

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) ?



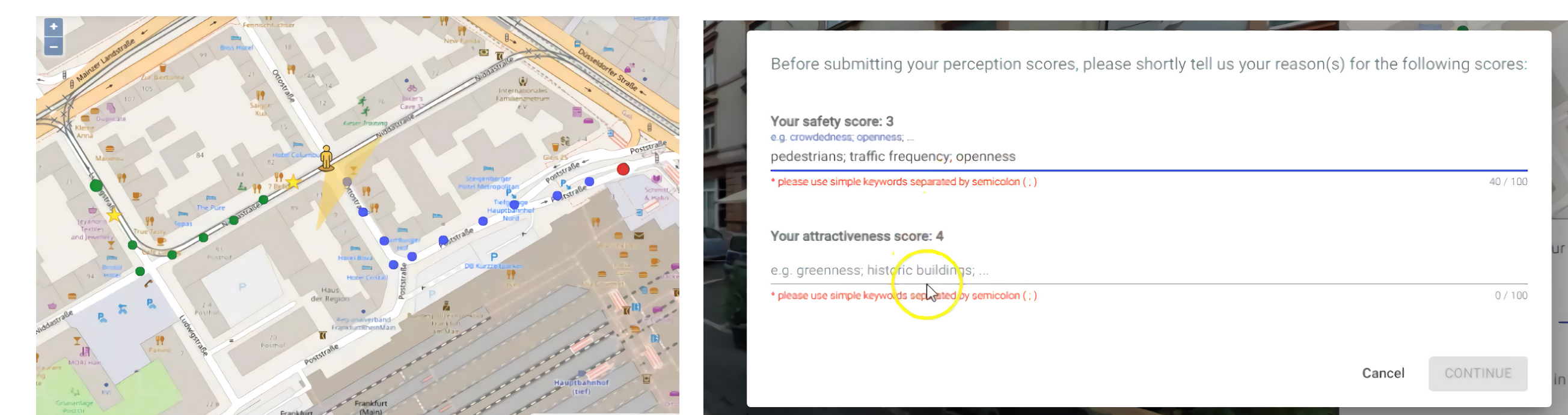
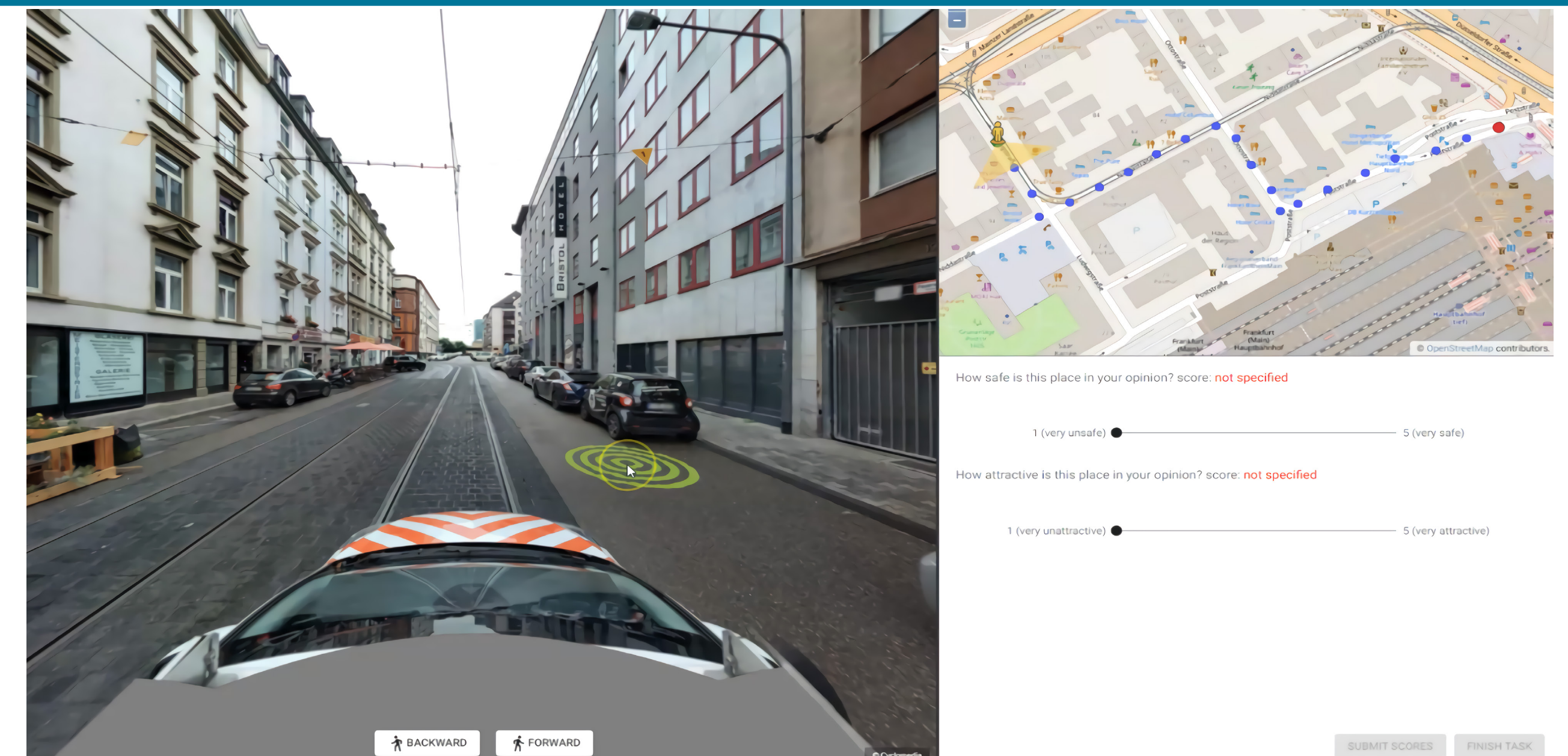
How?

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

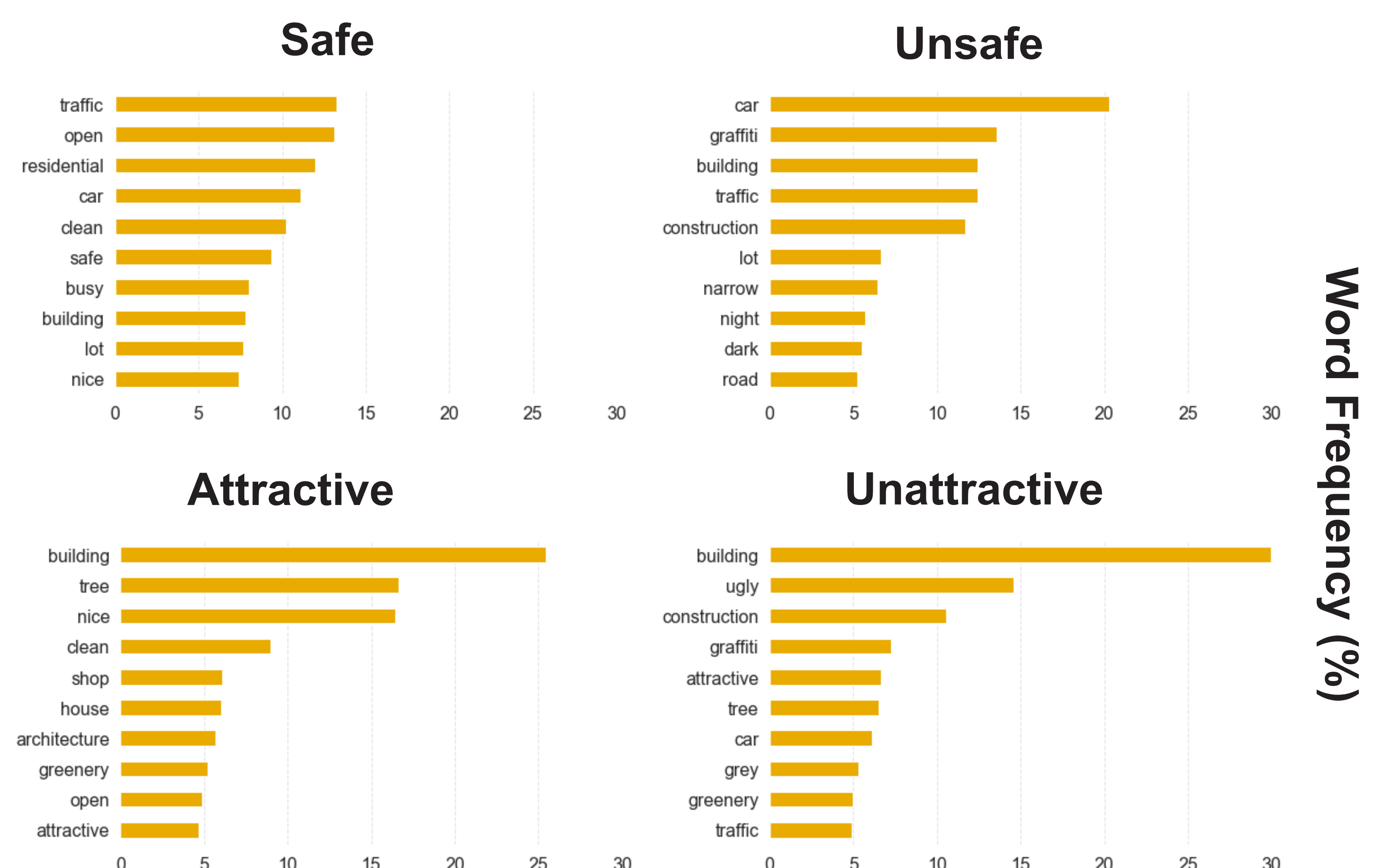
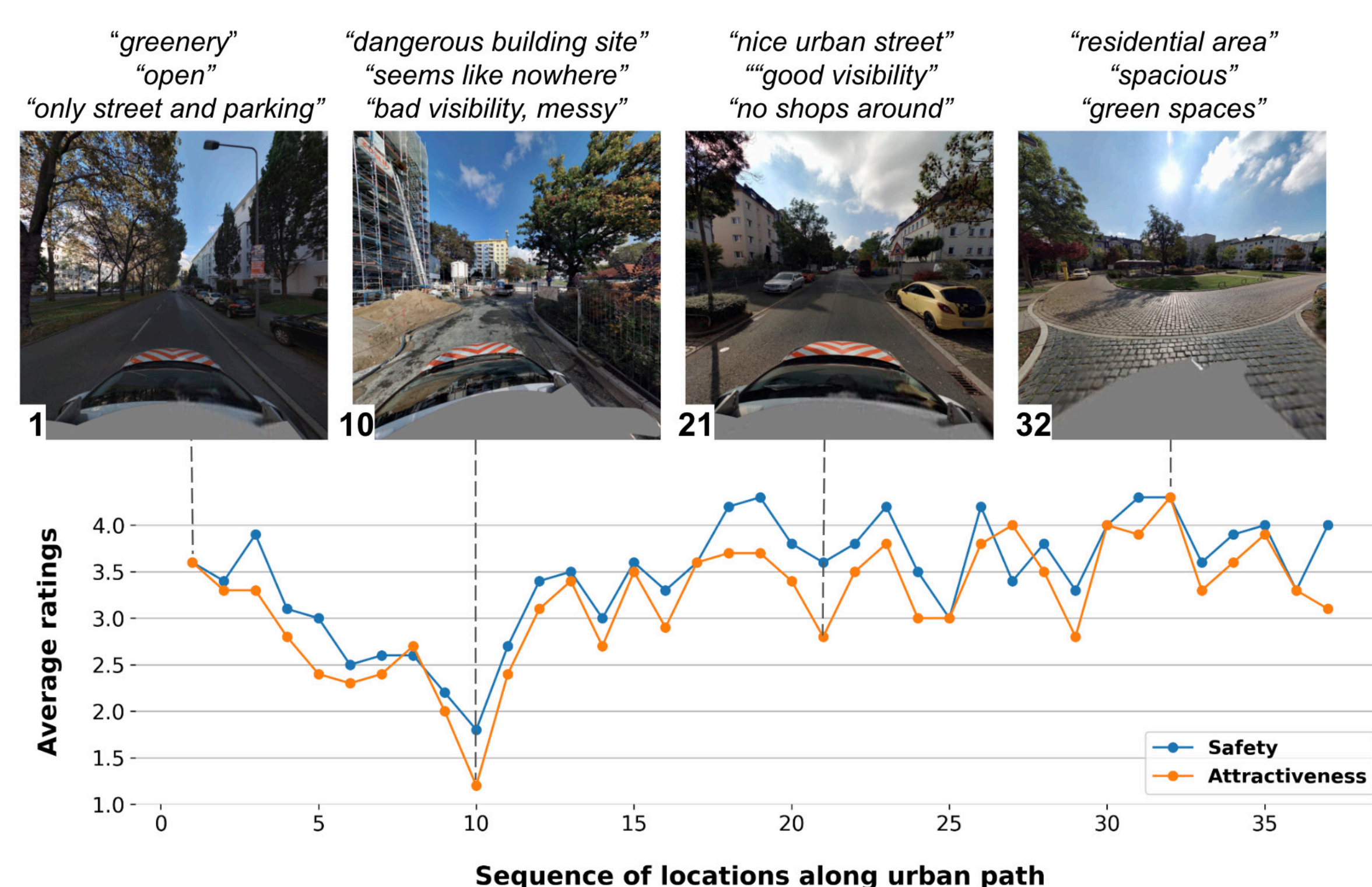
- **Street exploration** without the need to be there physically
- **Representative** sample of participants in terms of demographics
- **Collecting what participants say** (not what a model says)



Results

Case Study

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

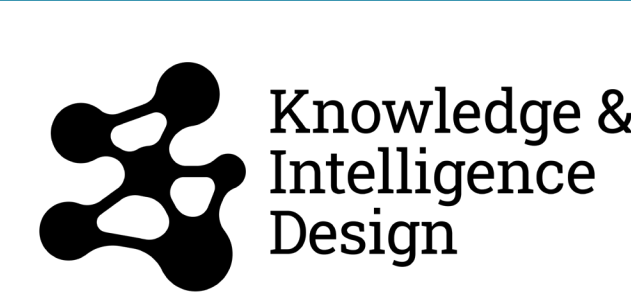
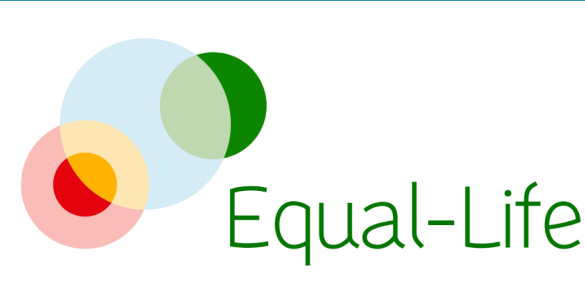


Key Takeaways

- **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)



GitHub



Urban Analytics

