



Delft University of Technology

## **Wesense**

### **Social sensing the quality of urban environments**

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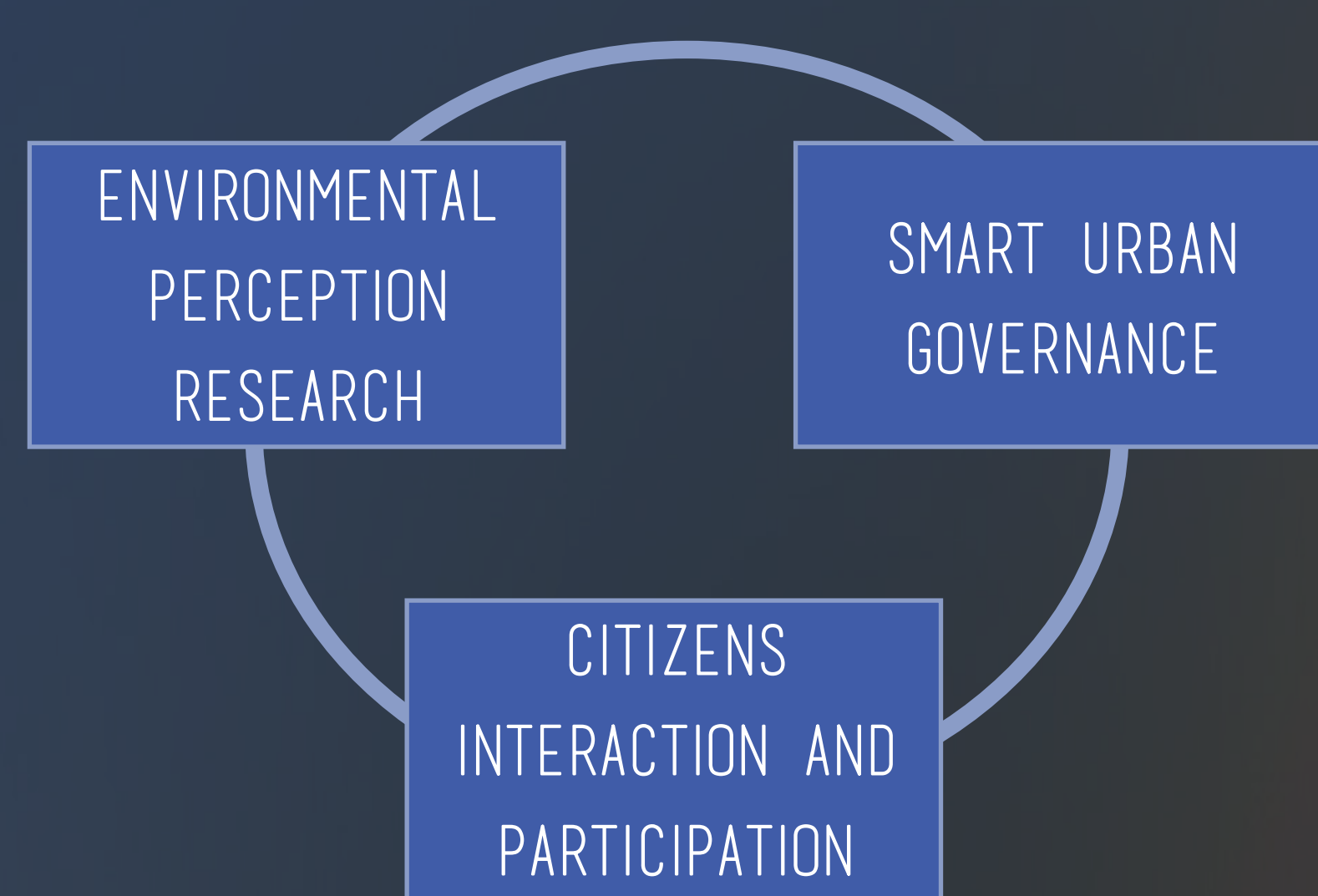
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# SOCIAL SENSING THE QUALITY OF URBAN ENVIRONMENTS

WeSense is an environmental perception project led by the Urban Landscape Architecture Research Group at Delft University of Technology. The goal is to generate insights on people's perception of urban environments and what effects these surroundings have on them, using a mobile app. The pilot stage of the project is run in Amsterdam, as part of the AMS (Amsterdam Metropolitan Solutions) initiative.



## APPLICATION: CITY OF AMSTERDAM

### Roomy, Tidy, Safe or Familiar?

*How people perceive their urban surroundings and how they value them.* Which public spaces are lovelier, livelier, safer and more comfortable than others? Do perceptions differ if people are familiar with a place or not? And how do things such as noise, smells and tidiness affect the perception of a city's public spaces?

### Vondelpark or Kalverstraat?

*Perception of urban environments in relation to specific types of public spaces.* Are streets perceived and valued differently than parks? Are highly public places such as squares perceived and valued differently than less public spaces such as playgrounds and allotment gardens?

### Nieuw-West or Oud-Zuid?

*The relationship between different 'fabrics' or neighbourhood layouts and perception.* A city like Amsterdam has many different types of neighbourhood environments, from historical inner-city districts with narrow streets and little public open space, to modern functionalist districts on the edges of the city with open, airy spaces and lots of green. Are certain

### In the Pilot stage the WeSense project will develop:

1. A systematic and verifiable method to collect data on citizen's perception, use, and valuing of the public urban environments in Amsterdam.
2. A mobile phone application for social sensing.
3. A demonstration version of the website to show the basic functions of the future SMIS and present the results of the pilot stage.
4. A method to provide direct, simple, and visually appealing feedback of responses on both mobile phone app and a website.

neighbourhood surroundings perceived and valued differently than others? And if neighbourhoods with a similar layout score differently, what affects this?

### Downtown or City Fringe?

*The perception of contemporary urban territories such as metropolitan areas.* In increasingly heterogeneous urban regions such as Amsterdam, the range and character of environments has increased dramatically, while the distinction between city and countryside has decreased. How do people perceive and value new kinds of hybrid places such as leftover areas and in-between spaces? How do people make sense of these environments, and what do they mean to them?

### Where do citizens recharge your batteries?

*Relationship between the preference of different urban environments and psychological restoration.* How do different surroundings affect preferences, and lead to psychological restoration? The study explores this question by measuring real-time perceptions and affective evaluations of urban environments, with a special interest in the effect of environmental characteristics on psychological restoration.

## RESULTS

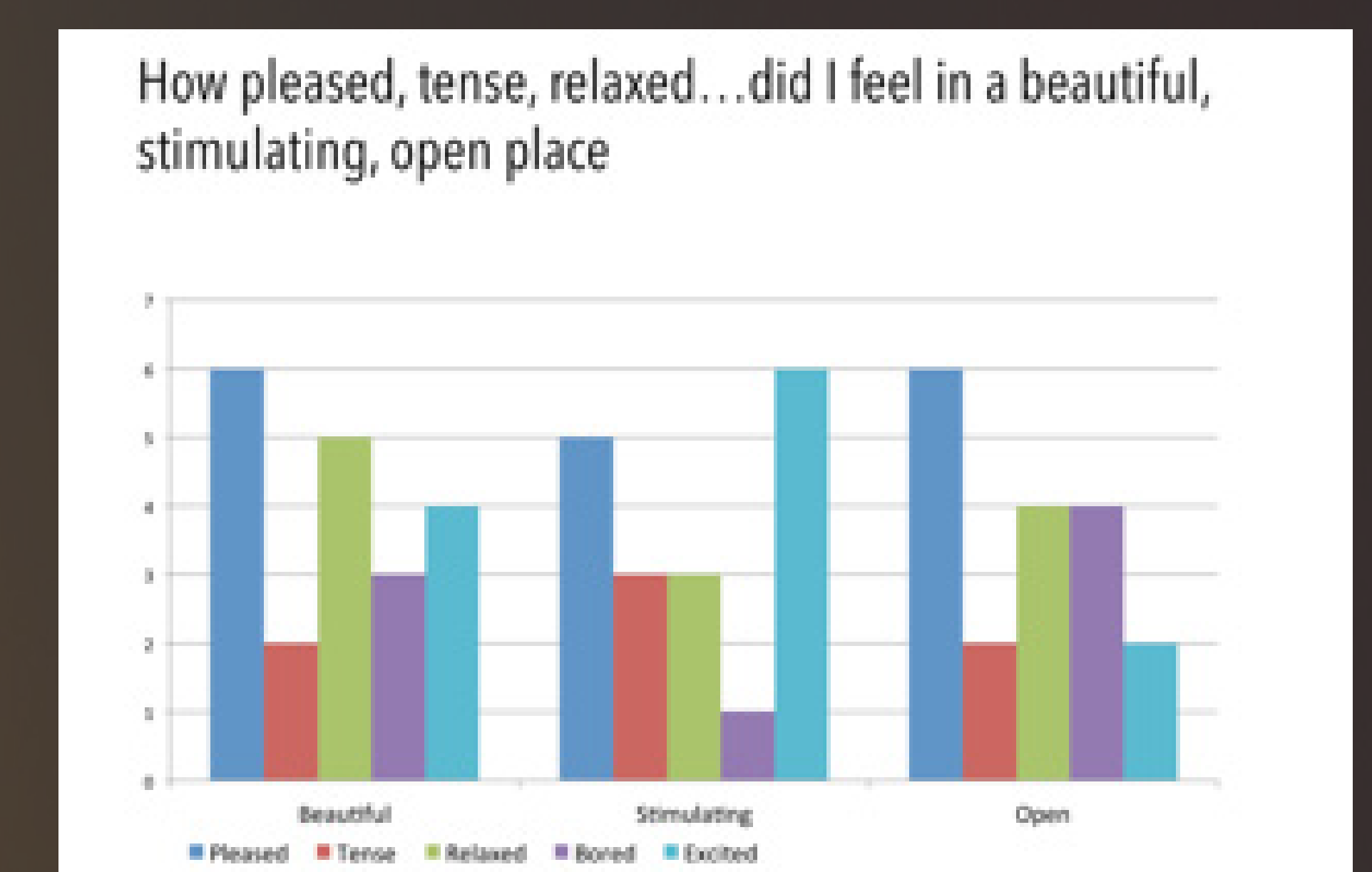
Collected data and dynamic maps will provide valuable contribution to research on urban space perception. Societal benefits of the research include contributions to better planning, design and management of urban public spaces, as spatial decision-making is still largely based on expert-based interpretations of existing situations and future needs. Data on perception of urban environments can also input into policy on health, lifestyles and social services.

Example of one of the possible dynamic maps that will soon be displayed on the website [www.wesense.info](http://www.wesense.info)



## STATS

Example of one of the many possible graphs that can be generated from the collected data and displayed on the website



## ABOUT

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### Supported by



### Website and App Development

PSYT  
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### Design

Lightingale Media Productions  
[www.lightingale.nl](http://www.lightingale.nl)



WeSENSE app available in the app store by the end of June 2016

WeSense website, look for the updates in September [www.wesense.info](http://www.wesense.info)