

Crowdsourcing perceived qualities of city streets using street-level images

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Why?

City-streets that feel **safe and attractive** motivate active travel behaviour and promote people's **wellbeing**

But what makes a street feel safe or attractive?

Let's compare:

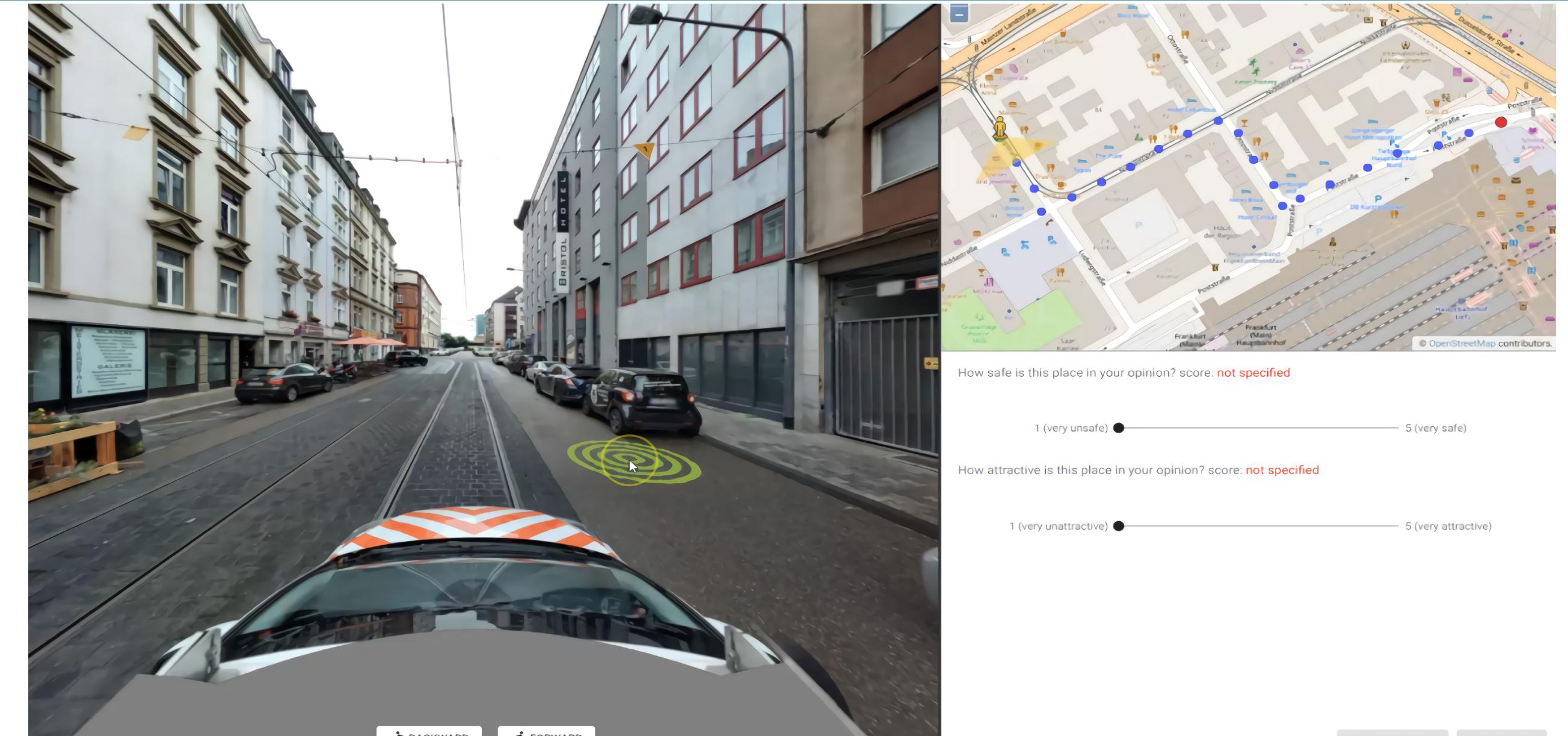
How safe or attractive do the following locations look from 1 (very unsafe/unattractive) to 5 (very safe/attractive) ?



How?

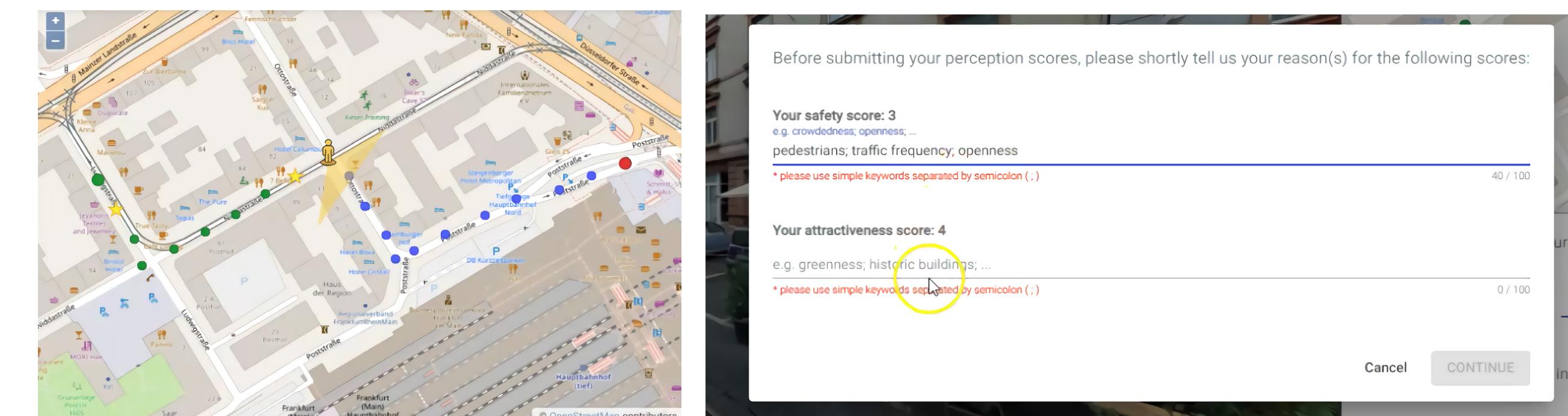
We developed a **crowdsourcing tool** that enables participants to:

- Virtually navigate streets through a sequence of **street-level images**
- Rate locations based on the perceived **safety** and **attractiveness**
- Explain their ratings in their own words



Key Features

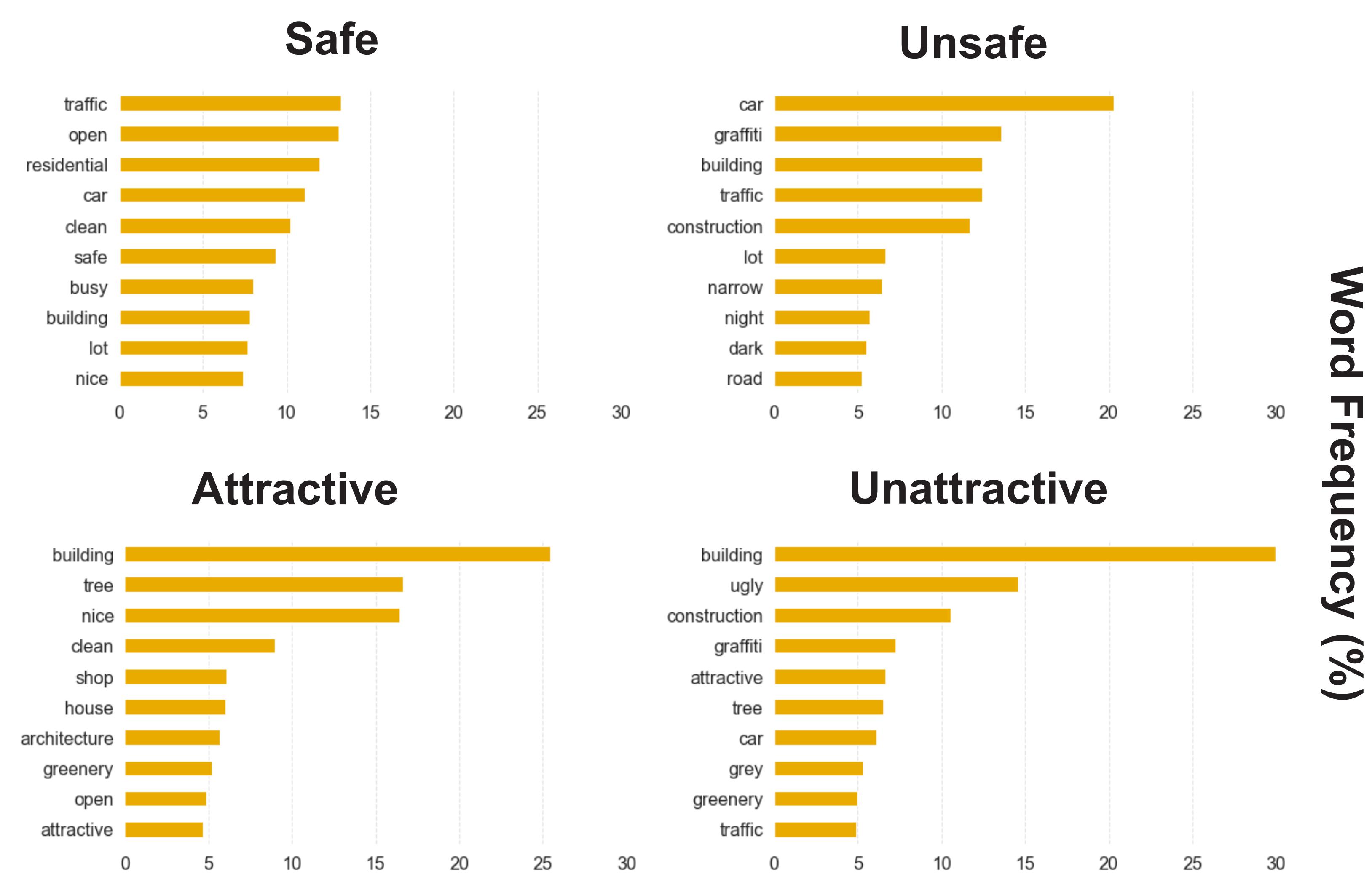
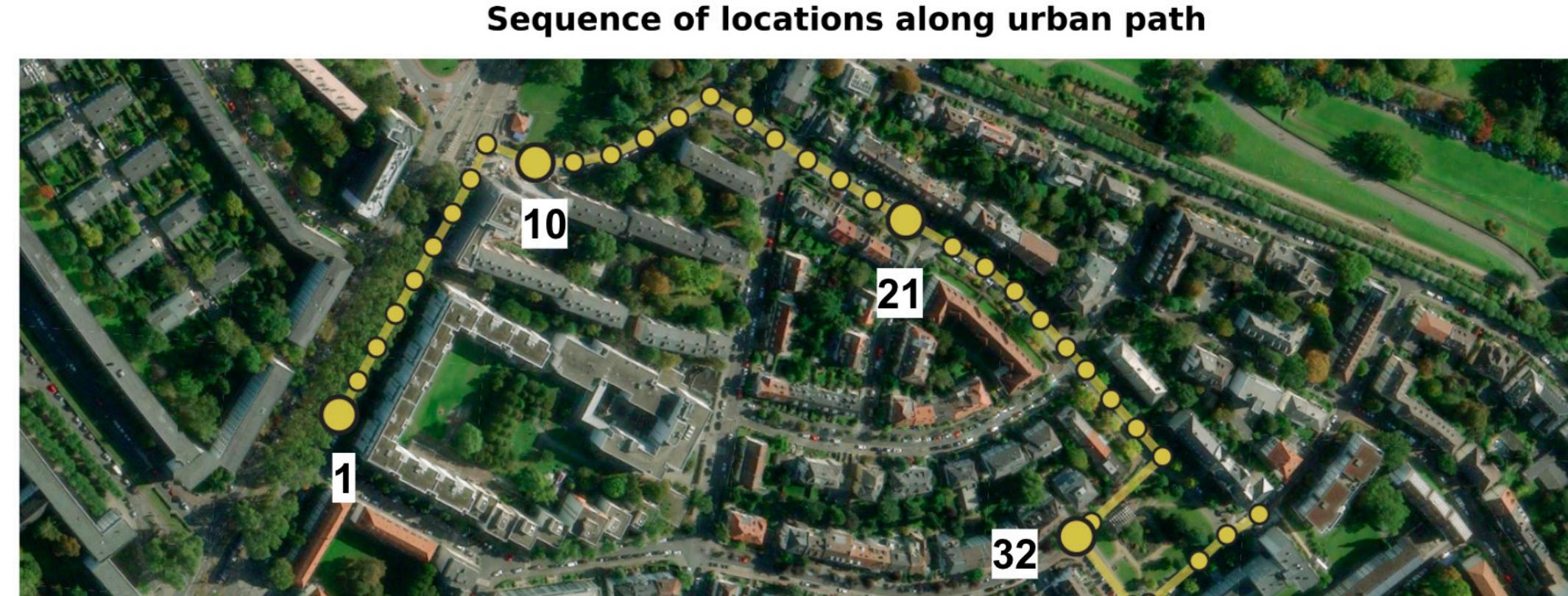
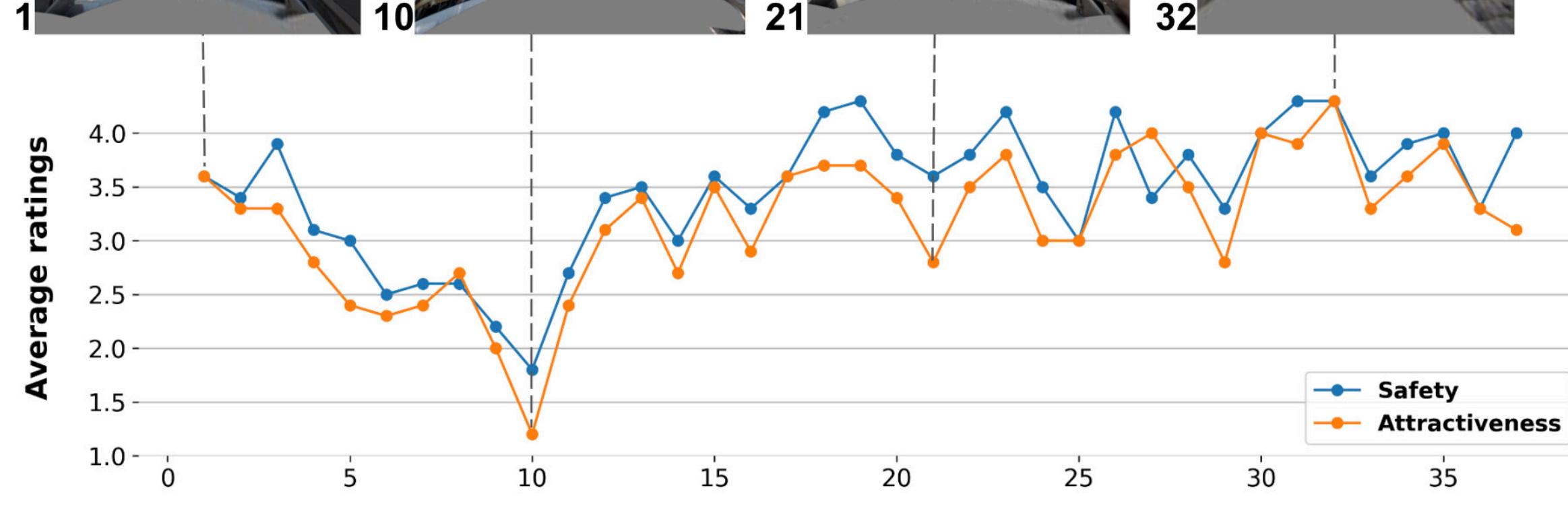
- **Street exploration** without the need to be there physically
- **Representative sample** of participants in terms of demographics
- **Collecting what participants say** (not what a model says)



Results

Case Study

- 403 participants
- 753 distinct **locations** in Frankfurt, Germany
- 7989 **rating pairs** of safety and attractiveness



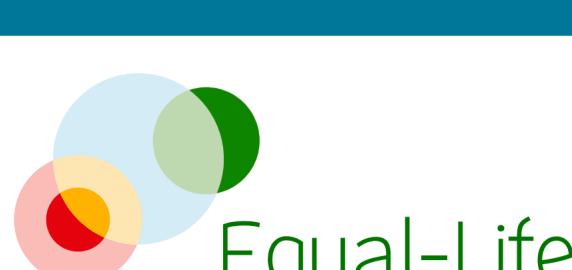
Key Takeaways

- **Practical value** of our crowdsourcing tool for capturing perceived qualities of city-streets
- **Perceived Qualities**
 - **Safety** → Presence of human activity
 - **Attractiveness** → Aesthetic qualities and amenities
- Some street features **outweigh** any other set of features (e.g., *construction sites and underpasses*)

Word Frequency (%)



GitHub



Urban Analytics

