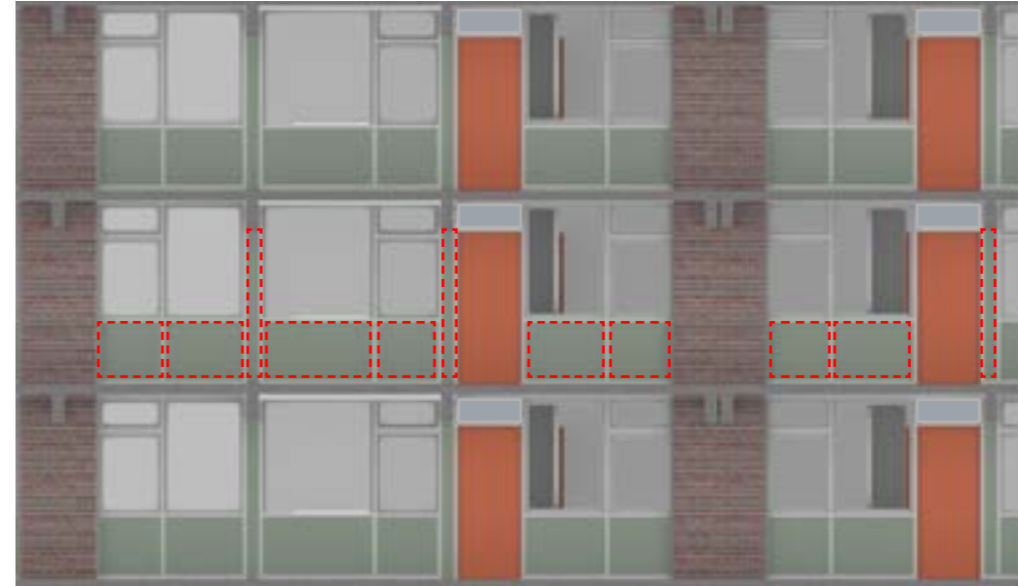


Wooden frames
Aluminum frames



17 m³ 1,4%
3 m³ 0,2%

Material analysis - Facade panels



Sandwich panels
% facade typical floor = 40%



27 m³ 2,2%

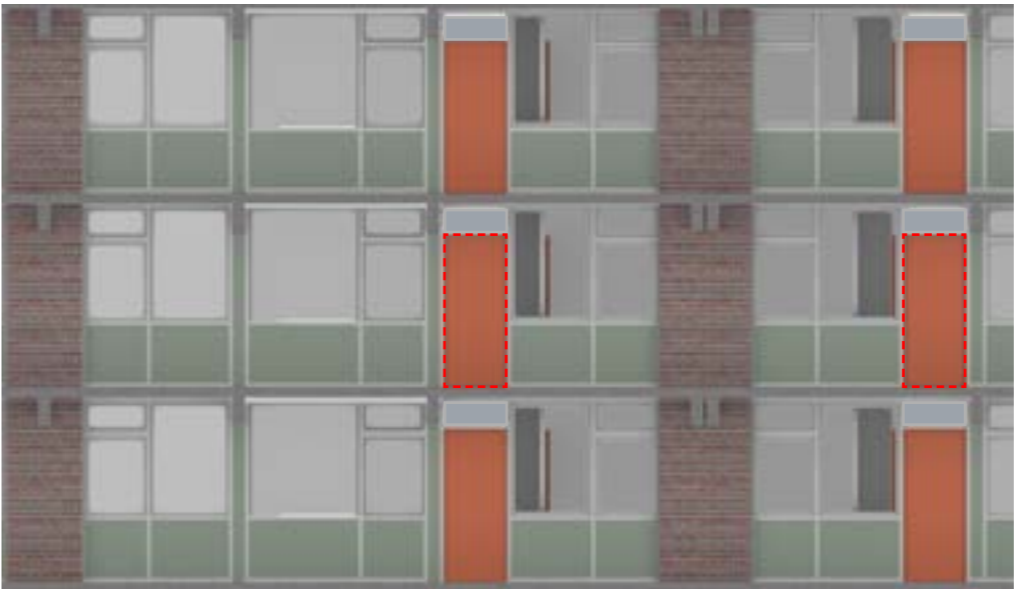
Material analysis - Windows



% facade typical floor = 50%



Material analysis - Doors

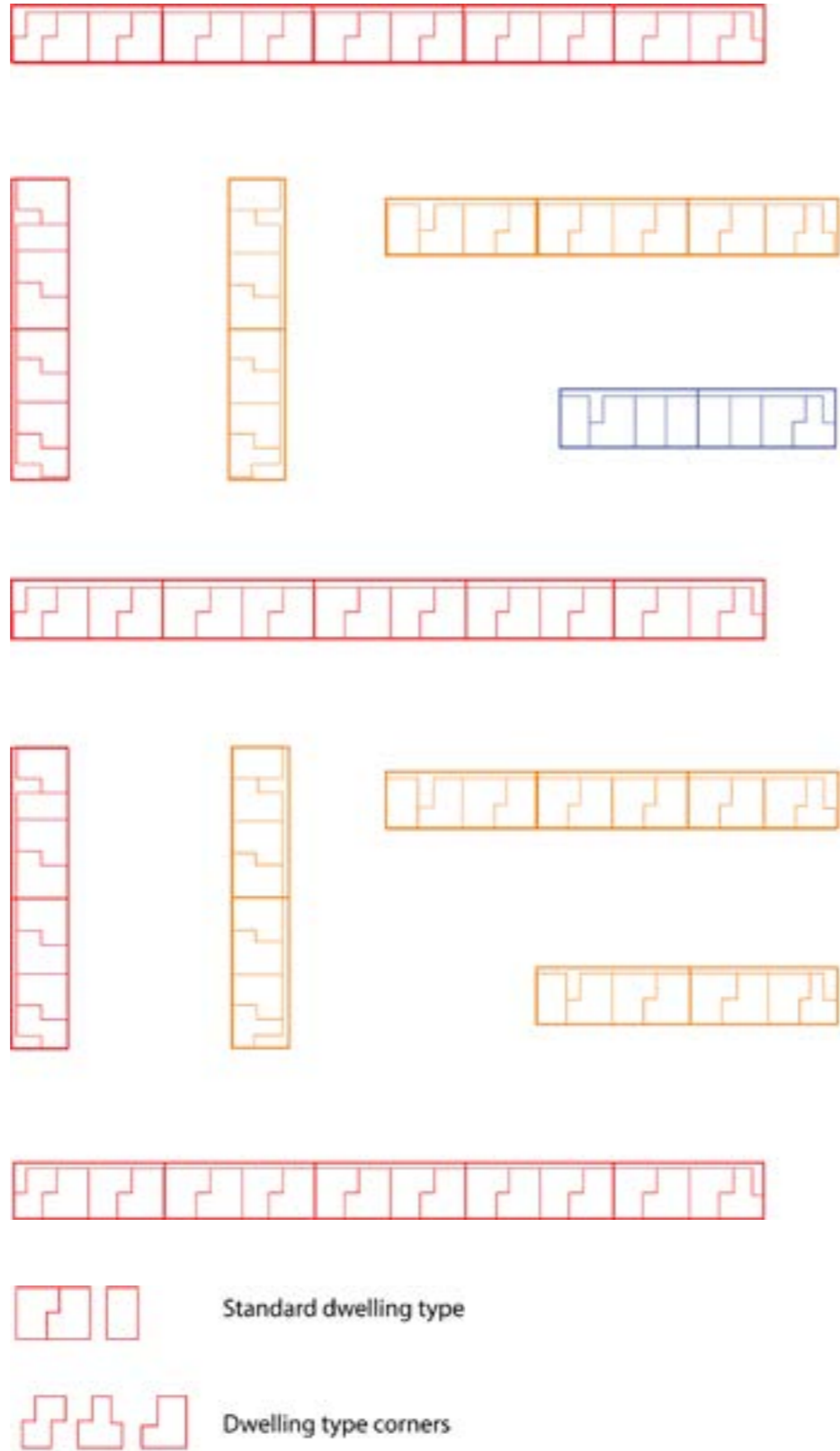


Doors

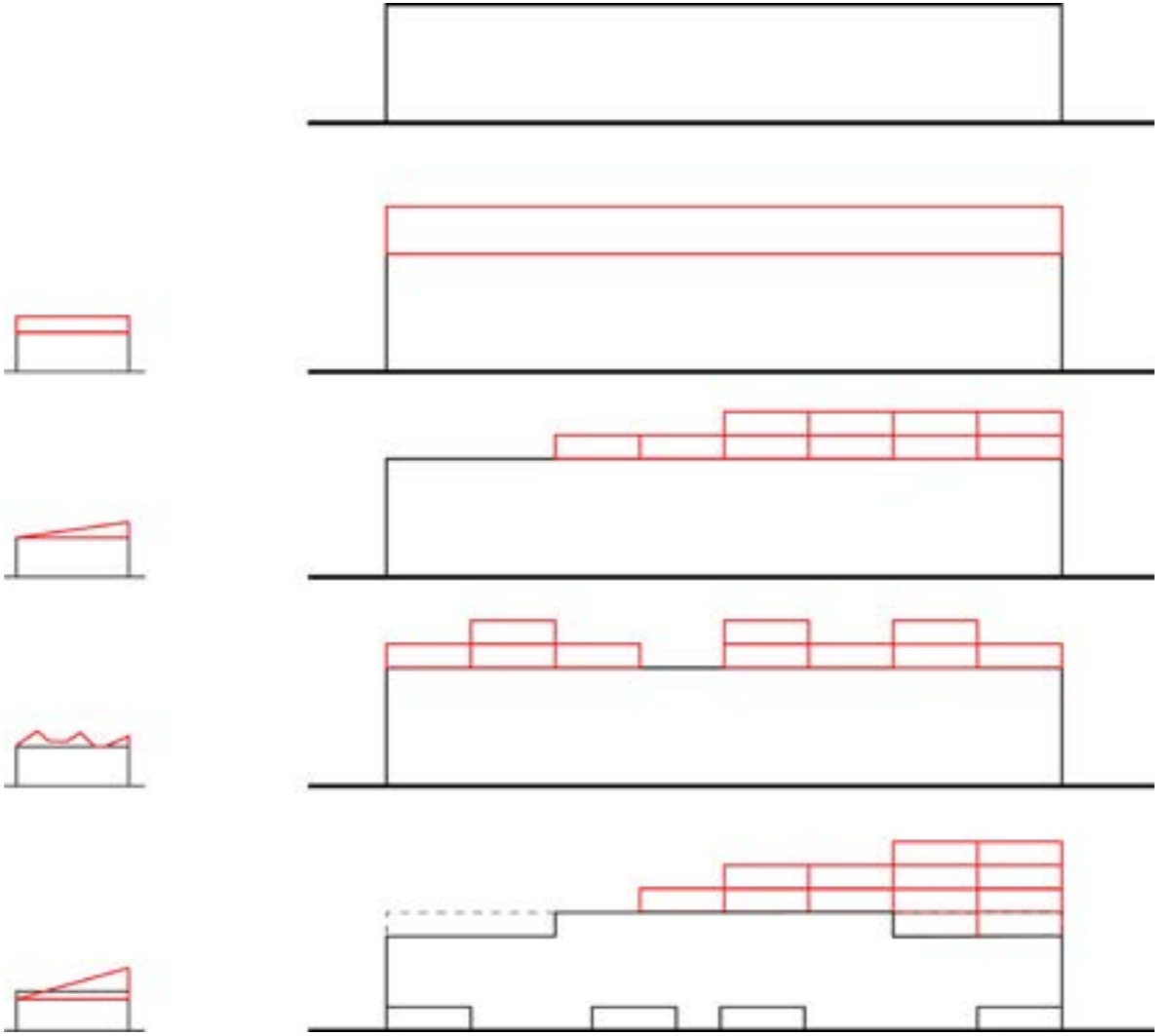


474 pcs

Material analysis - Repetitive elements



Ambition - structure



Maintain
Add layer

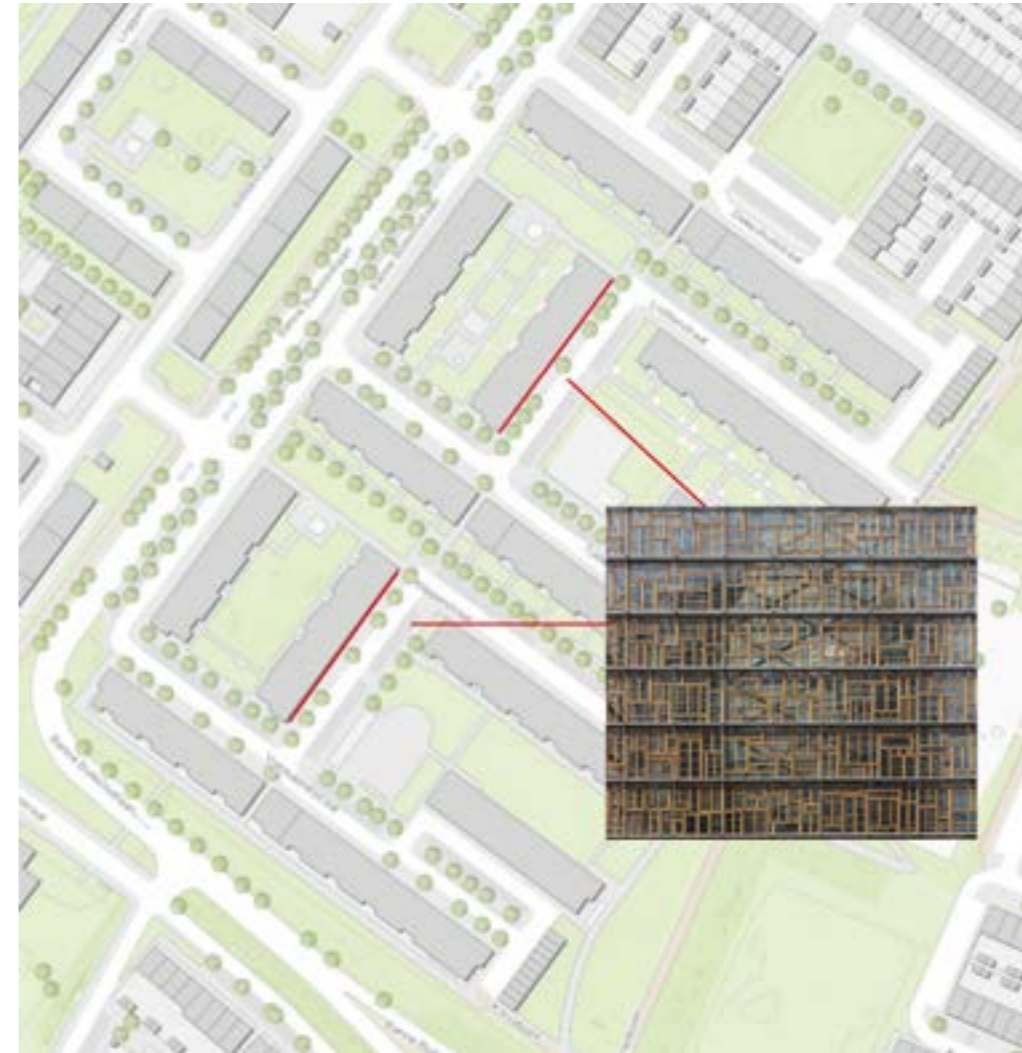
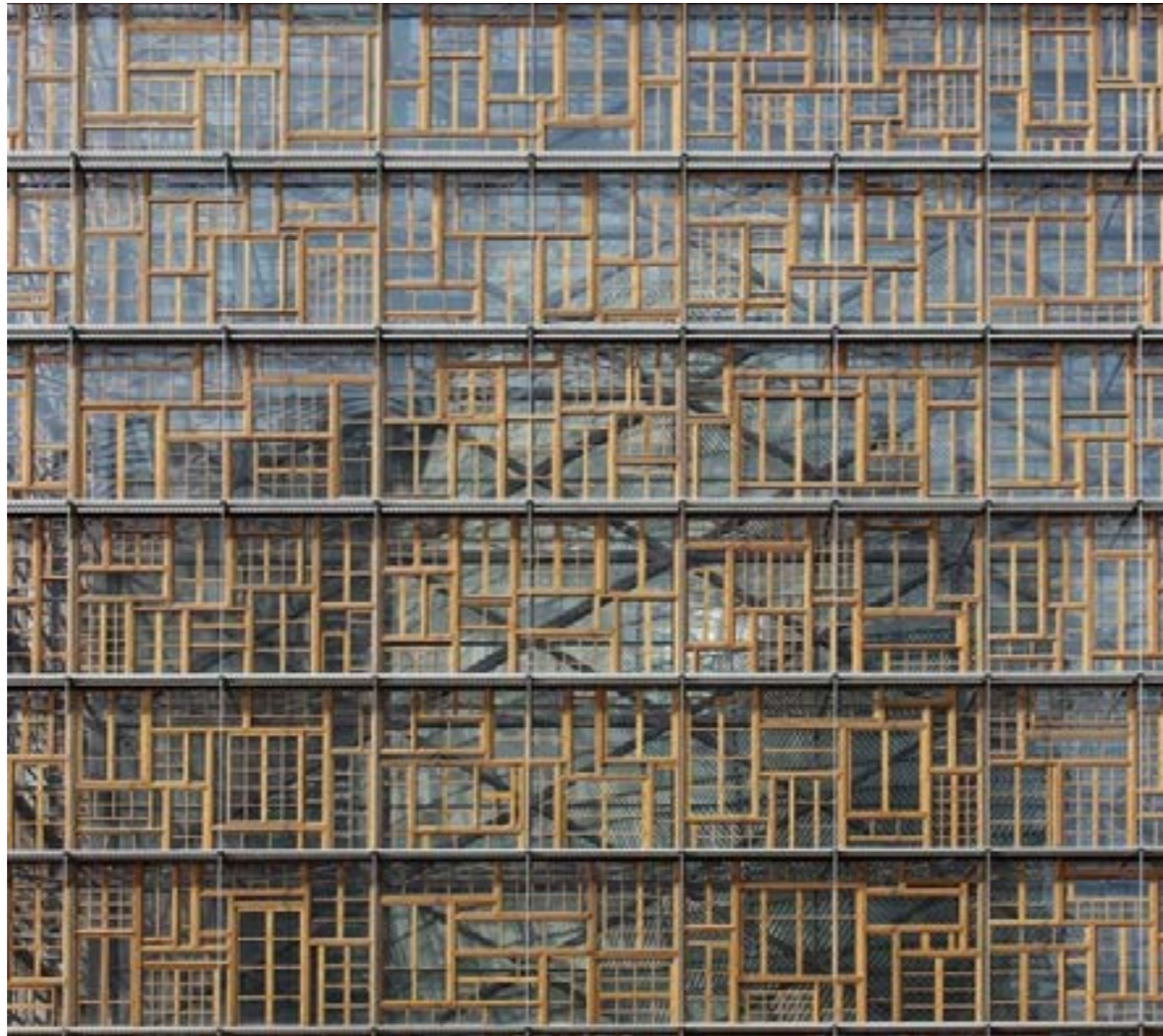


Ambition - skin



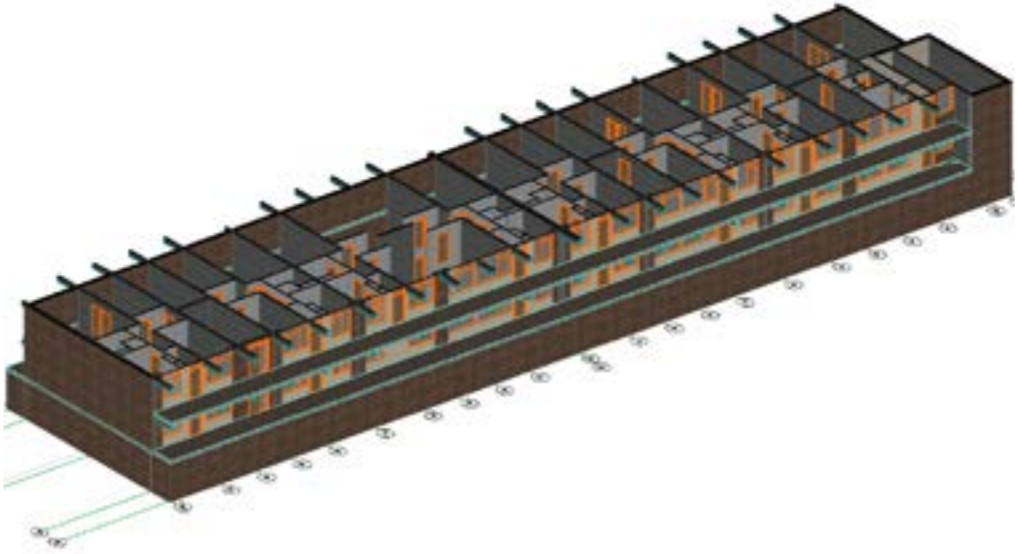
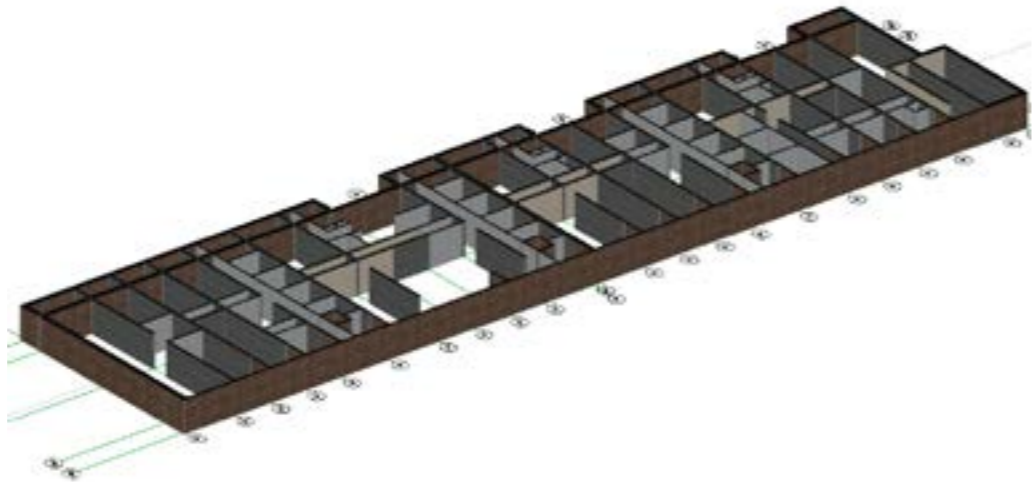
'Playful' facade - break with monotonous/repetitive character

Ambition - Windows



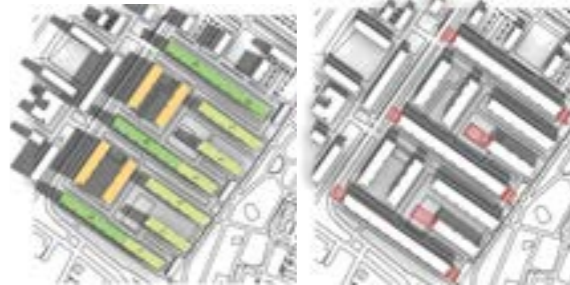
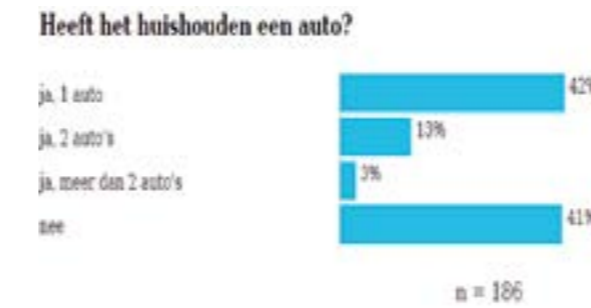
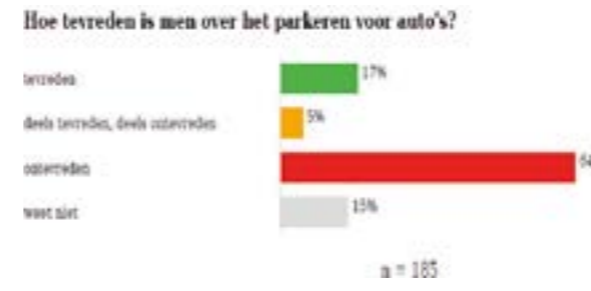
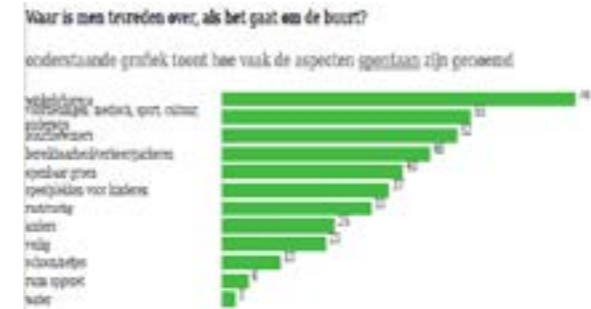
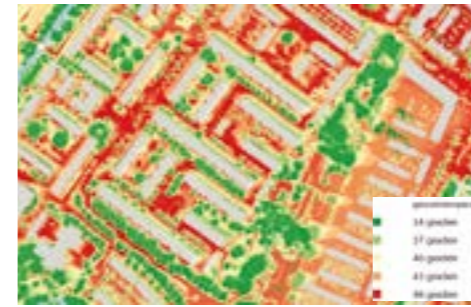
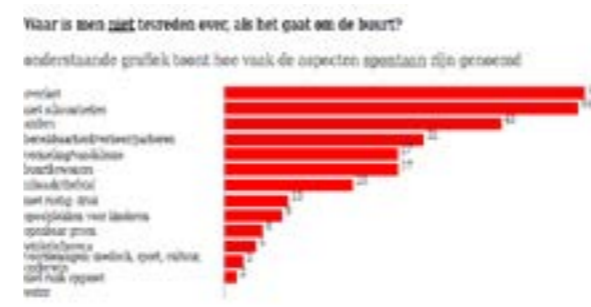
Second skin on gallery
Second skin combined with balconies..?

Ambition - Space plan



Revise dwelling layout

Value Assessment



Location visit

- Survey

- Data

- Drawings

Ambition

Focus on social values like sharing & community building

Human scale

Liveliness

Nature inclusive

Climate-adaptive

Location



Ambition



Ambition



Ambition



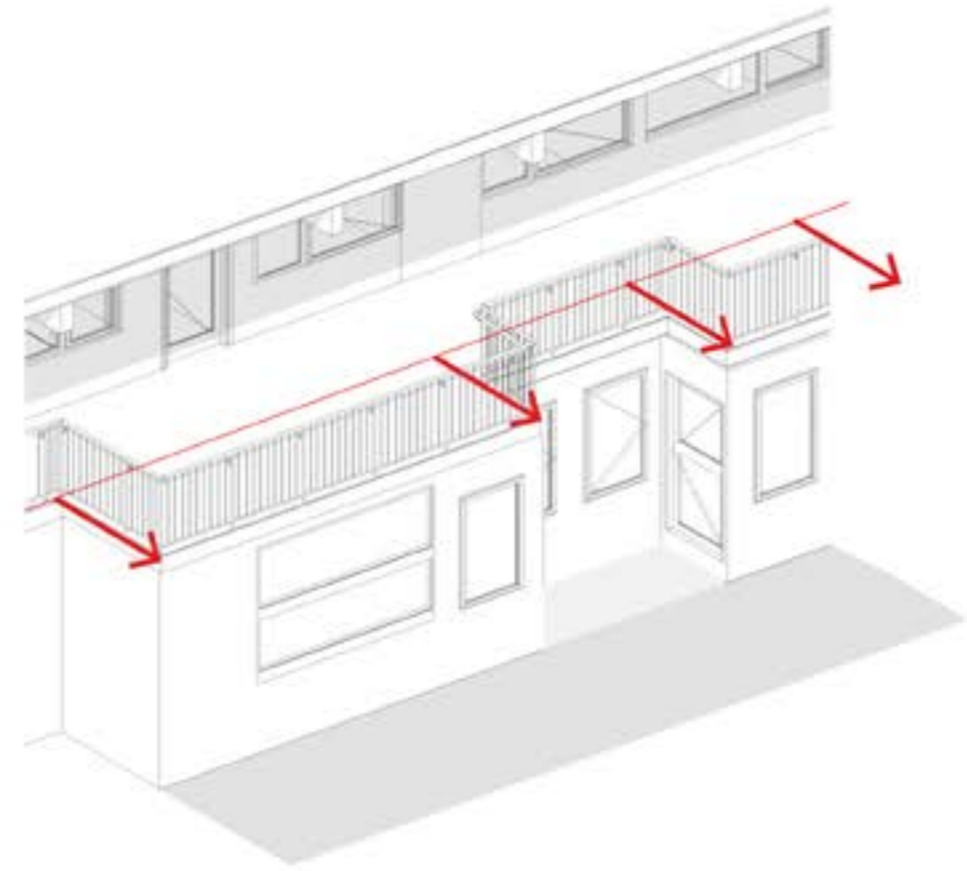
Ambition



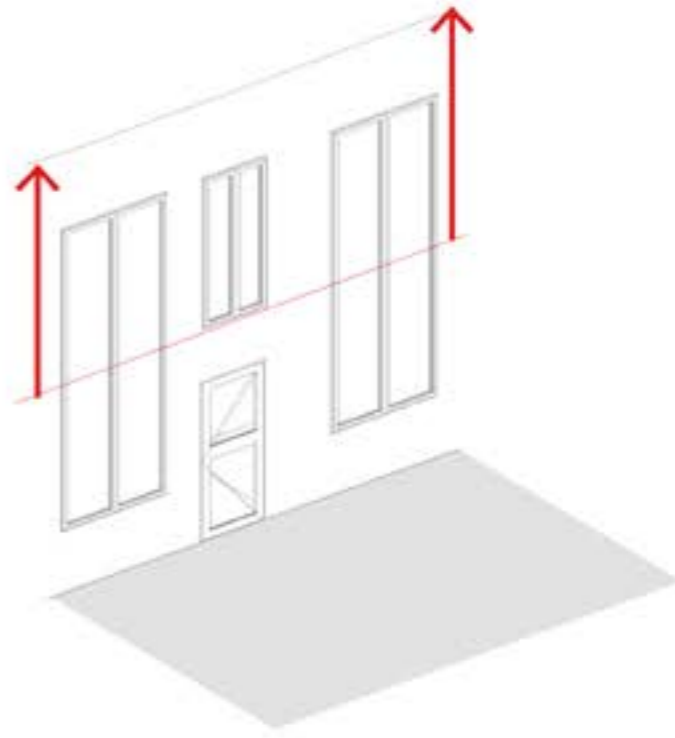
Ambition Plinth



Situation



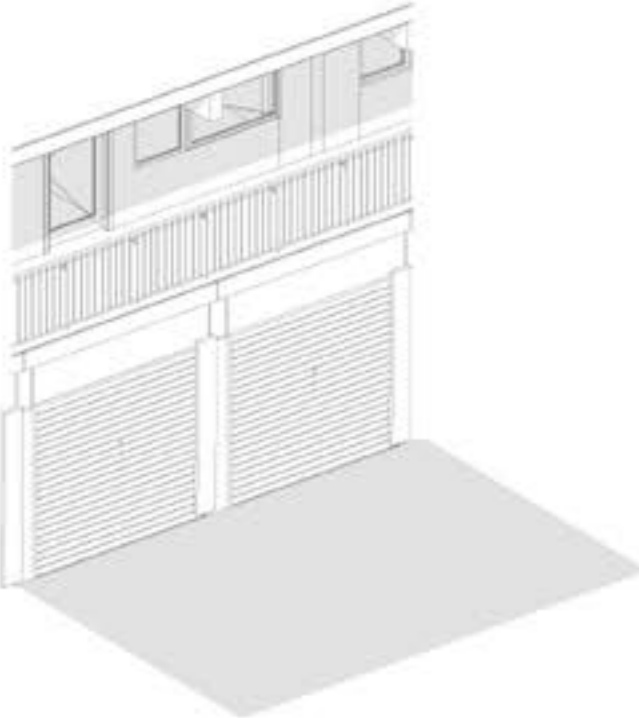
Enlarged plinth



Double layered plinth

Open Plinth
Human scale

Ambition Plinth



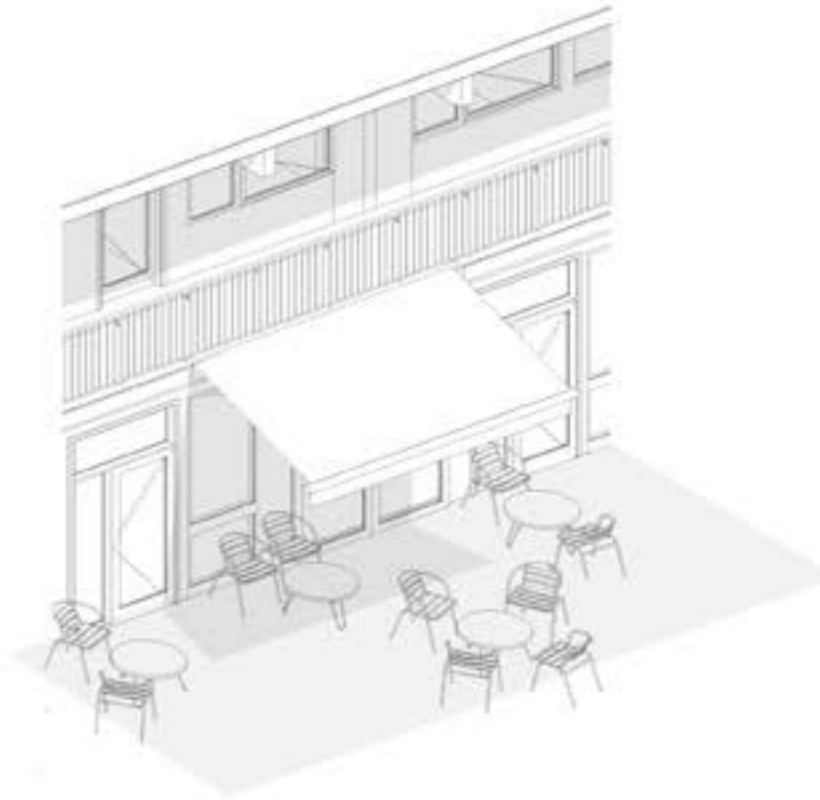
Situation



Semi-private pavement



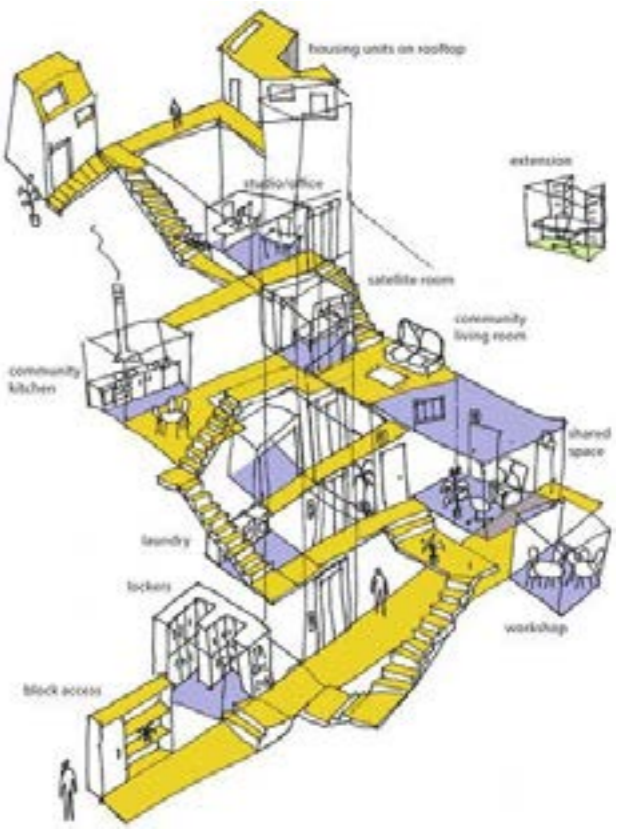
Semi-private garden



Public function

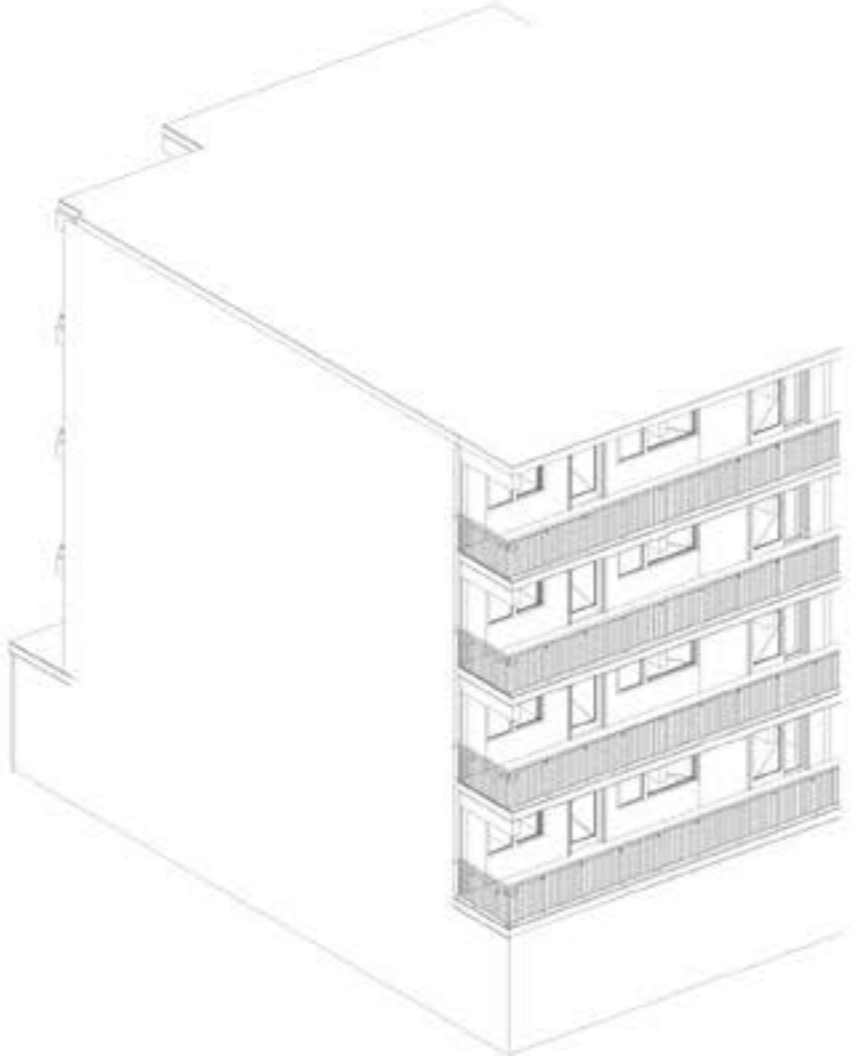
Safety & Liveliness

Ambition Floors

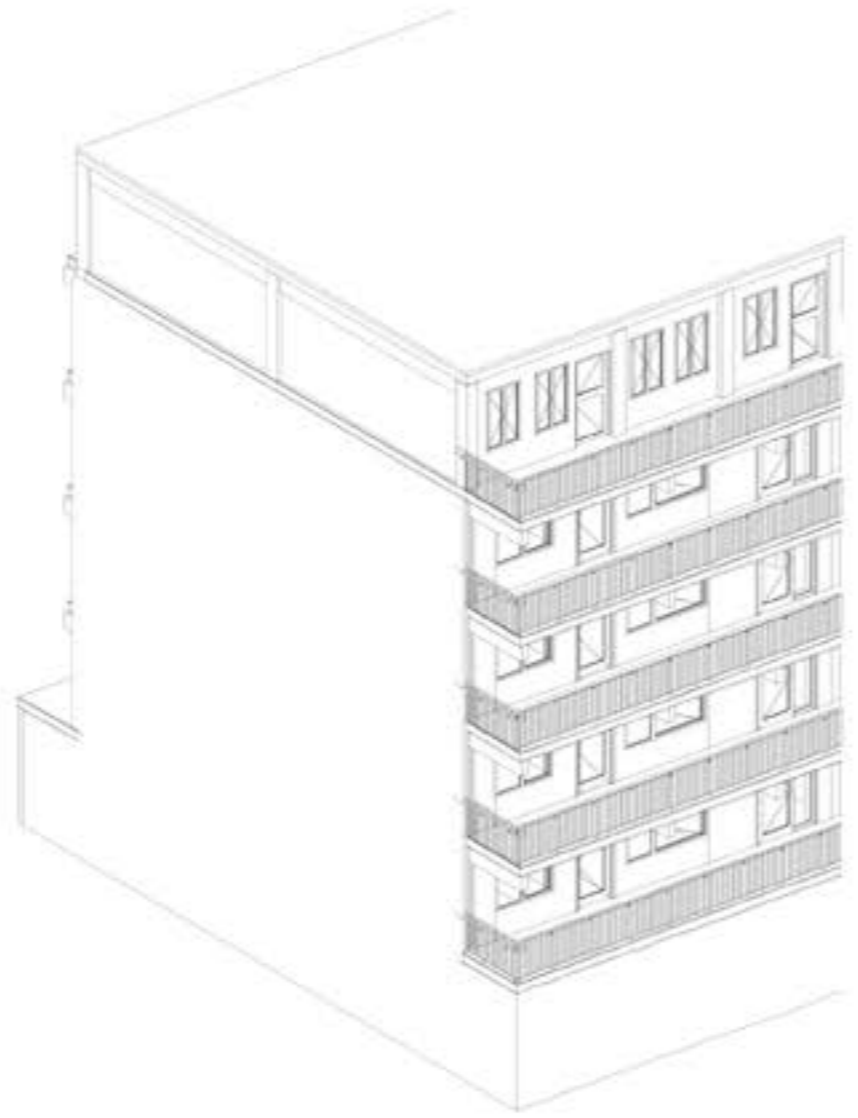


Shared spaces & living gallery

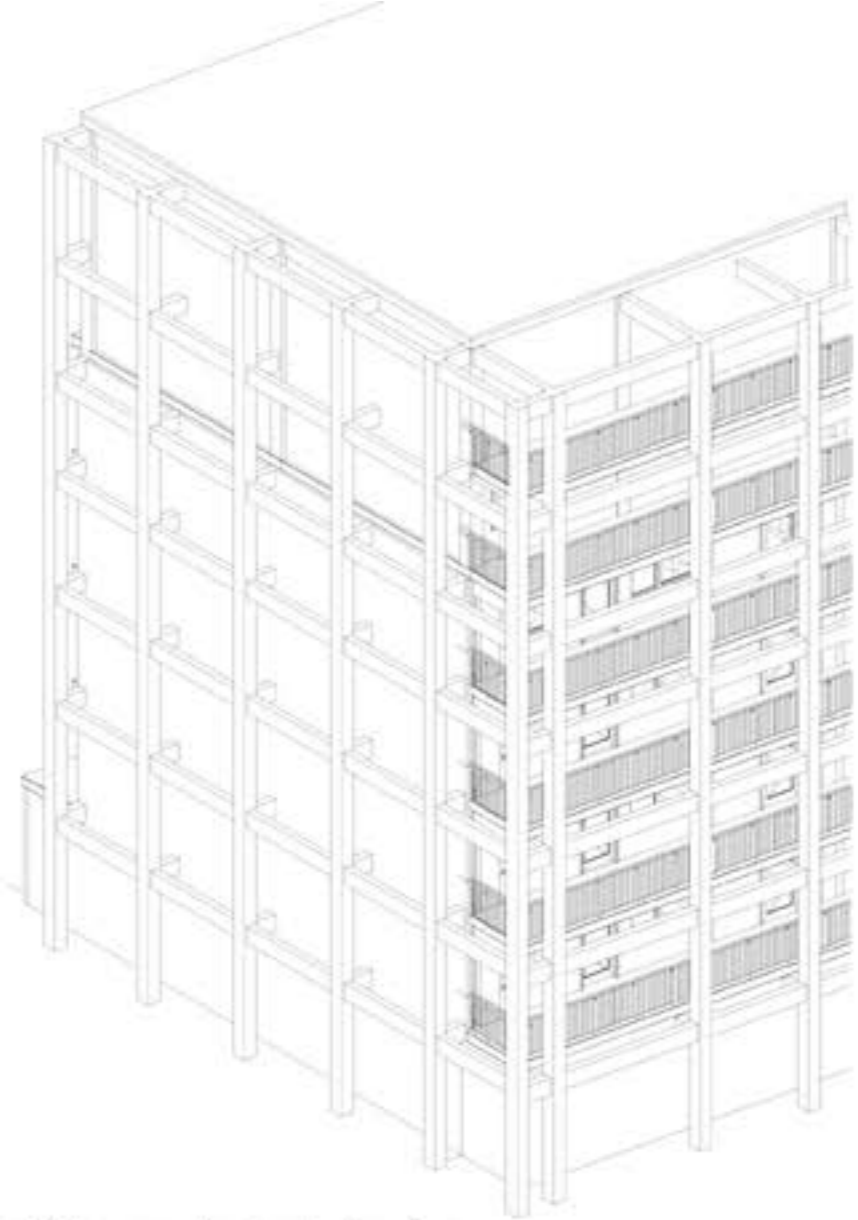
Ambition optop



Situation

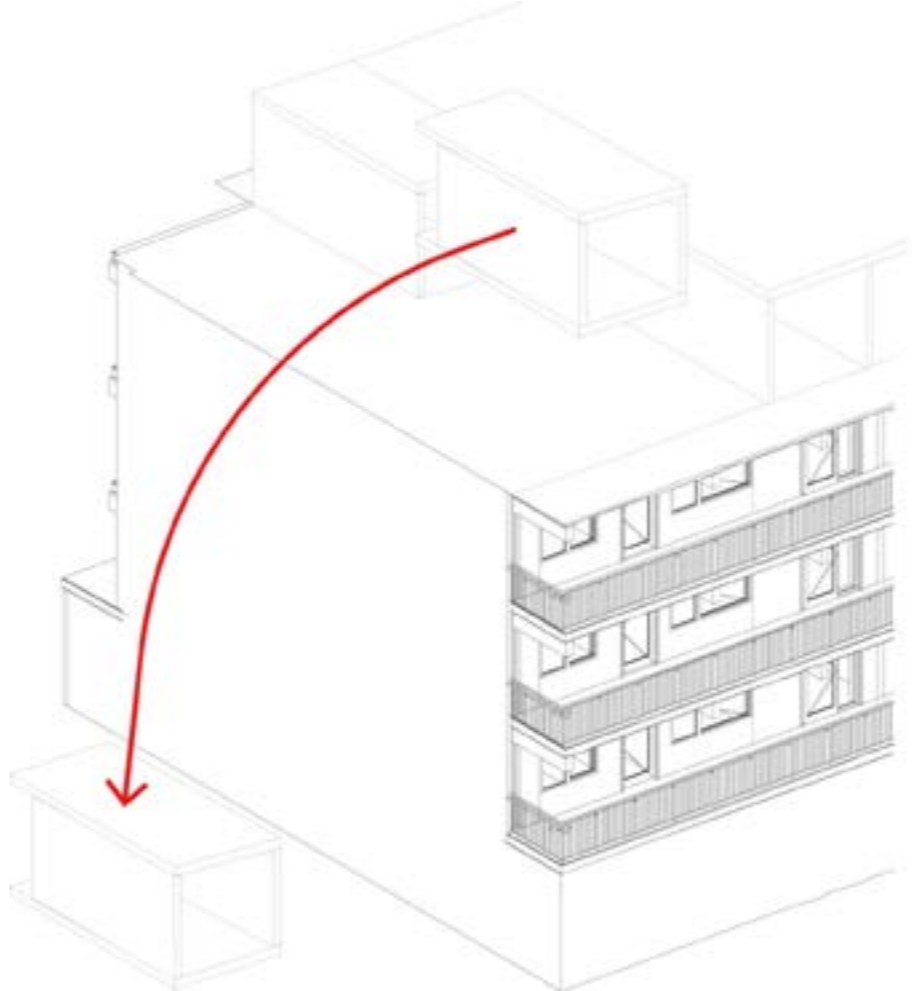


+ 1 layer

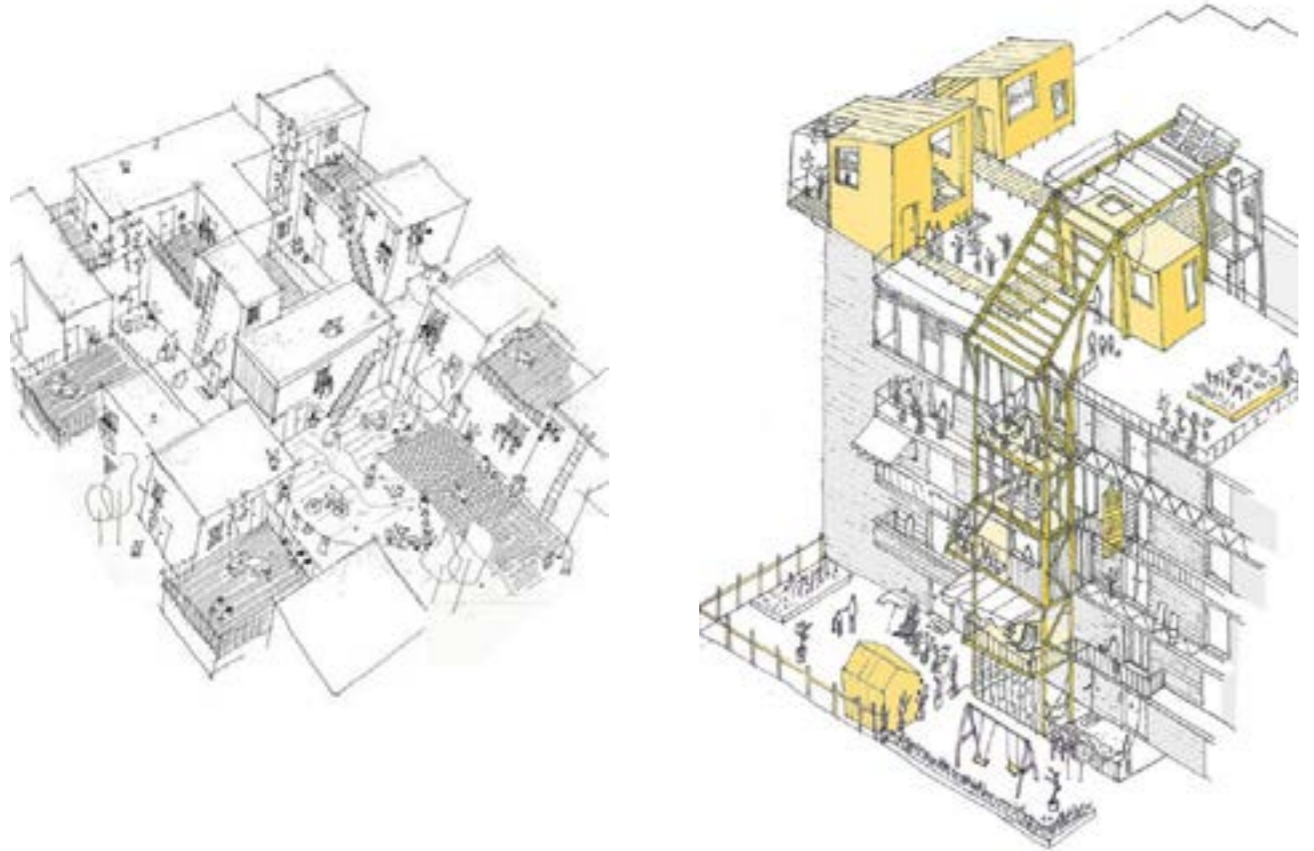


+ 2 layers + added structure

Ambition optop



Ambition optop



Ambition Dwellings

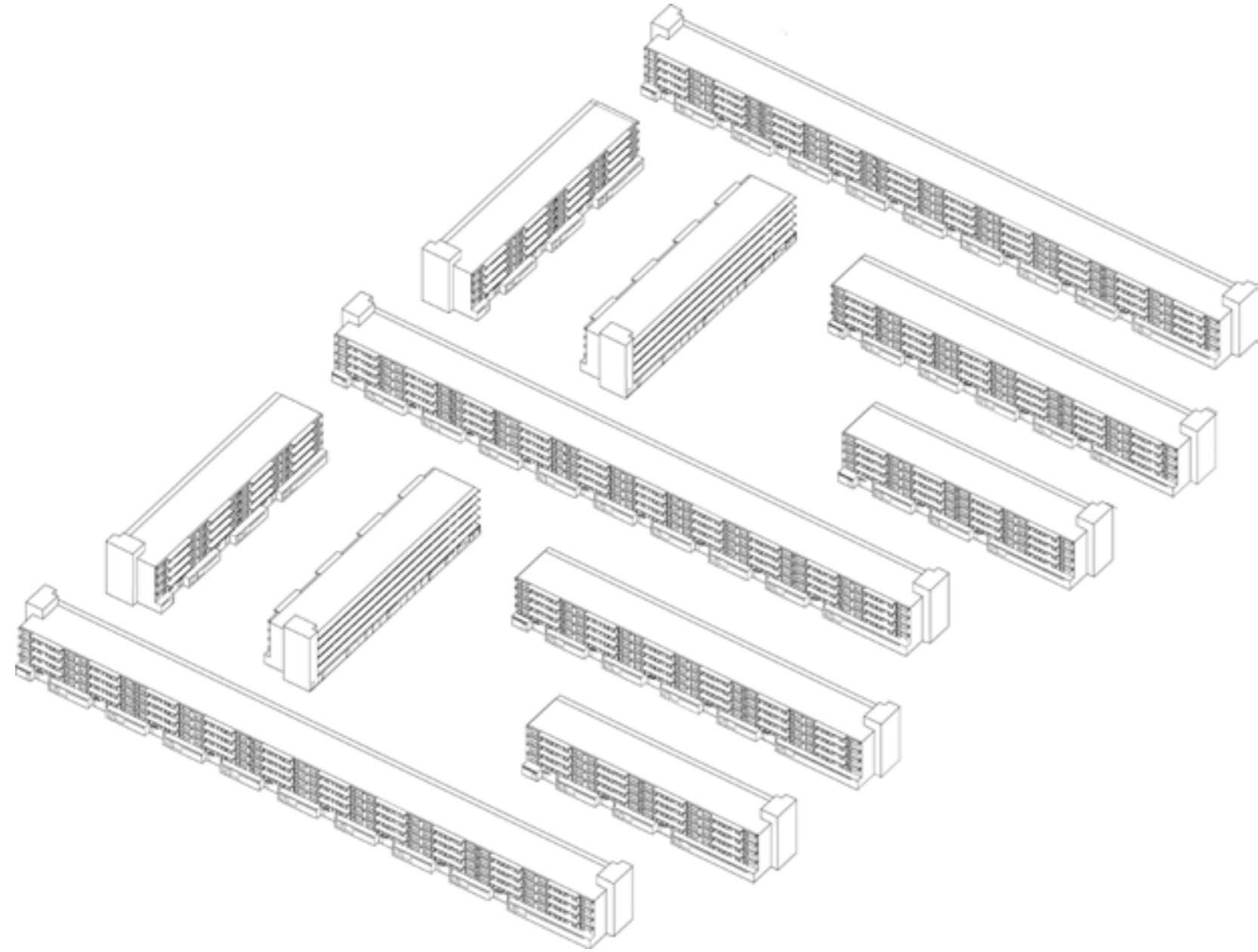
Mix of dwelling types

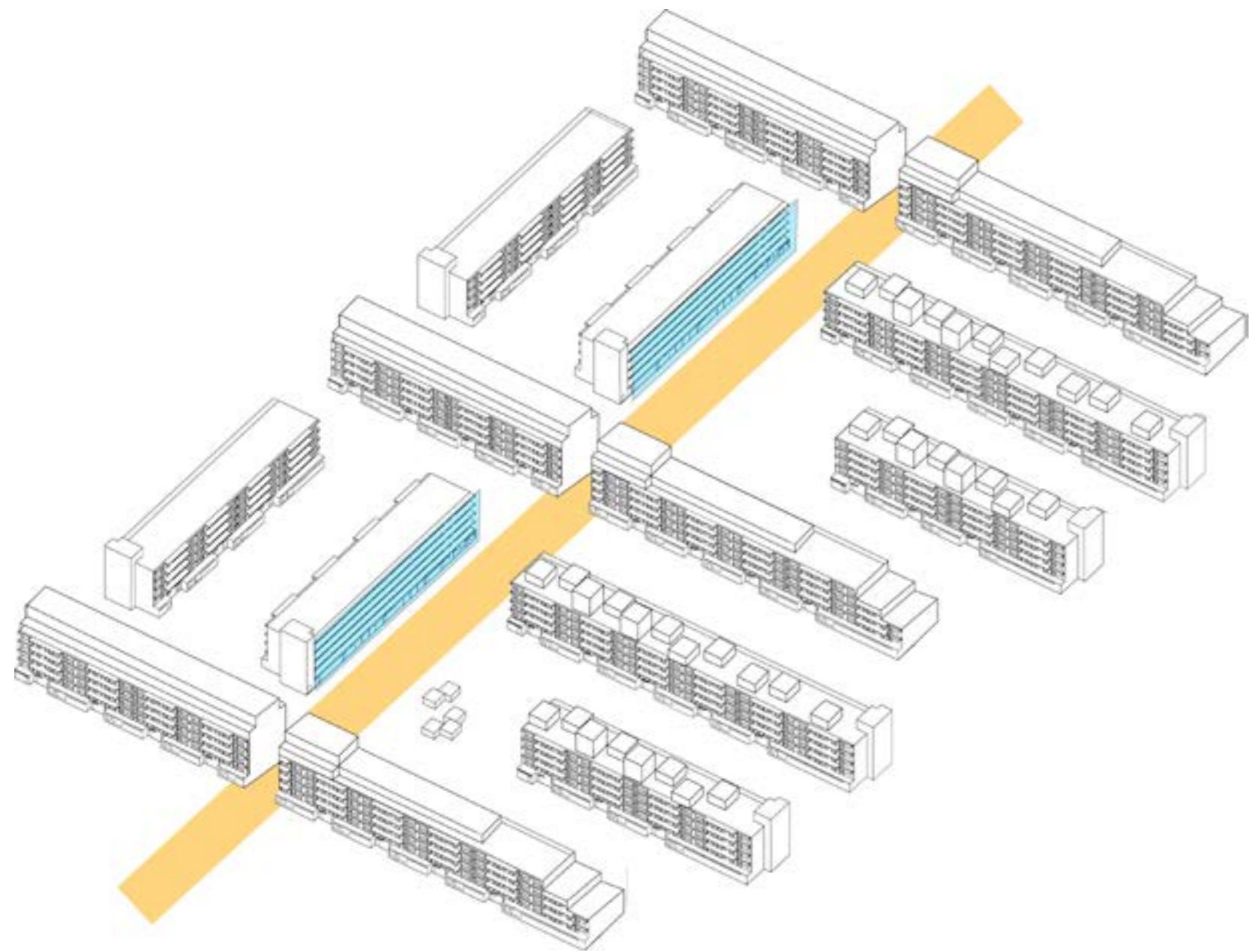
+ Smaller dwellings for Starters & Single-person households

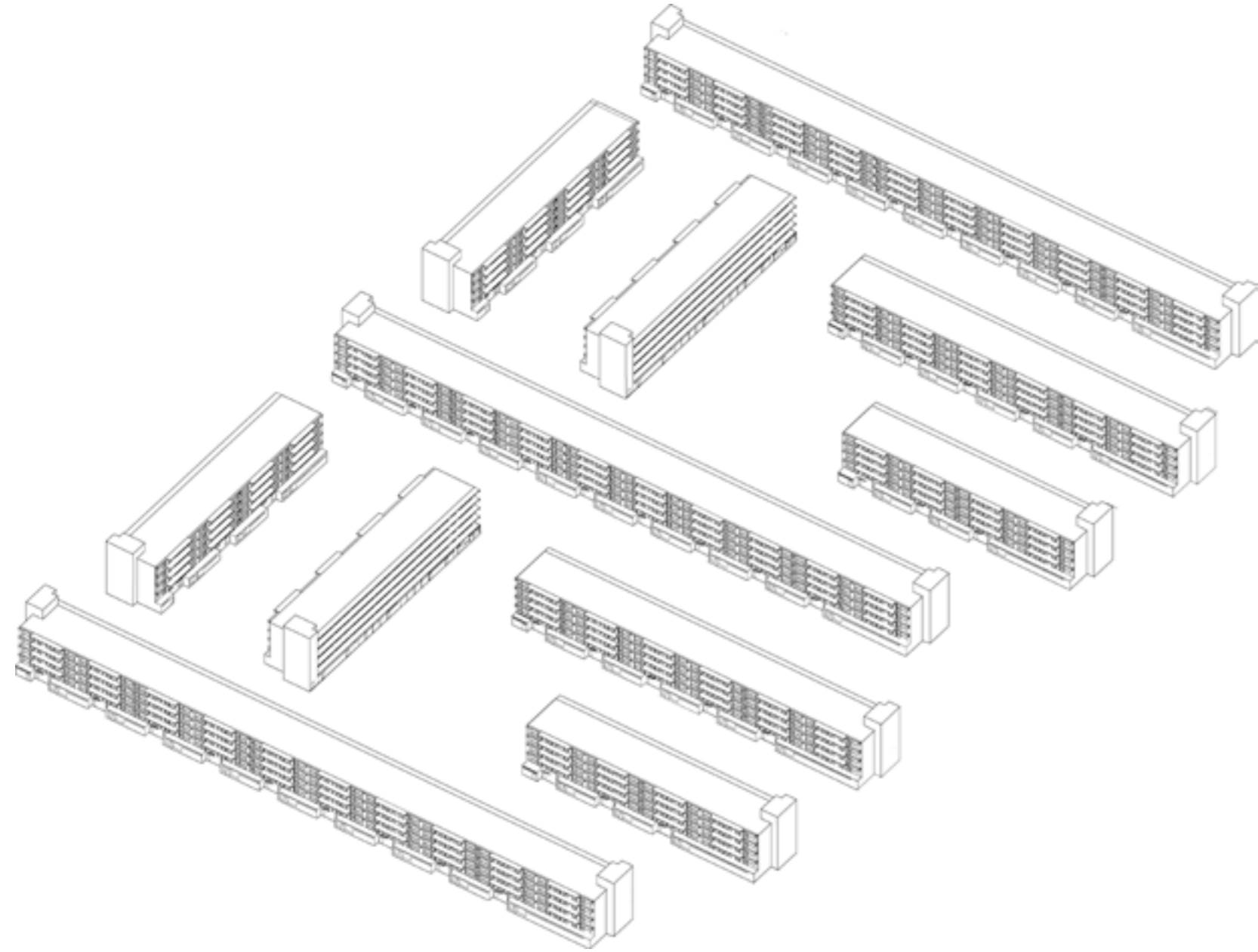
+ Combined dwellings for Co-housing

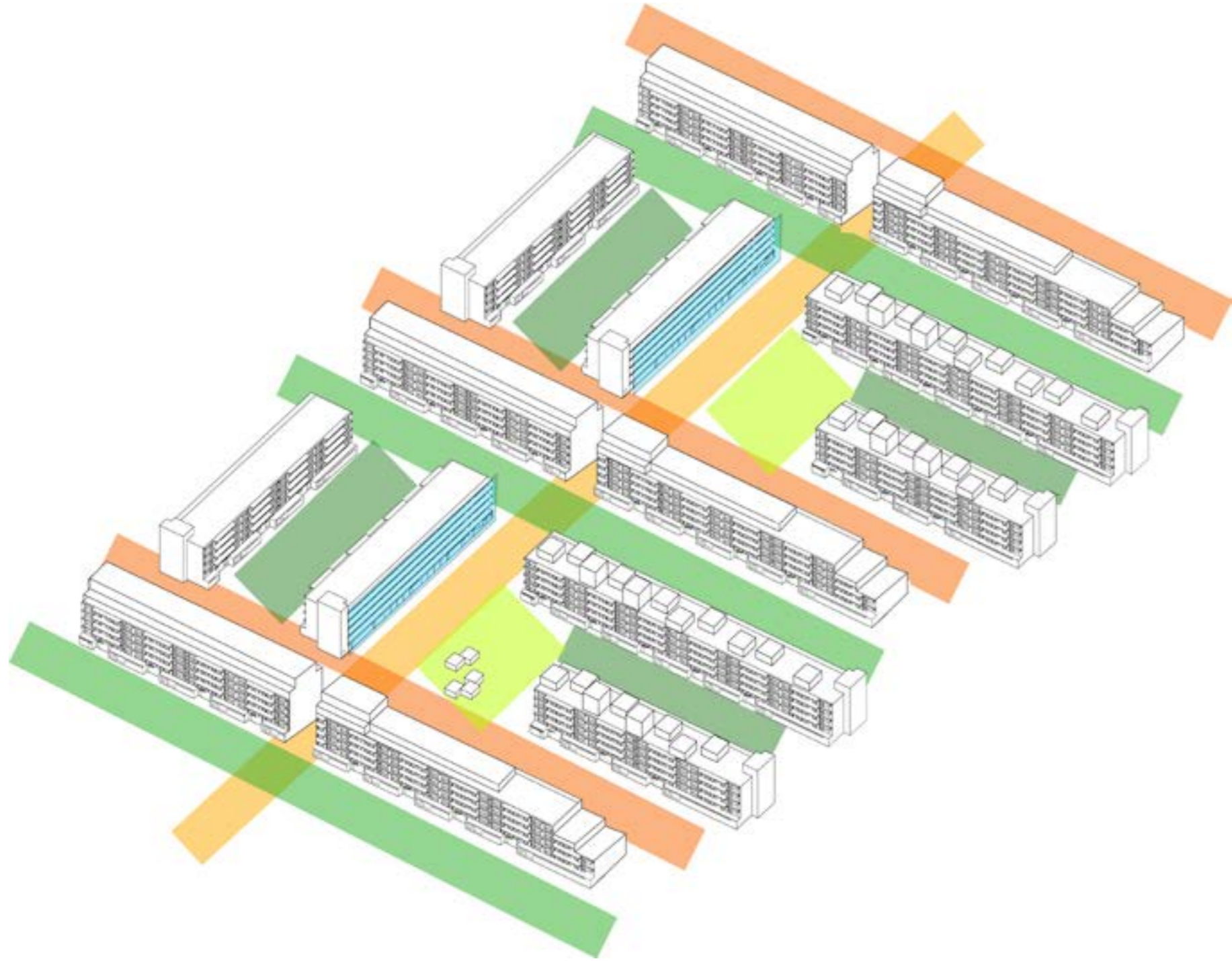
Family homes

Flexibility!









Site visit



Site visit



Safety



Gemeente
Amsterdam

Onveiligheidsbeleving
ontwikkelbuurten Noord

Banne Buiksloot

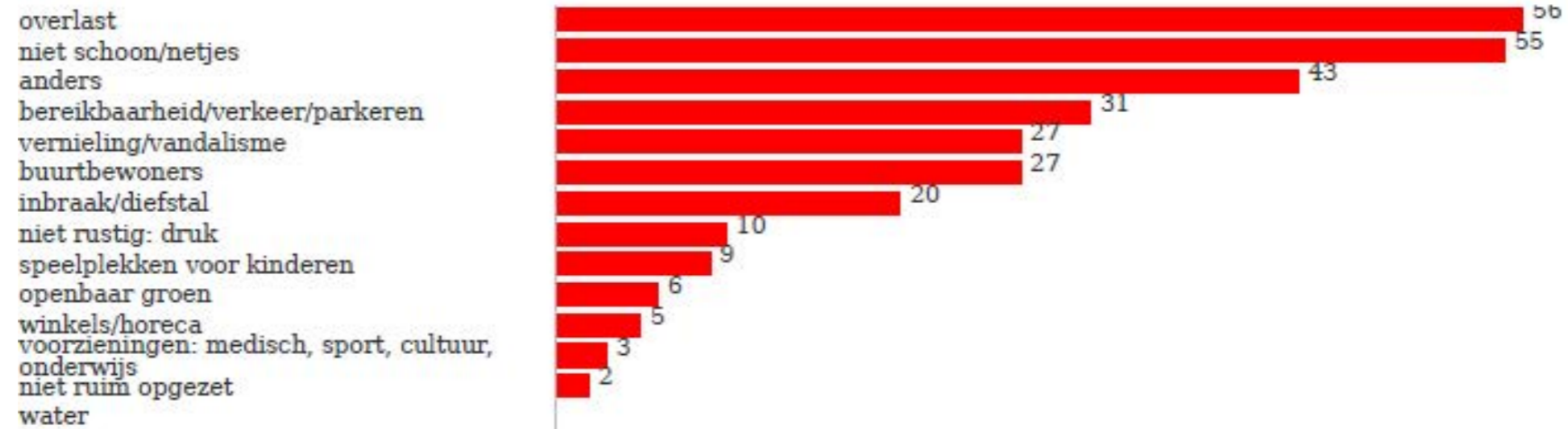
Onderzoek, Informatie en Statistiek



'In De Banne, the perception of insecurity among residents is primarily caused by youth disturbance, a lack of social cohesion, crime, and urban decay.

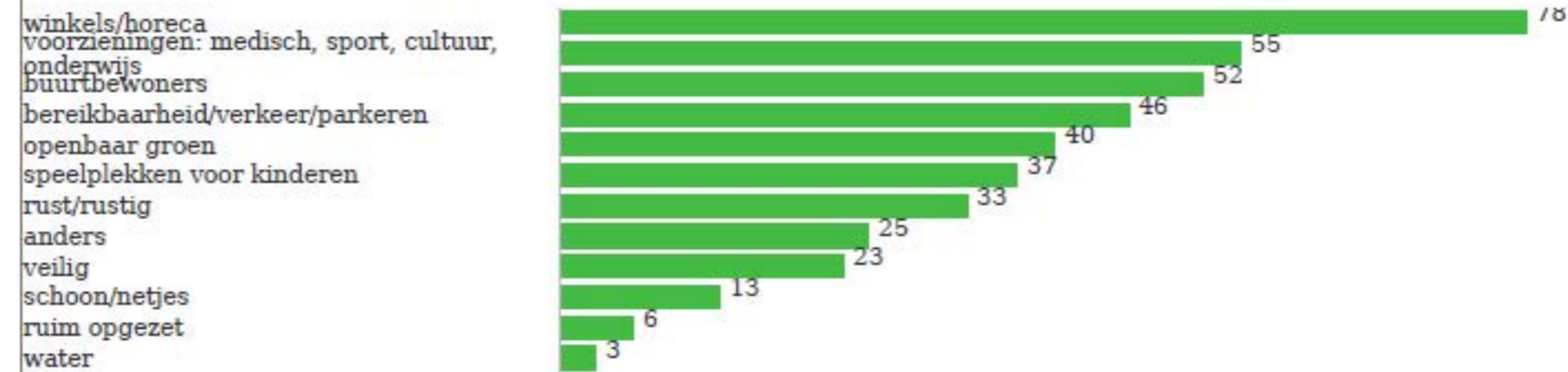
Waar is men niet tevreden over, als het gaat om de buurt?

onderstaande grafiek toont hoe vaak de aspecten spontaan zijn genoemd

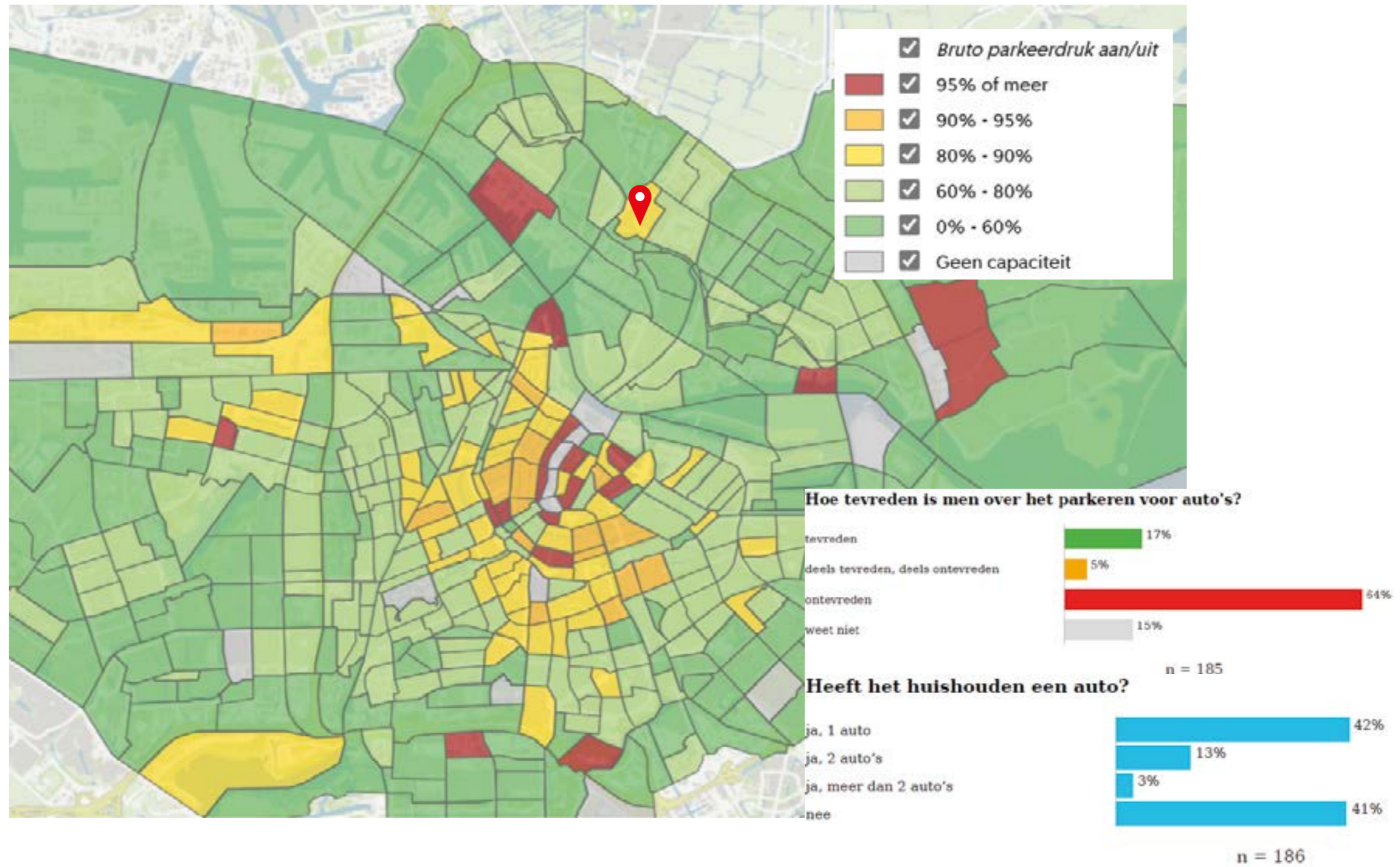


Waar is men tevreden over, als het gaat om de buurt?

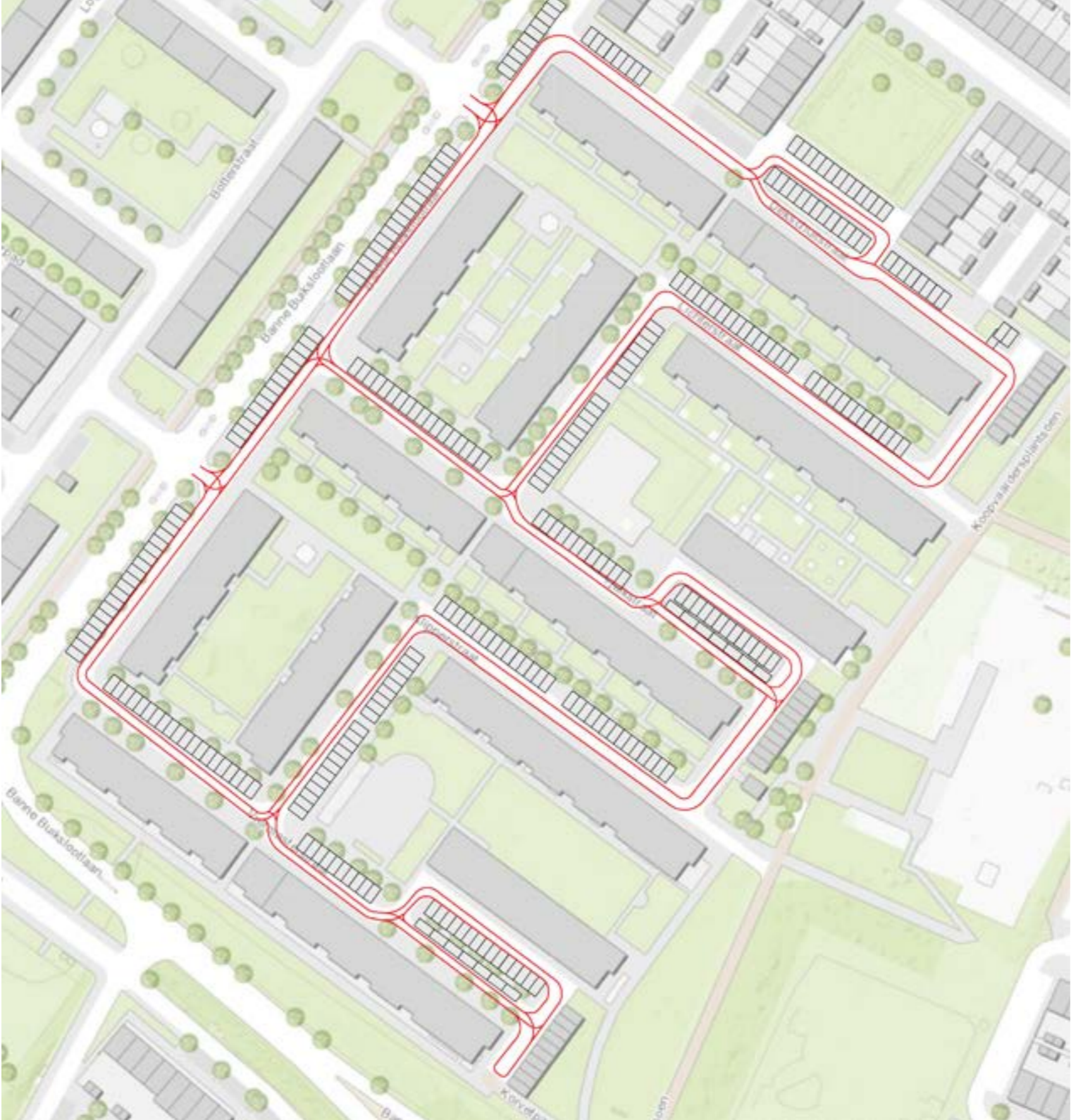
onderstaande grafiek toont hoe vaak de aspecten spontaan zijn genoemd



Parking



Parking



366 parking places
577 dwellings
0,63 p/dw

Parking



- 118



+65

total parking = 323

28 shared cars - 295 private

23 shared cars - 300 private

Parking

Aantal geëiste en maximaal toegestane parkeerplaatsen per woning	A-locaties		B-locaties		C-locaties	
	Minimum-parkeernorm	Maximum-parkeernorm	Minimum-parkeernorm	Maximum-parkeernorm	Minimum-parkeernorm	Maximum-parkeernorm
Vrije sector						
-Woningen tot 30 m ² bvo	geen	1	0,1 ²	1		
-Woningen tussen 30 m ² en 60 m ² bvo	geen	1	0,3	1	Maatwerk	Maatwerk
-Woningen boven de 60 m ² bvo	geen	1	0,6	1		
Sociale huur	geen	1	geen	1	Maatwerk	Maatwerk

Tabel: Parkeernorm bij nieuwbouwwoningen per type woning, voor bewoners (exclusief bezoek). Bewoners worden uitgesloten van parkeervergunningverlening. Bvo = bruto vloeroppervlak.

500 cars for 577 dwellings + visitors

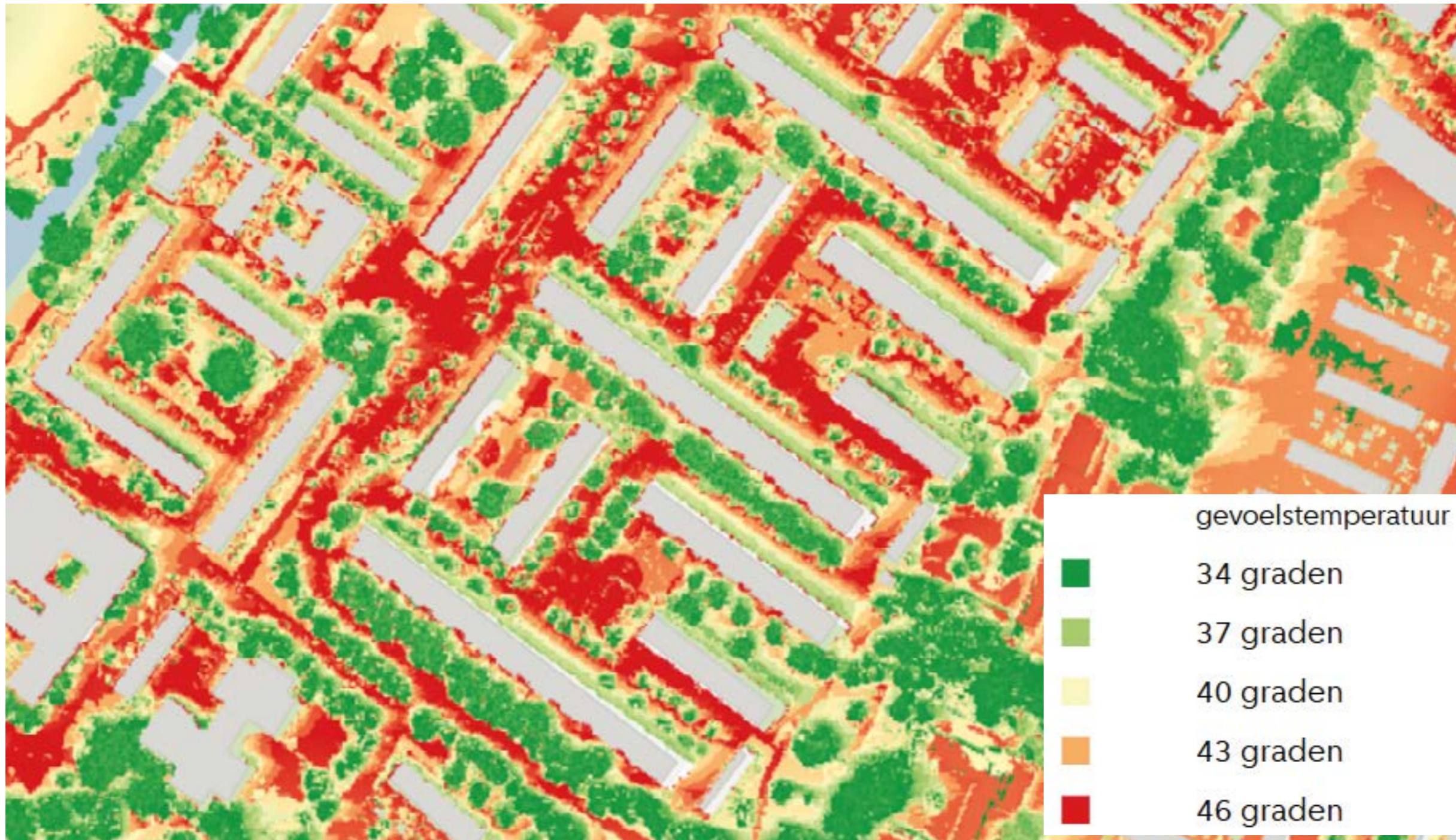
New carparks +/- 25 = 525

366 - 525 = -159 cars

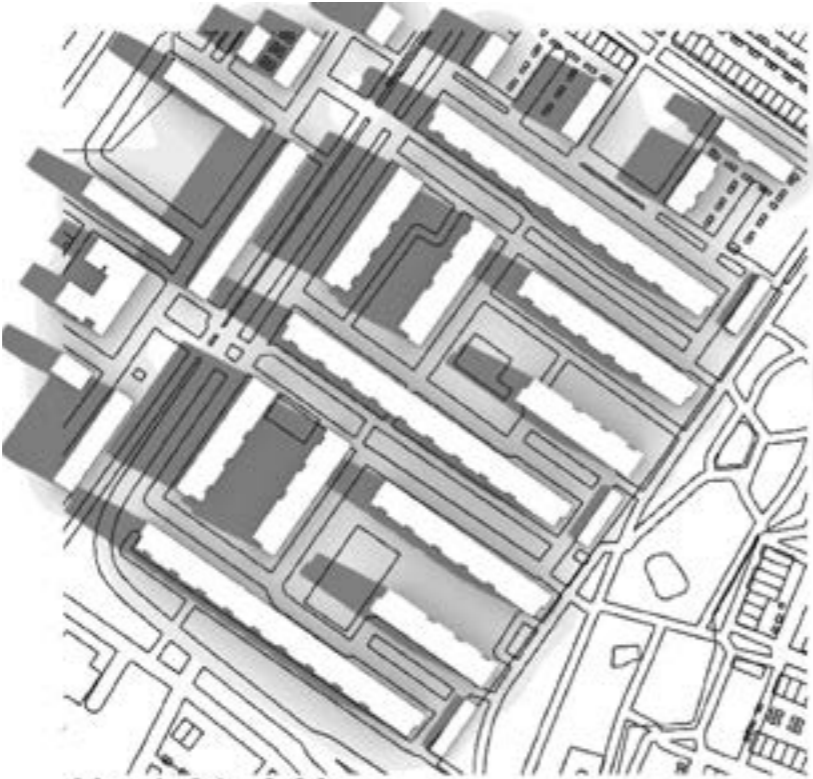
1 shared car = 8 - 13 private cars

13 - 21 shared cars needed

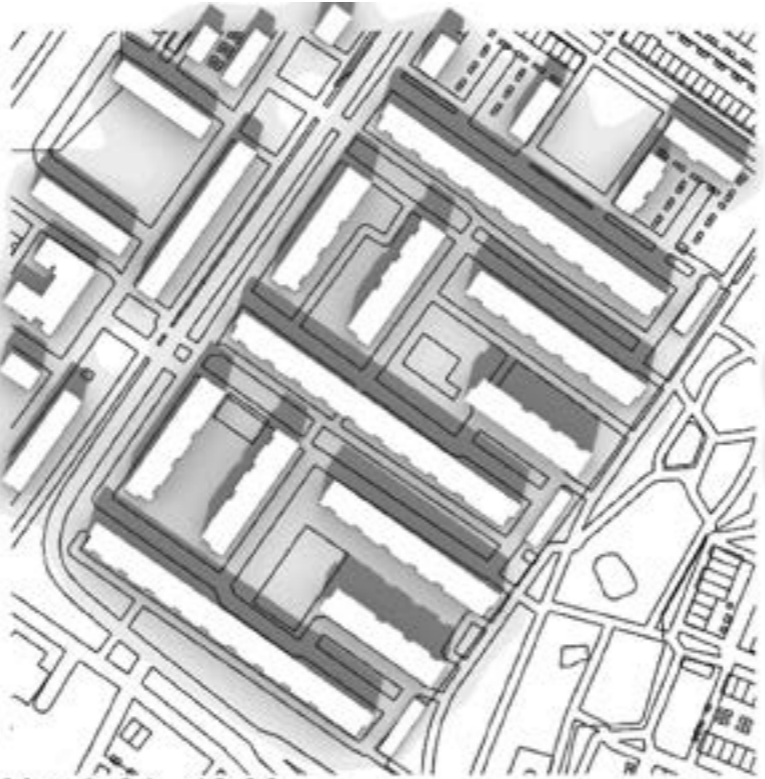
Urban Heat



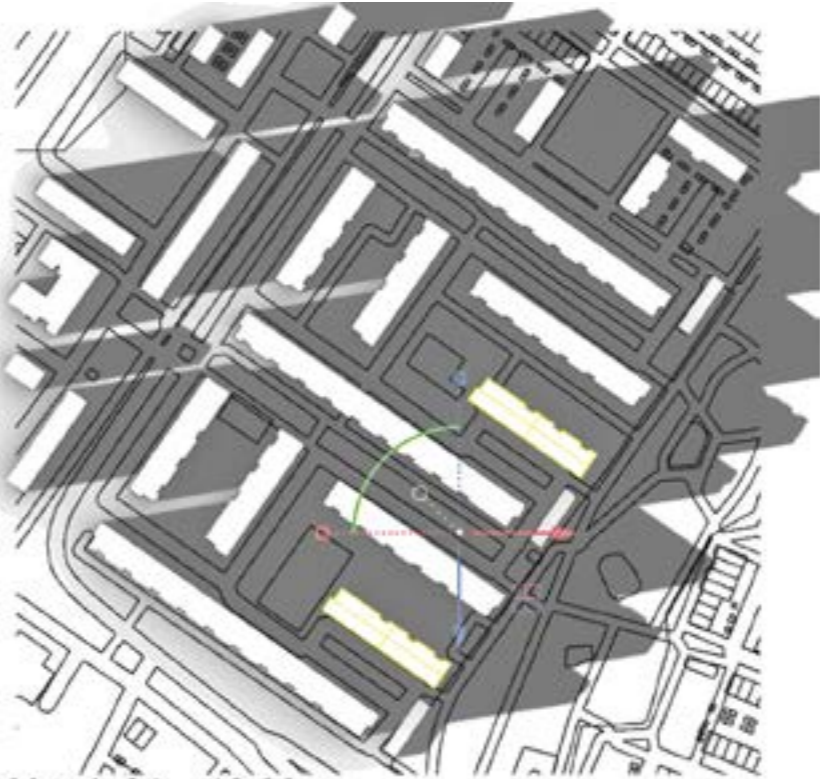
Sun Analysis



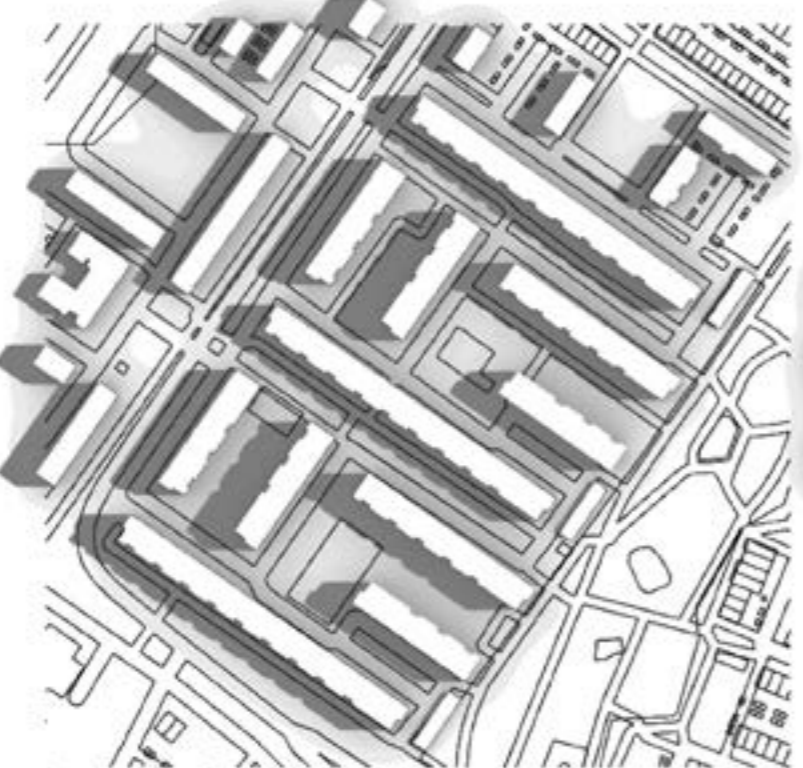
March 21. 9:00



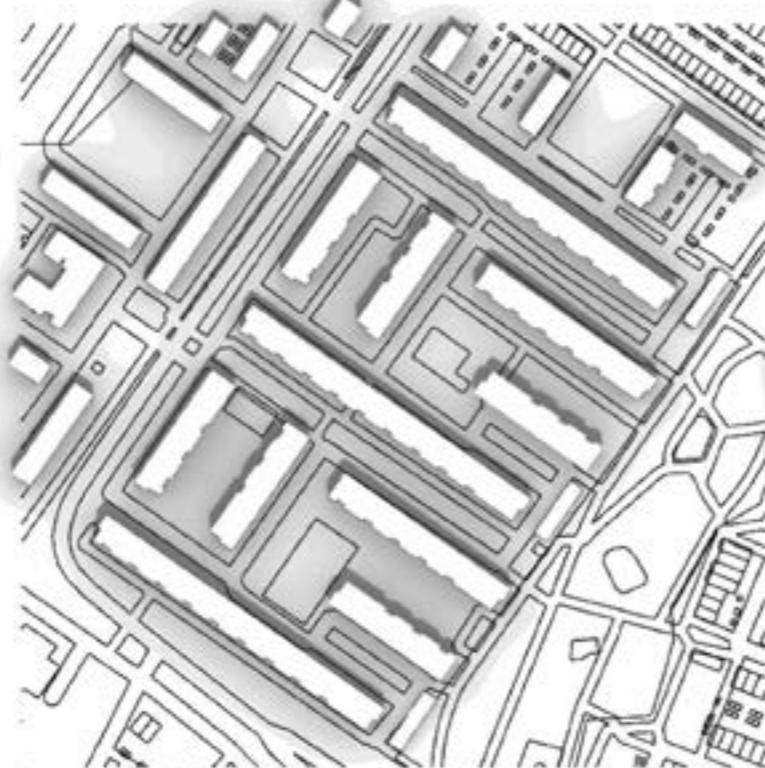
March 21. 13:30



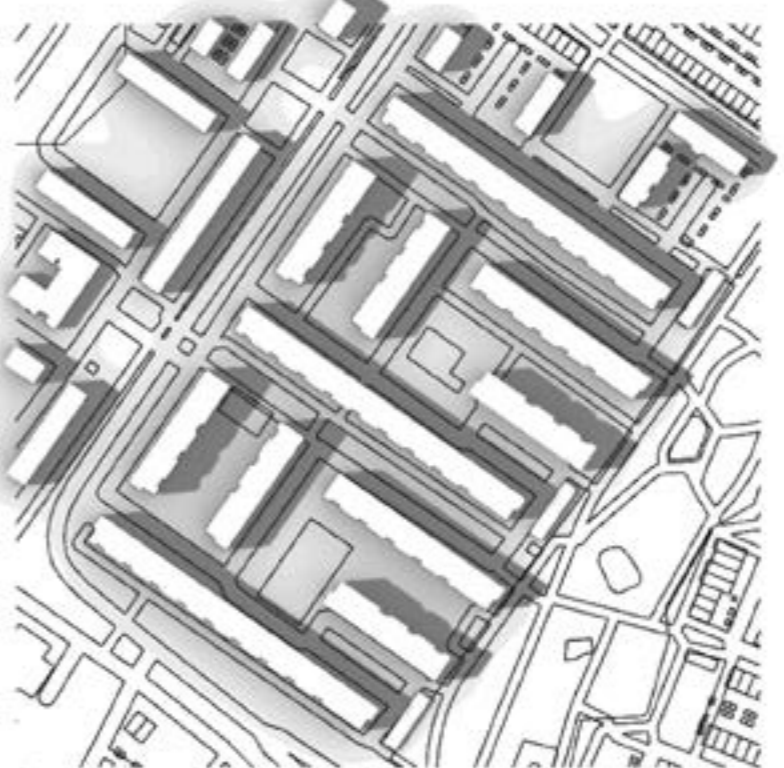
March 21. 18:00



June 21. 9:00



June 21. 13:30

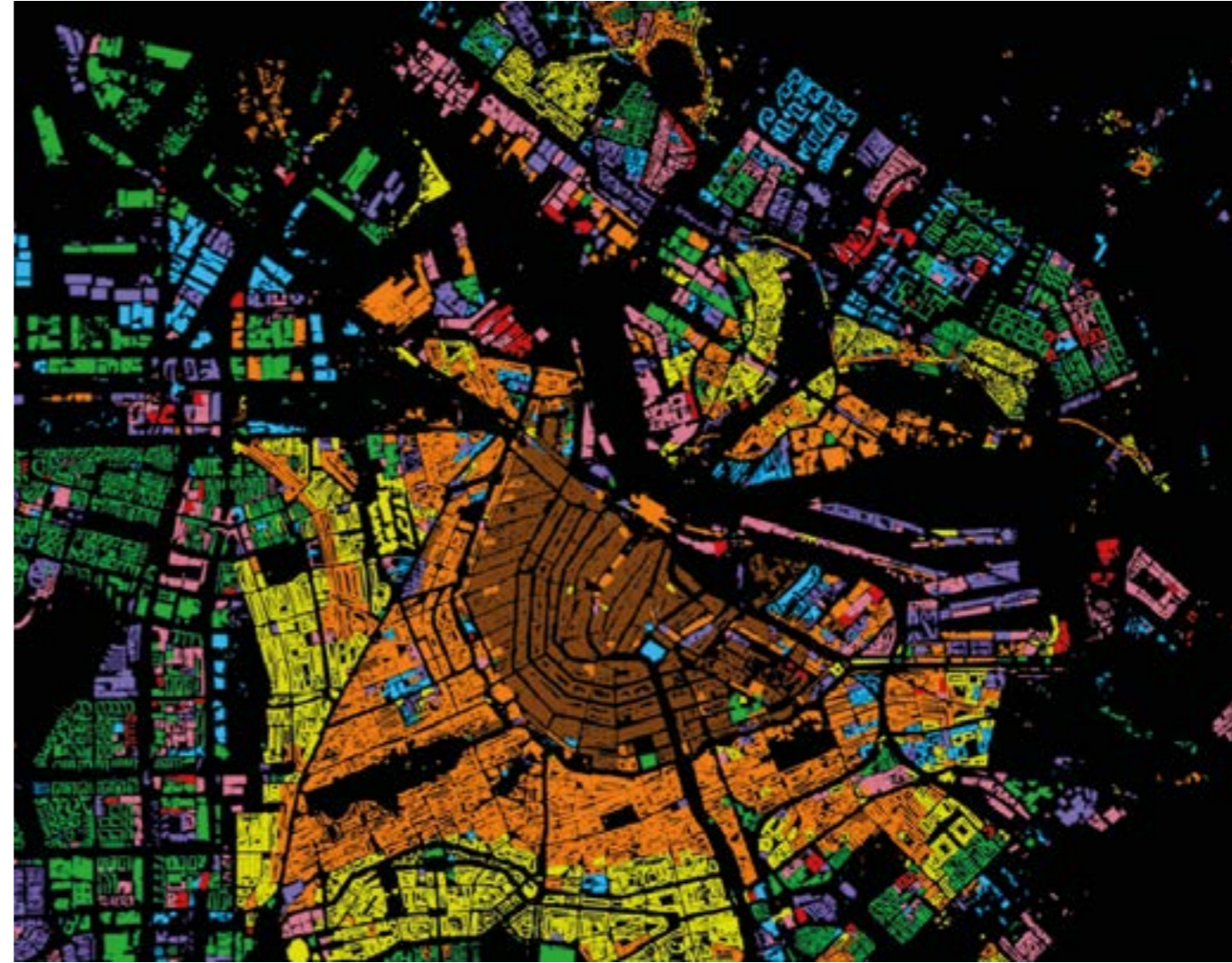
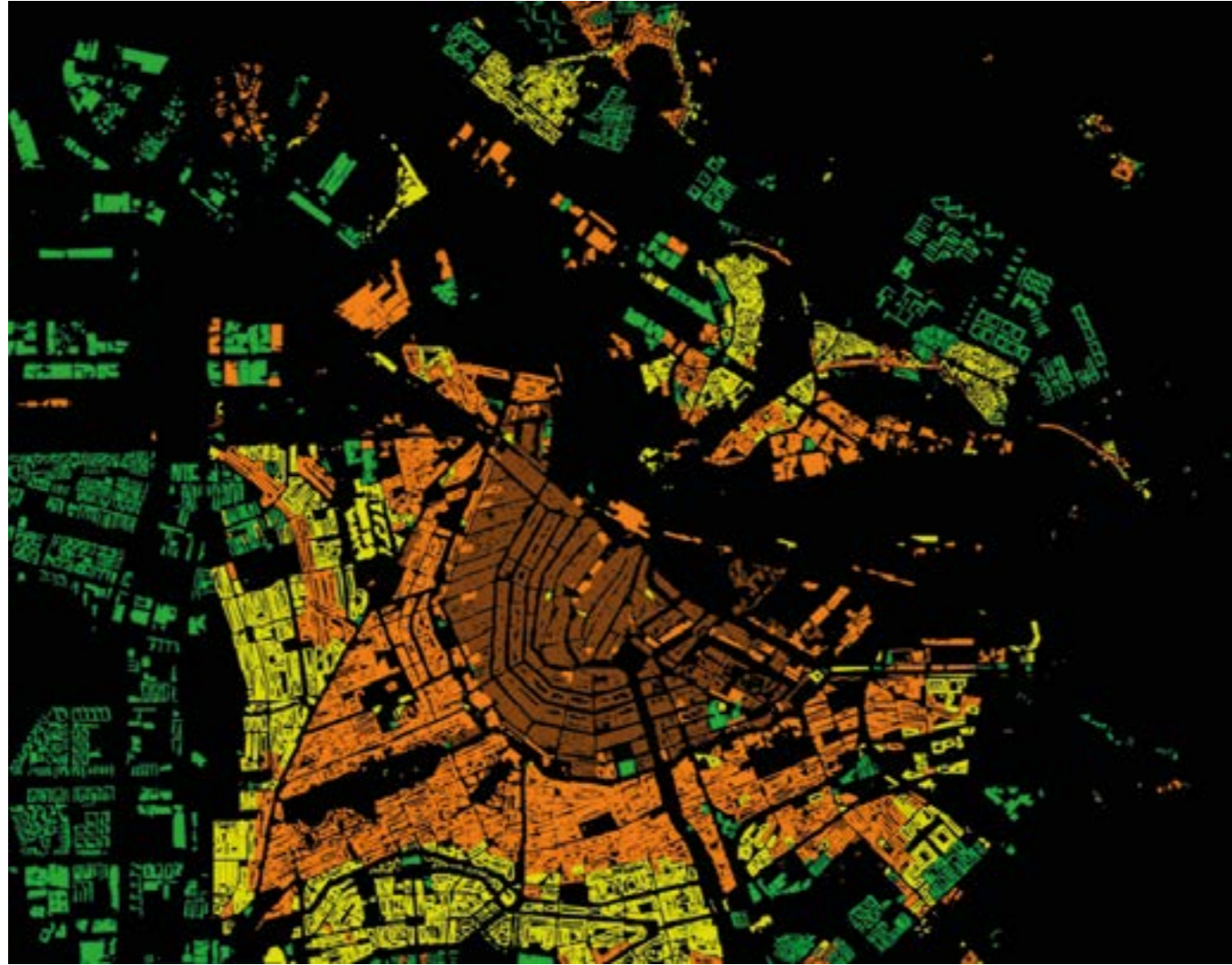


June 21. 18:00

Urban development



Urban development



- Voor 1860 (Binnenstad en Grachtengordel)
- 1860-1919 (19de-eeuwse Ring)
- 1920-1939 (Gordel '20-'40)
- 1940-1969 (Algemeen UitbreidingsPlan)
- 1970-1985
- 1986-1999
- 2000-2019
- Vanaf 2020