

Revealing wasted urban space with crowd-sourced data

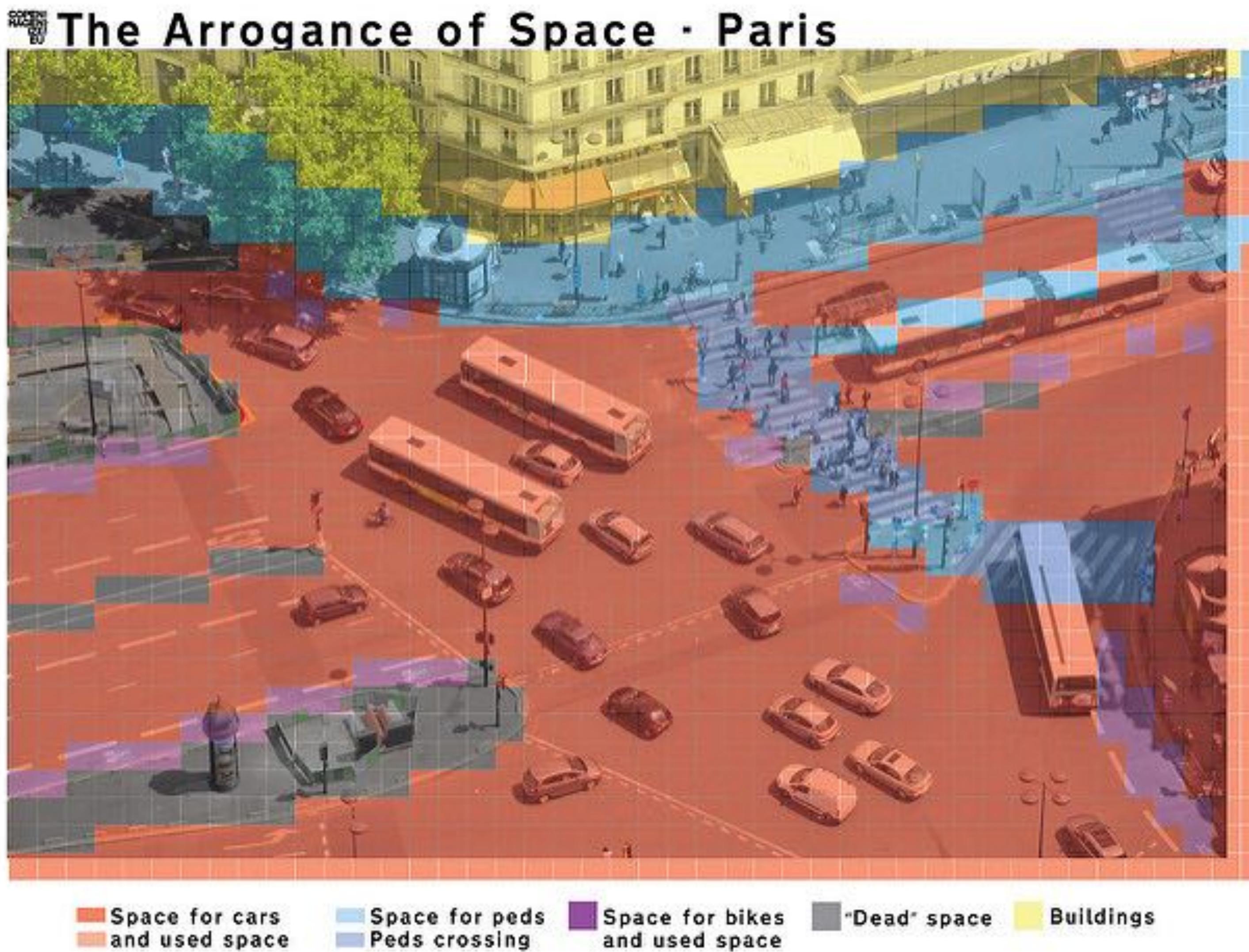
Michael Szell

ITU Copenhagen
ISI Foundation
CSH Vienna

Oct 17, 2019



Space is not distributed in a fair way between different modes of transport



Most space is for cars, but most people use bicycles



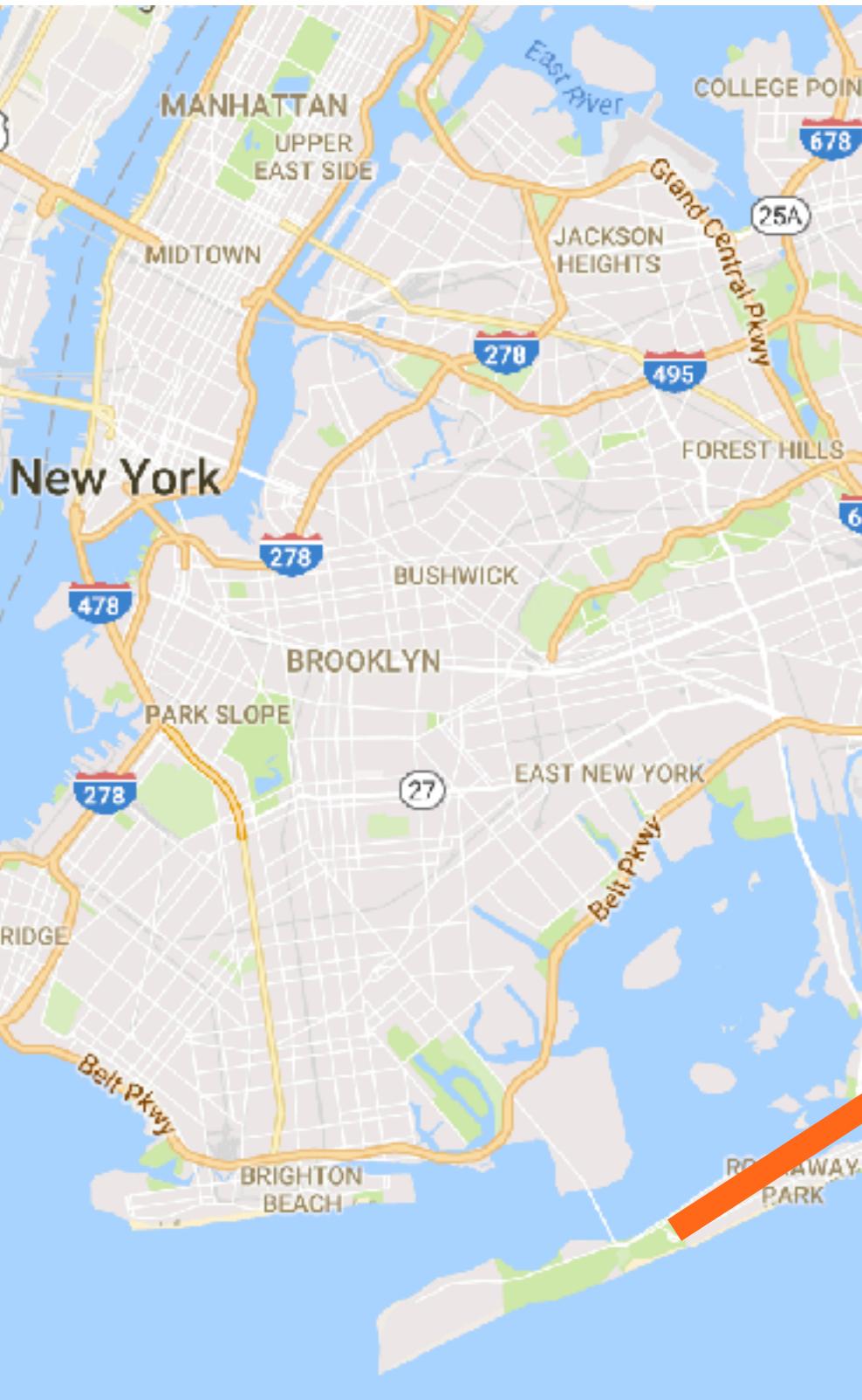
Modal Share for Copenhageners Commuting to Work/Education

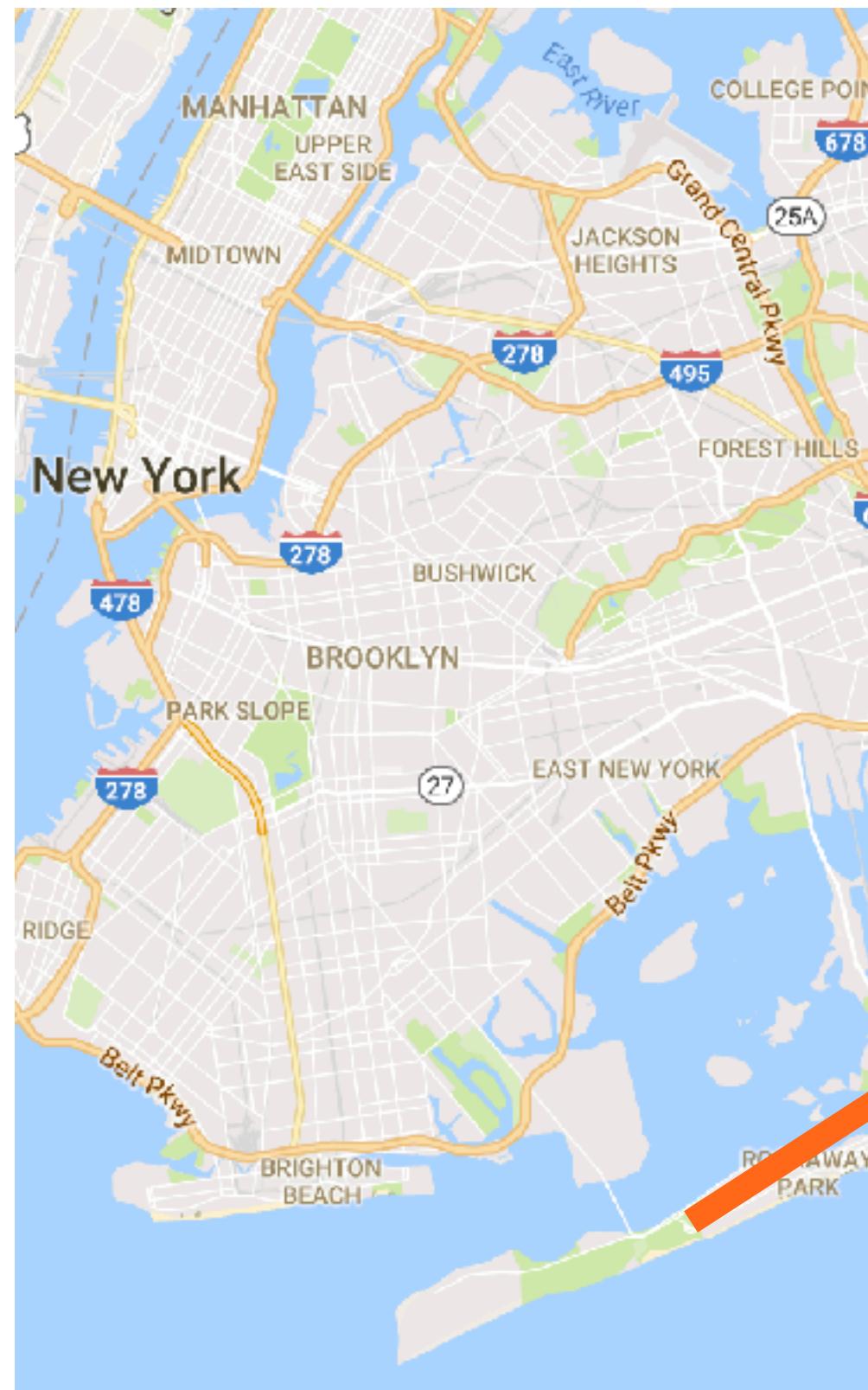


Allocation of Transport Space in Copenhagen

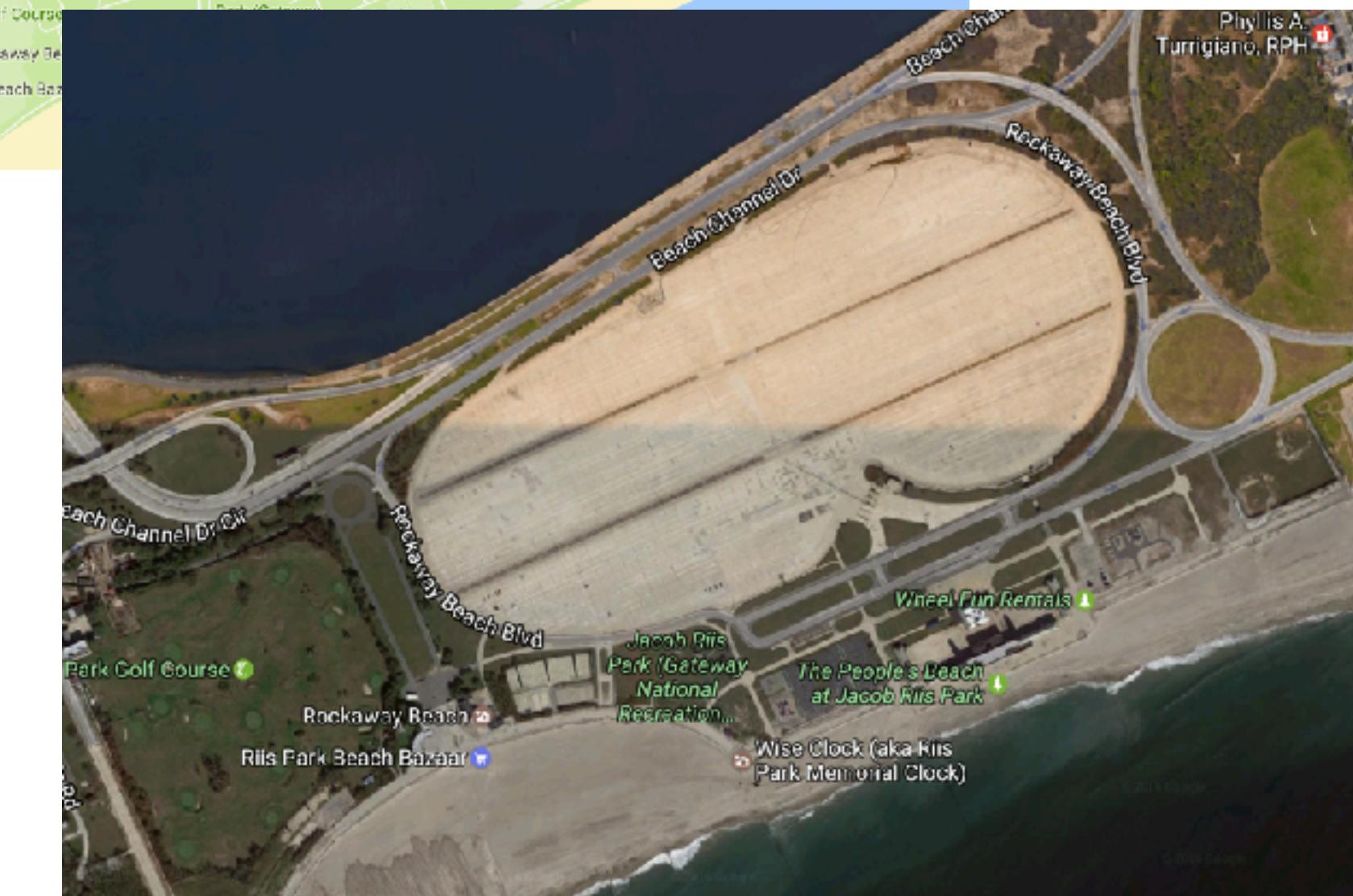
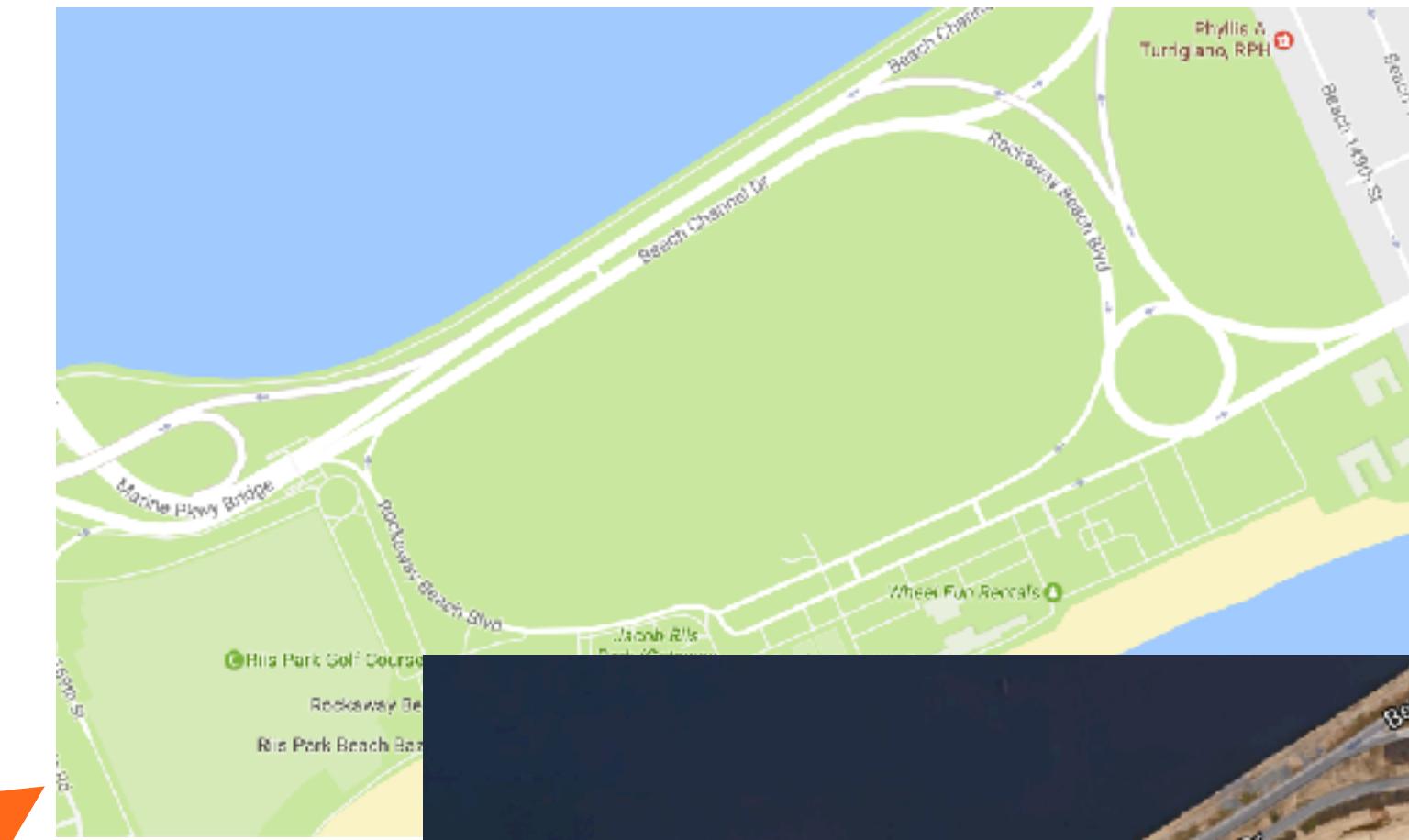


Can we analyze and visualize
large-scale open data to learn more?

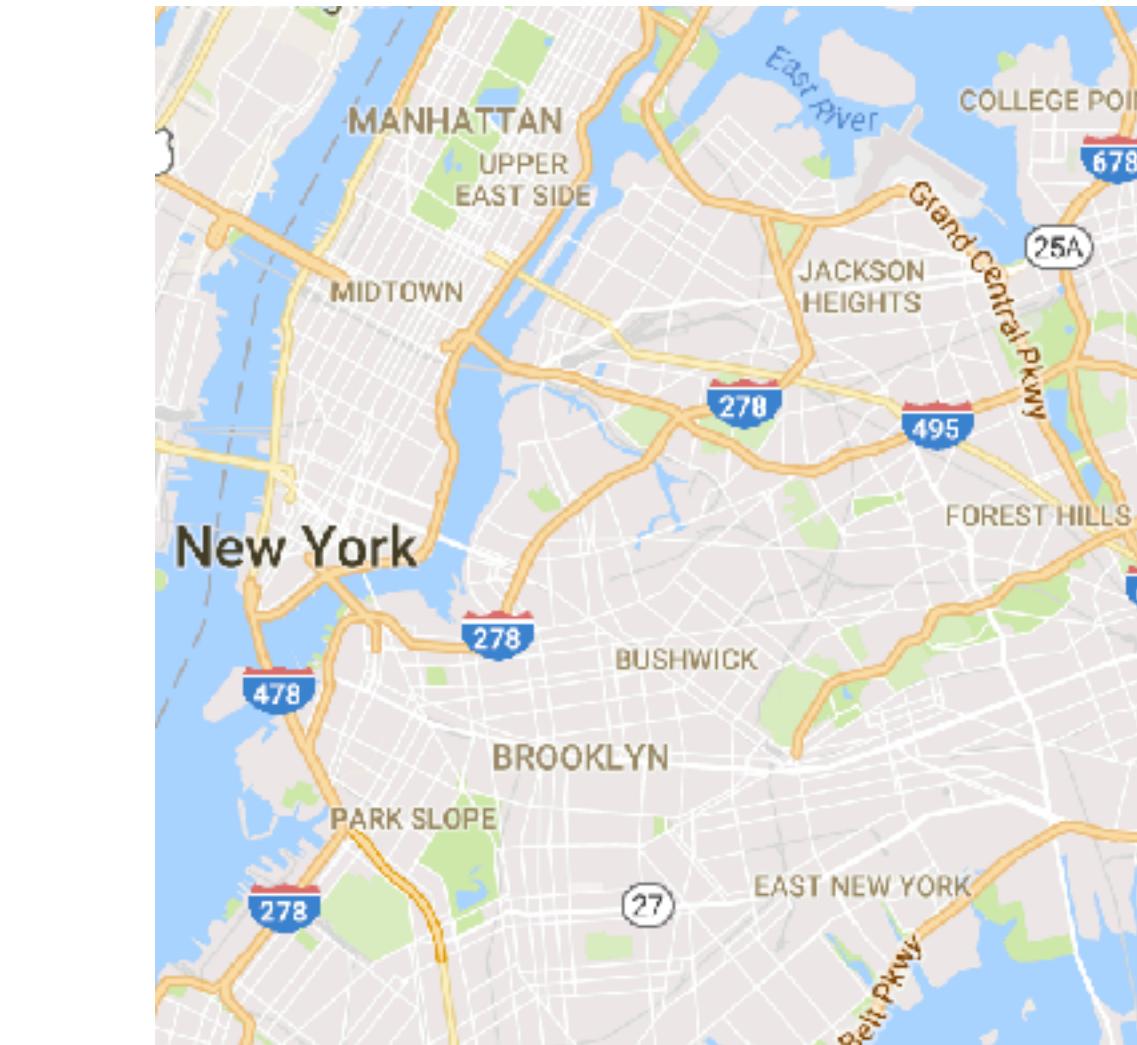
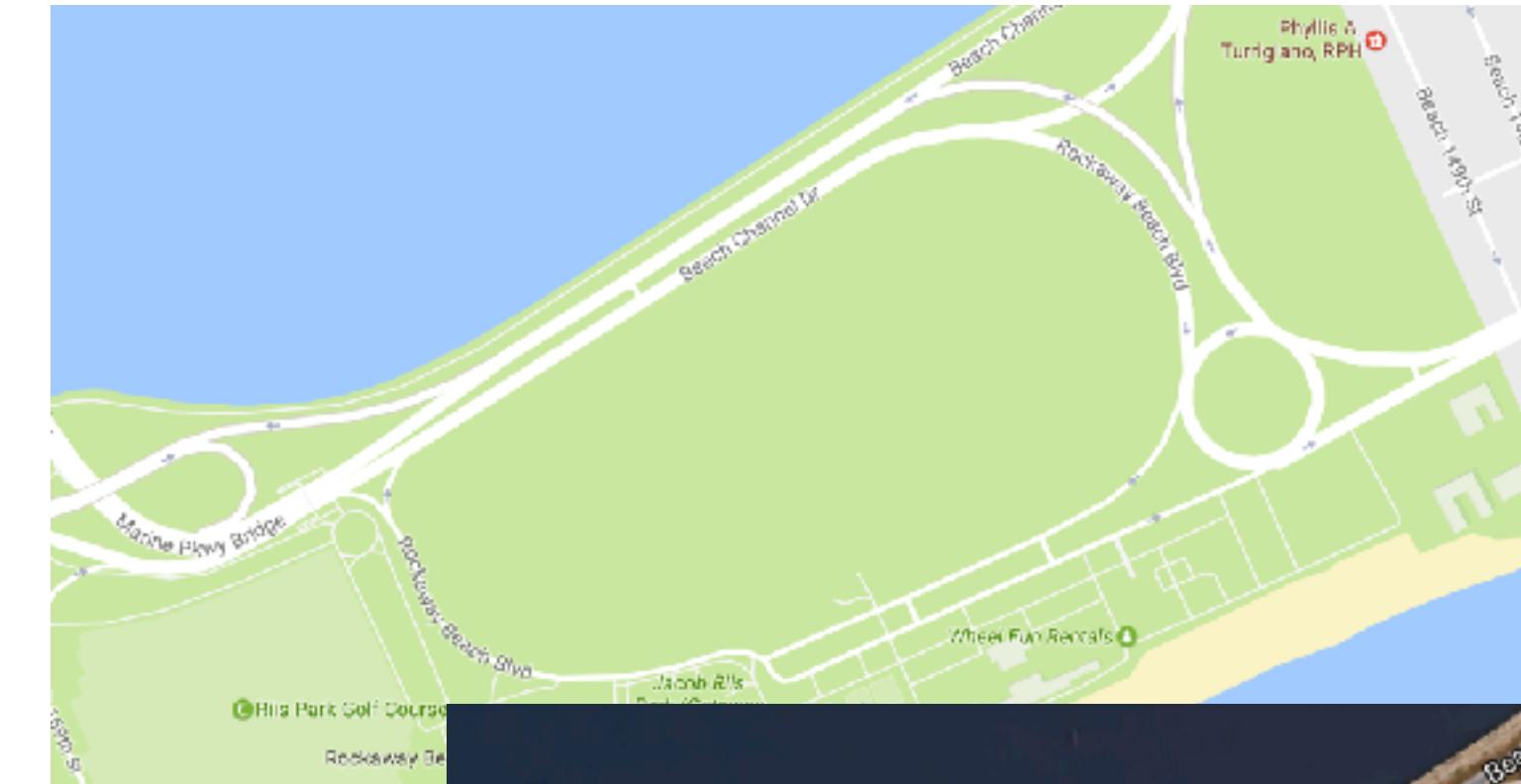
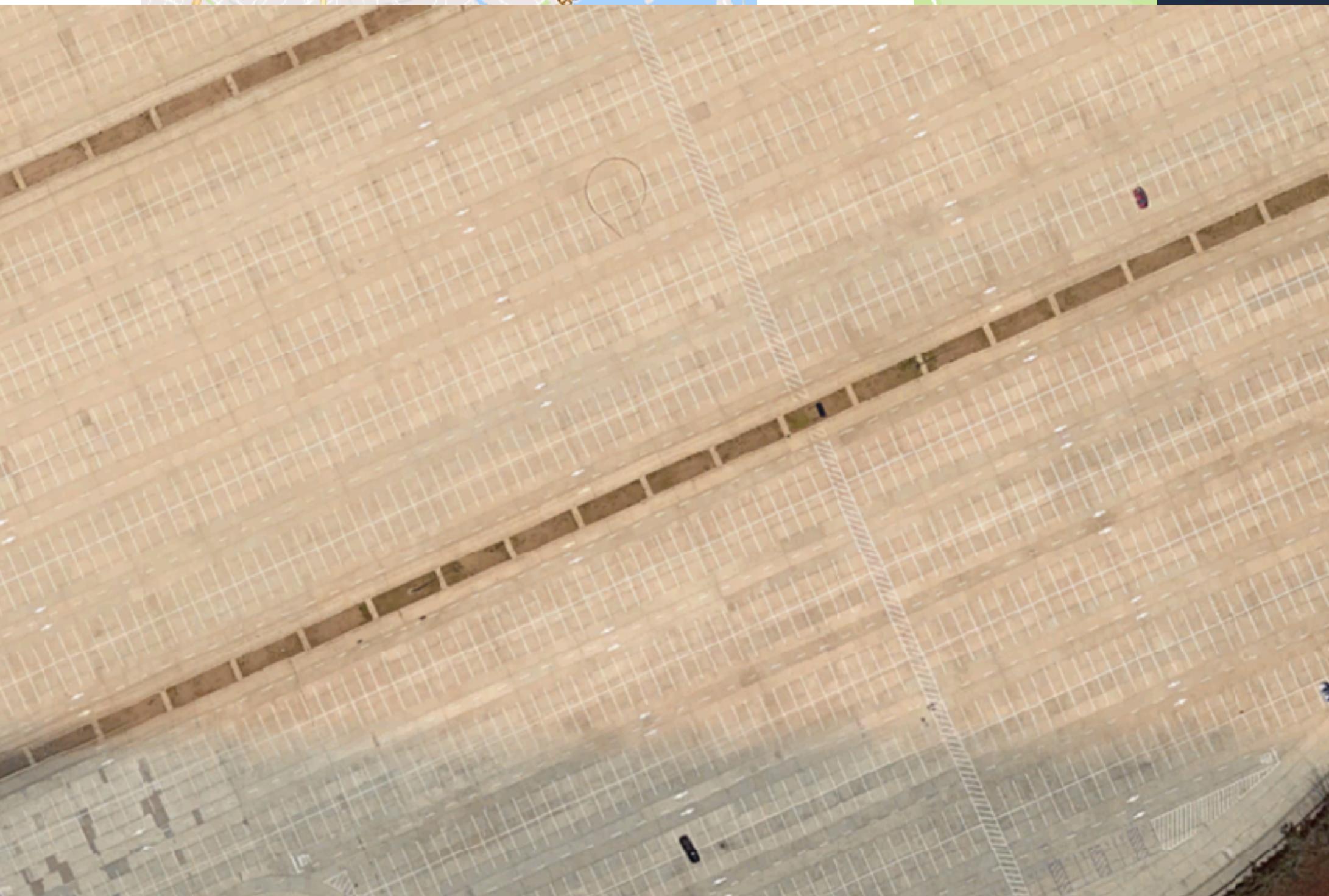




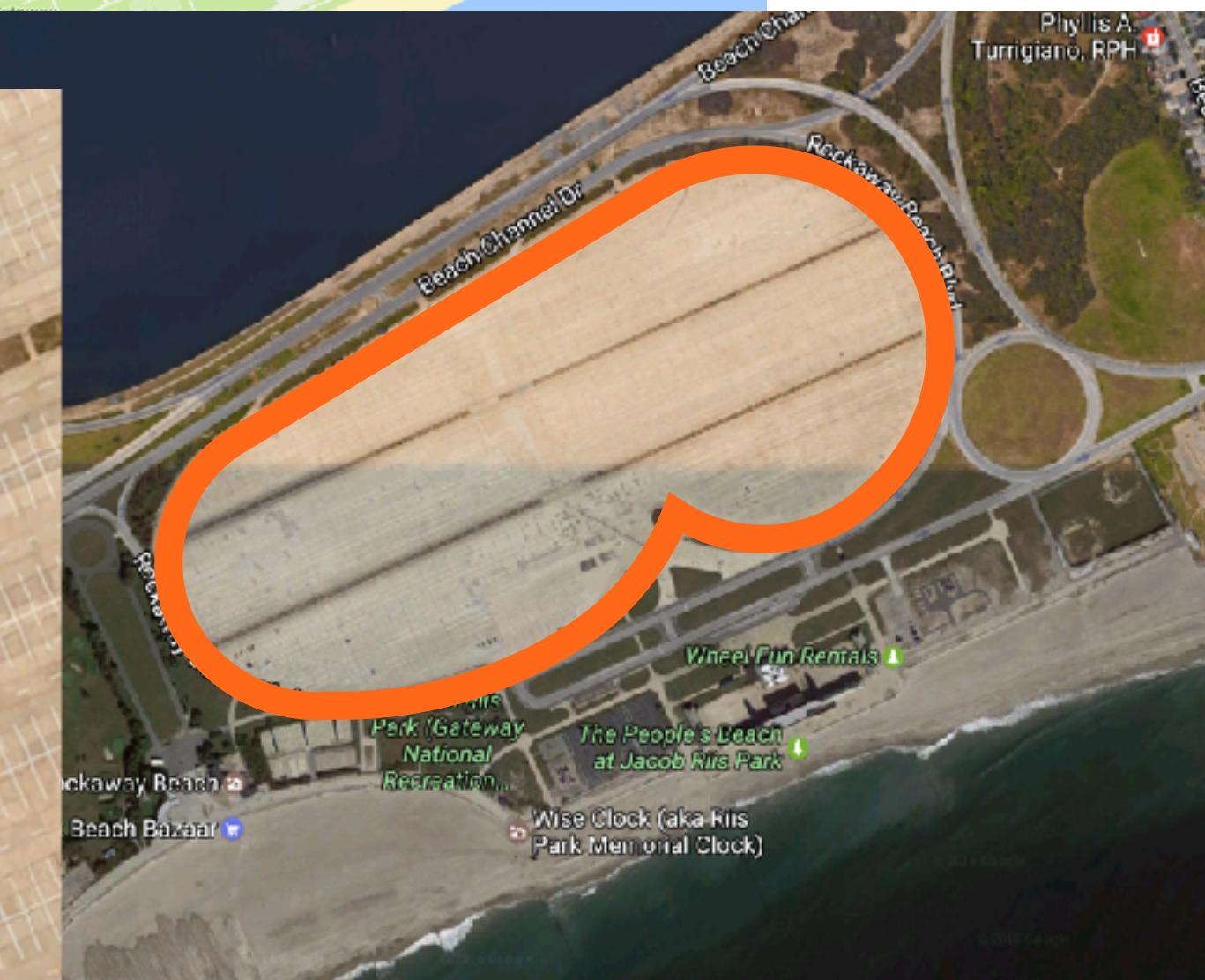
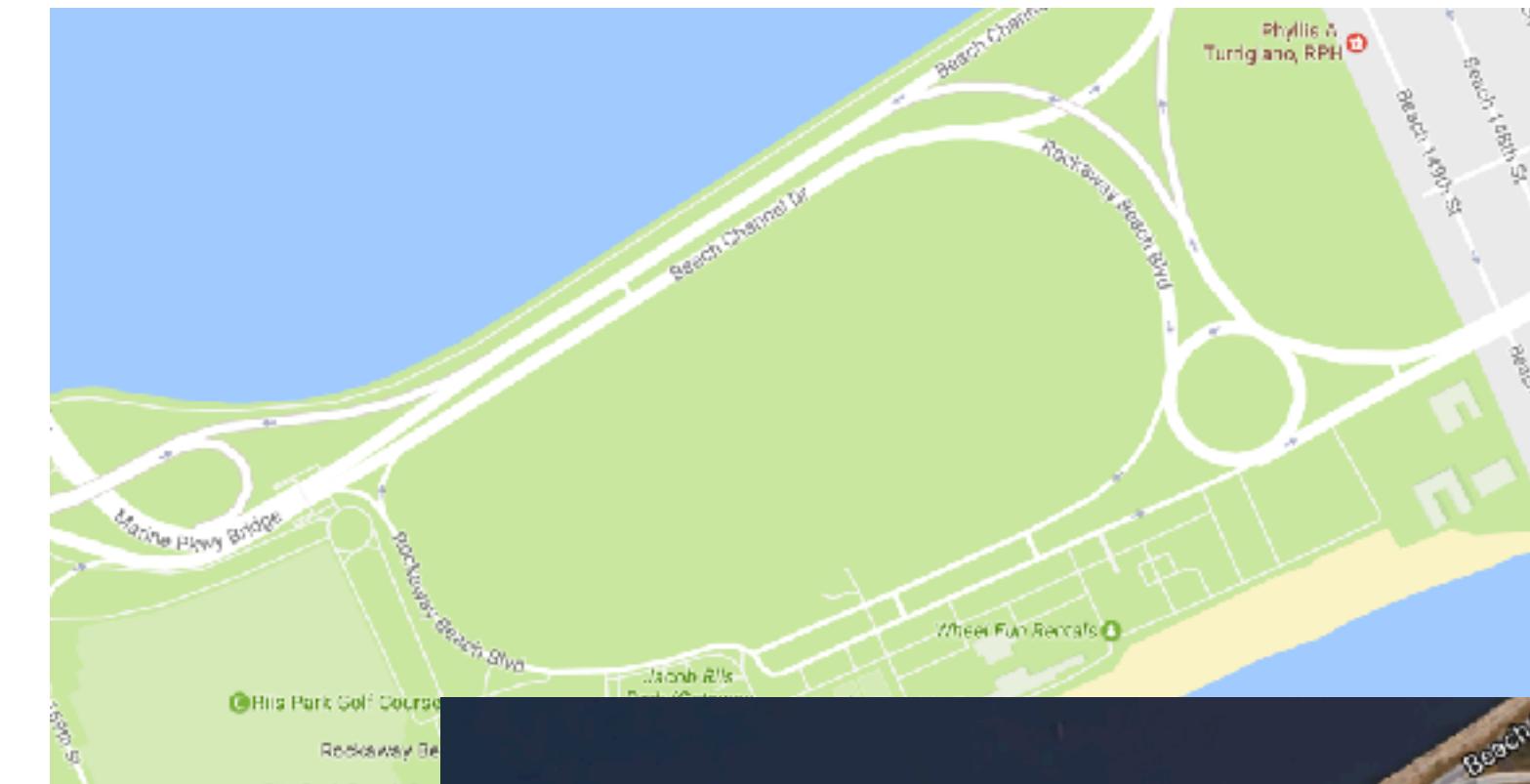
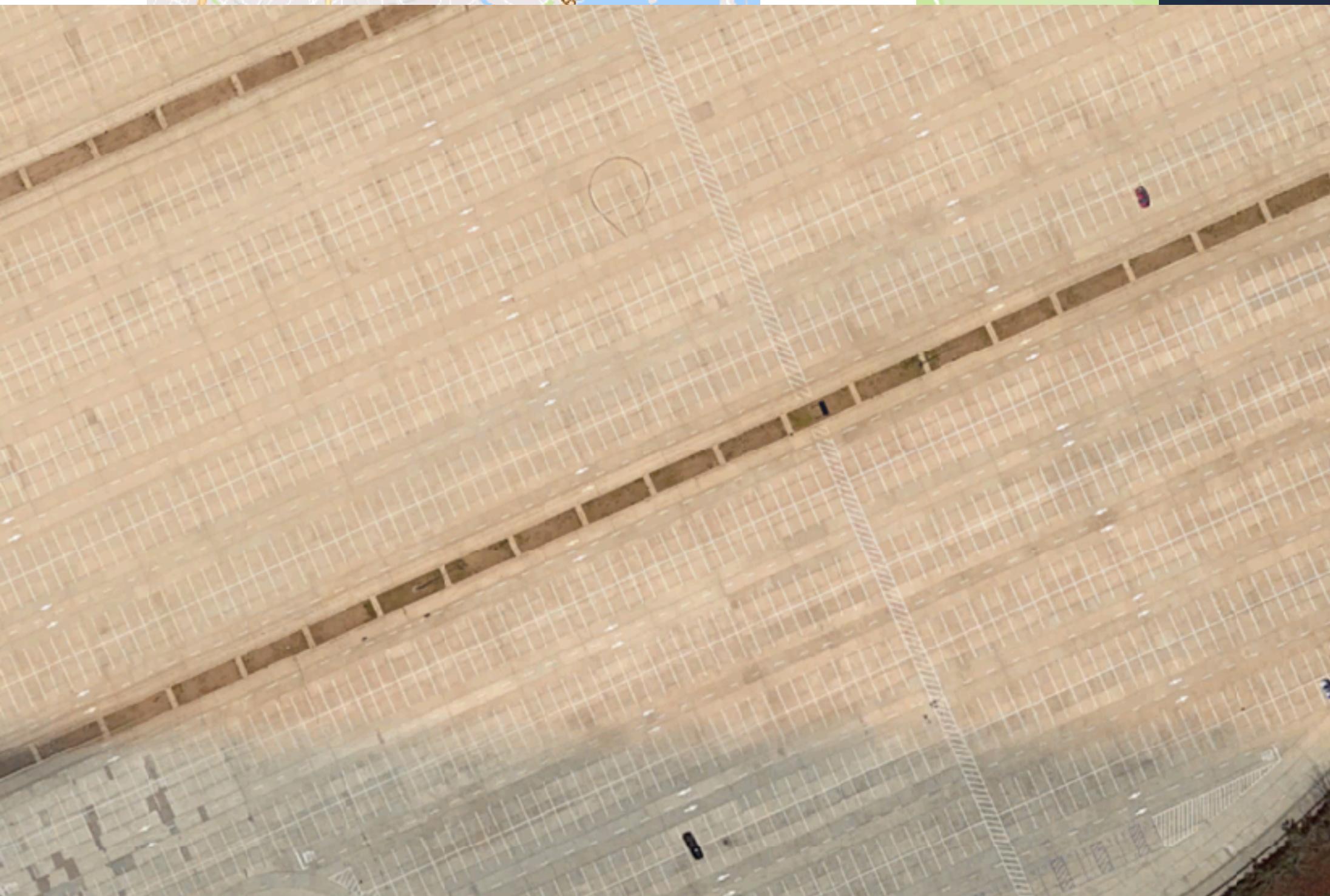
What a lovely green..



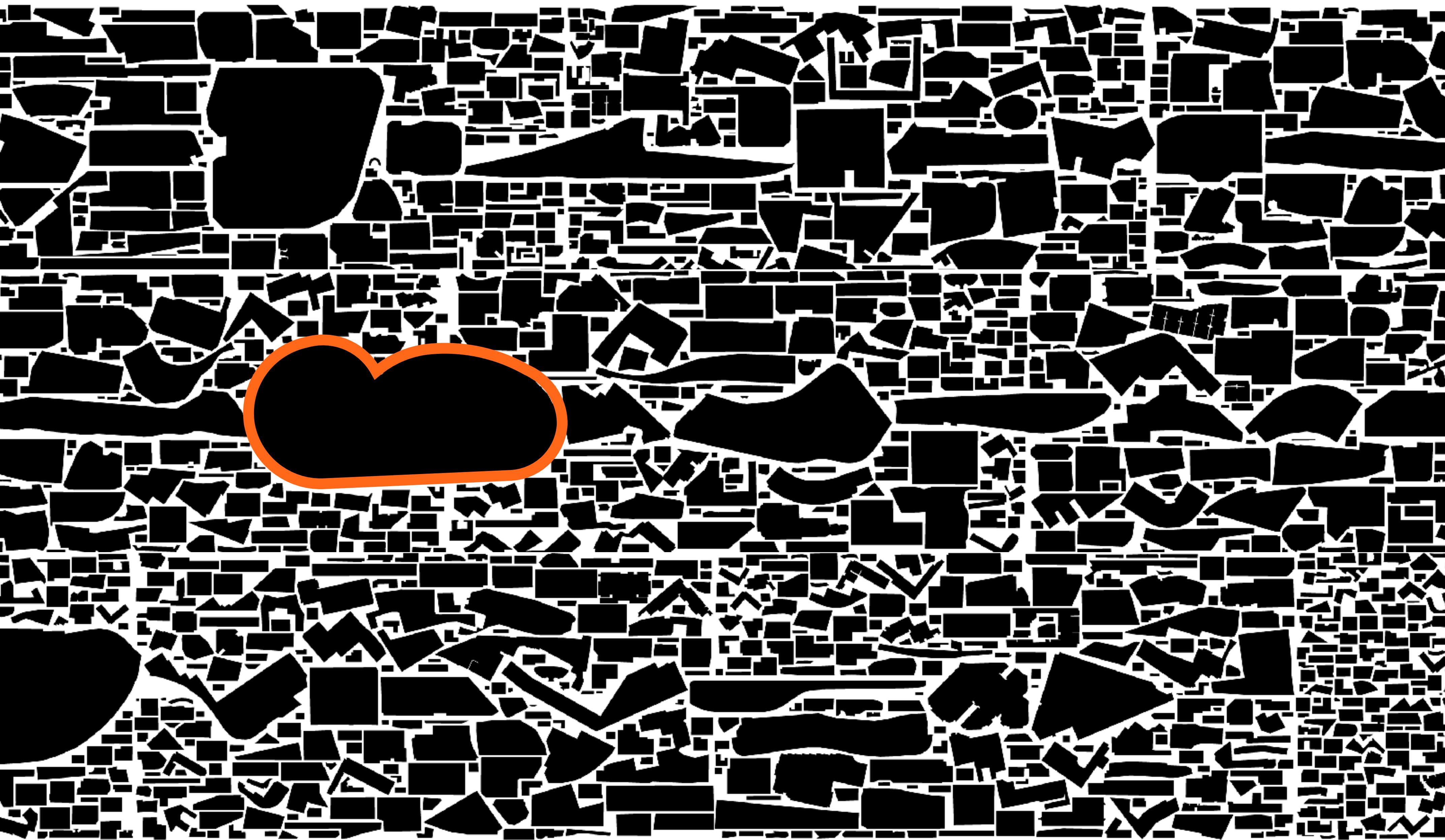
What a **lovely green.. MONSTER**



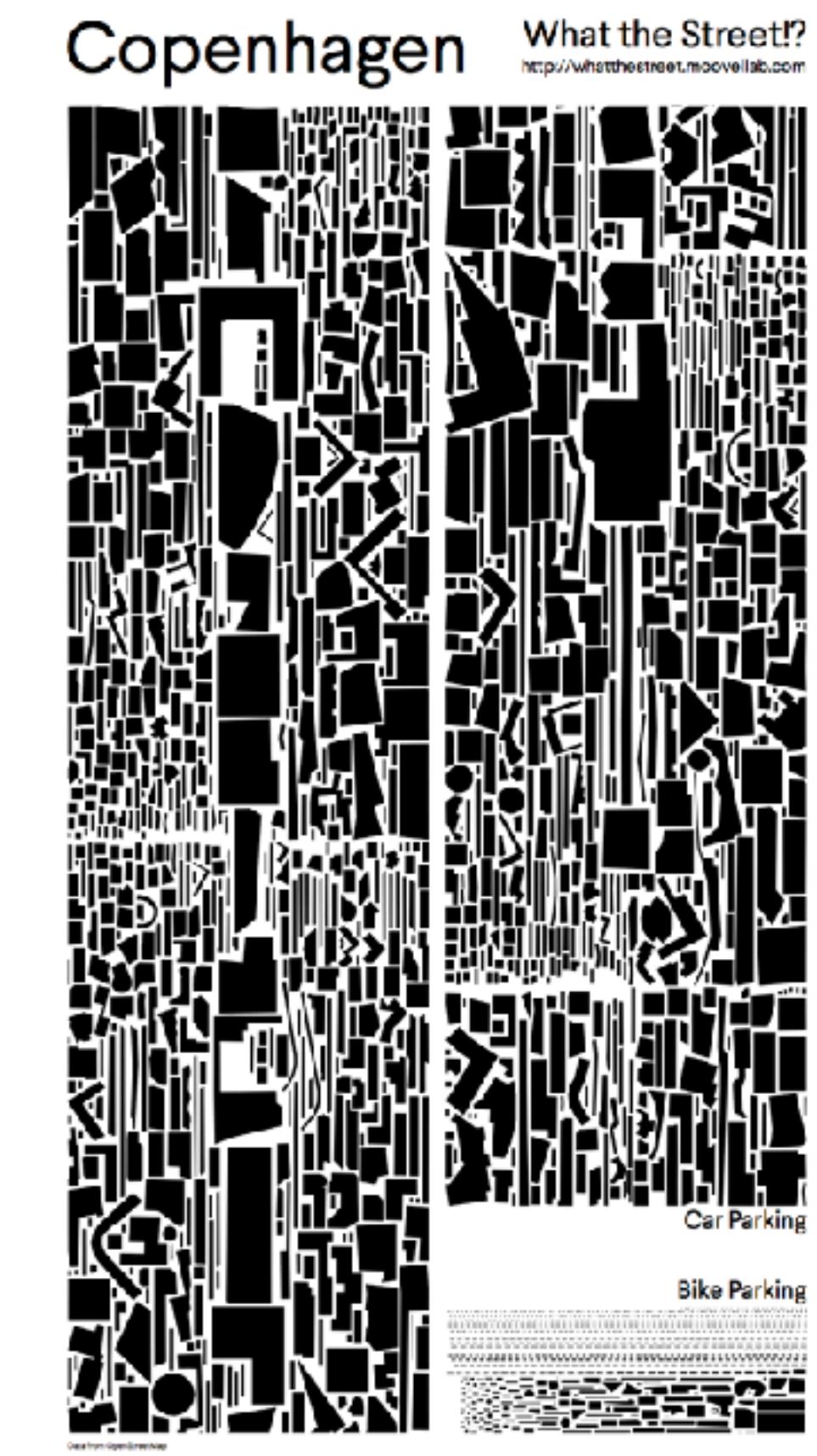
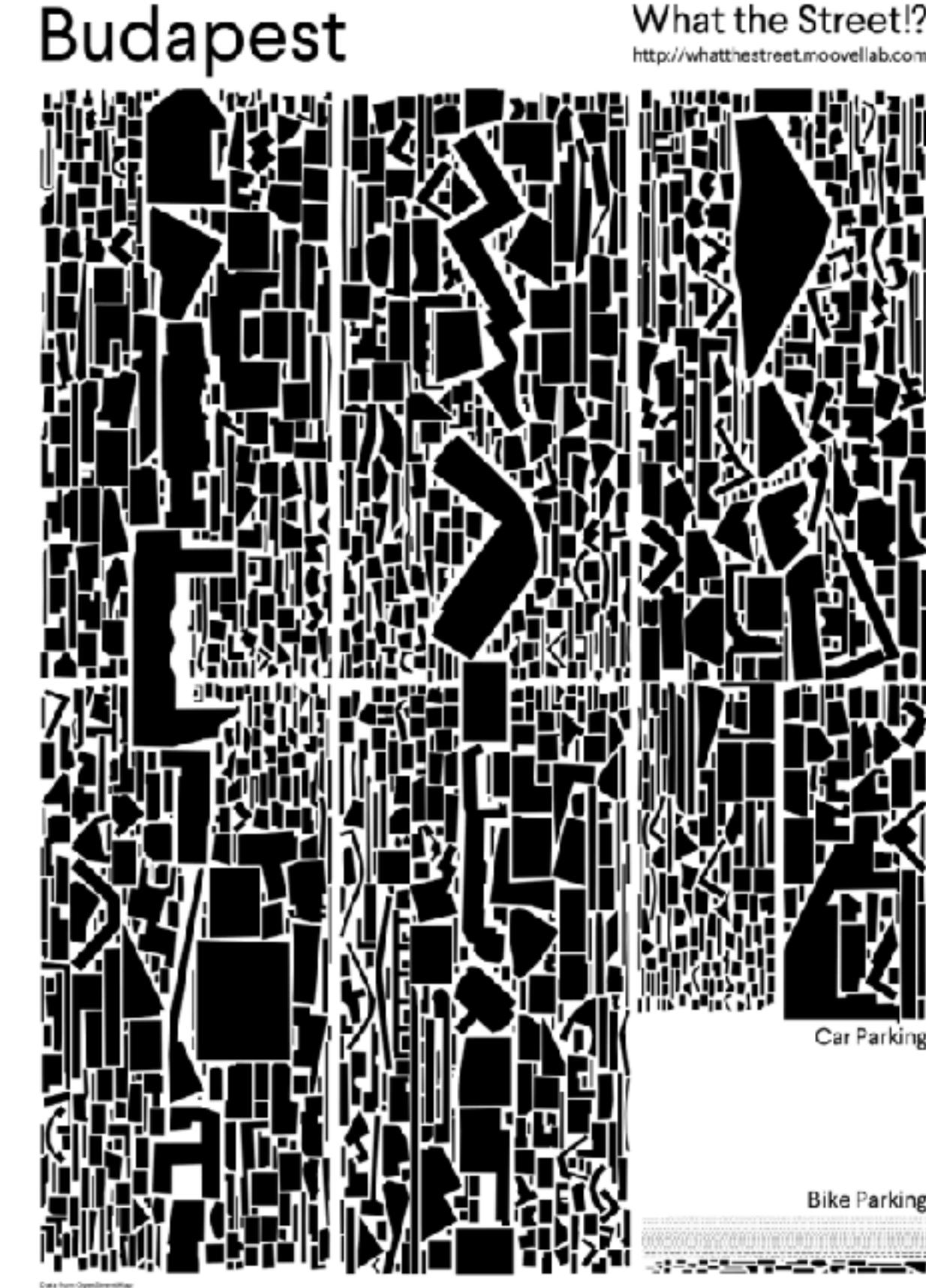
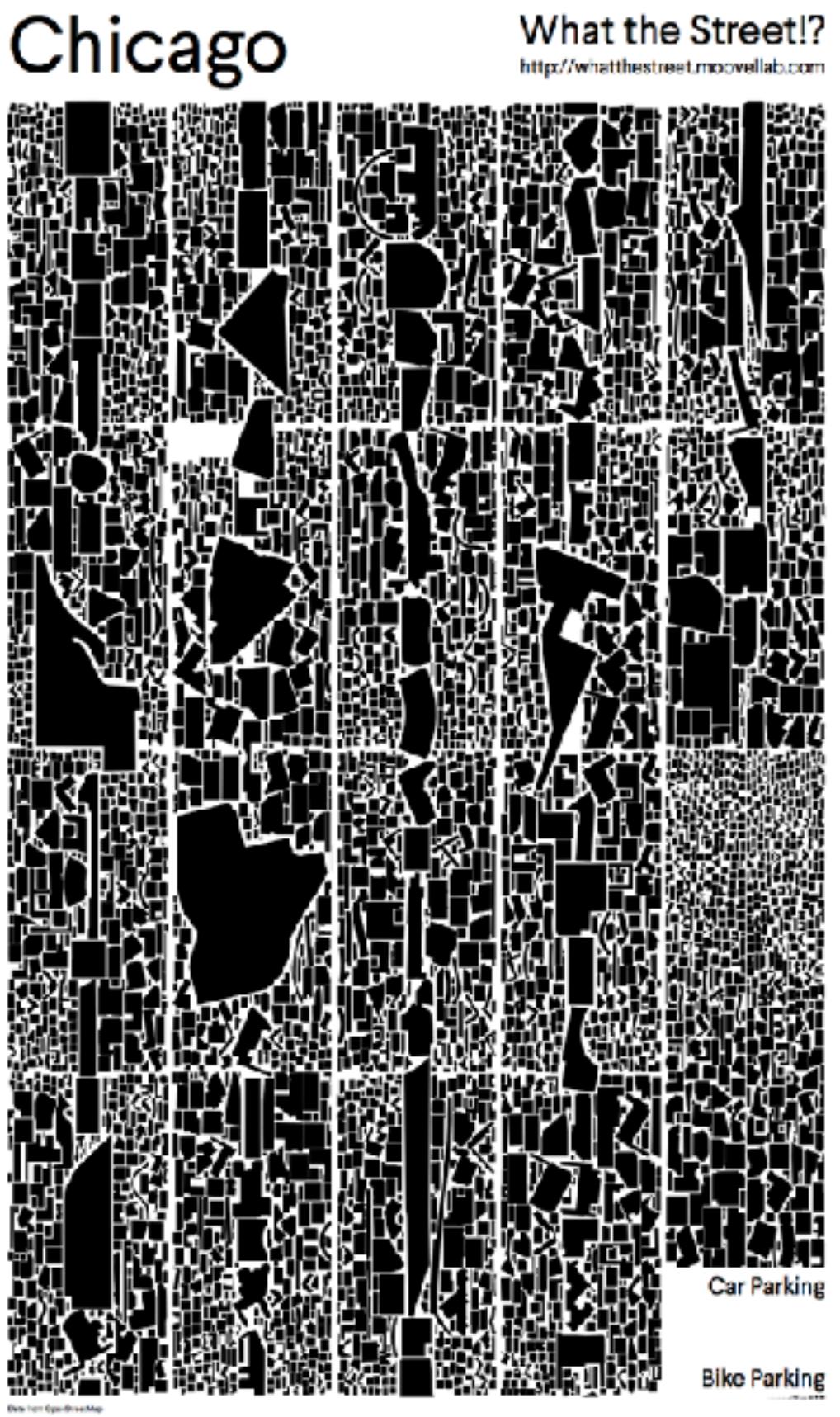
800m x 500m



We visualized ALL parking spaces with polygon packing



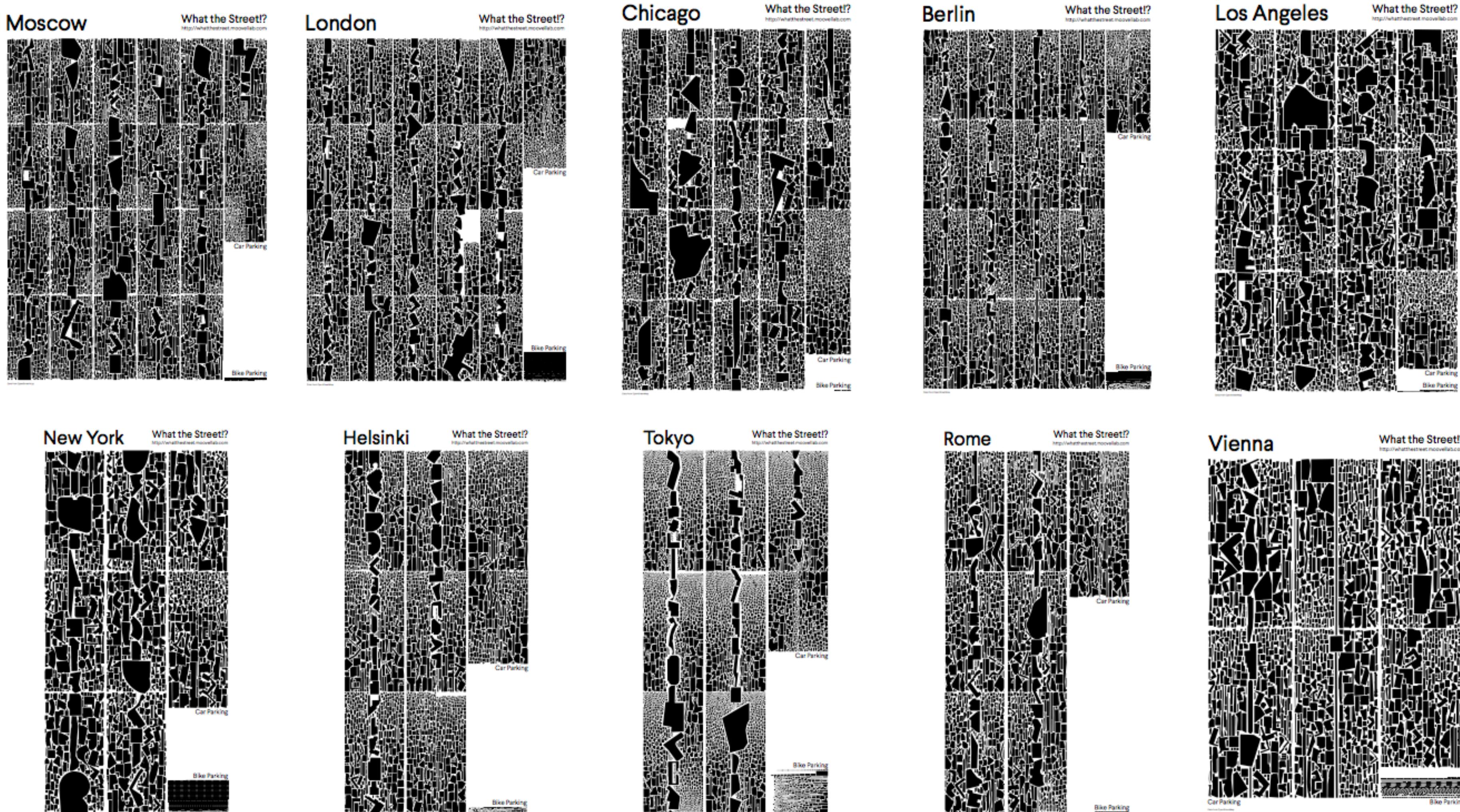
There are huge differences between car and bike parking



There are huge differences between car and bike parking



Our project **What the Street!?** covers 23 world cities



Open-sourced at <https://github.com/moovel/lab-what-the-street>

Why is there so much car parking?

Is it necessary?

Cars are used 36 minutes per day

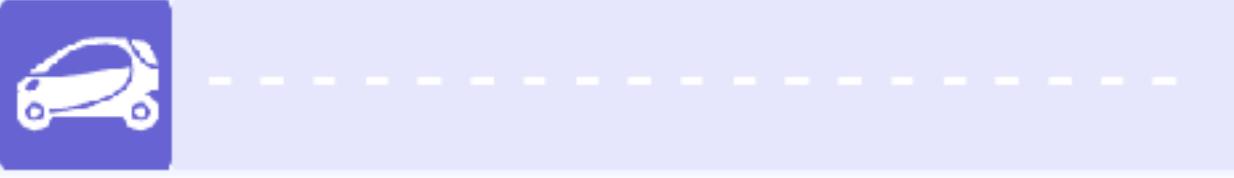
Cars are not used 1404 minutes per day

Cars are used 36 minutes per day

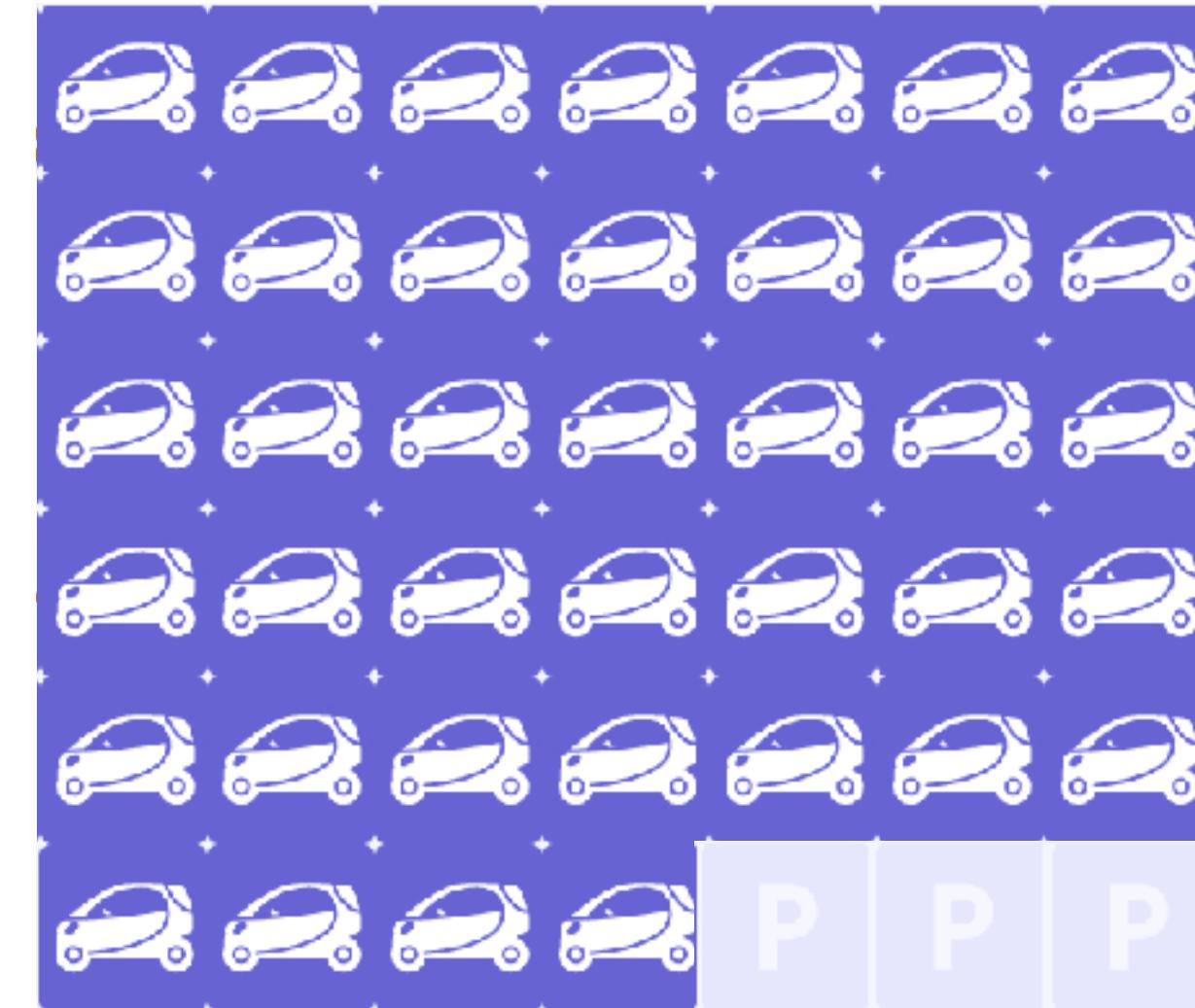
Cars are not used 1404 minutes per day

A typical snapshot of Copenhagen

5,500 cars moving



250,000 cars parked



We are wasting space worth 6,000 playgrounds!

A typical snapshot of Copenhagen

5,500 cars moving
6,000 = Playgrounds

2.5 ×
CHRISTIANIA

250,000 cars parked



whatthestreet.moovellab.com

The Mobility Space Report: What the Street!?

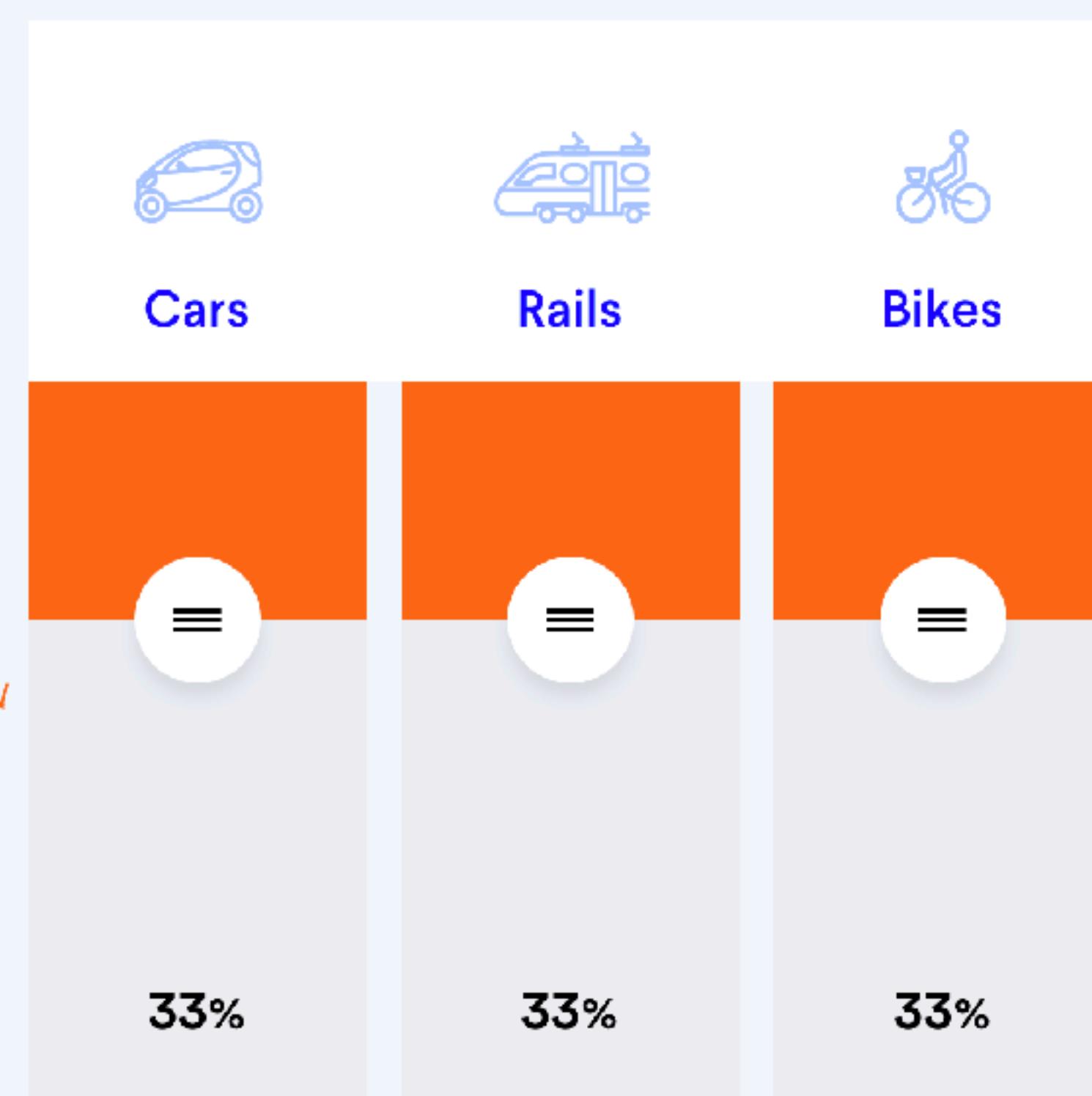
About



Who owns Copenhagen ? ↓

City space is limited! What do you think, how much space is allocated to the different ways of moving through the city?

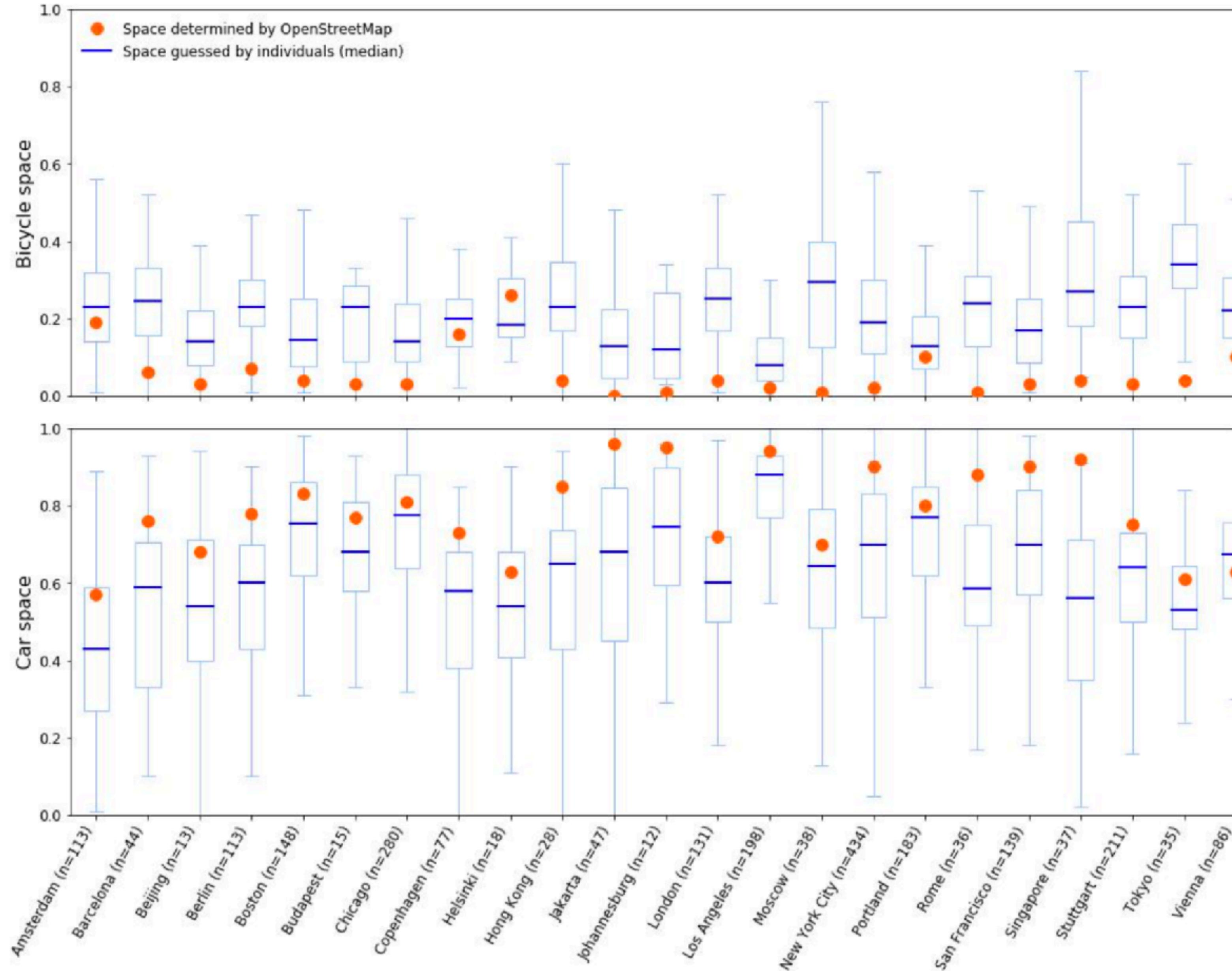
TAKE YOUR
BEST GUESS
BY ADJUSTING THE
SLIDERS

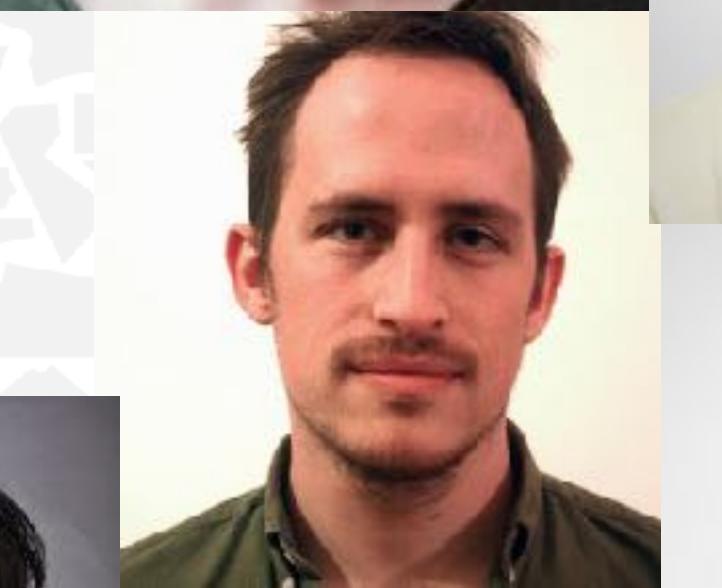
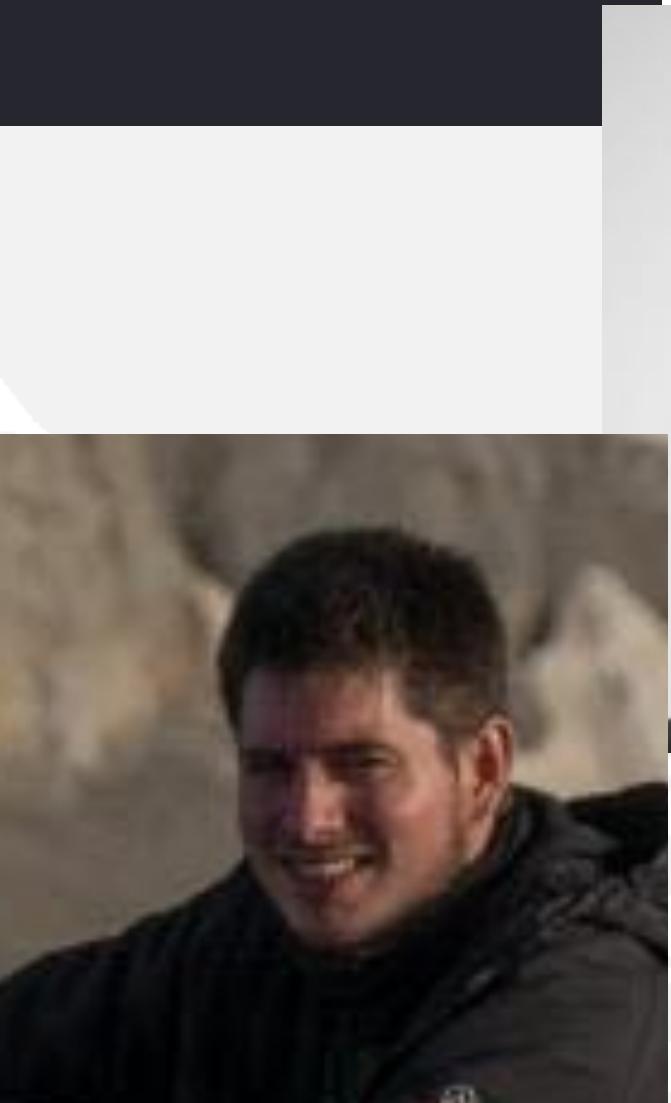


Get Started



People underestimate car space, overestimate bike space





What the Street!? made it into the permanent exhibition of Futurium, opened Sep 5

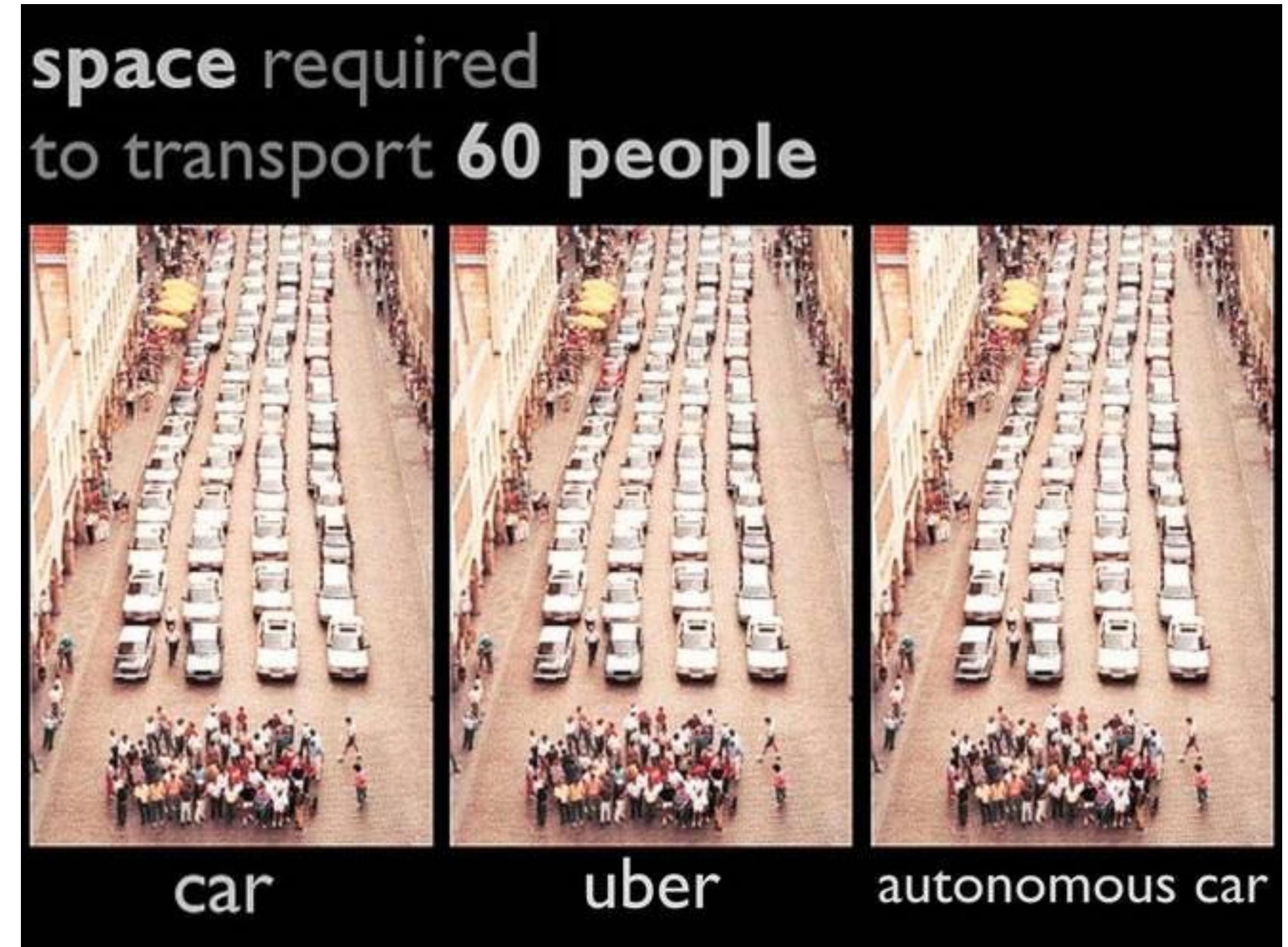


How can we get back all the space?

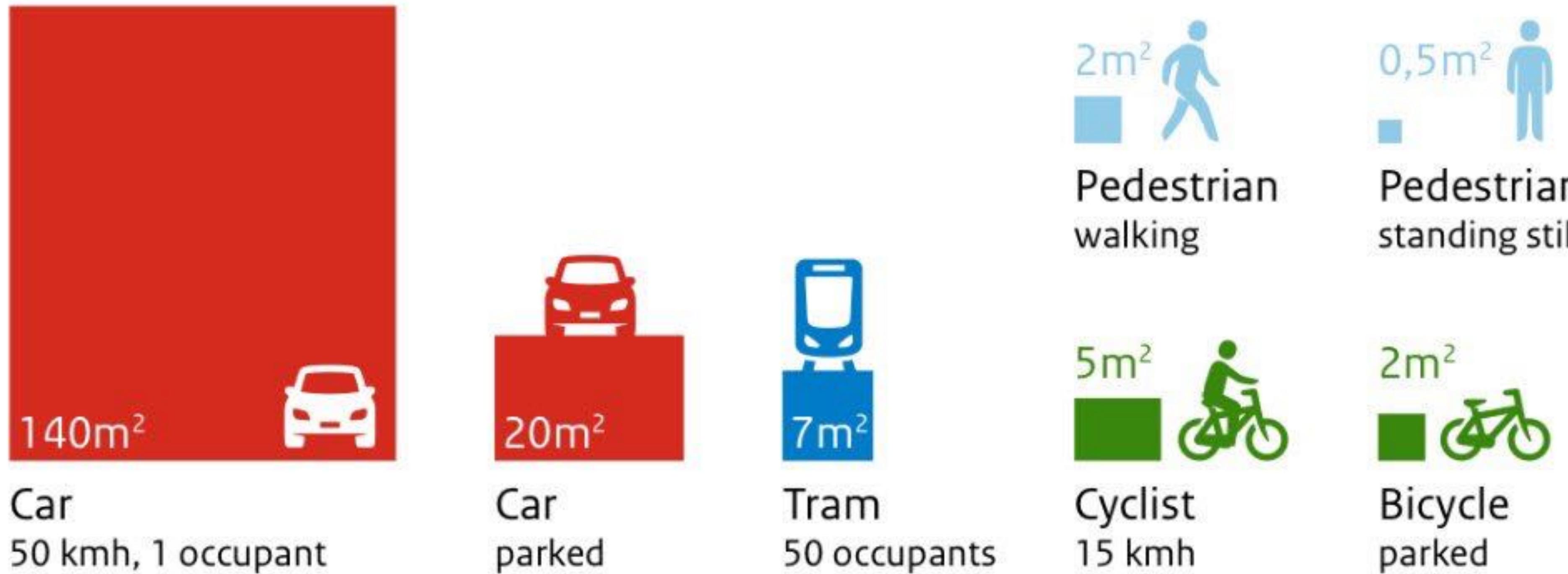
10% of self-driving cars can deliver same mobility



Self-driving, shared cars sound nice but are NOT the ultimate solution



You can't beat math: Simple geometry tells us cars will ALWAYS be inefficient



What can philanthropists / policymakers do?

1) Support OpenData initiatives

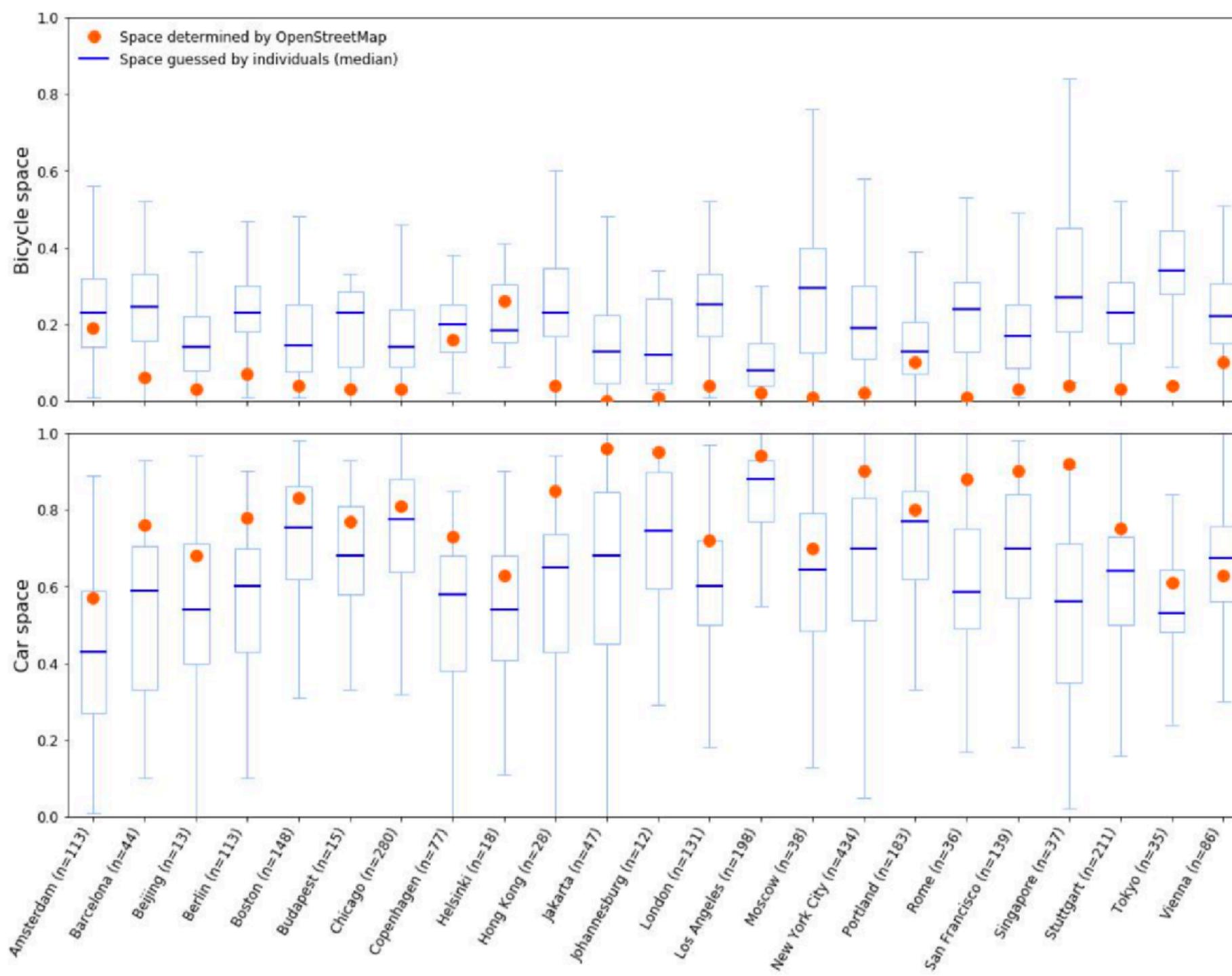


OpenStreetMap

What can philanthropists / policymakers do?

1) Support OpenData initiatives

2) Become aware of our biases



What can philanthropists / policymakers do?

- 1) Support OpenData initiatives
- 2) Become aware of our biases
- 3) Support bold policies towards liveable cities

