Enhancing Public Space Safety for Women

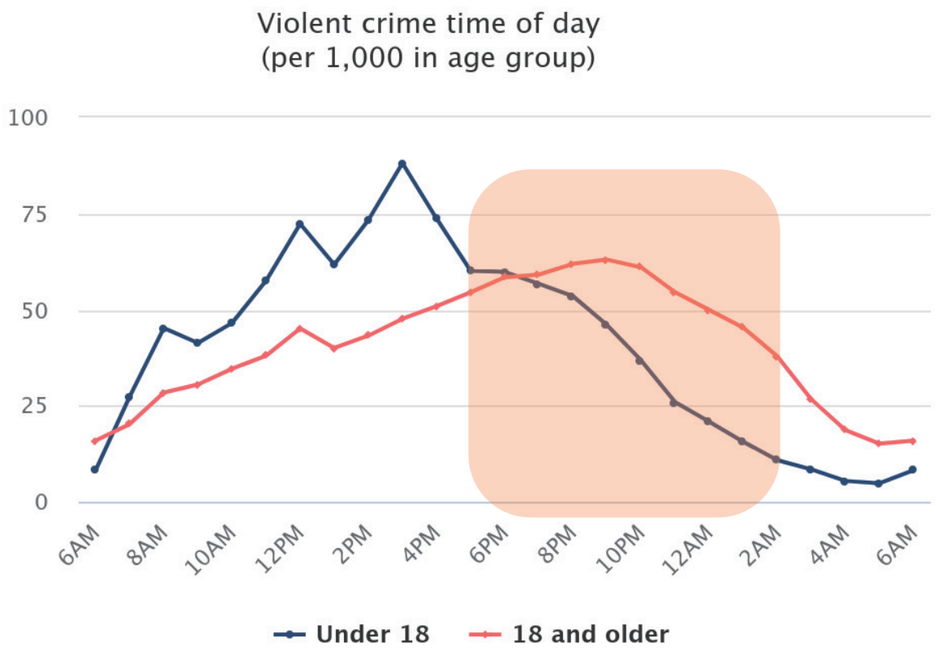
ENJOY THE SAFETY

through Nighttime Economy

6016561
Ziyun ZHOU P5
presentation

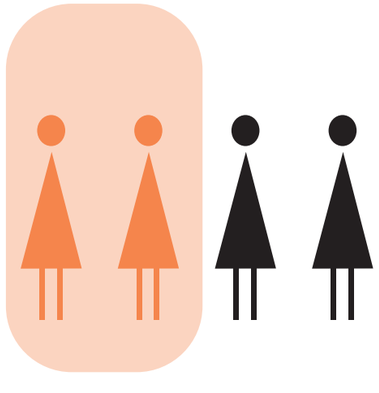
1. Background

WHY NIGHTTIME



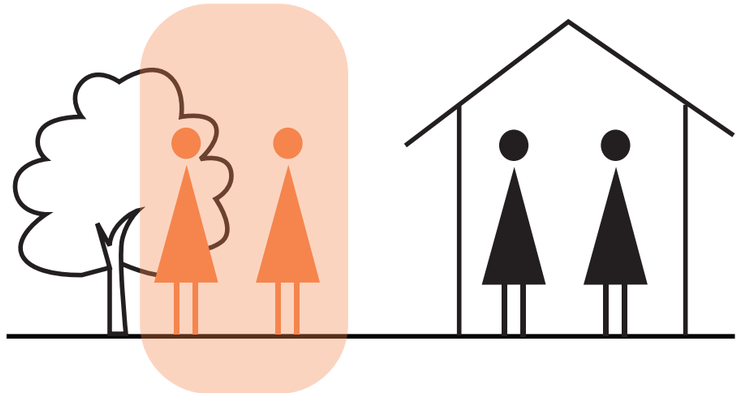
Note: Violent crimes include murder, violent sexual assault, robbery, aggravated assault, simple assault, and kidnapping. Data are from law enforcement agencies in 45 states and the District of Columbia.

WHY WOMEN



75% of women in the Netherlands have experienced sexual harassment

WHY PUBLIC SPACE



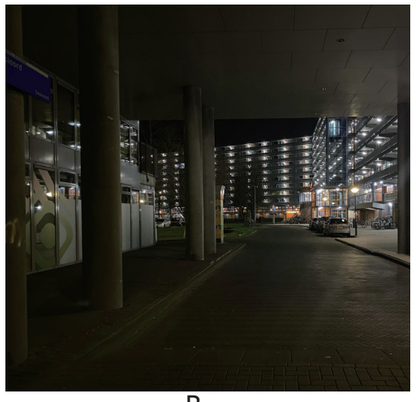
51% of sex harrasment occurred in public spaces such as streets

First Let's Talk About SAFETY

1.1. Is the Netherlands Safe at Night?

Do you think the Netherlands is safe?
Do you feel that the city you live in is safe?

A



B

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F

Do they think the Netherlands is safe?
Do they feel that the city you live in is safe?

A

B

C

D

E

F

1.2. A Personal Motivation

1.3. Feelings and experiences of insecurity are related to personal background.

Can you recall the last time you felt unsafe going out at night (after 18:00)? What happened, and what made you feel unsafe?

Usually, I'll ask someone to go out with me so I don't feel too afraid.

Men catcalled me, which made me feel uncomfortable.

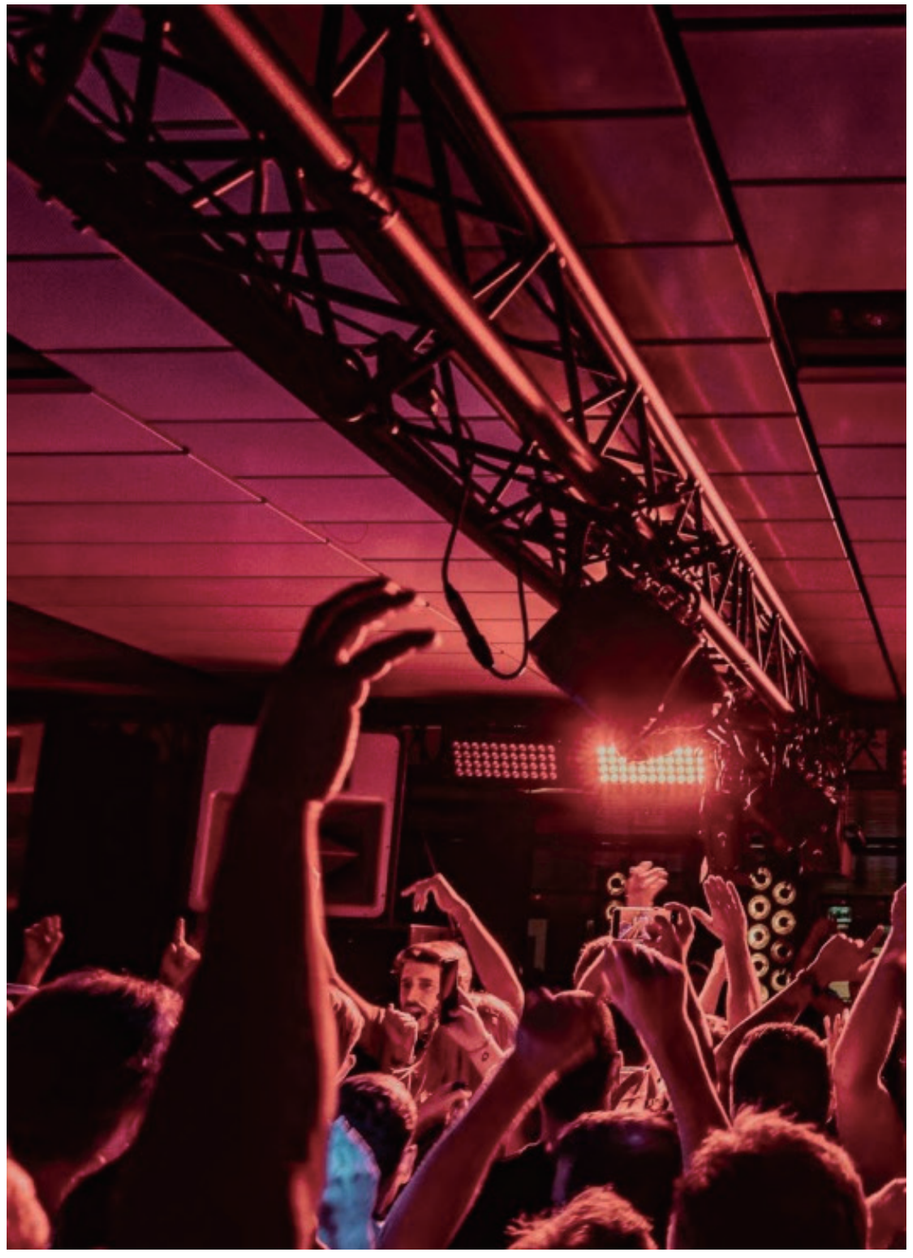
I was chased by a man and had to take a detour to get home.

Yes—drunk people yelling, and so on.

Then Let's Talk About NIGHTTIME Economy

1.4.Uneven Nightscape, Unequal Safety – Centralized economy vs. marginalized safety

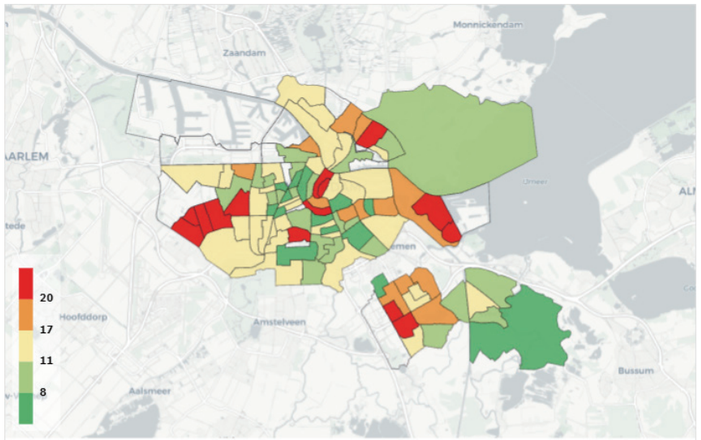
Amsterdam's nightlife industry is a vital contributor to the local economy. With **approximately 500 establishments** dedicated to nighttime activities, the sector generates around **5,000 jobs**. The city's rich cultural offerings attract **1.5 million visitors** annually, with these tourists injecting approximately **€1.25 billion** into the economy through festivals, clubs, and other nightlife activities. (World Cities Culture Report , 2022)



SOURCE: Space for
night culture
Future of the Amsterdam Night,2024

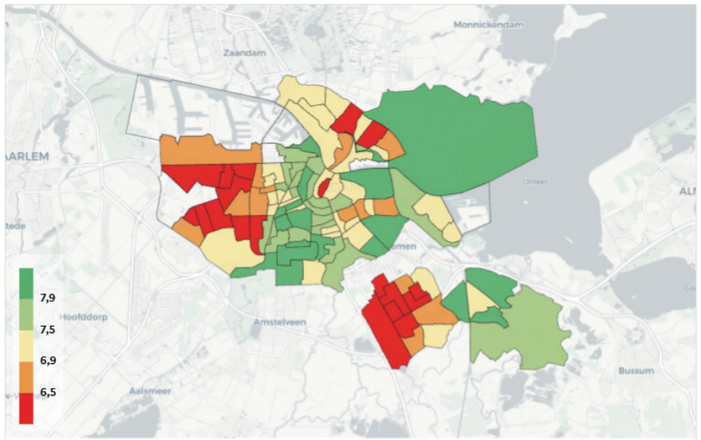
1.5 Uneven Nightscape, Unequal Safety
– Centralized economy vs. marginalized safety

Is there any correlation between the two?



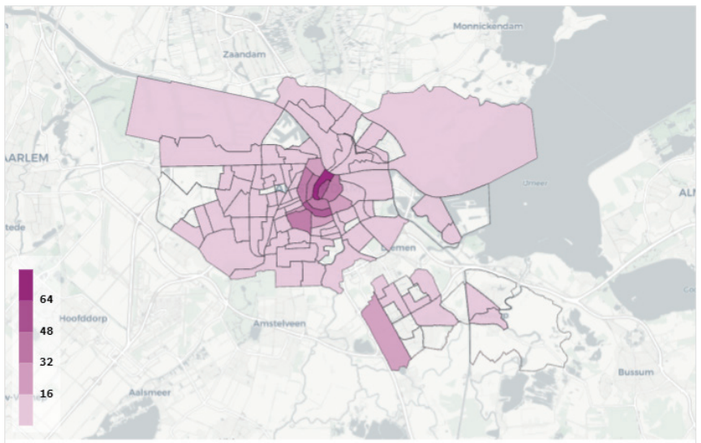
Criminaliteit: % toegenomen wijken in 2023

onderzoek.amsterdam.nl



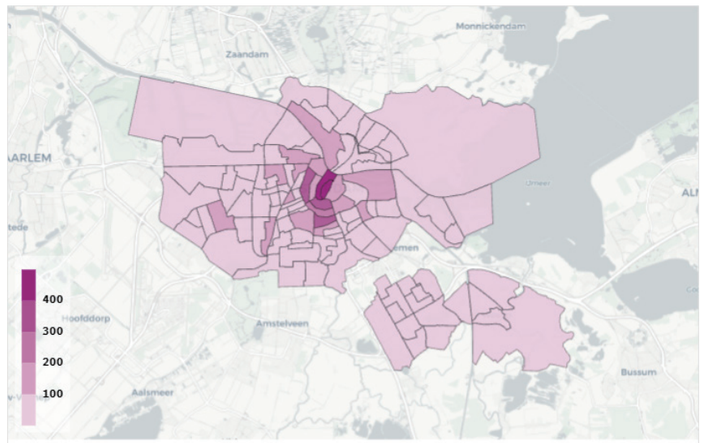
Veiligheidsgevoel 's avonds (1-10) wijken in 2023

onderzoek.amsterdam.nl



Horeca: vestigingen hotel wijken in 2023

onderzoek.amsterdam.nl



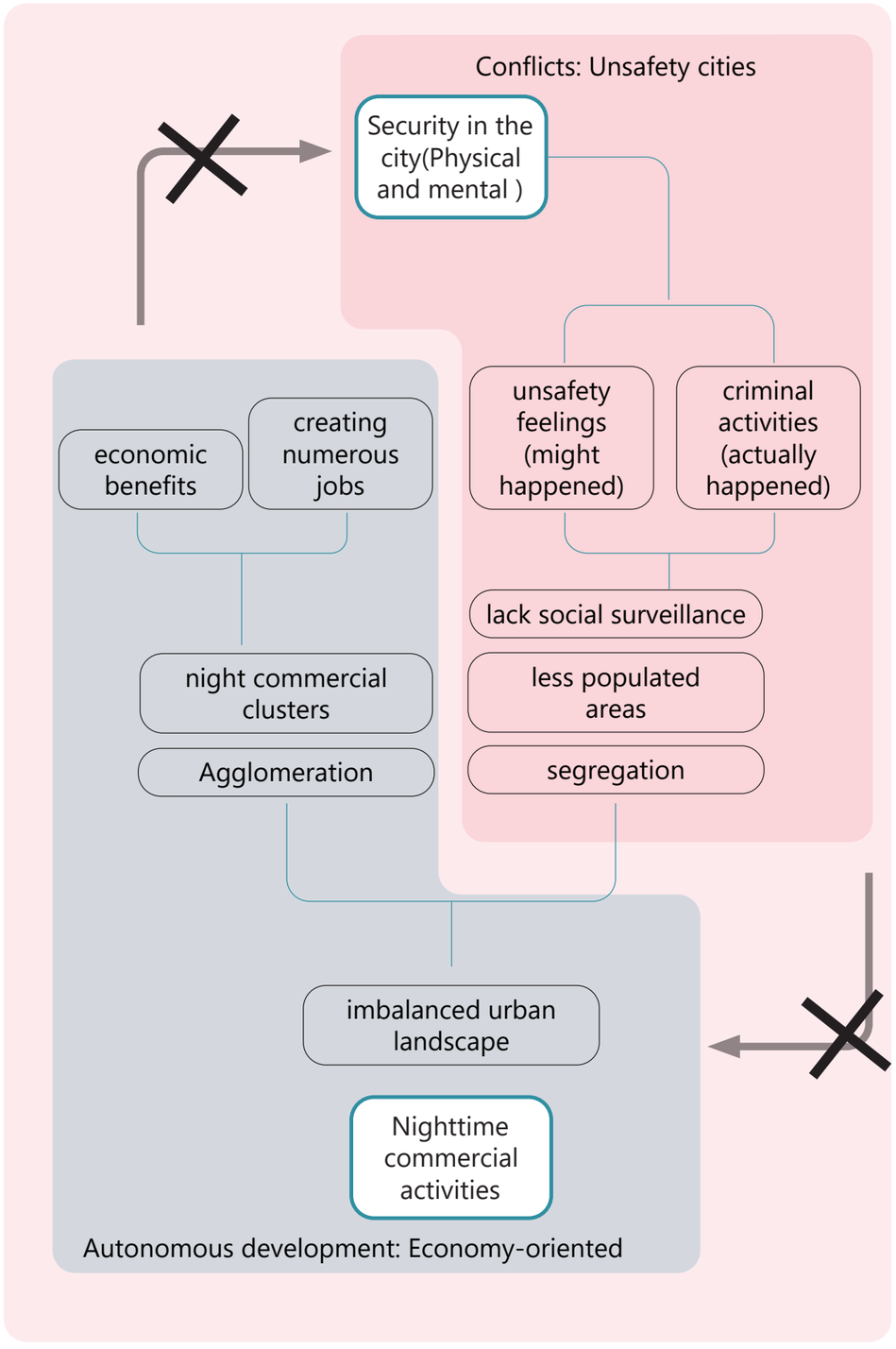
Horeca: vestigingen totaal wijken in 2023

onderzoek.amsterdam.nl

https://miro.com/app/board/uXjVP3YKZ9M=/?moveToWidget=3458764604314933765&cot=14

2.Structure

2.1. Problem & Potential
– Defining the contradiction between safety and market-led development



2.2.Research Questions
– From one question to What / Where

How can nighttime economic activities enhance the security of public spaces during nighttime?

What

What types of nighttime economic activities contribute to public safety/lack of safety?

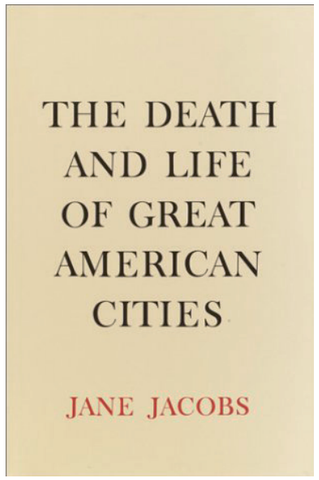
What specific factors help transform public spaces into safer environments at night?

Where

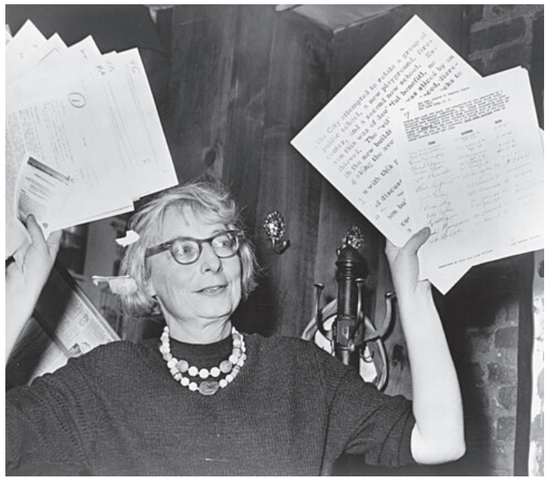
Where are the unsafe areas?

Where are nighttime economic activities concentrated

2.3. Theoretical Framework
– Public space, data, and Nighttime economic

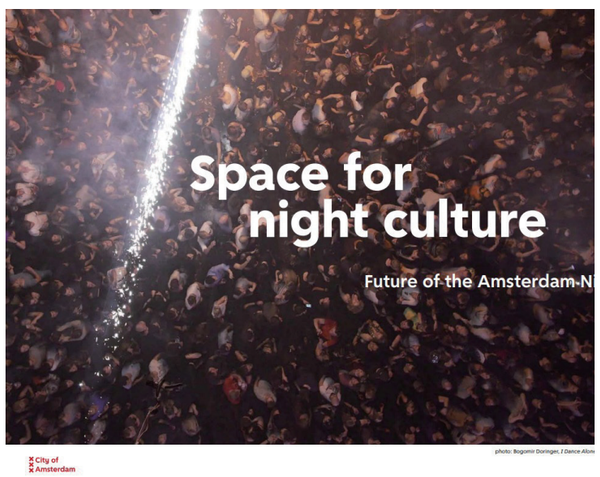


Source: https://en.wikipedia.org/wiki/Jane_Jacobs#

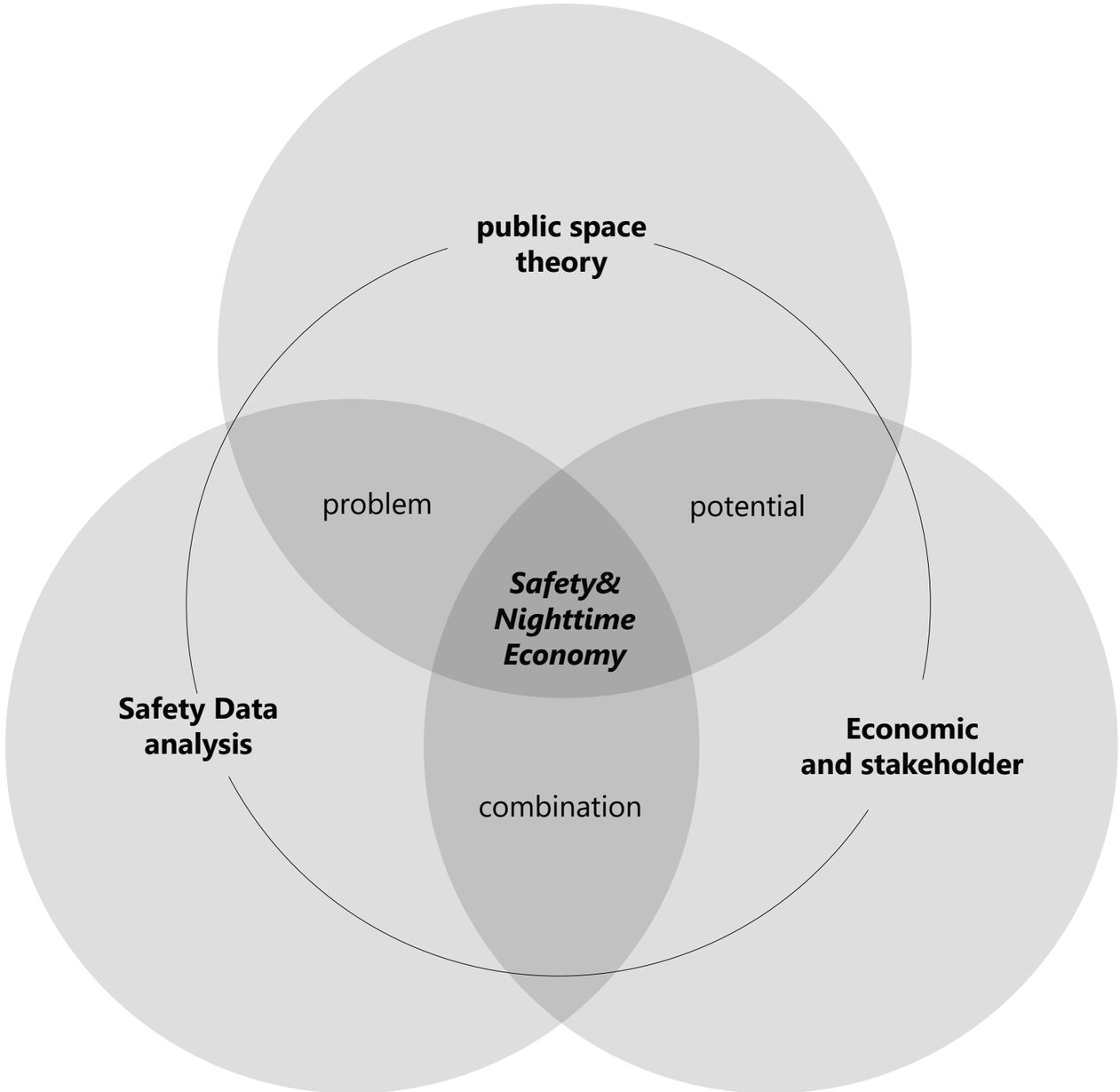


Jacobs as chair of a Greenwich Village civic group at a 1961 press conference
Source: https://en.wikipedia.org/wiki/Jane_Jacobs#

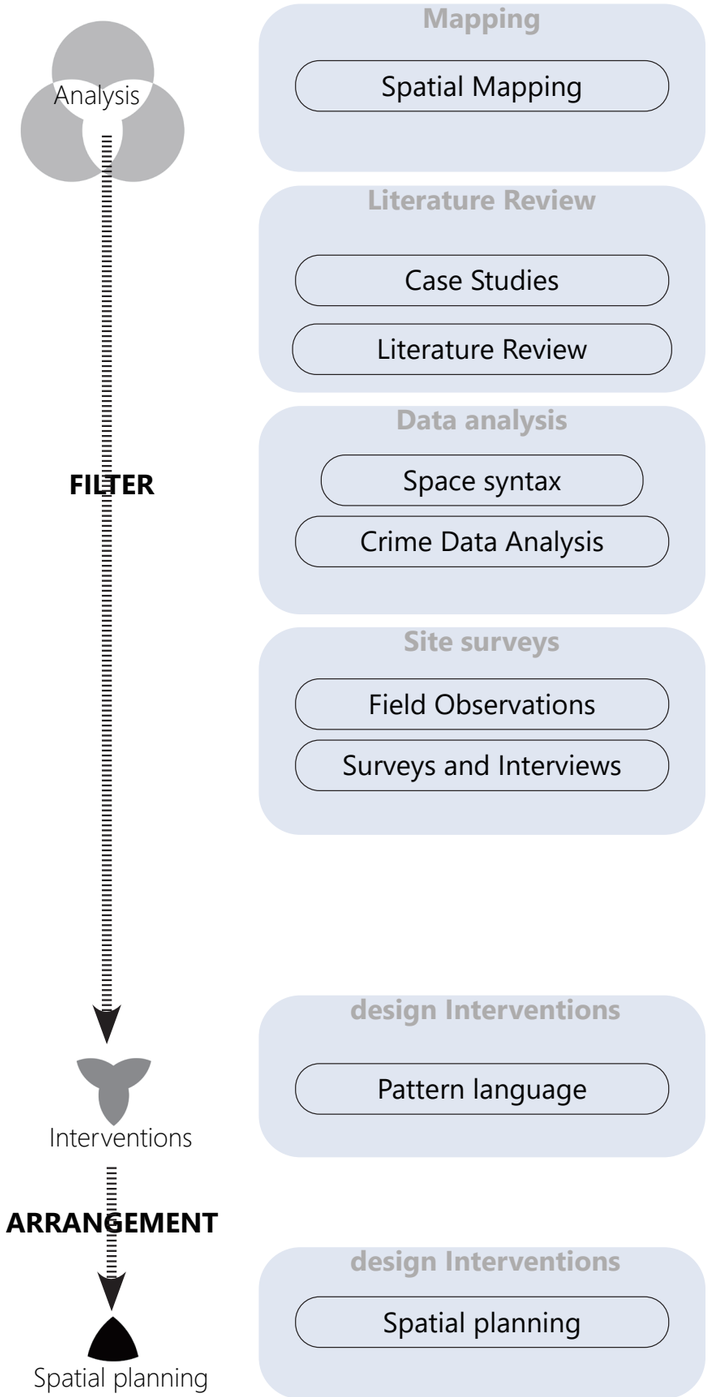
Source:Verantwoording Veiligheidsindexen 2021

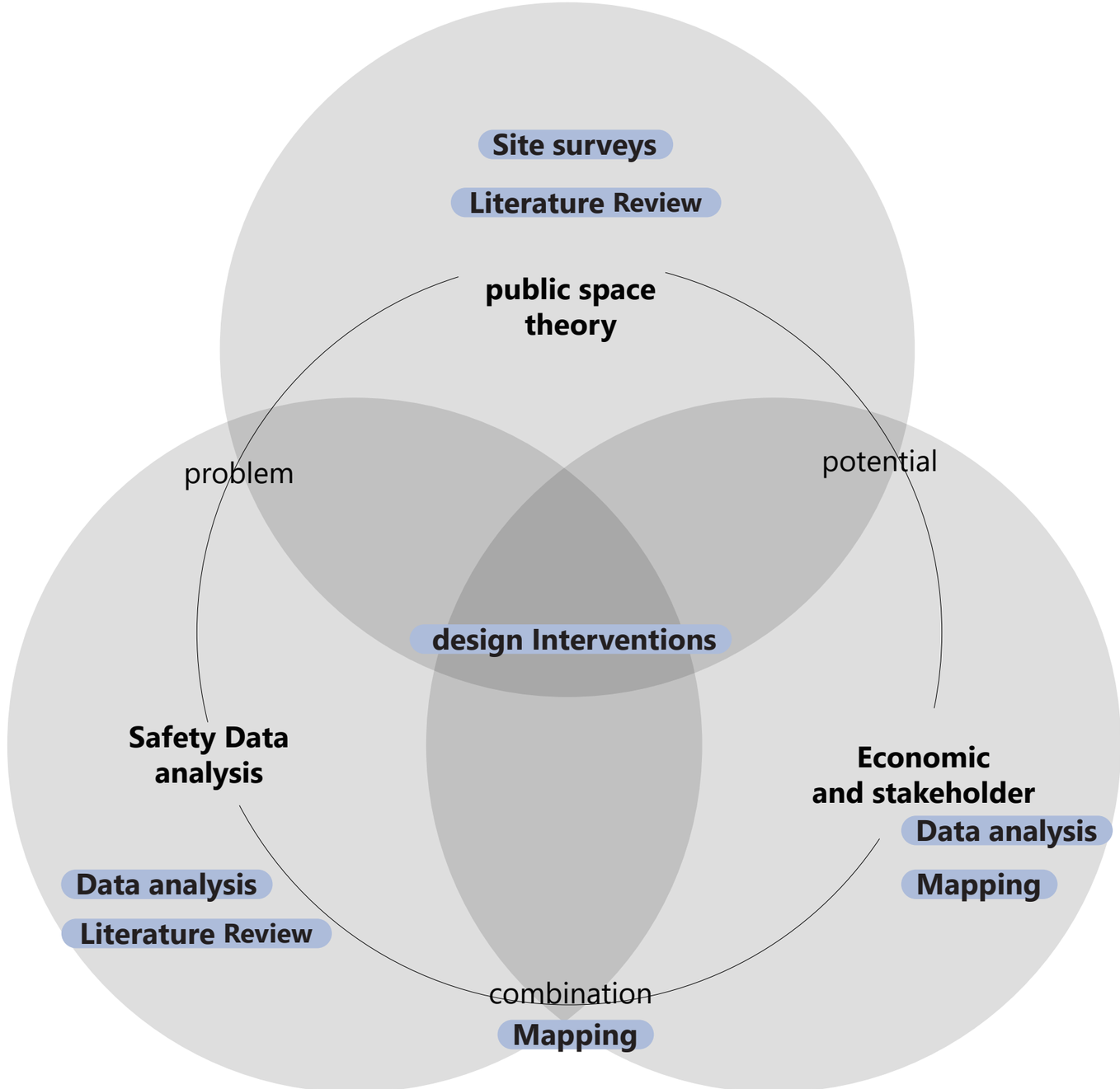


Source:Space for
night culture
Future of the Amsterdam Night

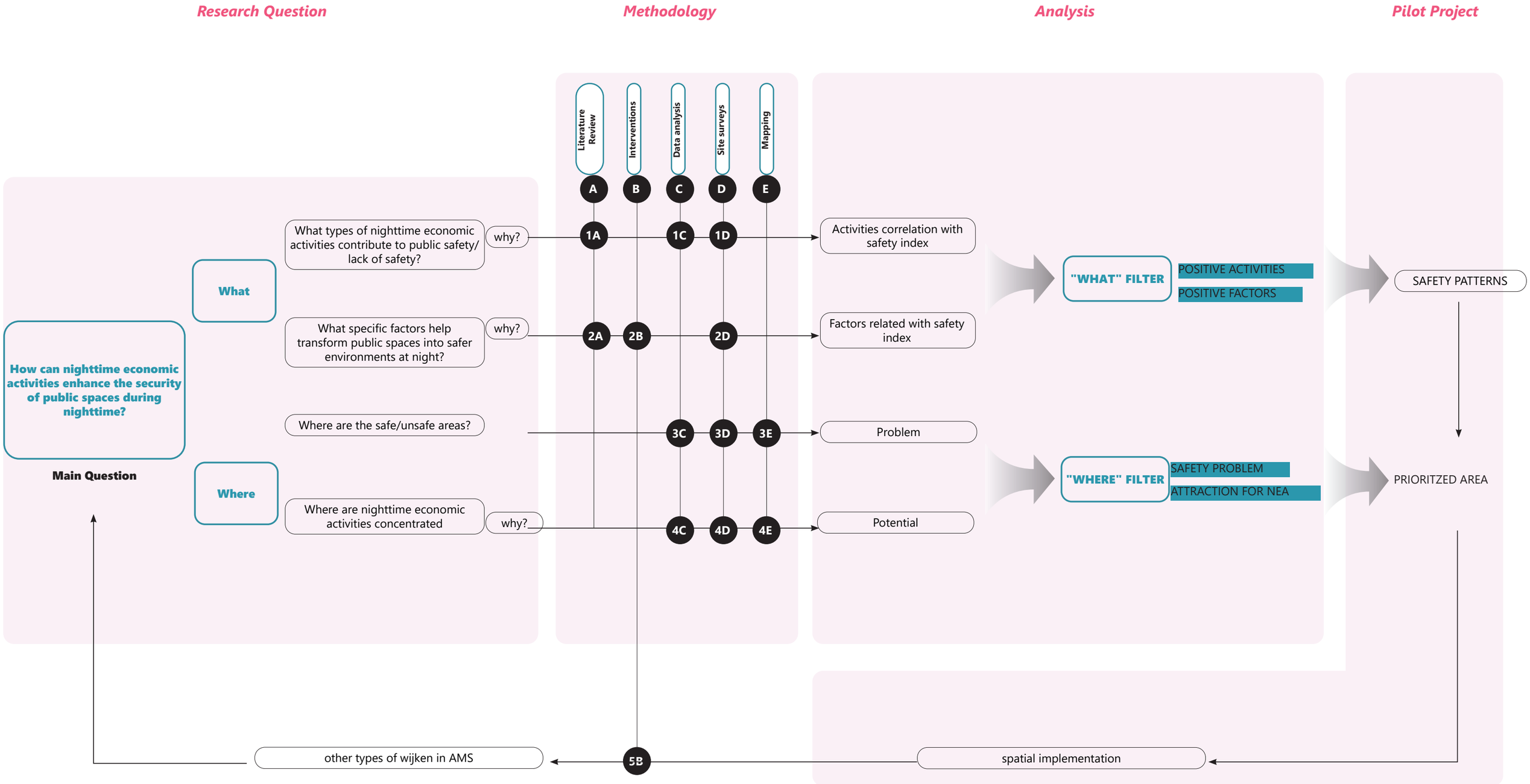


2.4.Methodology framework





2.5.Study Framework
– From analysis to intervention



WHY AMSTERDAM

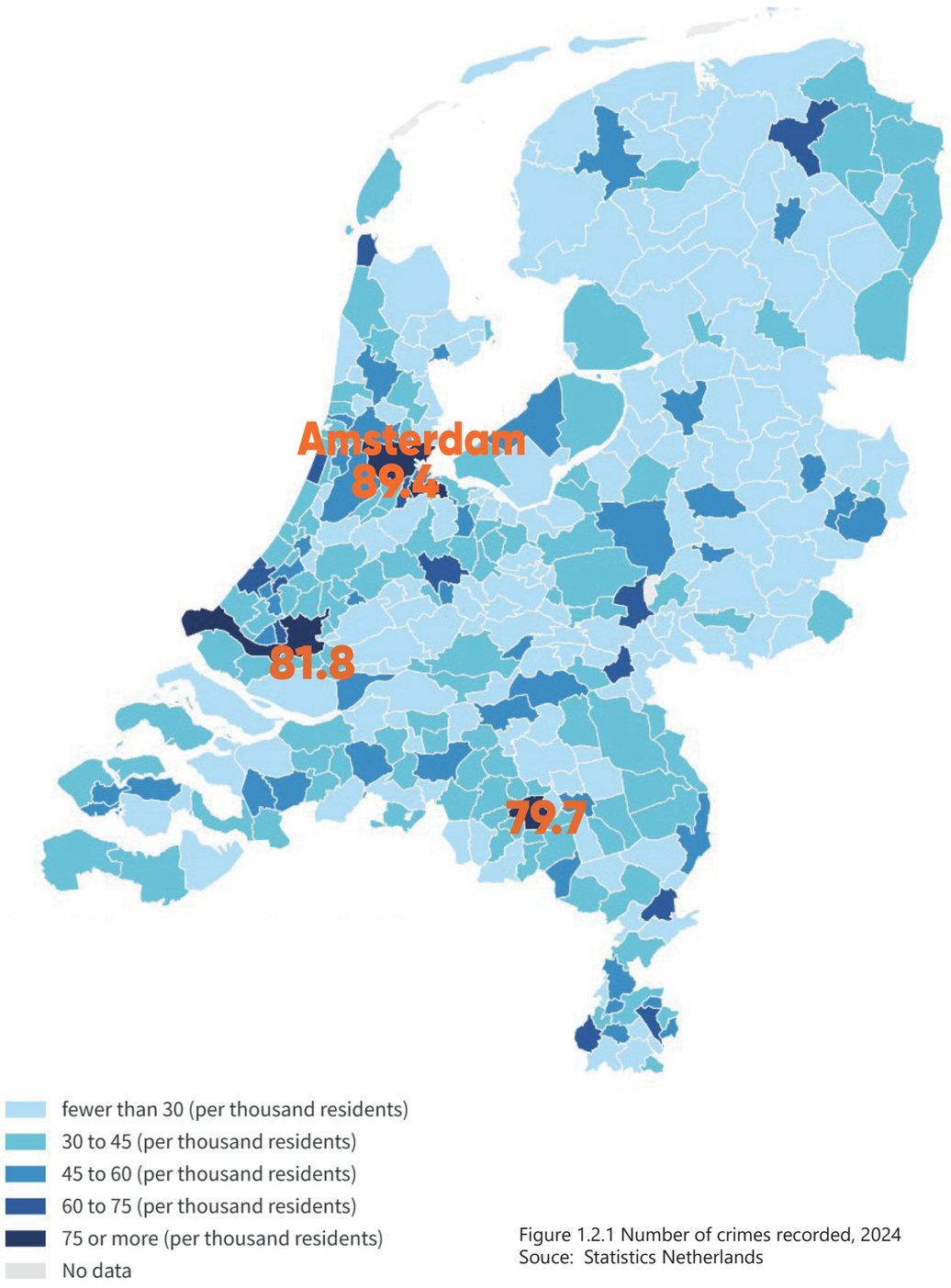


Figure 1.2.1 Number of crimes recorded, 2024
Souce: Statistics Netherlands

WHY BIJLMERMEER

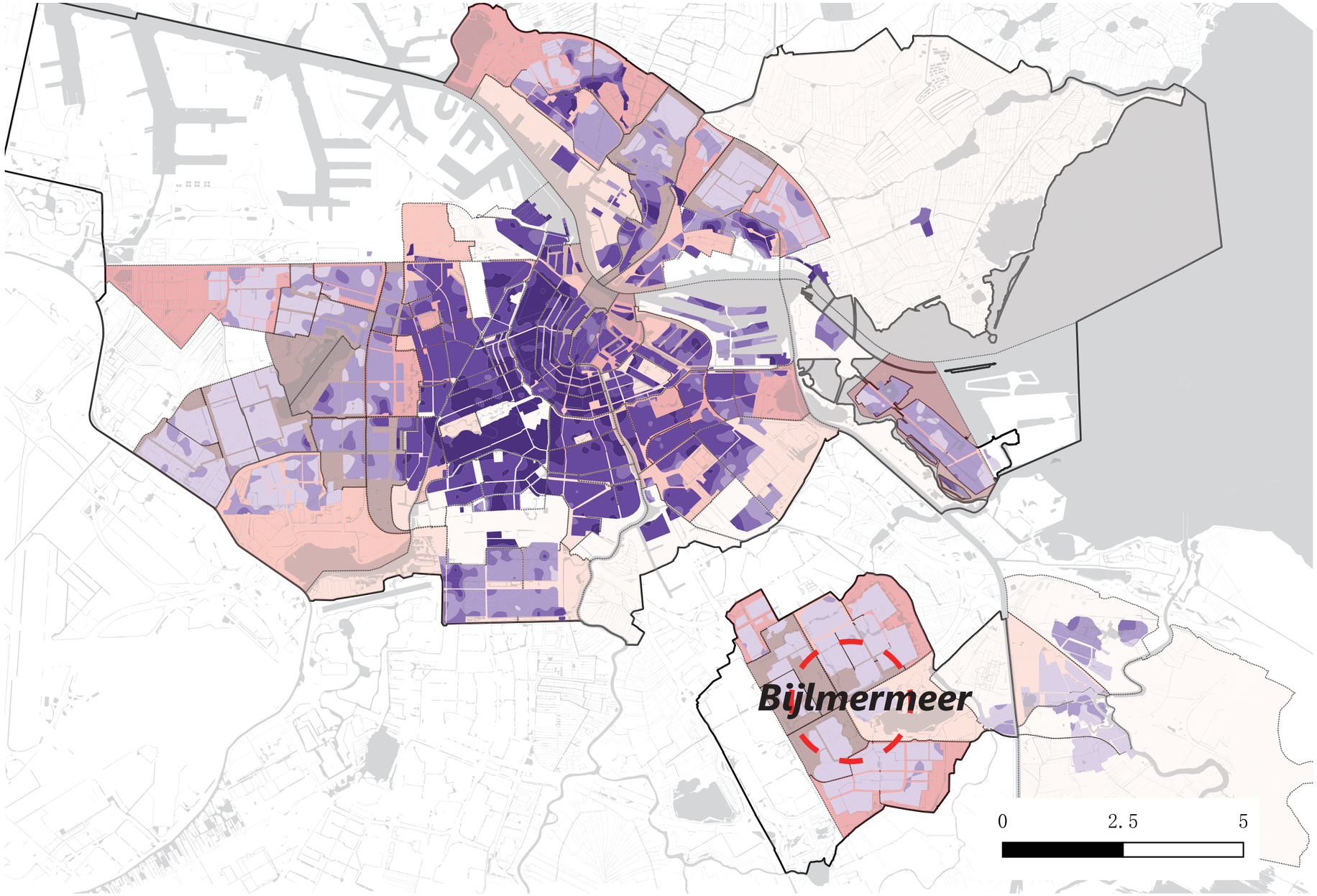


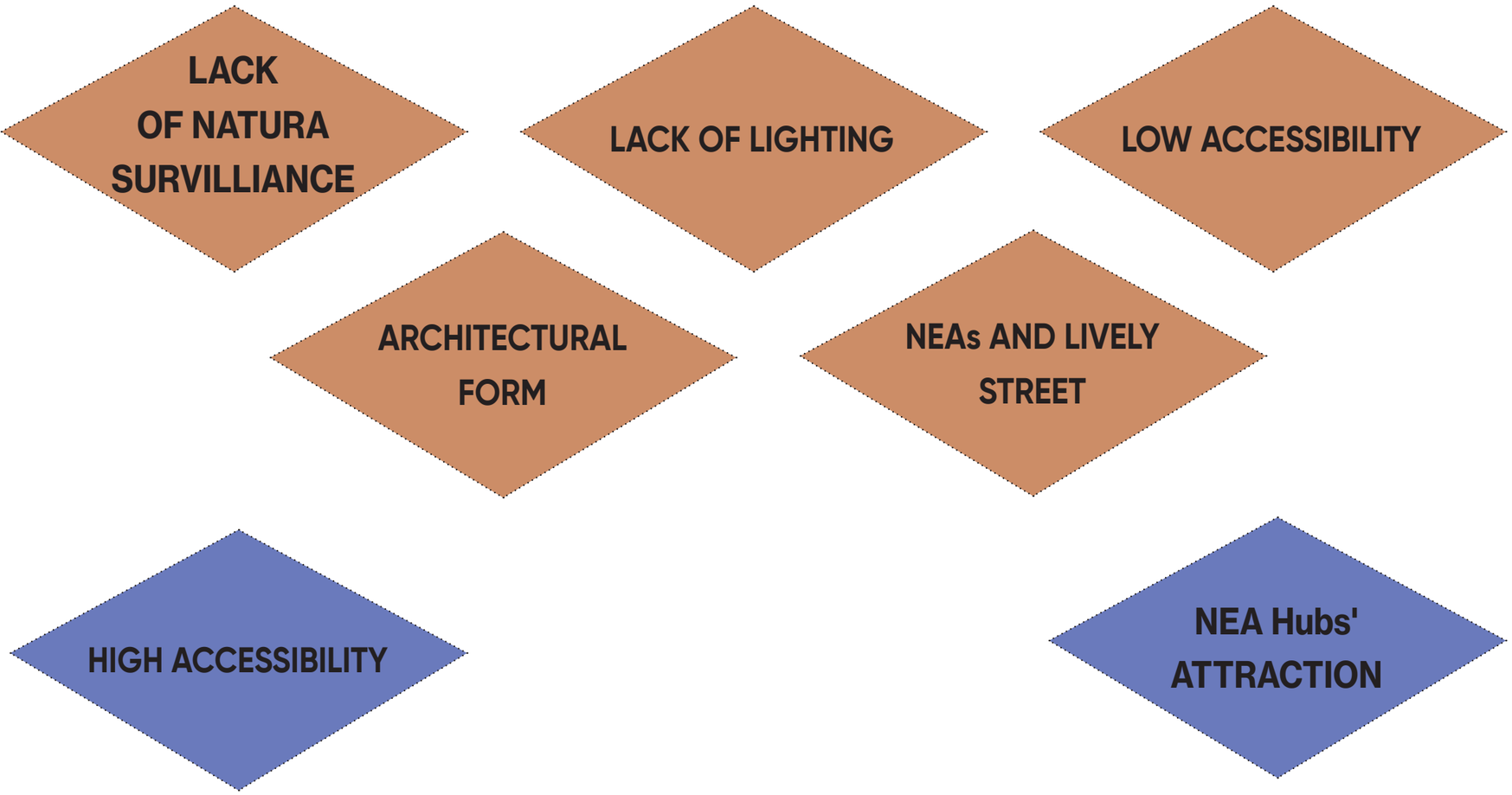
Figure 1.2.3 Map of problem and potentials
Data Source: Gemeente Amsterdam,2024

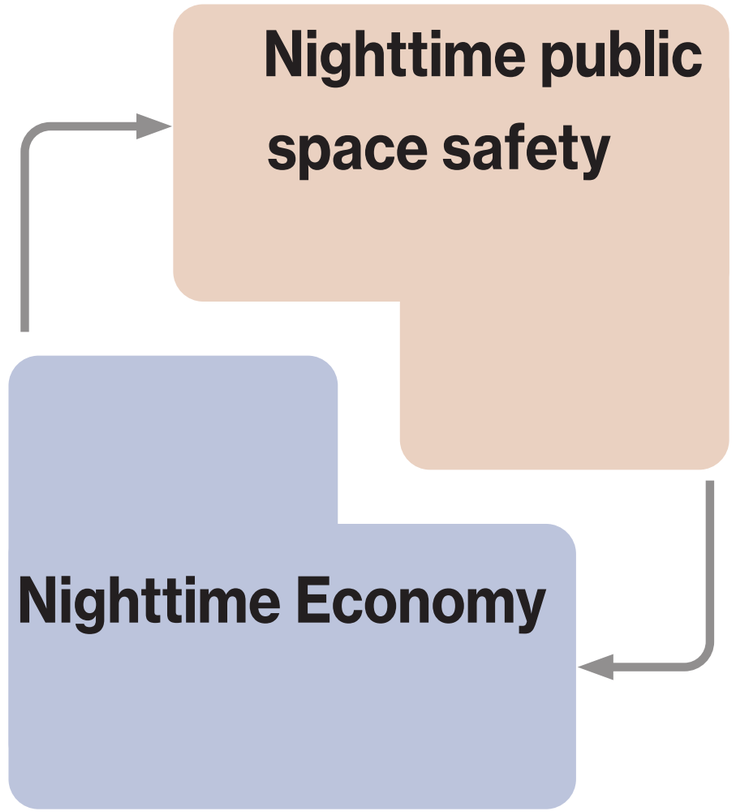
geojson_lnglat — WONINGW/
- 3130 - 4695
- 4695 - 6260
- 6260 - 7043
- 7043 - 7825
- 7825 - 11738

wijk_madebyziyun
- 54 - 85.4
- 85.4 - 91.8
- 91.8 - 106.2
- 106.2 - 122.2
- 122.2 - 172

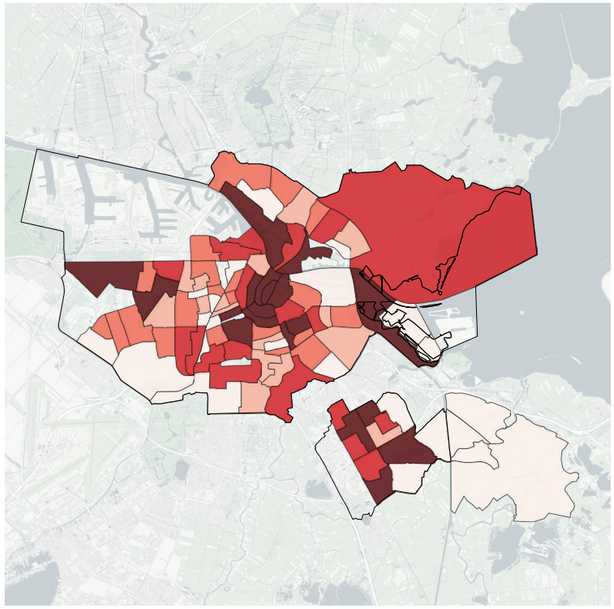
3. Research

3.1 LITERATURE REVIEW

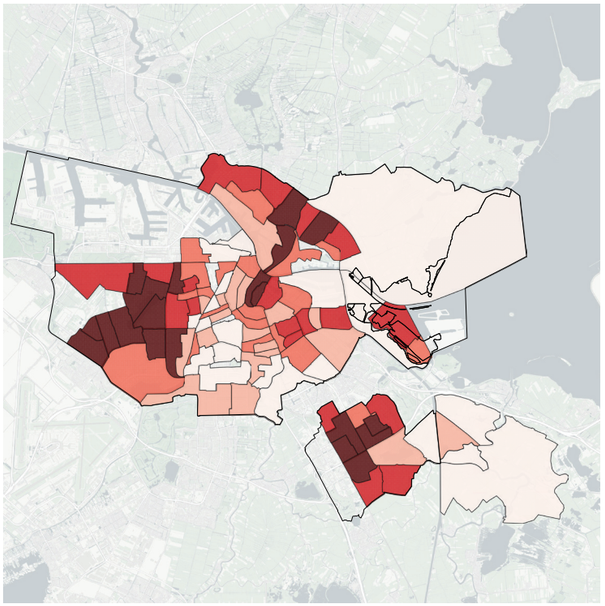




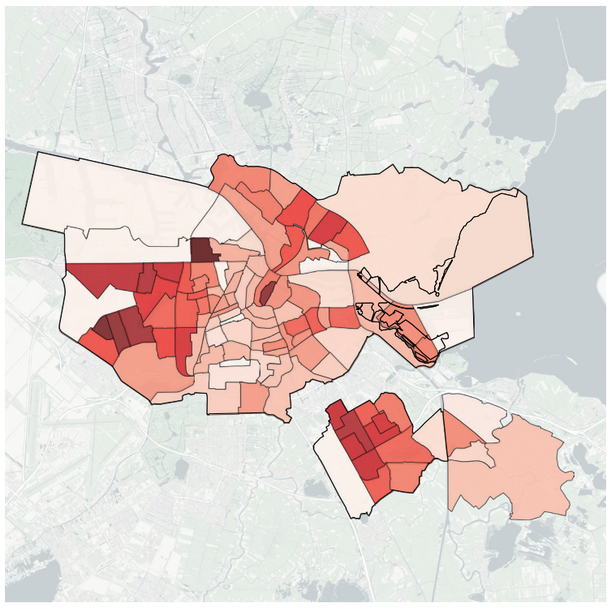
3.2 DATA ANALYSIS



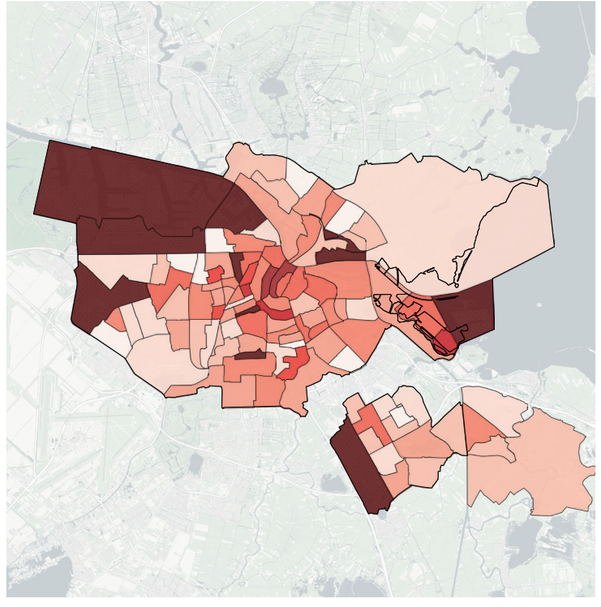
registered crime



percived safety in evening



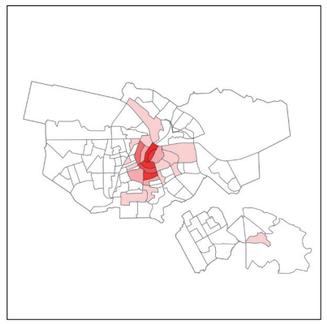
safety nuisance



sextual crime

Figure 3.2.5 Spatialized safety index Amsterdam
Made by Author
Data Source: onderzoek.amsterdam.nl

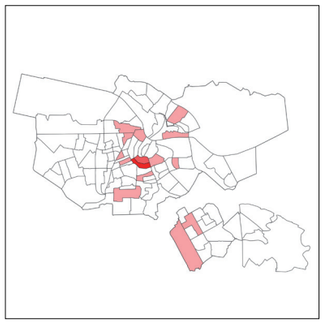
Prostitute



Restaurant

Pub

Bar

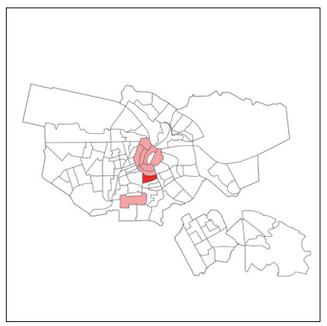


cinema

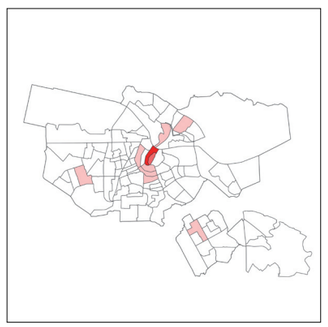
laundry

stripclub

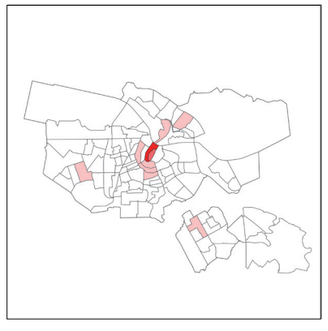
nightclub



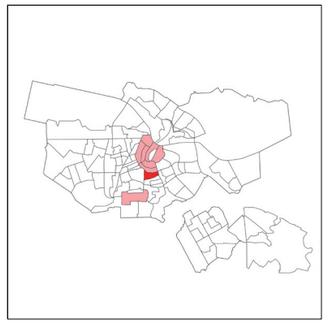
coffeeshop



fastfood

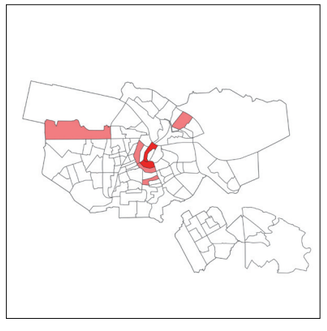


gym/fitness training

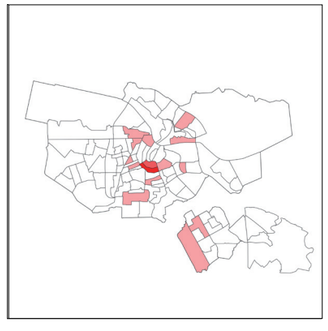


supermarket

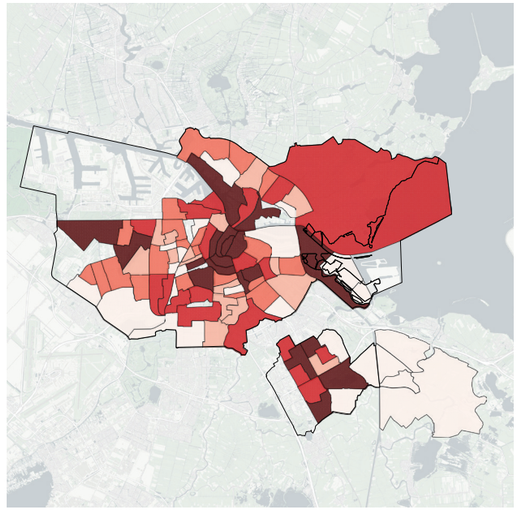
massage



casino



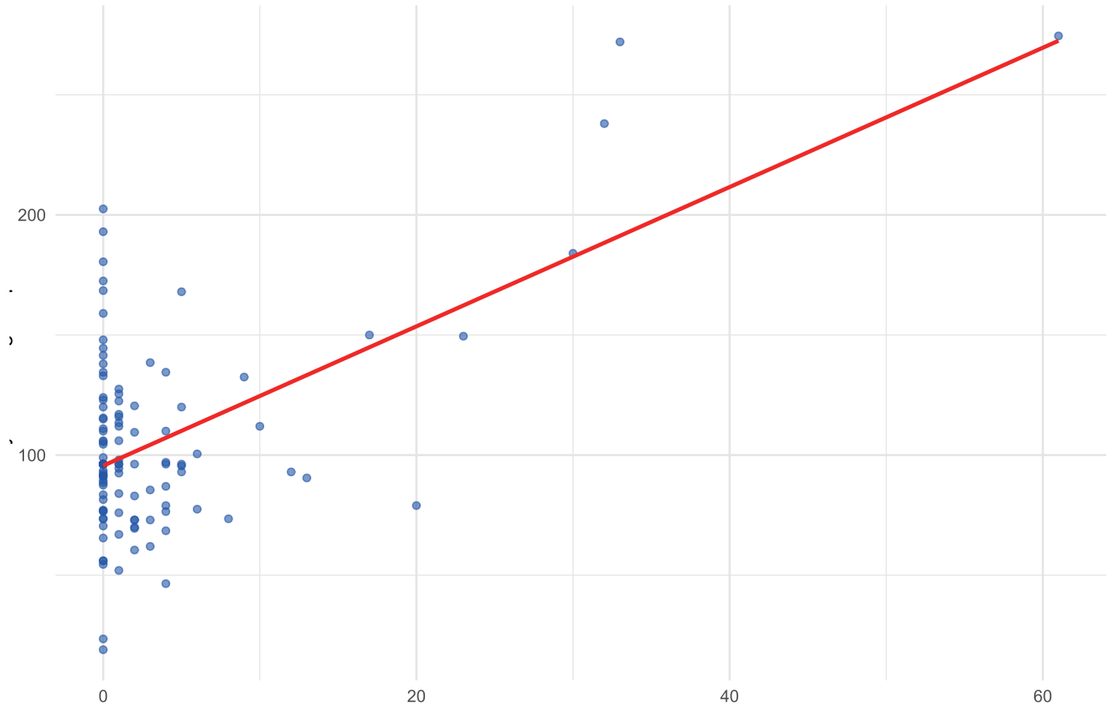
hotel



registered crime

Pub

registered crime rate



number of Pubs

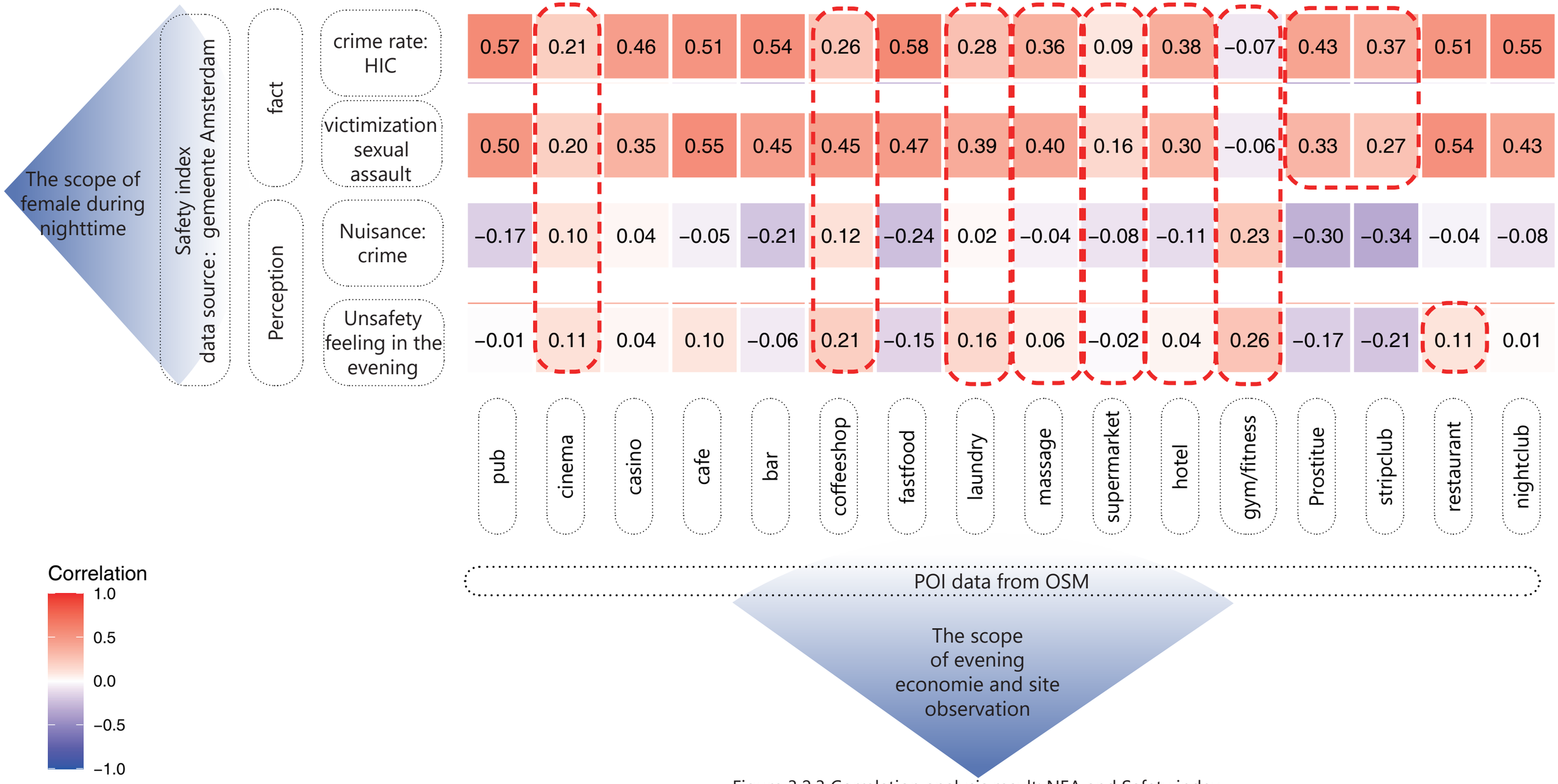
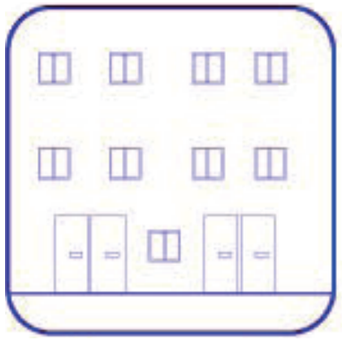
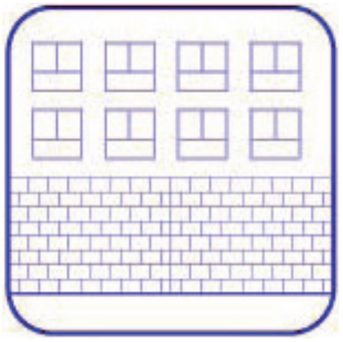


Figure 3.2.3 Correlation analysis result: NEA and Safety index
Made by Author
Data Source1: onderzoek.amsterdam.nl
Data Source2: Open Street Map

3.3 SITE SURVEY

Figure 3.3.1 Five types of Building Facades
Made by Author
Source: google street map





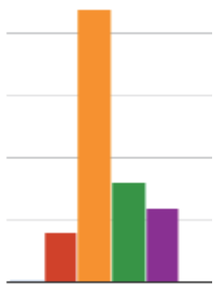
A

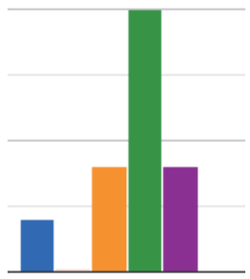
B

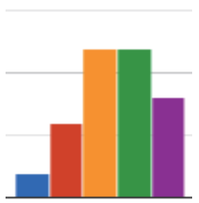
C

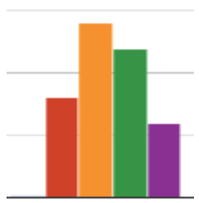
D

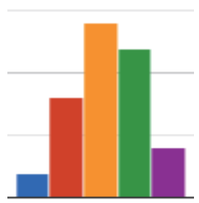
E

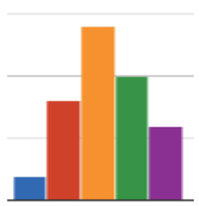












A
4.0

B
3.6

C
3.4

D
3.3

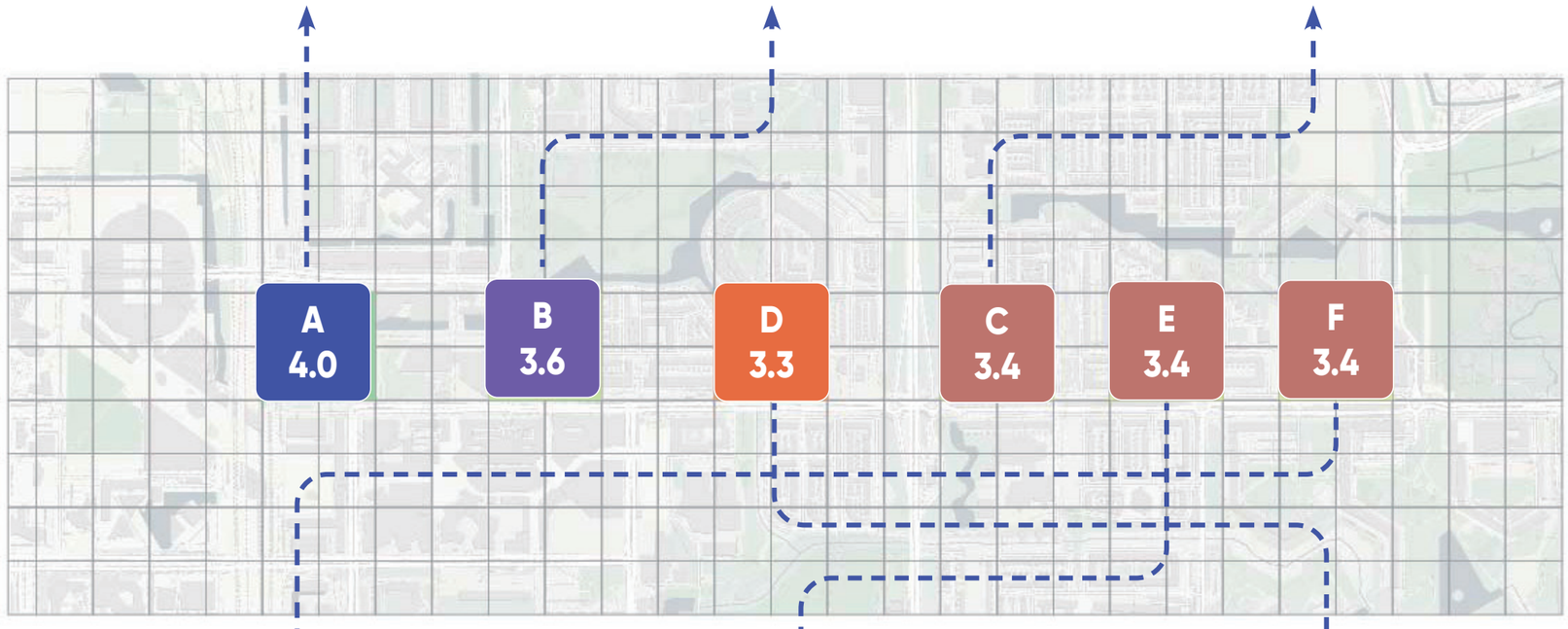
E
3.4

F
3.4

A

B

C

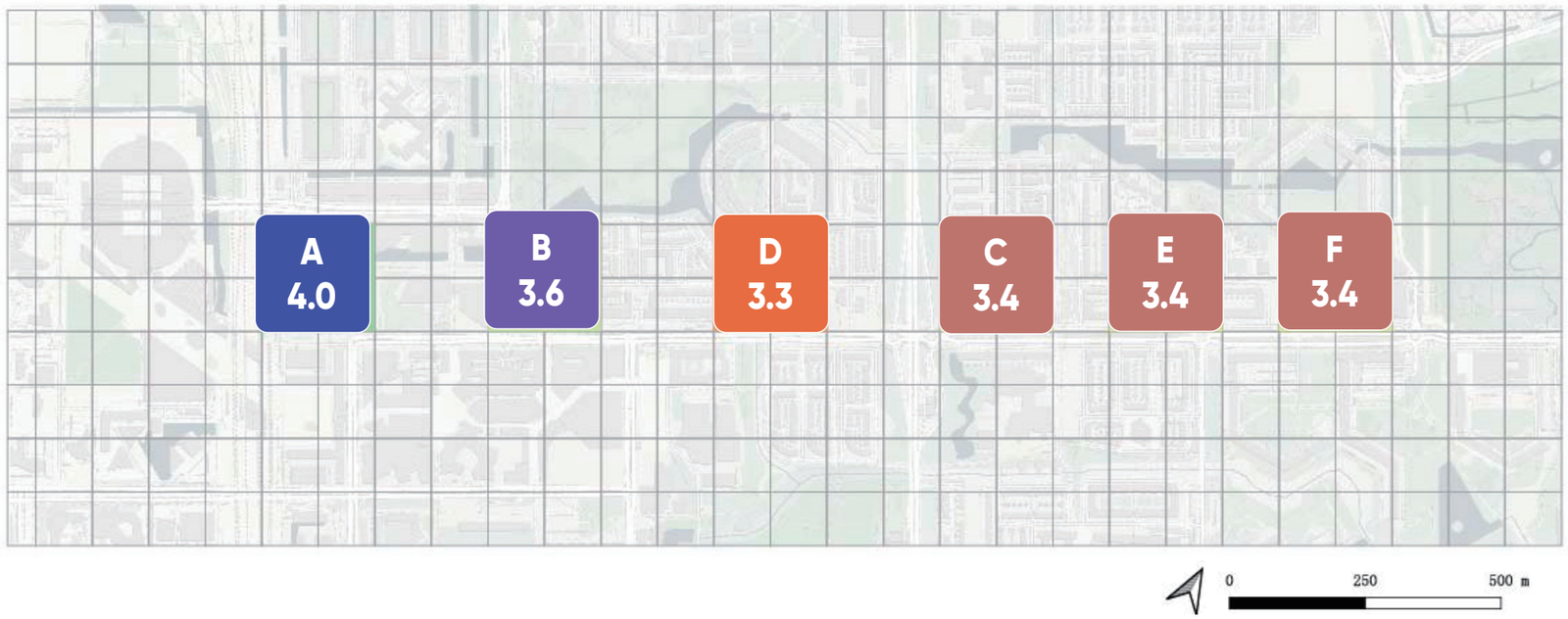

A
4.0
B
3.6
D
3.3
C
3.4
E
3.4
F
3.4

F

E

D

0
250
500 m



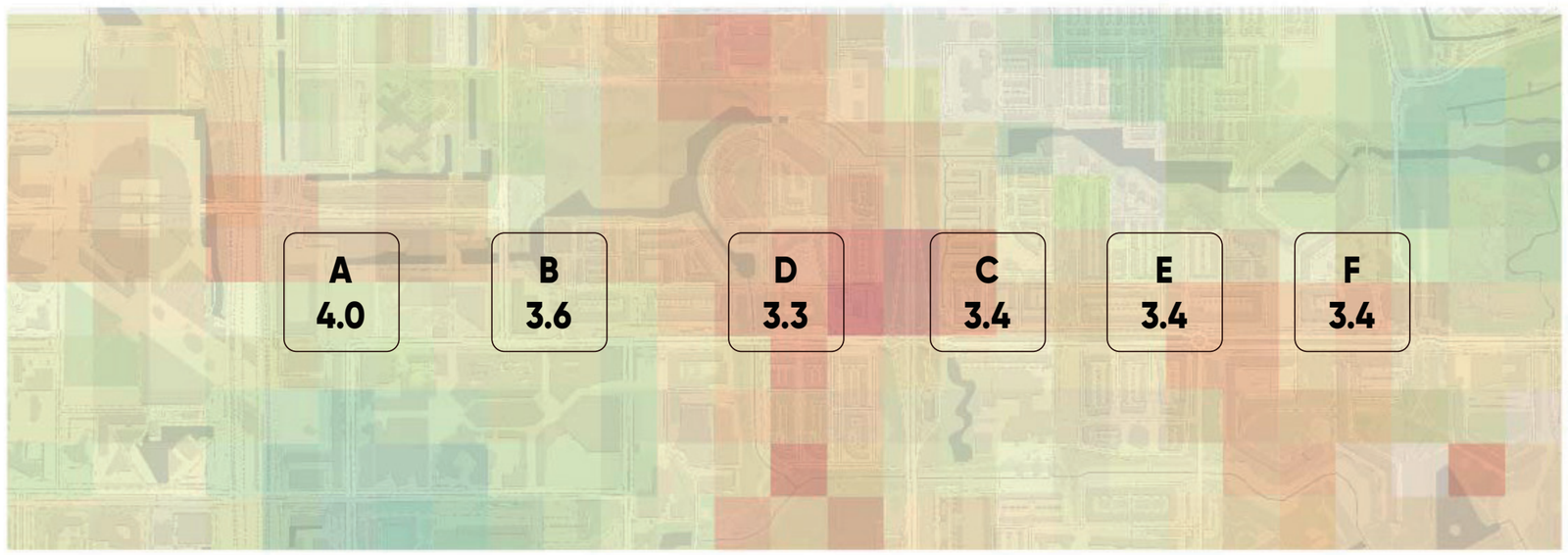
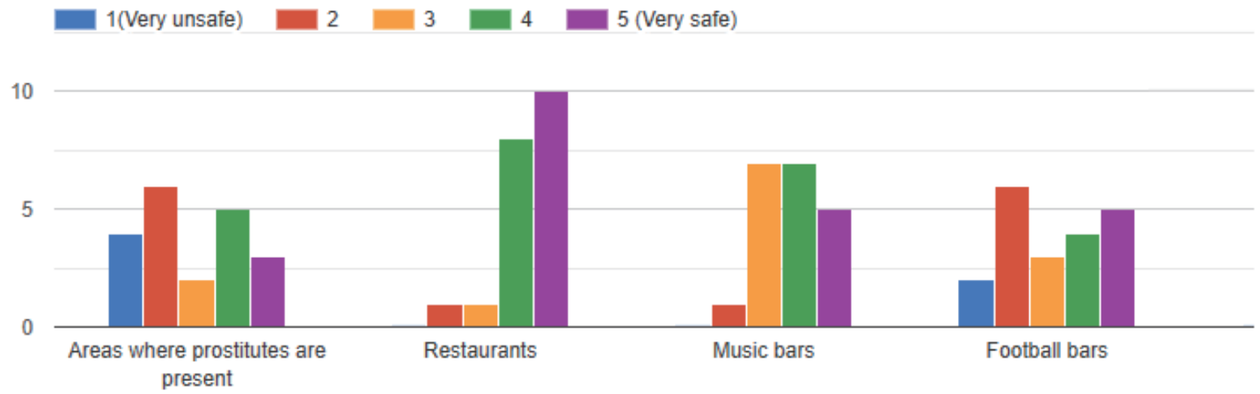
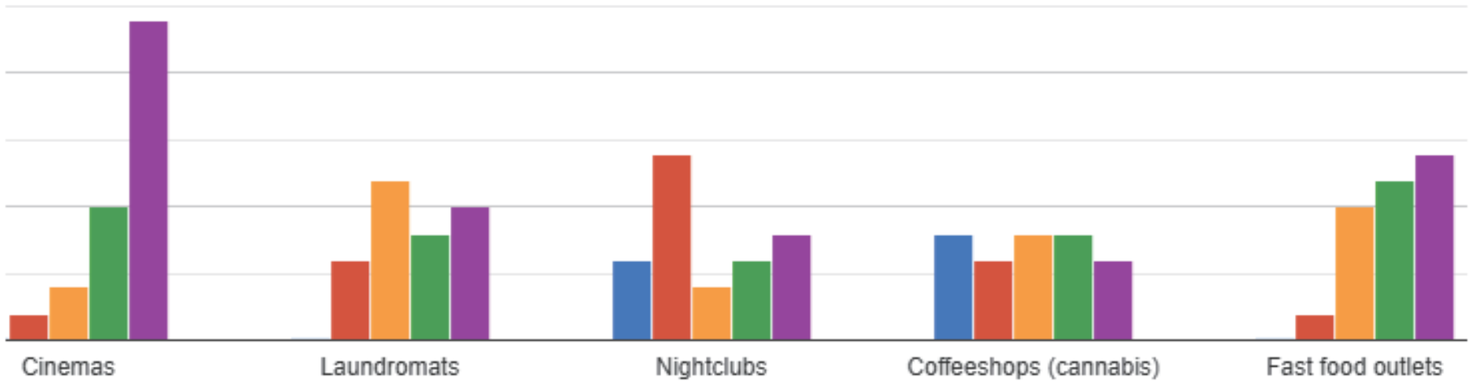
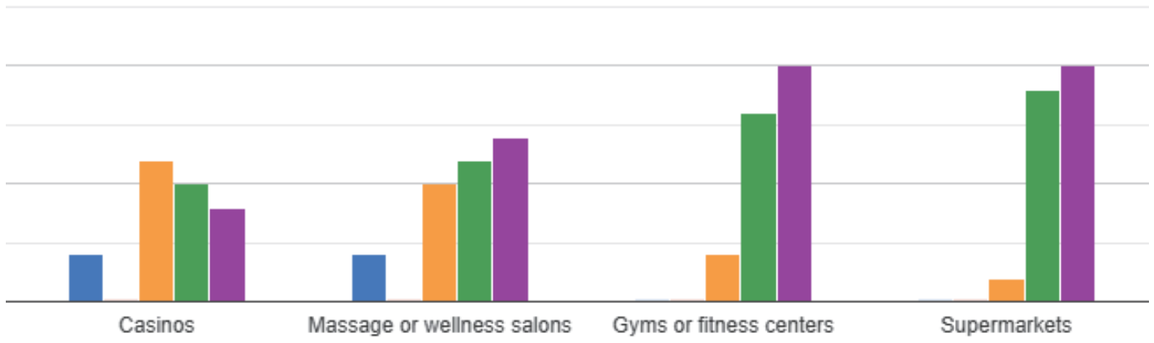


Figure3.3.8 .Perception of safety data.
source：Aimee，n.d.

3.2 How safe do you feel at the following places at night (after 20:00)?







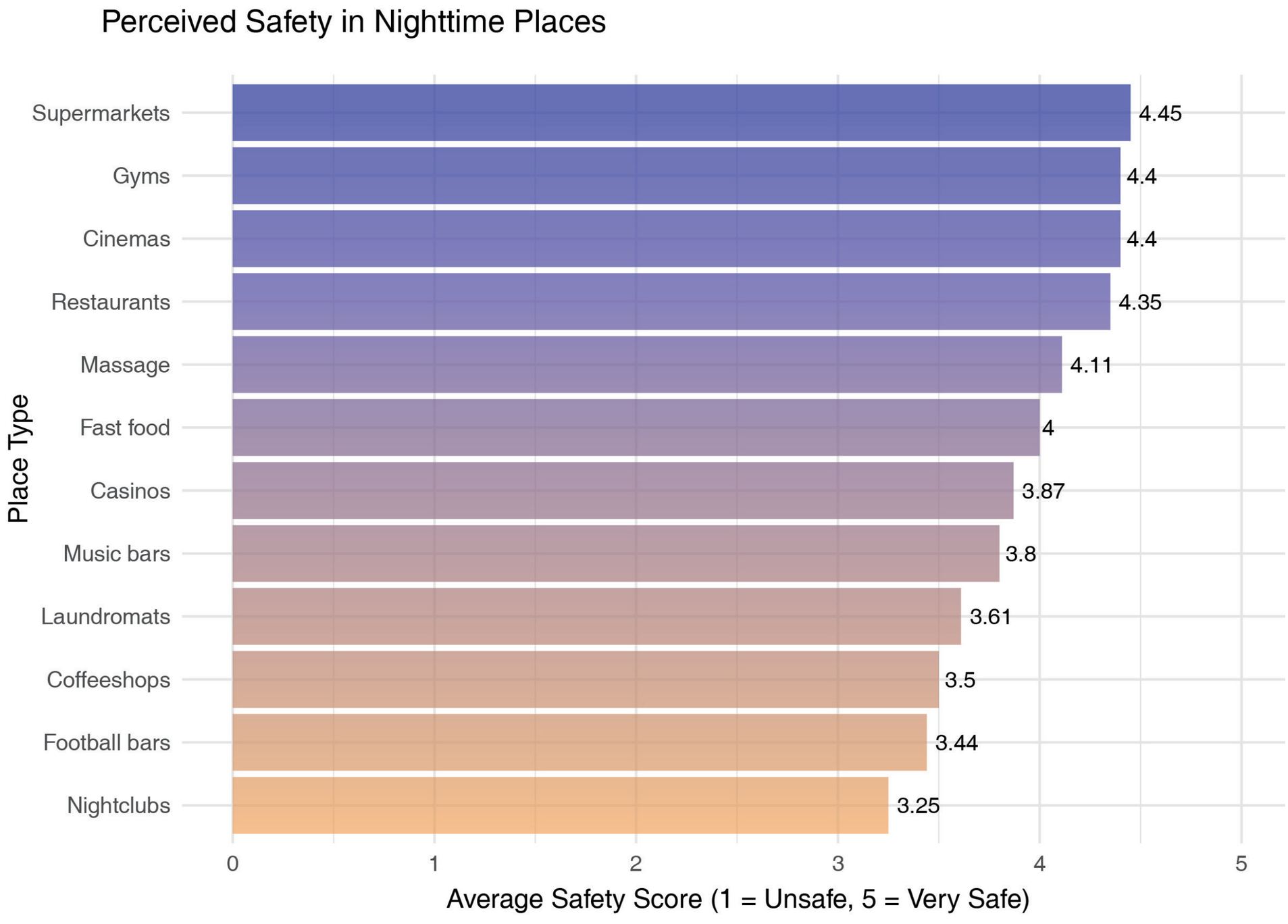
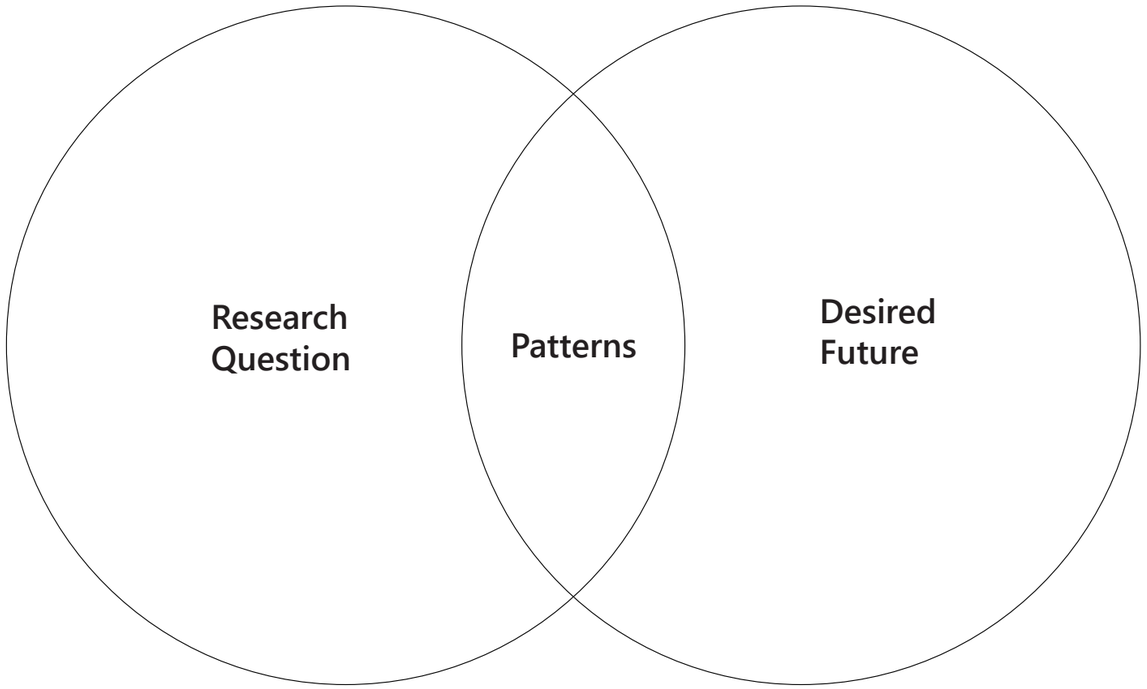
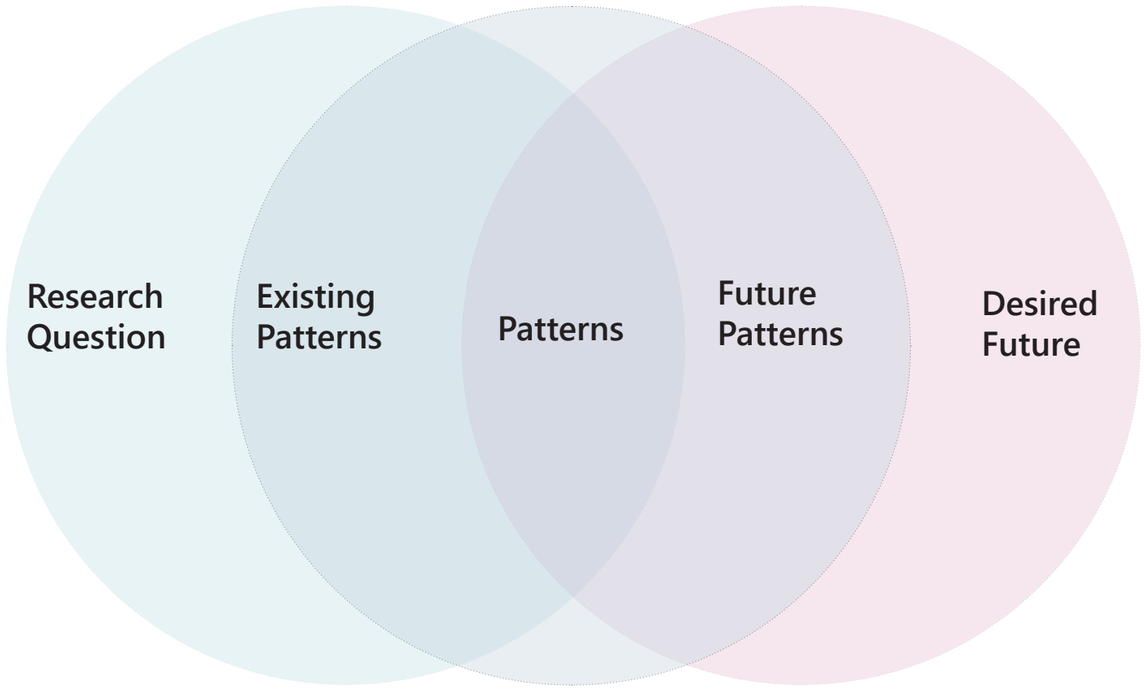

Perceived Safety in Nighttime Places
Supermarkets
Gyms
Cinemas
Restaurants
Massage
Fast food
Casinos
Music bars
Laundromats
Coffeeshops
Football bars
Nightclubs
4.45
4.4
4.4
4.35
4.11
4
3.87
3.8
3.61
3.5
3.44
3.25
Place Type
0
1
2
3
4
5
Average Safety Score (1 = Unsafe, 5 = Very Safe)

Figure3.4.1.Selection of patterns
Made by Author

4. PILOT PROJECT AND INTERVENTION

3.3.3. Pattern Language





Source: de Jonge, T. M., & van der Voordt, D. J. M. (2002). WAYS to study and research urban, architectural and technical design.

3.3.3. Pattern Language conclusion from research

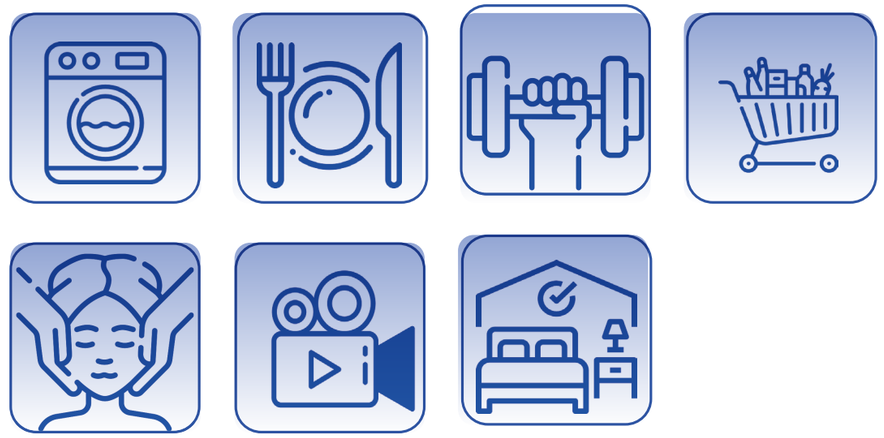
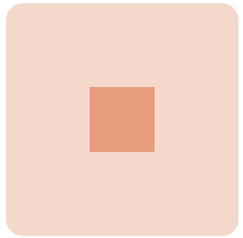
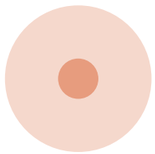


Figure3.4.3.patterns
Made by Author

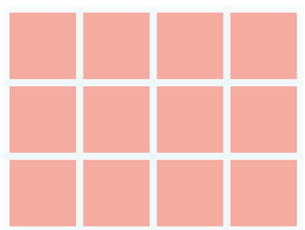
3.3.3. Buffer & Scale Logic – 25x25m grid as chessboard units



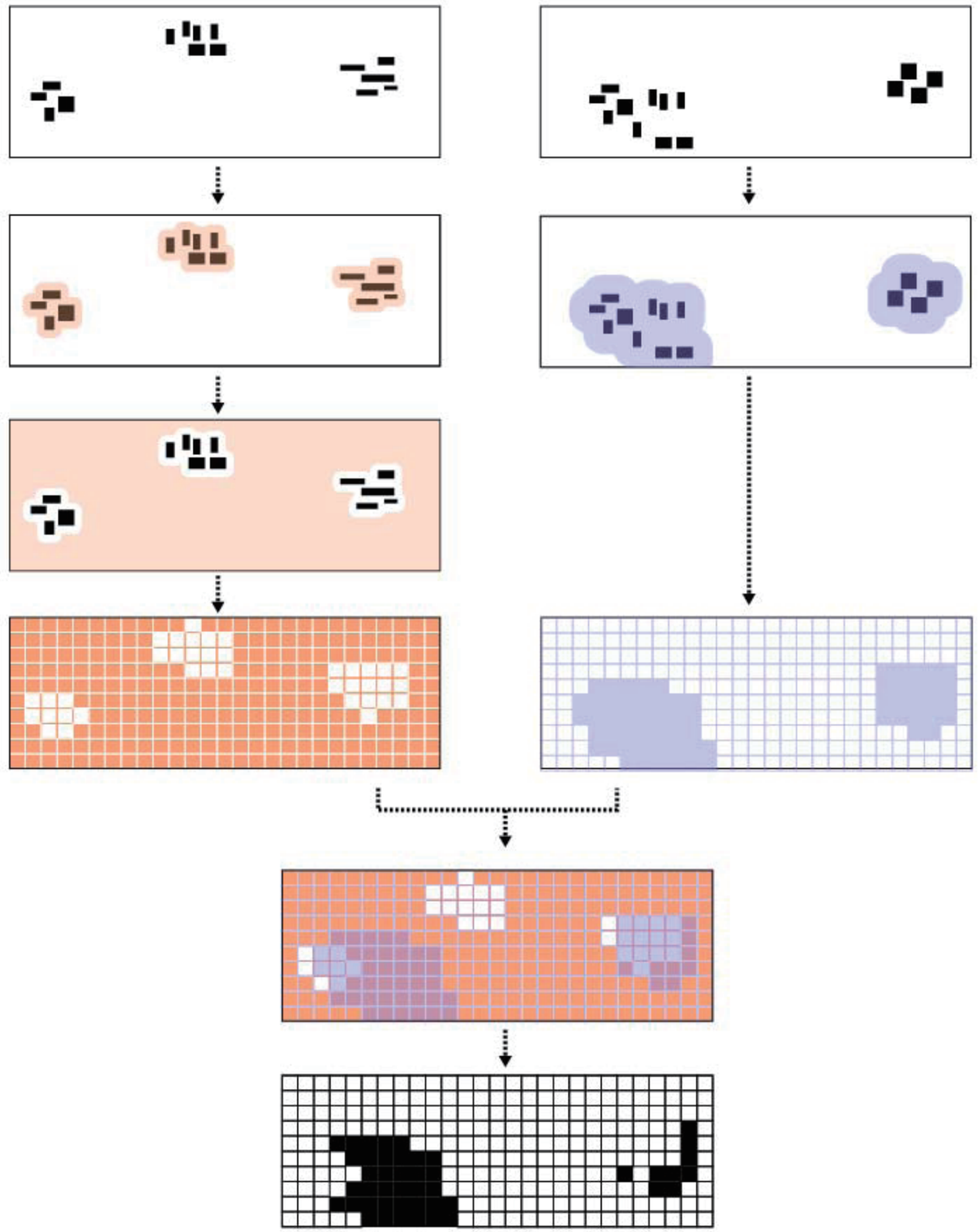
buffer zone-eye sight-25-50m (Cozens et al., 2005; Painter & Farrington, 1999).



buffer zone-lighting sphere-20m (Painter & Farrington, 1999).



grid 25m*25m



3.3.4. Surveillance Coverage Map

LACK OF NATURA SURVILLIANCE

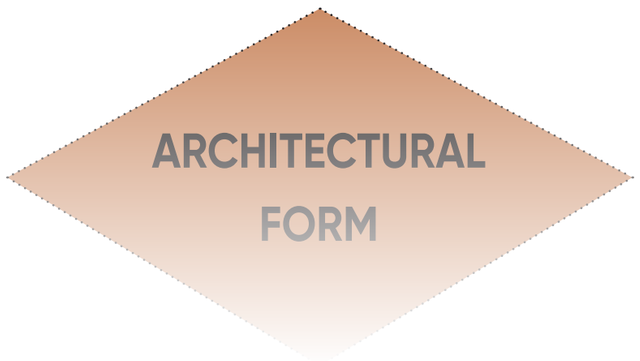
From A-E SAFETY-UNSAFETY

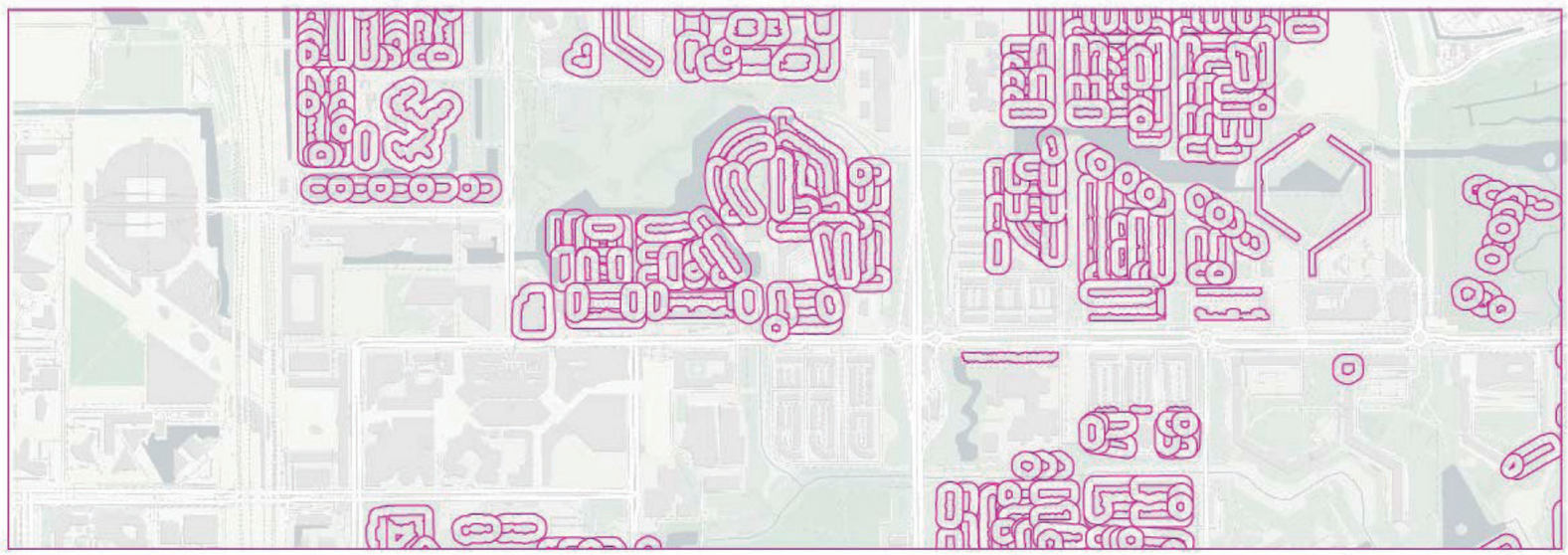
- façade typeA
- façade typeB
- façade typeC
- façade typeD
- façade typeE

Surveillance Coverage

Figure 3.3.2 Map of Five types of Building Facades
Made by Author

3.3.4. Surveillance Coverage Map





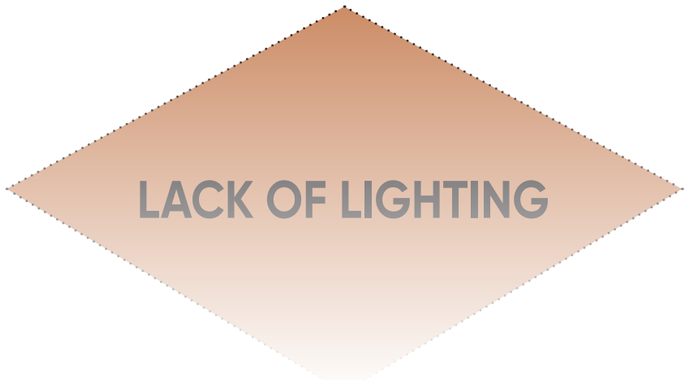
Surveillance Coverage

blank area

Positron [no labels]

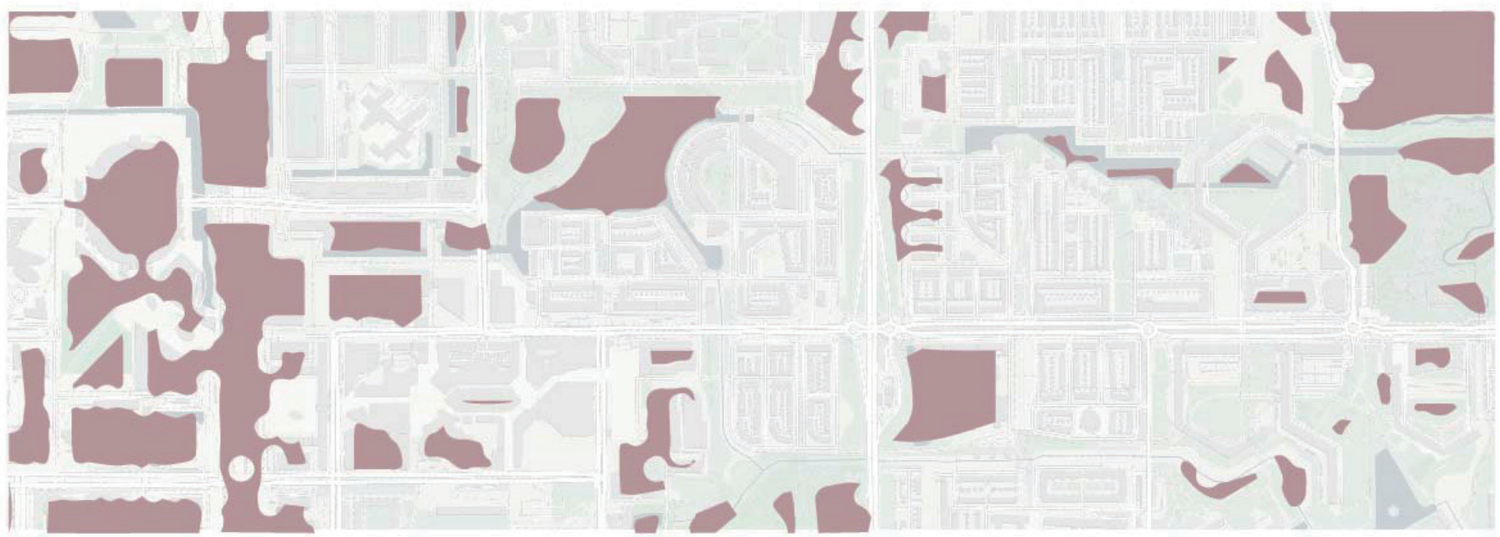
0 250 500 m

3.3.5. Lighting Coverage Map – Dark zones and buffer inversion



lights Coverage

blank area



Positron [no labels]

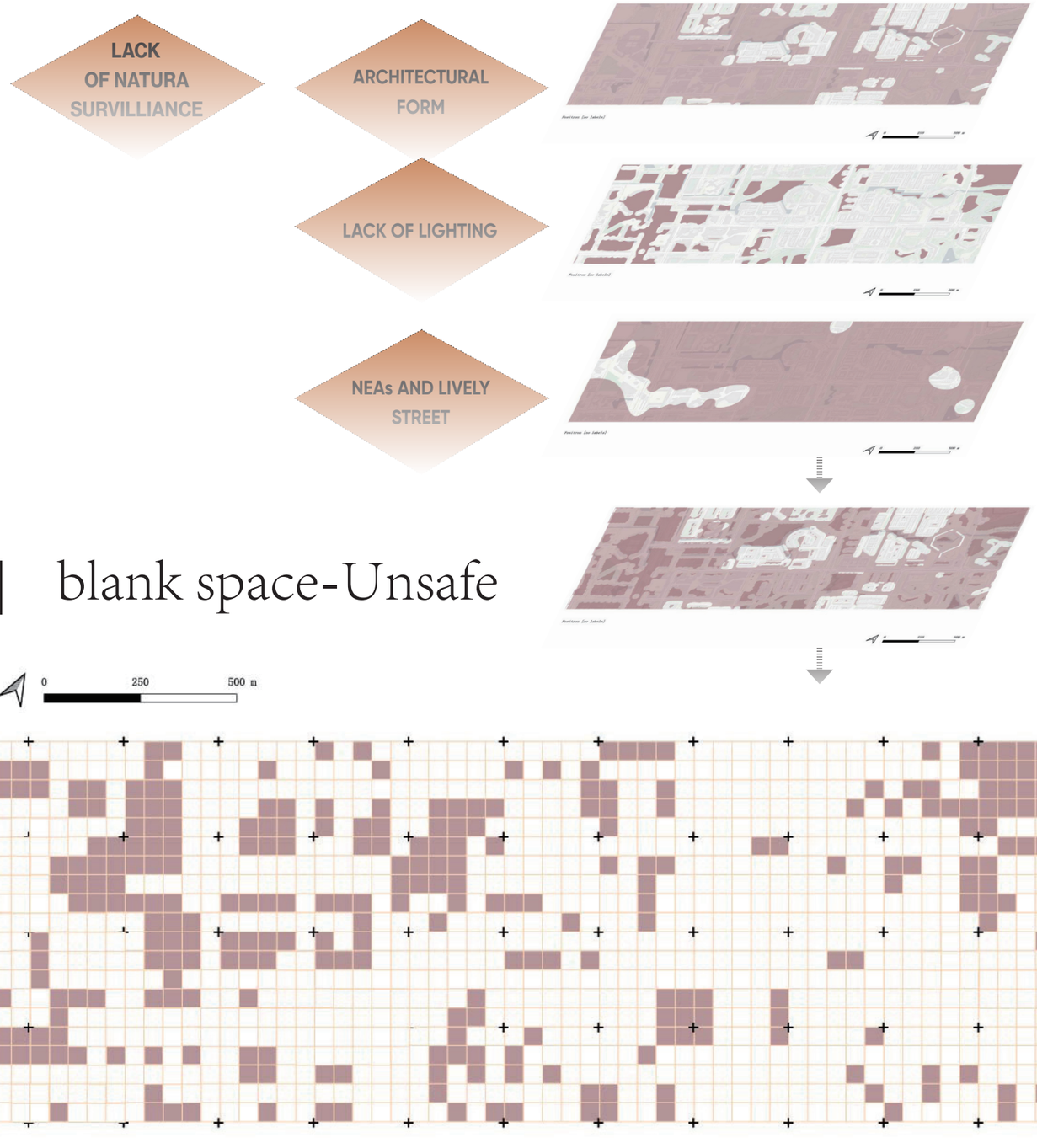
3.3.6. Night Economy Gaps – POI absence

NEA Coverage

blank area

Positron [no labels]

3.3.7. Combined Problem Layers – Where issues converge



Nighttime public space safety

Nighttime Economy

3.3.8. Night Economy Cluster Analysis

NEA Hubs'
ATTRACTION

NEA(before 22.00)

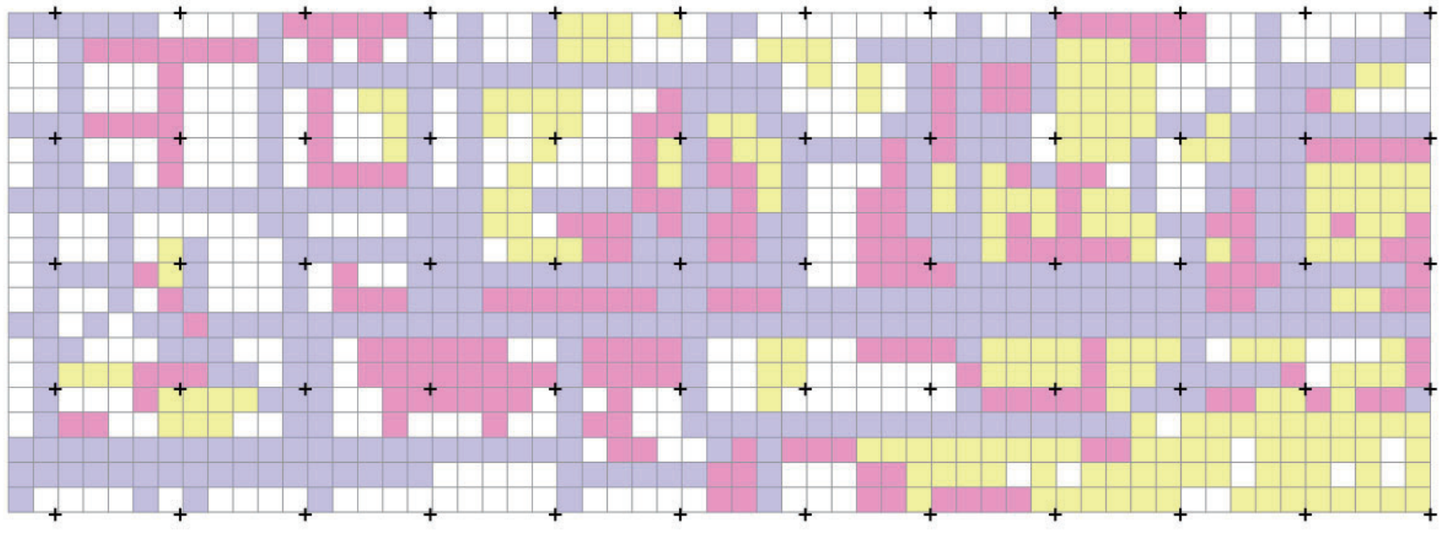
0 250 500 m

3.3.9. Accessibility Analysis – Using Angular Integration (Space Syntax)

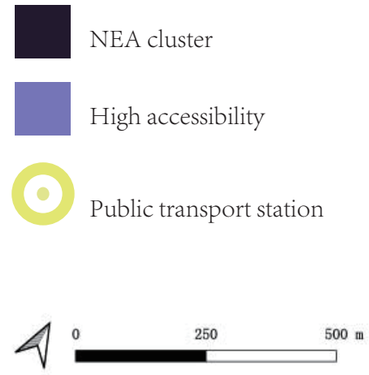
High accessibility

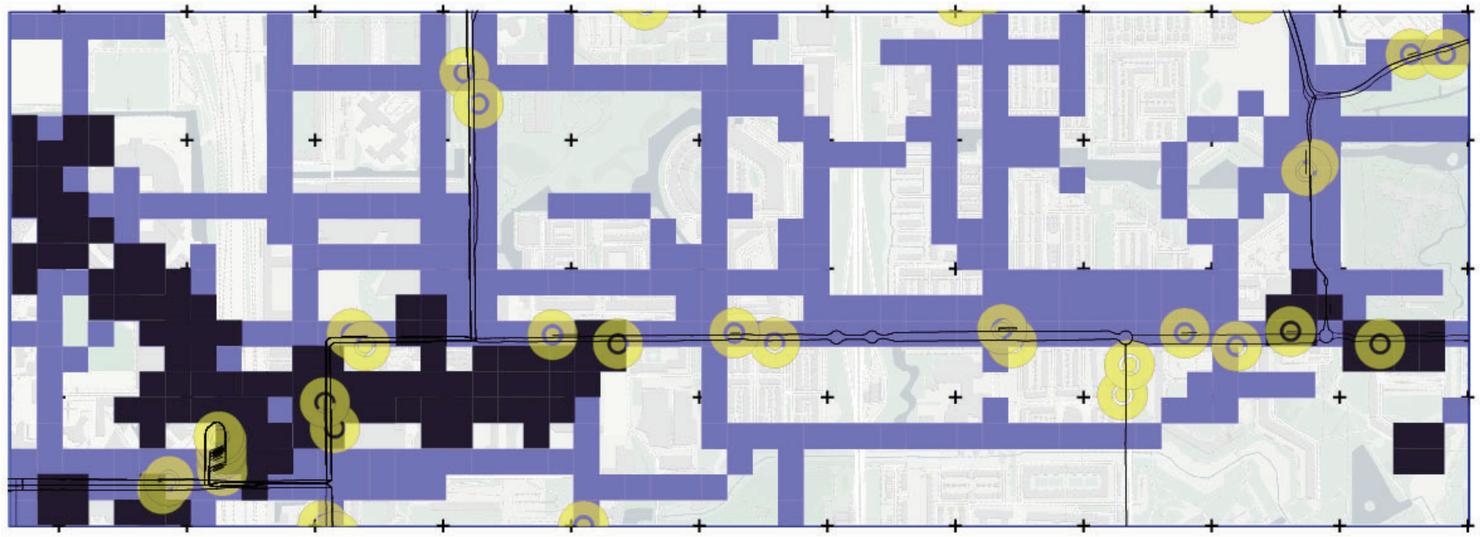
low accessibility

medium accessibility

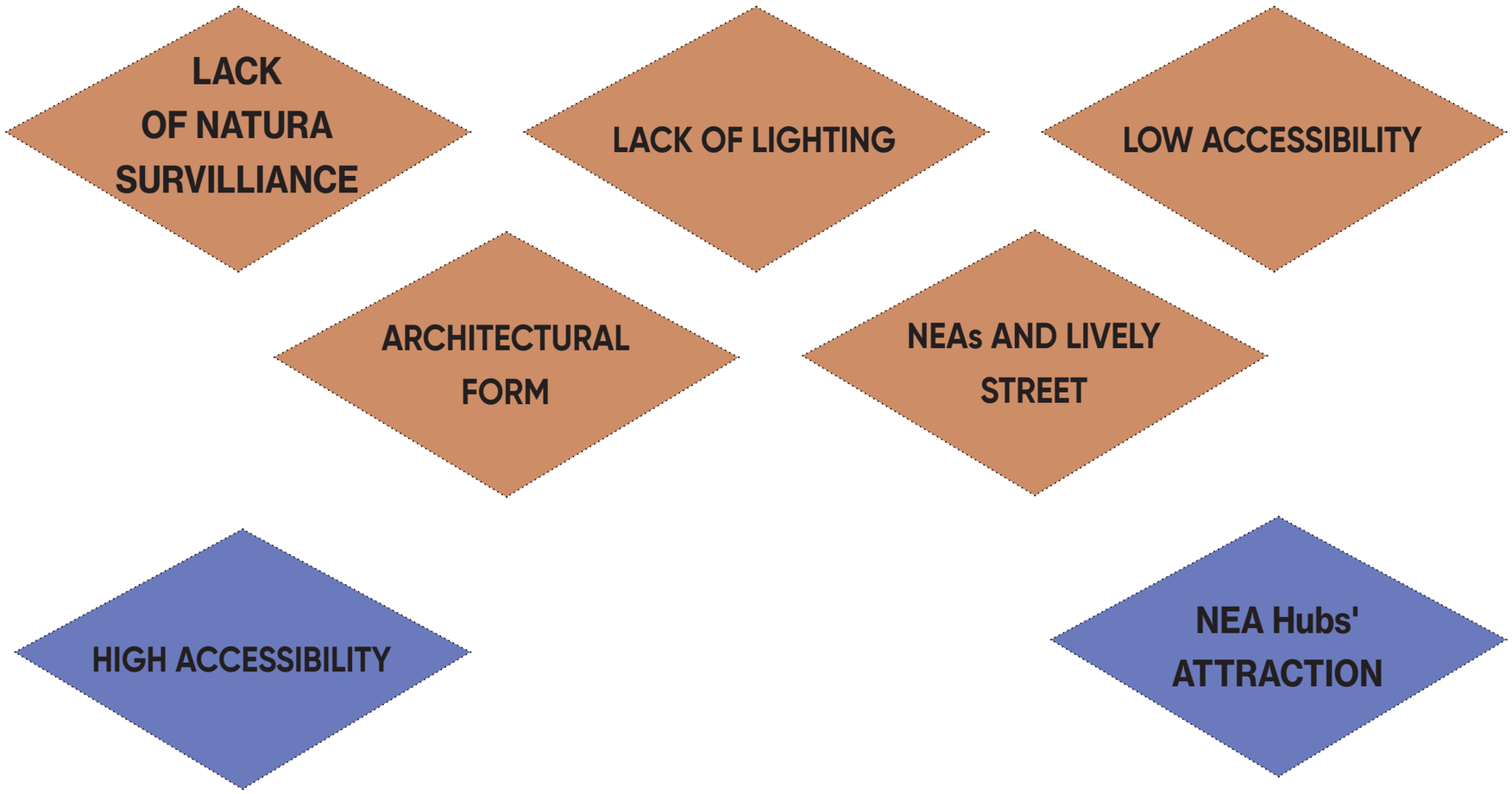


3.3.10. Final Potential Chessboard – Where flow and vibrancy meet

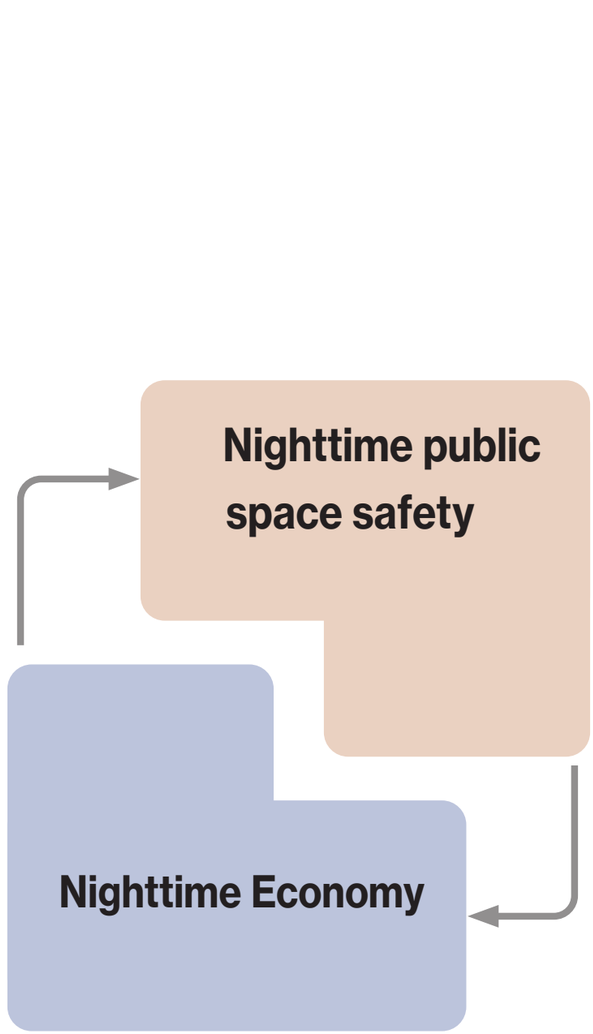


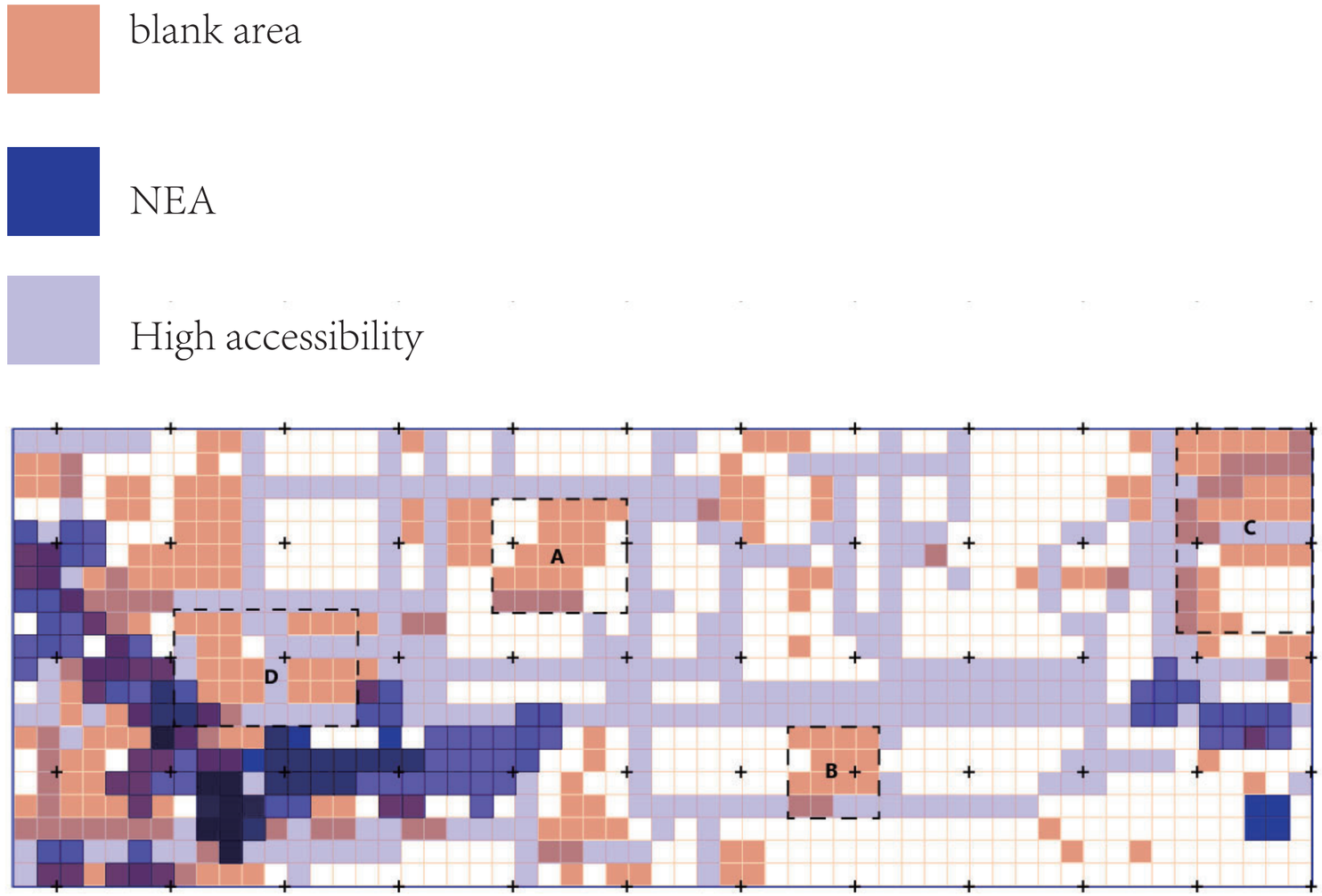


3.3.11. Overlaying Problem + Potential



3.3.11. Overlaying Problem + Potential – Identifying priority zones A–D





4.1. Towards Possible Future

4.4.2 Zone A – Detail Design Description

Figure 4.4.2 Detail of Area
Made by Author

4.4.3 Zone B – Detail Design Description

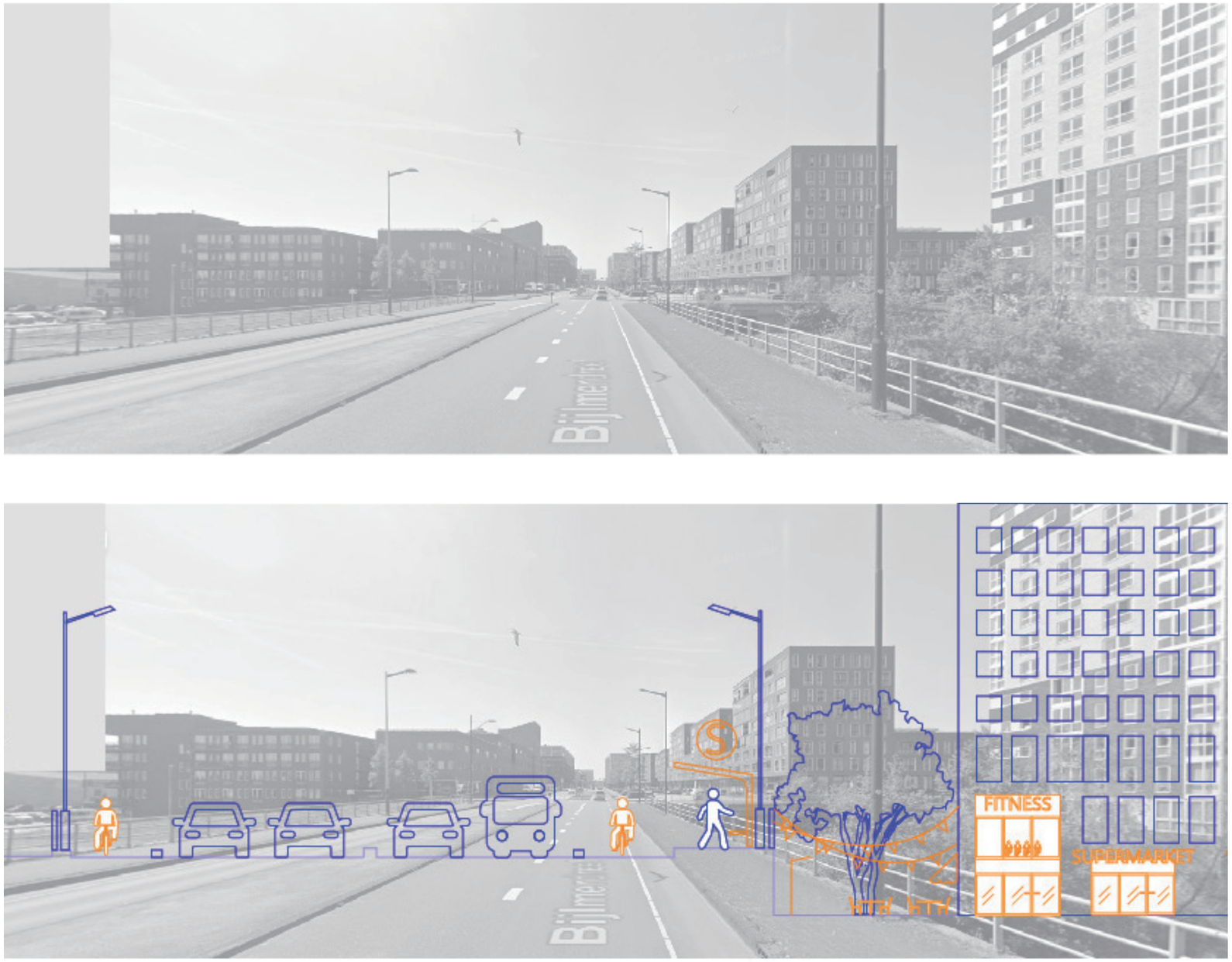
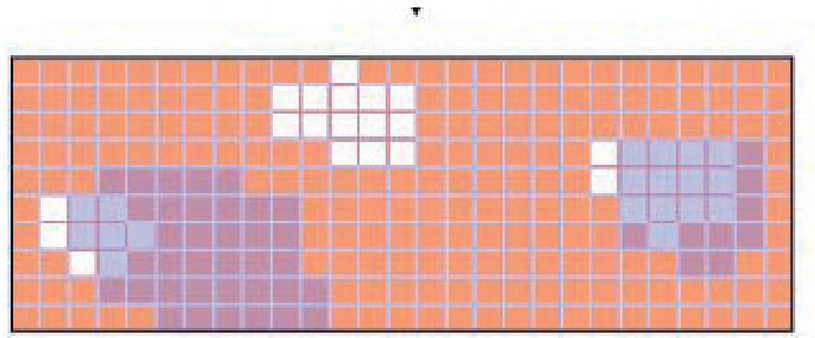


Figure 4.4.3 Detail of Area B
Made by Author

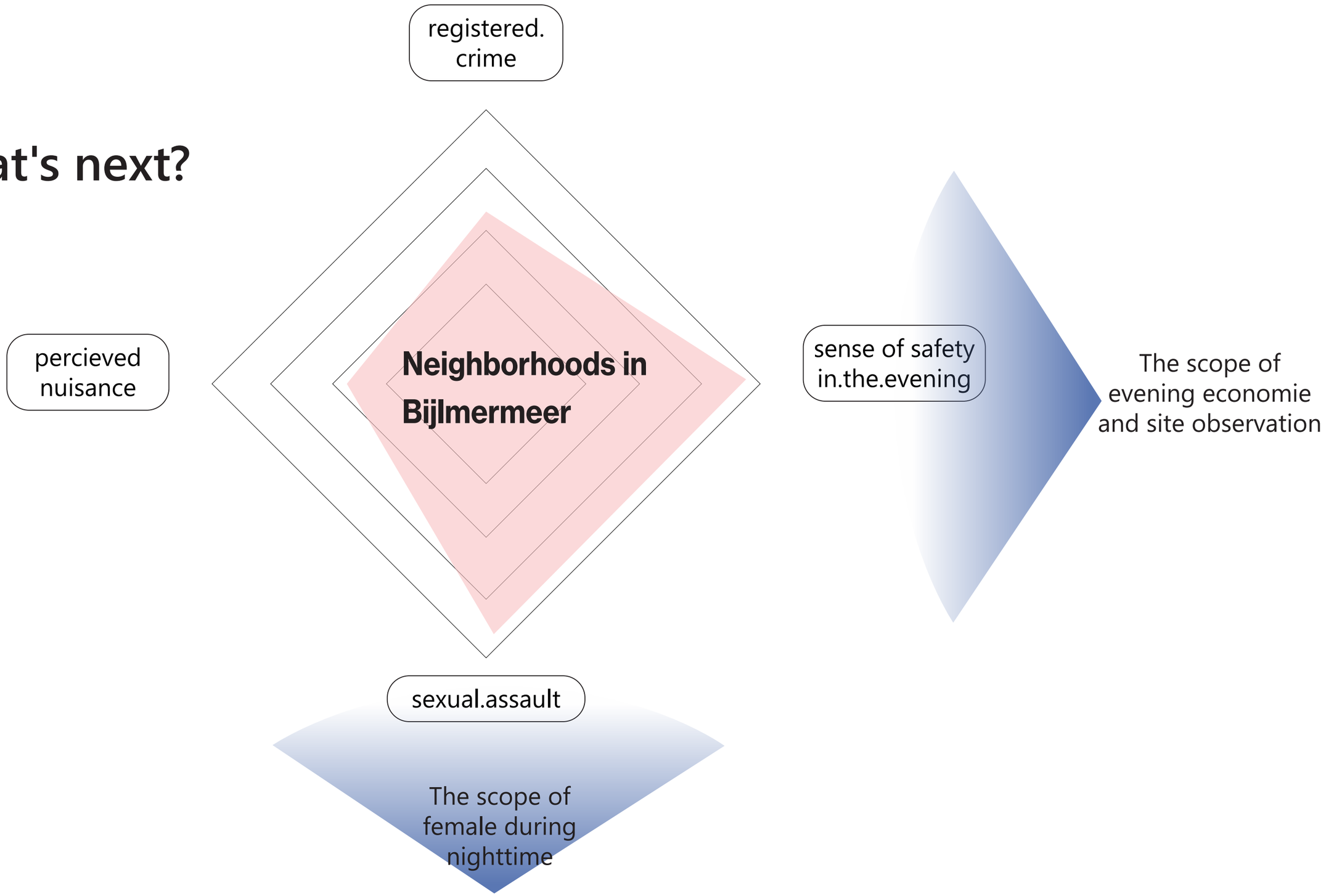
5. Conclusion

What

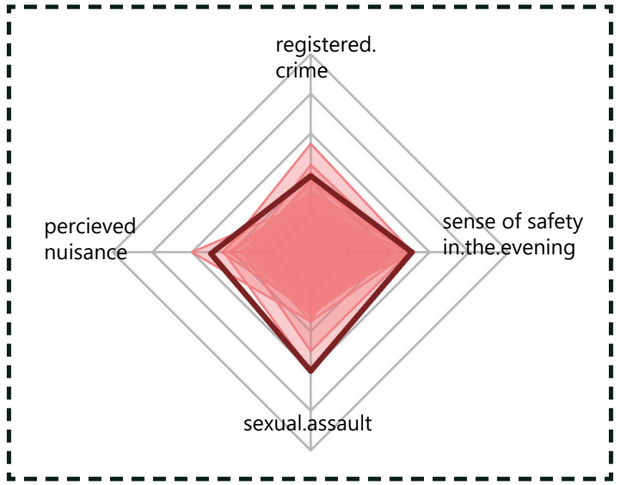
Where



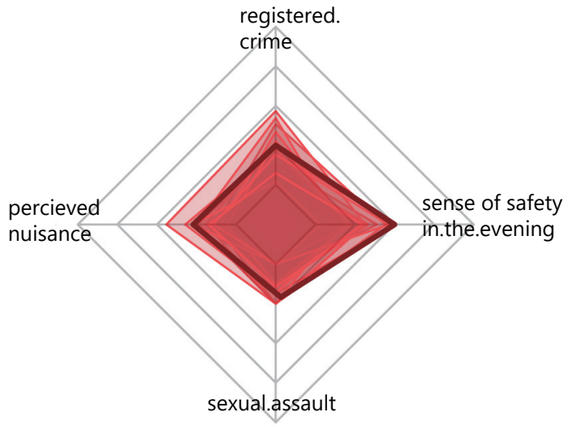
What's next?


registered.
crime
percieved
nuisance
Neighborhoods in
Bijlmermeer
sense of safety
in.the.evening
The scope of
evening economie
and site observation
sexual.assault
The scope of
female during
nighttime

TYPE 1



TYPE 2



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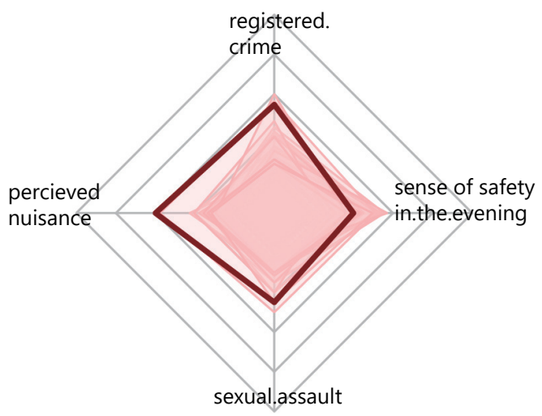
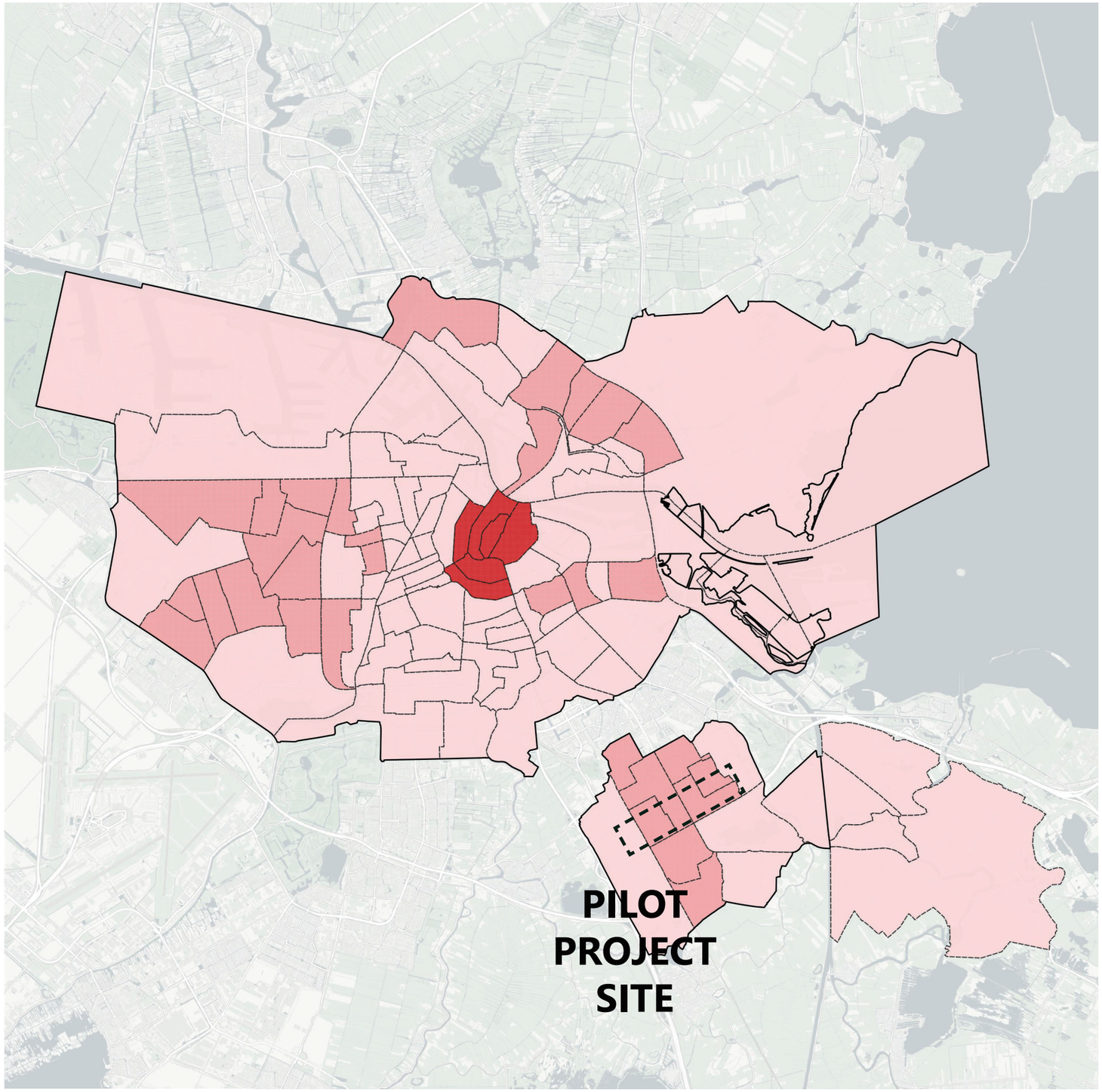
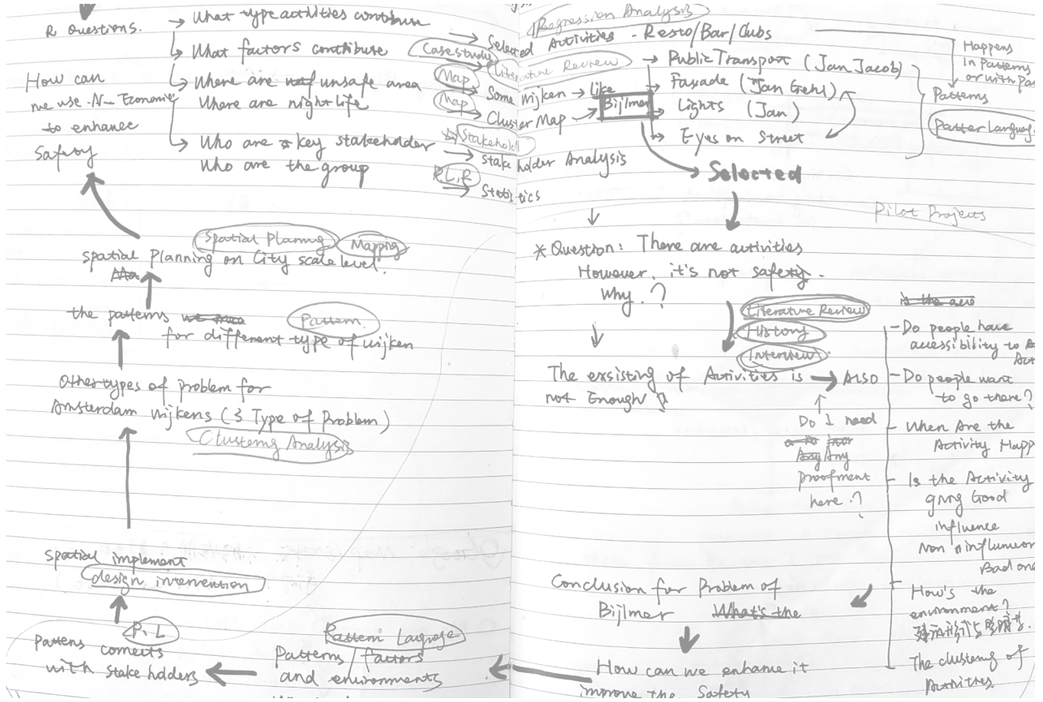




6. Reflection
– On demographics, methods, theories, and bias



The project's data analysis predominantly reflected the perspectives of younger people, **overlooking the experiences of older residents, different cultural group**s, and non-binary individuals, which limits the inclusivity of the findings.

While the integration of qualitative and quantitative methods is valuable, the introduction of more variables led to challenges such as spurious correlations and **a lack of clear causal explanations.**

The reliance on **existing urban theories like Jane Jacobs' "eyes on the street" was useful but also limiting**, as not all street activity contributes to safety in every context.

The project highlighted the need for a more nuanced understanding of nightlife safety, acknowledging that **methodological choices must be tested against local realities and the lived experiences of diverse communities.**

Thank you