

The Pedestrian First

How downtown Groningen can be planned in a pedestrian-friendly way

1 Introduction: Groningen as a bike city

Groningen is one of the best cycling cities. But how to deal with the pedestrian? The municipality of Groningen is actively engaged in restricting car use and stimulating other modes of transport. Groningen as a bicycle city has consequences. In the city centre, there is an increasing frequency of bicycle nuisance. How do you change the public space to stimulate pedestrians instead of cyclists?



2 Research Question

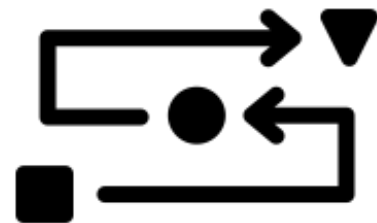
Main research question: **'In what way can the centre of Groningen be planned, so that it is more accessible for pedestrians and this has a stimulating effect on pedestrian use?'**



3 Methods

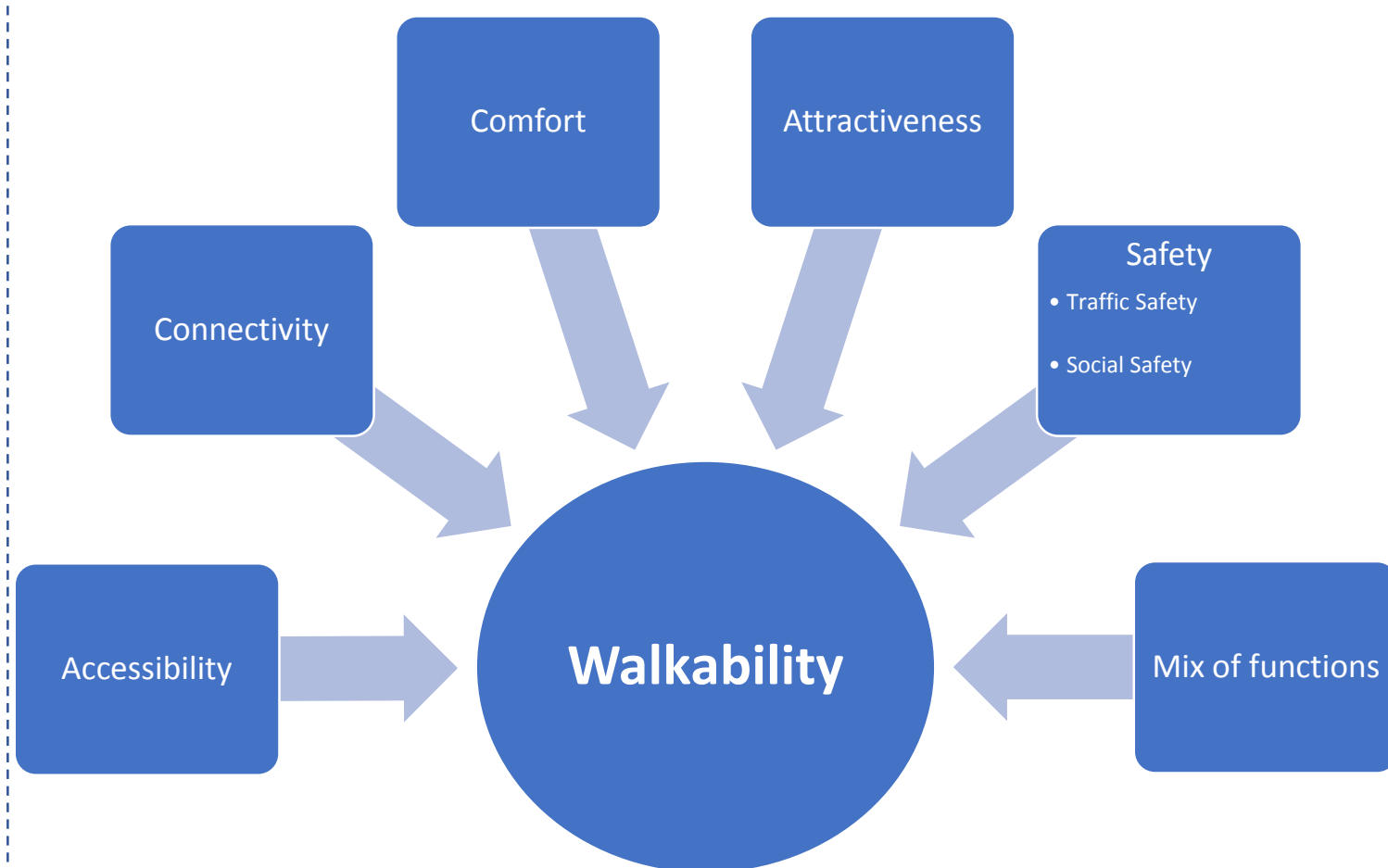
Theoretical framework:

Walkability according to Michael Southworth (2005, p. 247-248):



"Walkability is the extent to which the built environment supports and encourages walking by providing for pedestrian comfort and safety, connecting people with varied destinations within a reasonable amount of time and effort, and offering visual interest in journeys throughout the network"

But which aspects are important for walkability?



1. Accessibility: The area that a pedestrian can reach within a certain time, no footpath means a longer time to reach the destination
2. Connectivity: Link with other modes of transport, like a bus or a train
3. Comfort: Quality of the footpath, is it easy to walk?
4. Attractiveness: are there a lot of things to see and do, like shops or green space
5. Safety: Traffic Safety: Are there for example crosswalks and is it safe to walk
Social Safety: The 'eyes on the street', do you feel safe to walk
6. Mix of functions: diversity of land-use: shops, schools, houses etcetera. More diversity means more people on different times on the street

Data collection:

158 Surveys (hardcopy and via Maptionnaire)

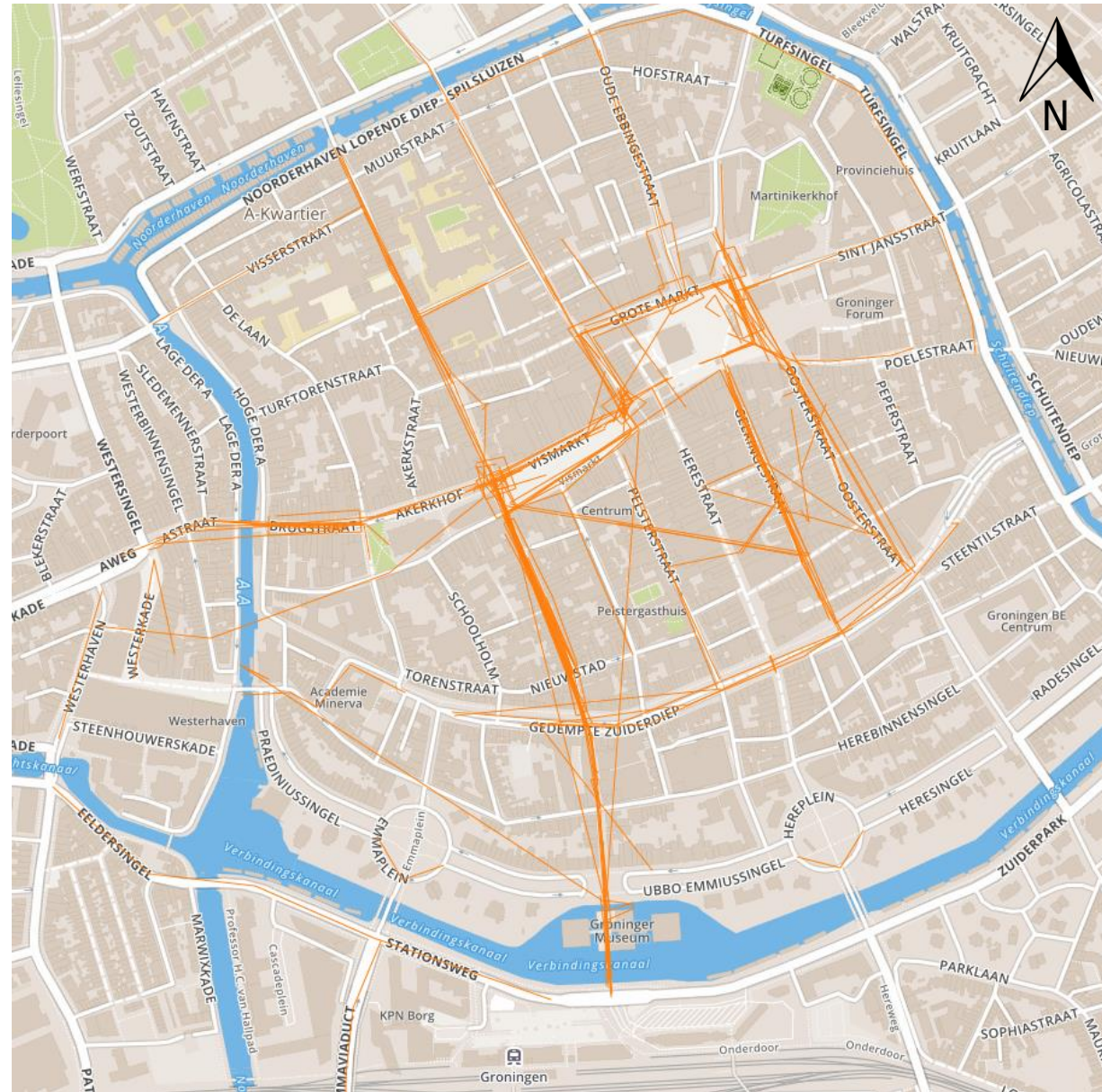
References:

1. Southworth, M. (2005). Designing the Walkable City. *Journal of Urban Planning and Development*, 131(4), 246-257
2. Jacobs, J. (2009). *De dood en leven van grote Amerikaanse steden*. Amsterdam: SUN Trancity
3. Alfonzo, M.A. (2005). To Walk or not to Walk? The Hierarchy of Walking Needs. *Environment of Behaviour*, 37(6), 808-836

4 Main findings



Least pedestrian-friendly

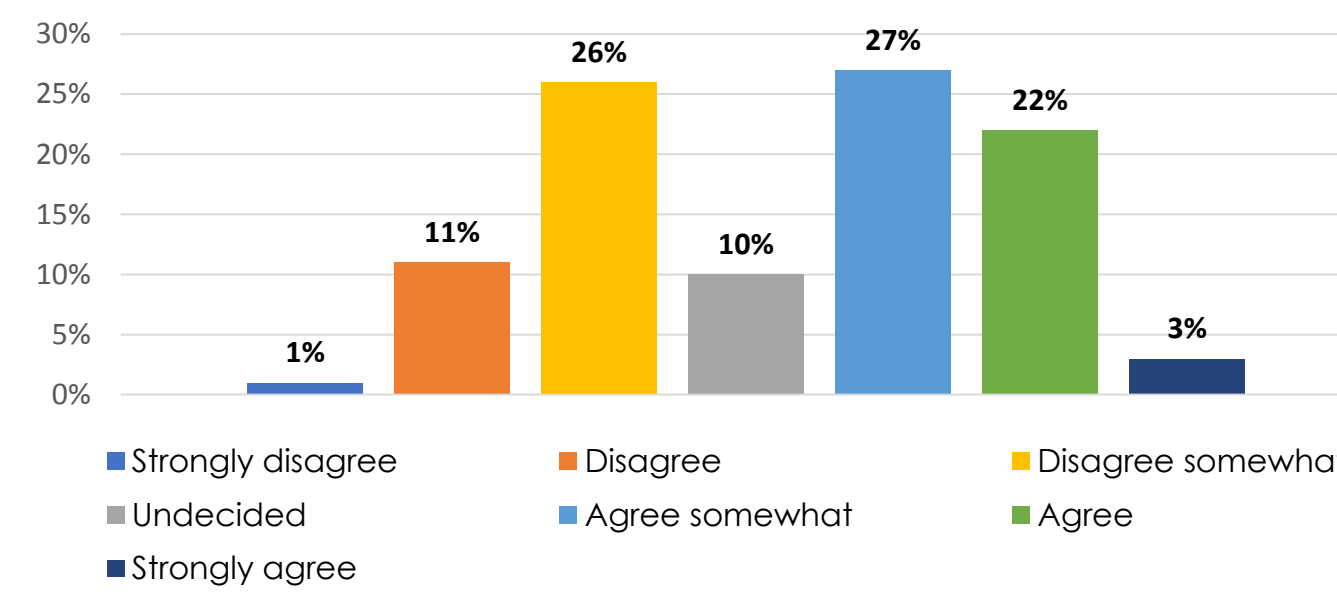


Most pedestrian-friendly



The orange lines (left figure) are valued by respondents as least pedestrian-friendly streets in the city centre of Groningen. Most mentioned are the Folklingestraat and the Guldenstraat. At the right figure you can see the streets which the respondents valued as most pedestrian-friendly.

The traffic safety for the pedestrian in the city centre of Groningen is good at the moment

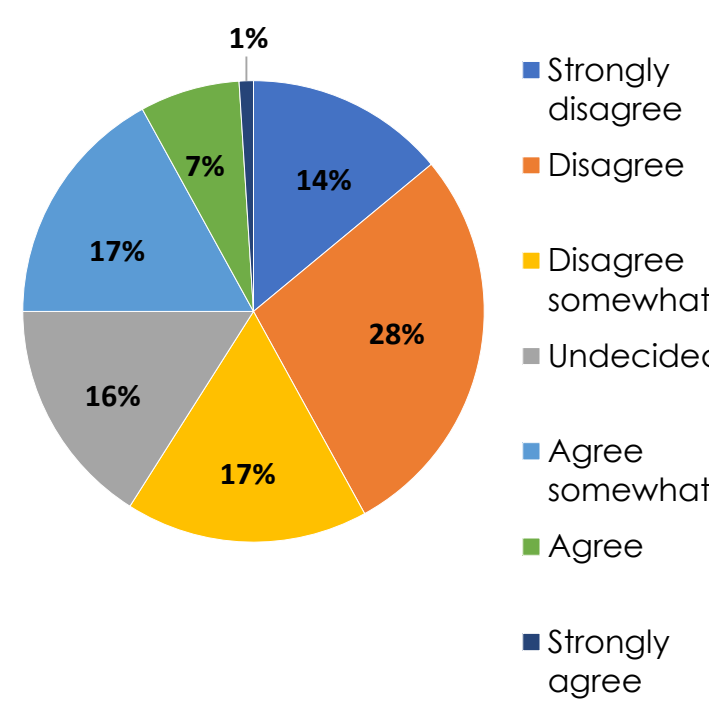


What do people think of the new shared-space concept in the Astraat and the Folklingestraat?

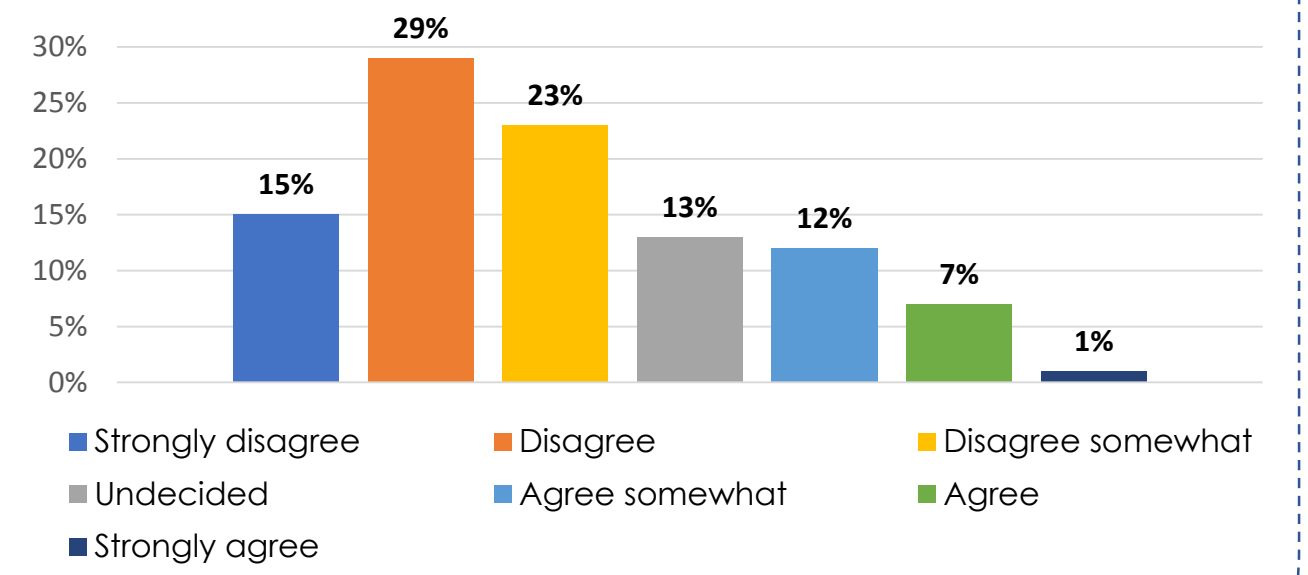
"The Folklingestraat is a disaster. As a pedestrian, I curse the cyclist, but as a cyclist I curse the pedestrian. The Astraat is a big improvement"
(Woman, 42 years)

"Cross over the street between the Grote Markt and the Vismarkt (Guldenstraat) is despite the pedestrian crossing not without any danger" (Woman, 42 years)

There is enough space to store my bike in the city centre of Groningen



The amount of green space in the city centre of Groningen is sufficient at the moment



only **54%**

Of the respondents feels encouraged to use the city centre of Groningen as a pedestrian

5 Recommendations: Groningen as a cycling & walking city?

Accessibility



More pedestrian zones provide better access for (elderly) people



Attractivity



More green space and benches creates a place where you want to stay



Connectivity



Lines on the street, to help people find their way



Safety



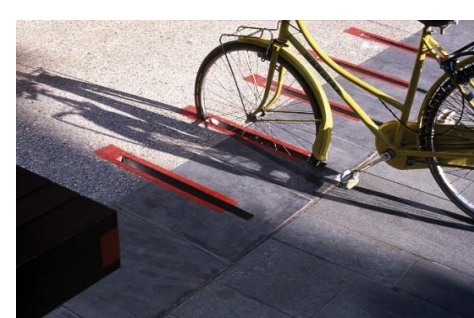
Crosswalks with LED lights, to get more attention



Comfort



Better bike storage means more space for pedestrians



Mix of functions



Try to allure cyclists to choose another road around the city-centre

