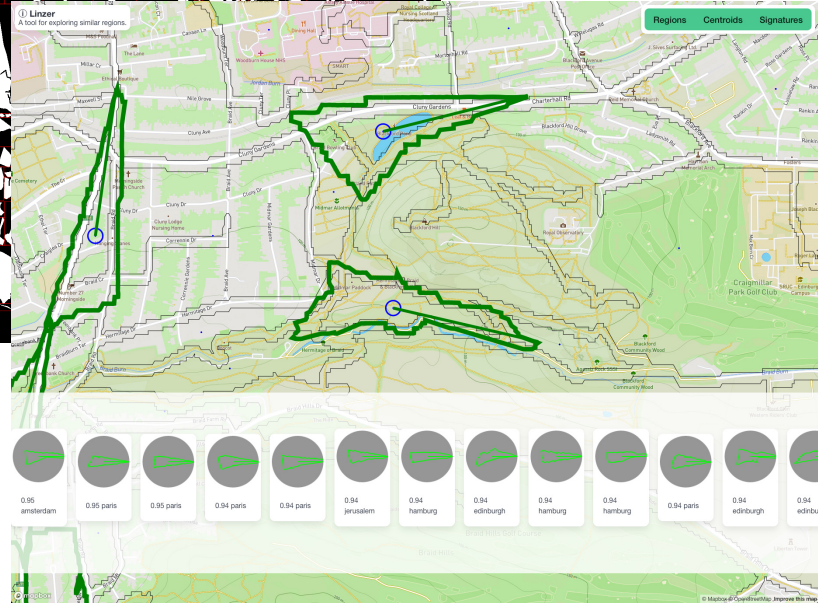
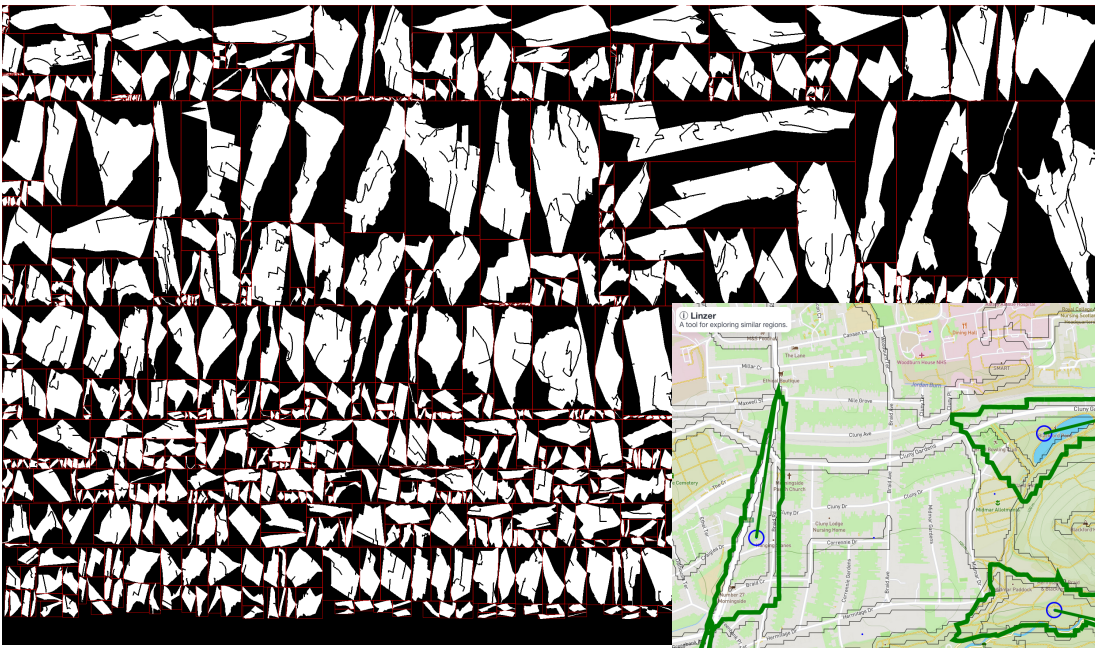




Biscuits and Beyond



<https://geo.houseofmoran.io>



<https://www.houseofmoran.com>



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Who am I?

- Principal Engineer at Skyscanner
- Started too many side-projects I never finished
- Persistent Geo Amateur
- Why not start a '*single*' Geo project I never finish and call it Art?



LES VILLES RANGEES

impressions numériques en 3ex sur papier Hahnemühle 310g// 80 cm x 110 cm par plan.



berlin / berlin rangé



Why

I wonder if I can do that
automatically?

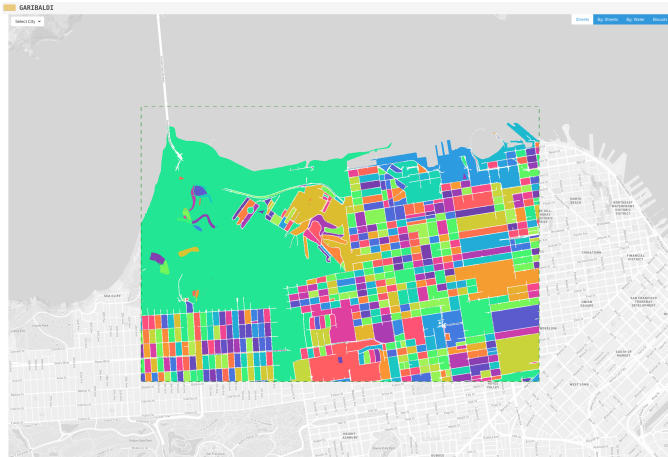


History



<https://speculaas.houseofmoran.io/>

- 😄 bin-packing auto-layout
- 😄 animated and interactive
- 😞 screenshotted static 'maps'



<https://garibaldi.houseofmoran.io/>

- 😄 dynamic maps
- 😄 interactive (runs in browser)
- 🤖 pixel-based region-building affected by resolution quirks



History

Maybe I have to learn
about GIS after all?

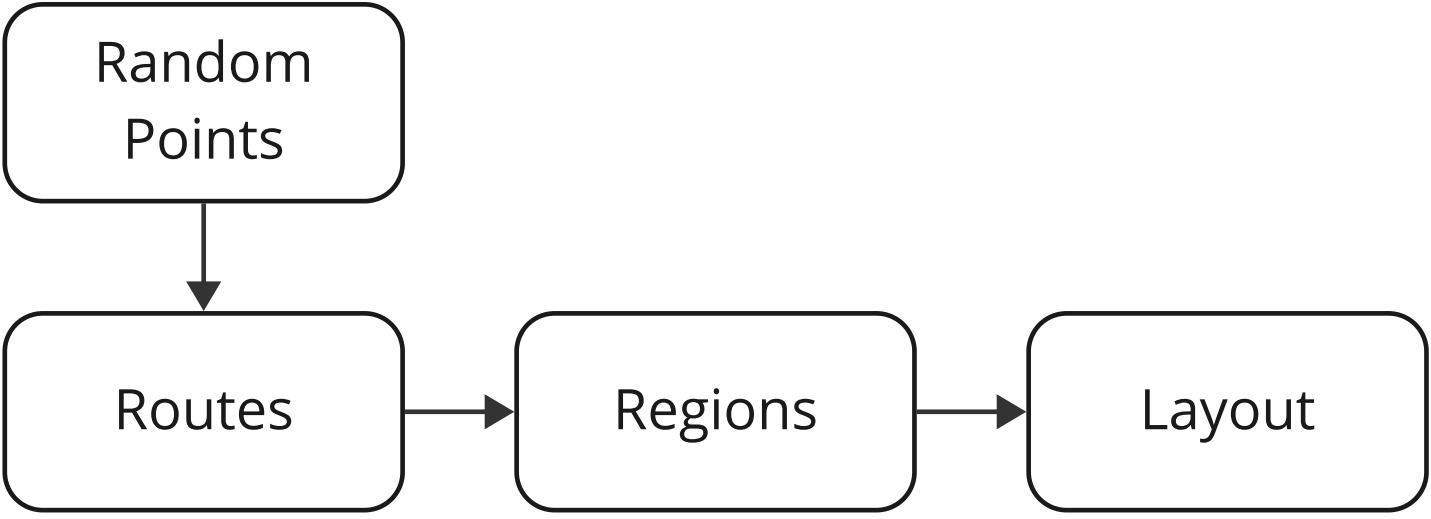


History

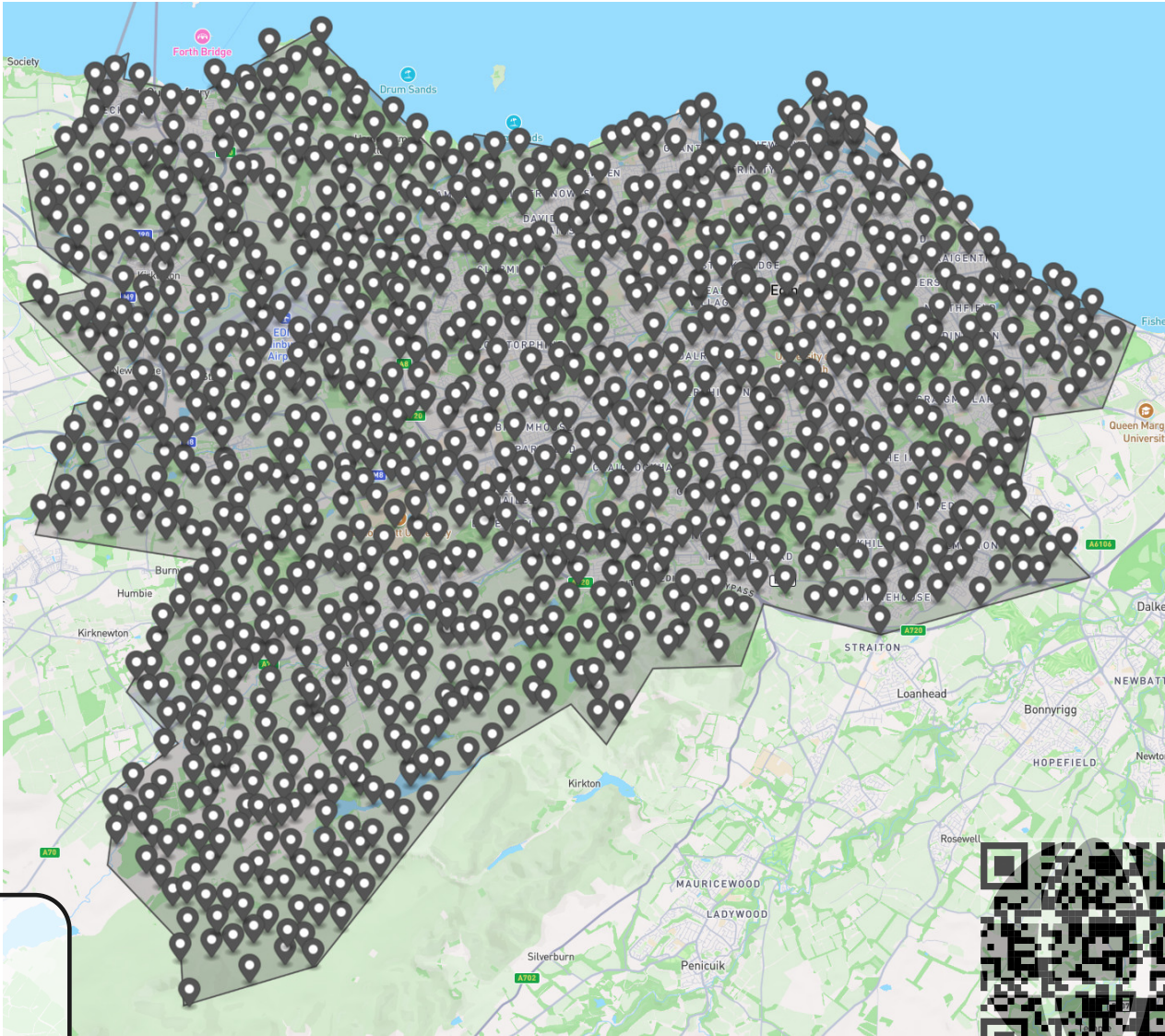
(Also, write everything in  / )



How



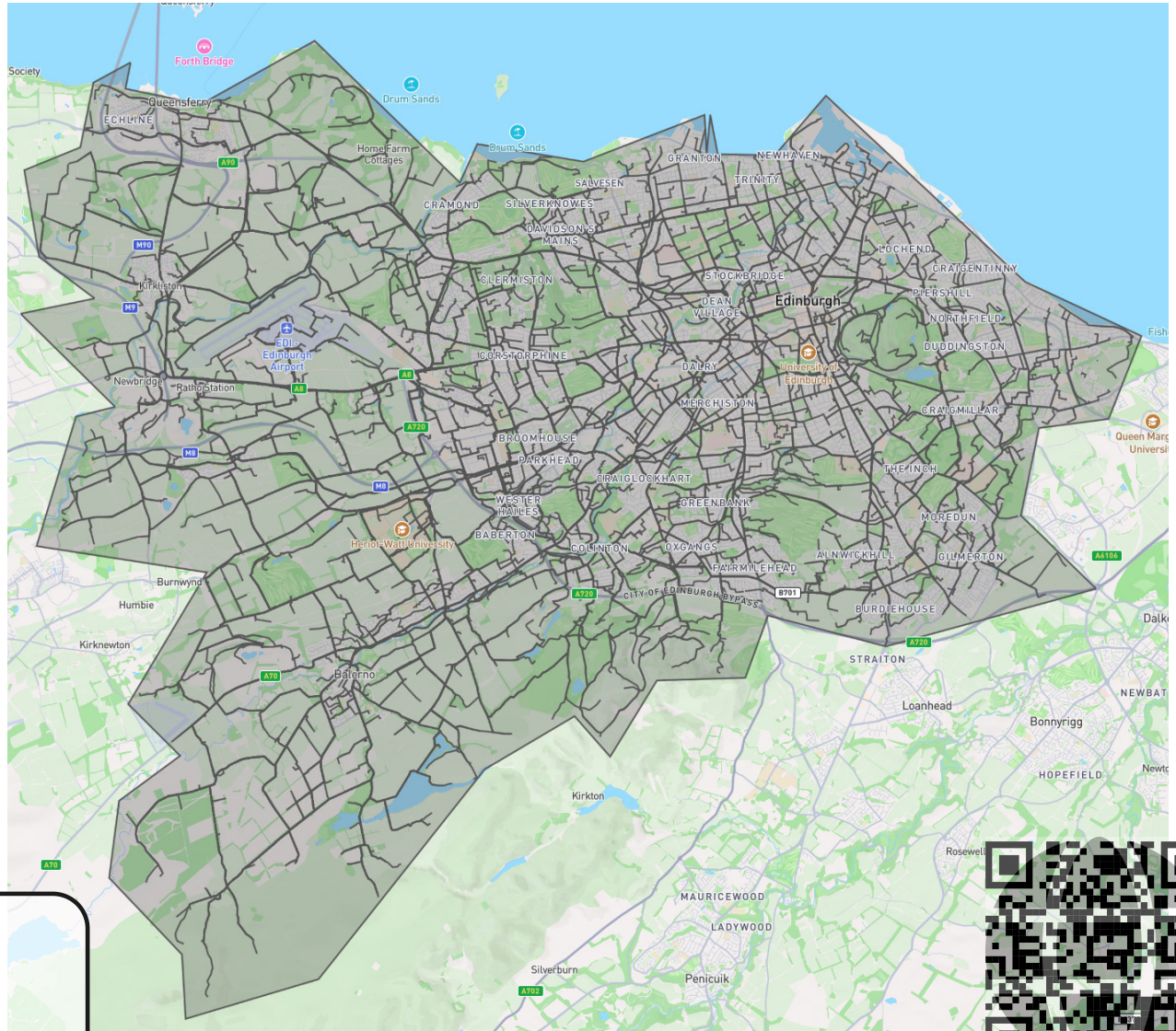
How



Random
Points



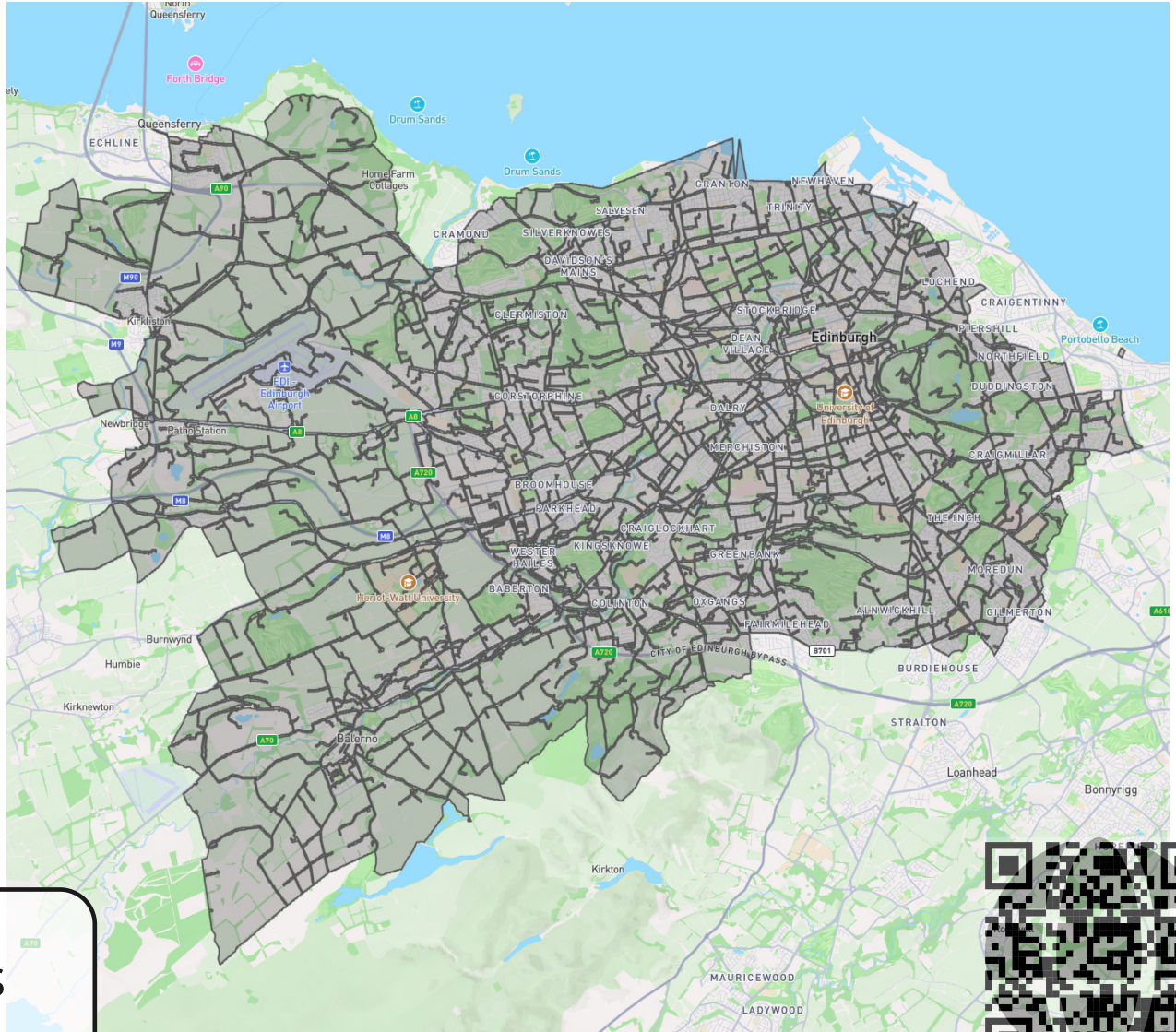
How



Routes



How



Regions



How



Layout



History



<https://github.com/mikemoraned/geo/tree/main/apps/linzer>

- 😊 pedestrian and auto-biased route sources
- 😊 deterministic
- 😊 bin-packing auto-layout



History

Maybe copying ideas from
Artists isn't so cool anymore?
(was it ever?)

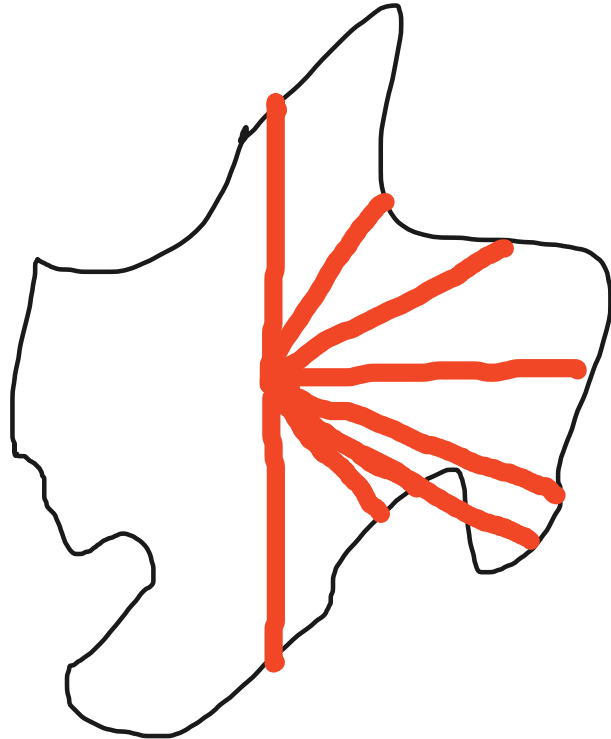
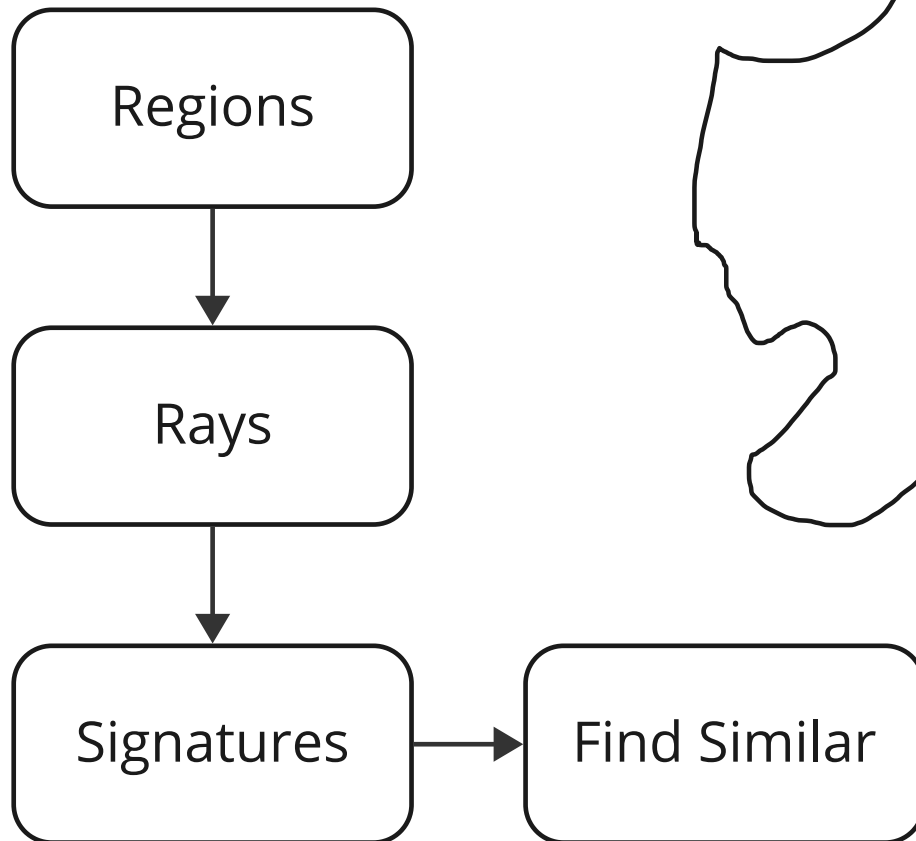


History

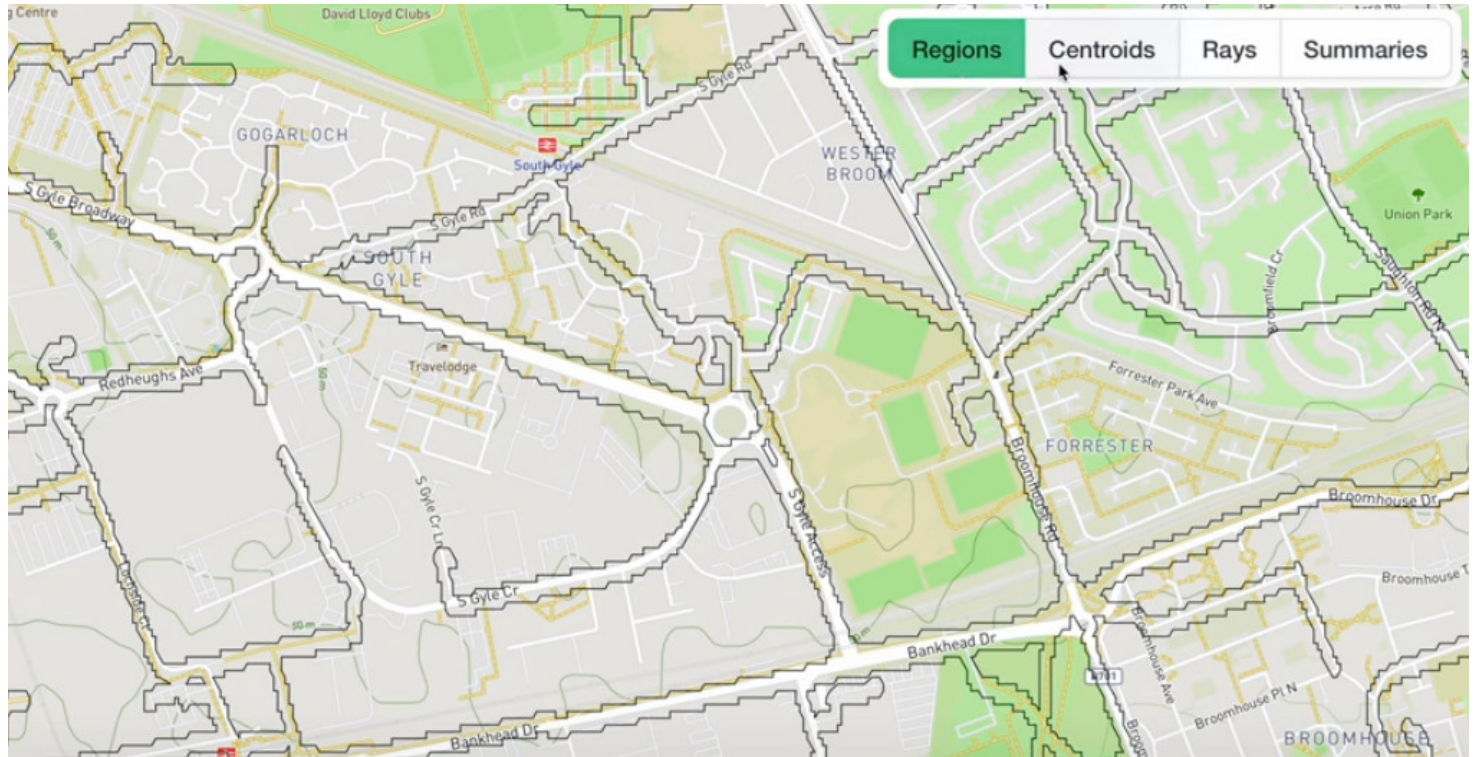
Let's build the foundations
for fucking about



How



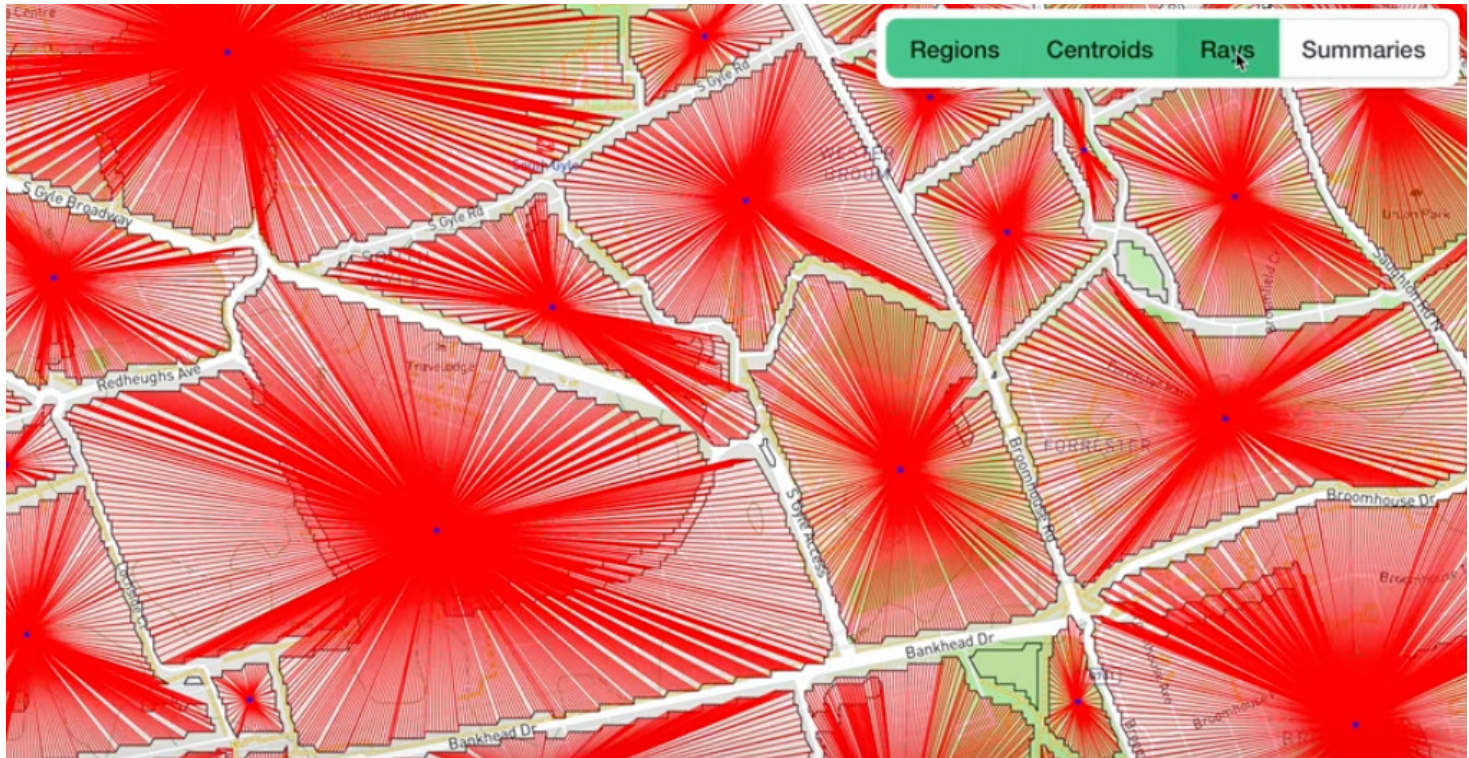
How



Regions



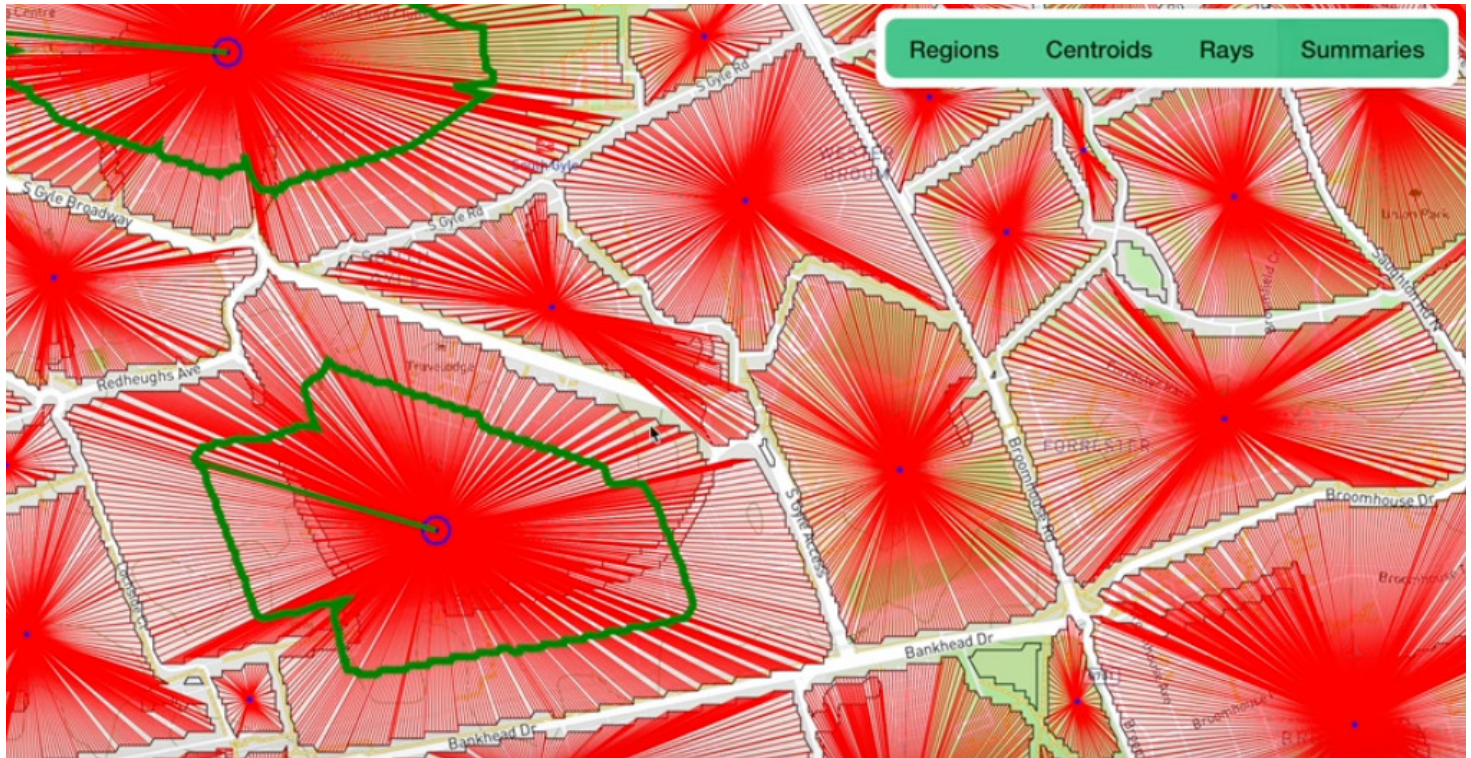
How



Rays



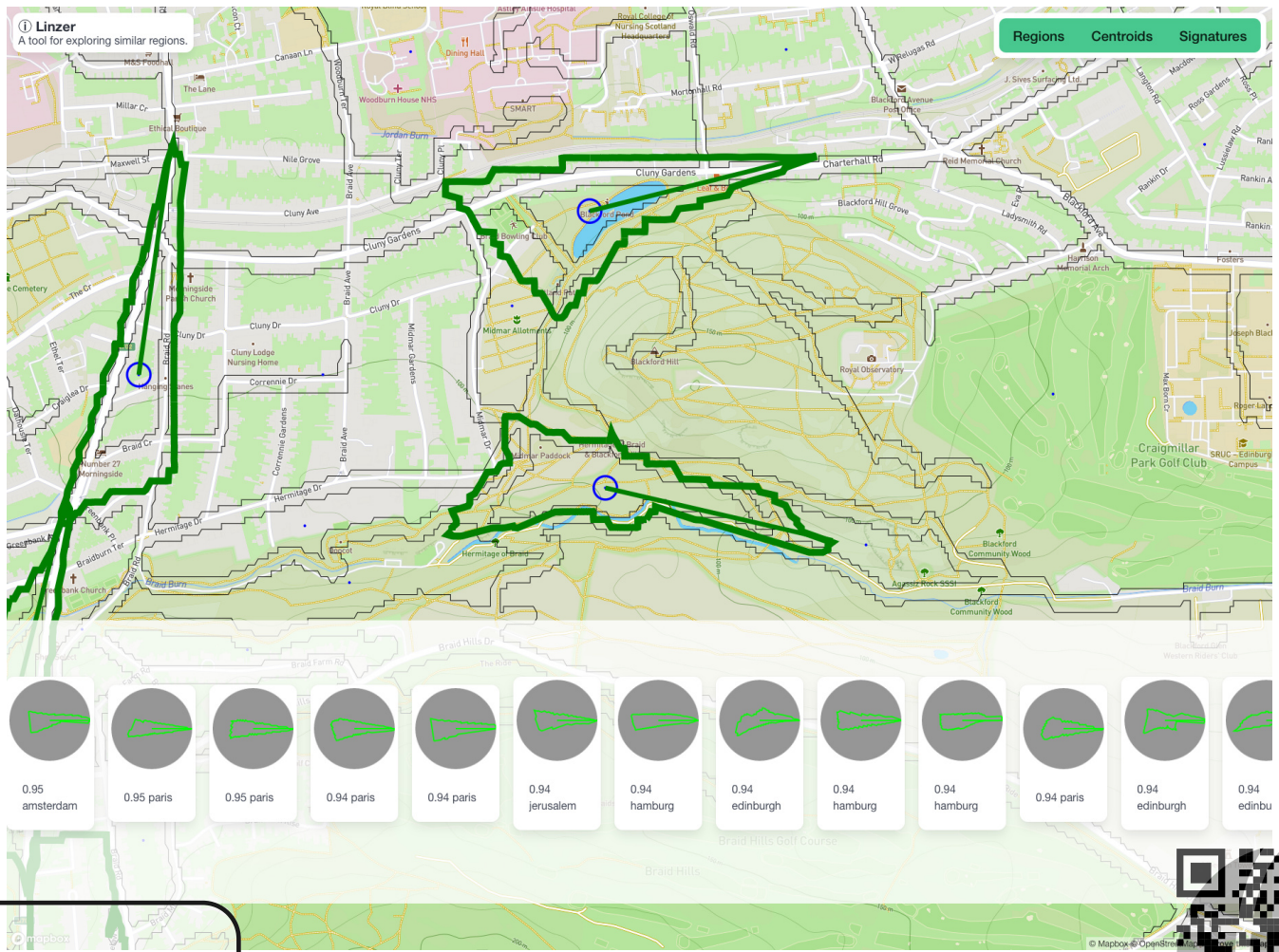
How



Signatures

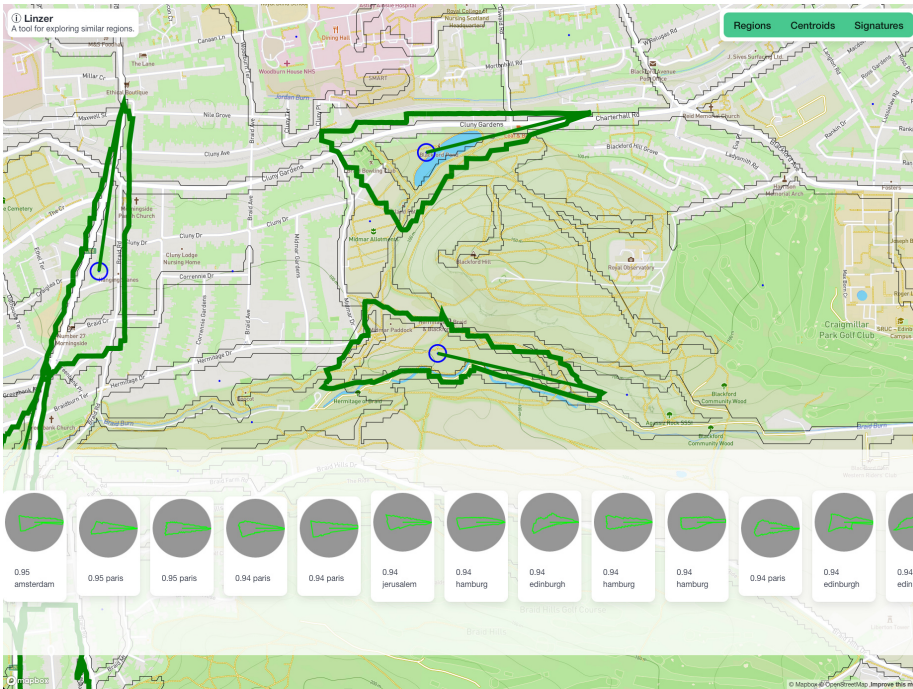


How



Find Similar

Now



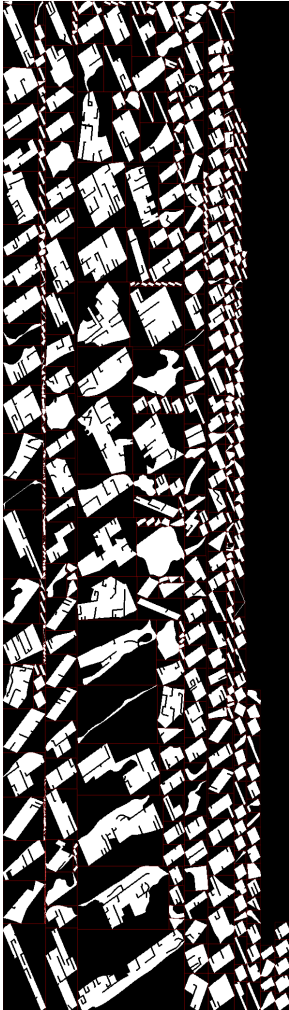
<https://linzer.houseofmoran.io>

- 😊 explore in the browser
- 😊 find similar regions
- 😞 not fully dynamic maps

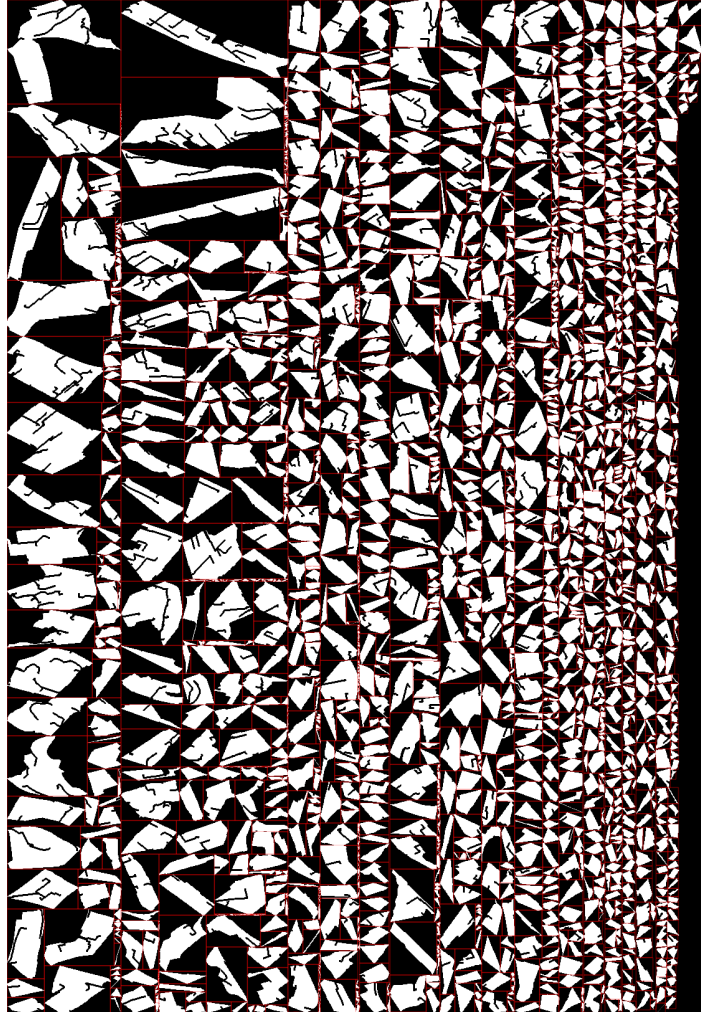


Quiz / Questions

A:



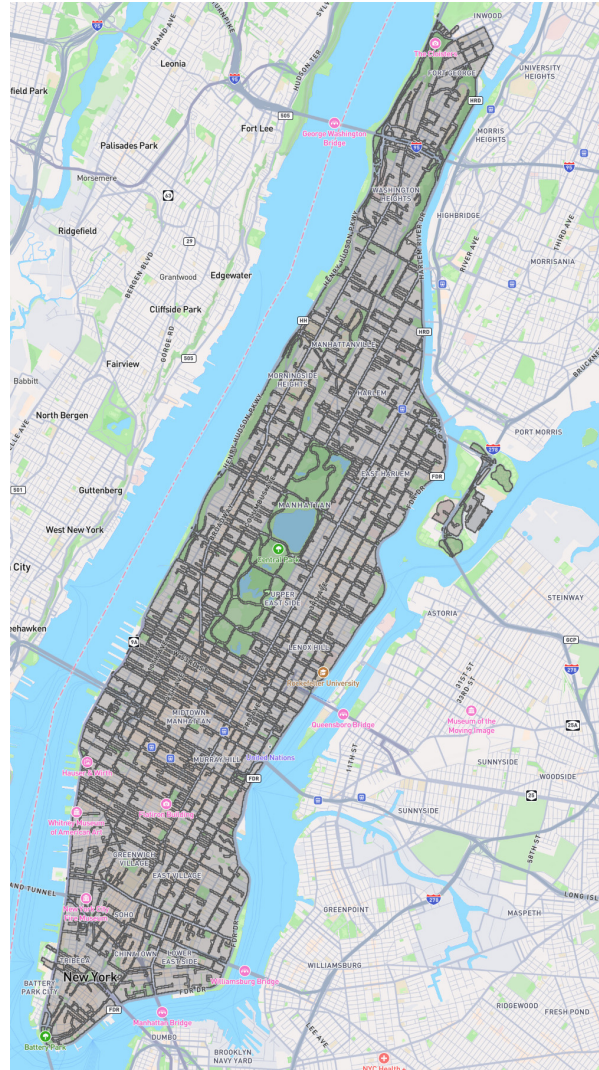
B:



*Which is
New York
and
which is
Paris?*



New York Autos



Paris Pedestrians



Resources / Useful stuff / Thanks

So many things, but in particular:

Debugging

geojson.io



geojson.io | powered by Mapbox

A quick, simple tool for creating, viewing, and sharing spatial data.

Base
Map

mapbox
Maps and
location for
developers

www.mapbox.com

Mapbox | Maps, Navigation, Search, and Data

APIs and SDKs for AI-powered maps, location search, turn-by-turn navigation, and geospatial data in mobile or web apps. Get started for free.

OVERTURE MAPS
FOUNDATION

overturemaps.org

Home - Overture Foundation

Overture is powering current generation map products by reliable, easy-to-use, and intel open map data. Our data sup developers who build map se use geospatial data.

Open
Data

www.openstreet...



OpenStreetMap

OpenStreetMap is a map of the world, created by people like you and free to use under an open license.

Route-
finding

Stadia Maps

Private, Performant, & Affordable Location APIs

stadiamaps.com

Stadia Maps: Location APIs for humans.

Location APIs for humans: map tiles, static maps, routing, geocoding and search for every app.

Core
Geo
Algorithms

georust.org

GeoRust

An ecosystem of geospatial tools and libraries written in Rust. 🦀 Say hello or ask questions on Discord. 💻 Development occurs on GitHub across per-project repositories. 📖 Check out the book for a lighthearted introduction to Rust and Geospatial. Handlin...

Friendly
people!

Exploring
Geo
Datasets

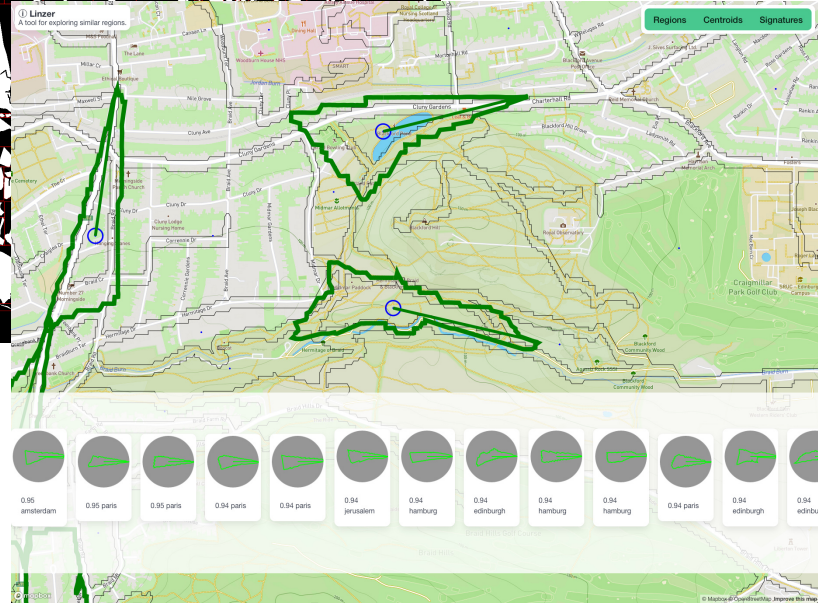
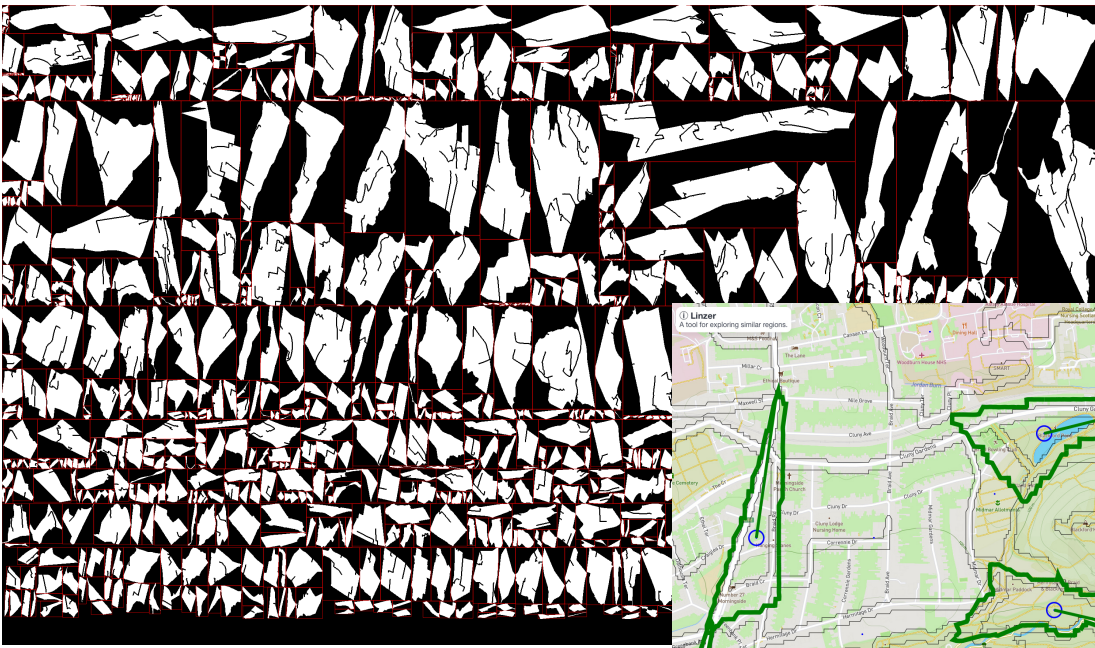
[EDI:](#)
[June](#)
[24th!](#)

thegeomob.com

**Geomob -
geoinnovation for fun
or profit**

Geomob is an event series and podcast for location based service creators and enthusiasts.





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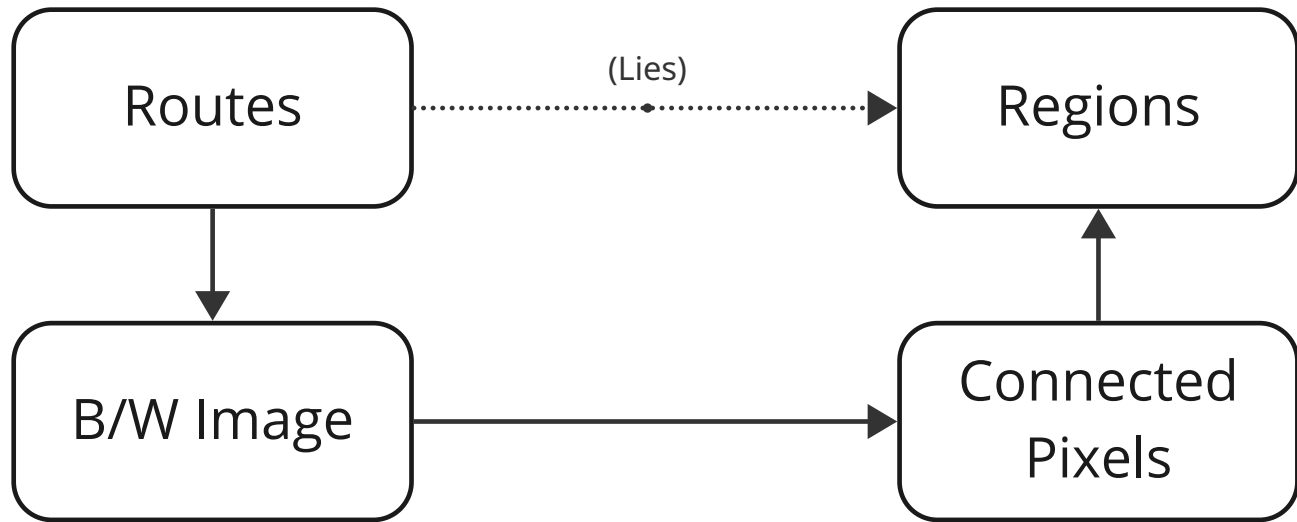


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Extra: pixel-based region-building



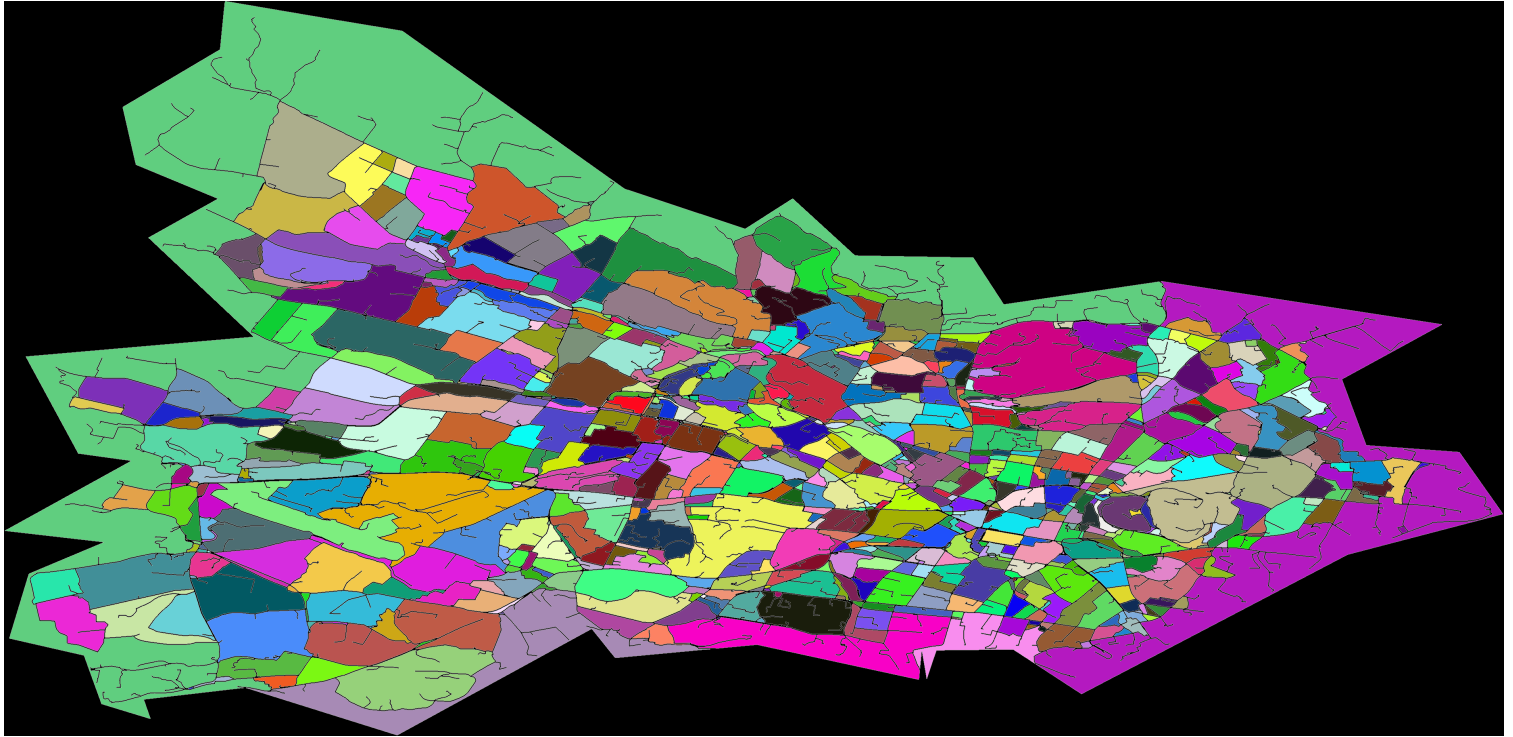
How



B/W Image



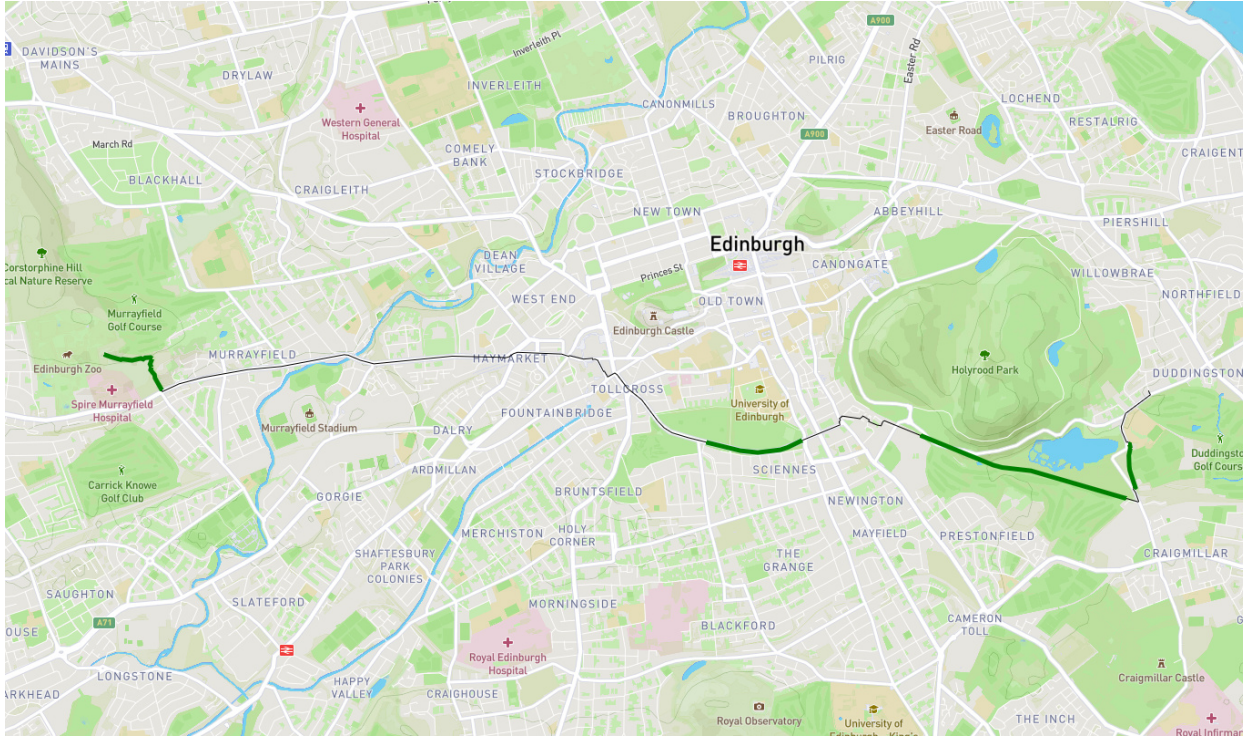
How



Connected
Pixels



Extra: Greenery and Water



<https://spectrum.houseofmoran.io>



```

WITH city AS (
    SELECT geometry
    FROM   division_area
    WHERE
        -- id = '0851d7537fffffffff015d4f9f0d8b31e6' -- Berlin
        -- id = '085ba2a9bfffffffff01a888f06236016b' -- Edinburgh
        id = '0850a811bfffffffff010c628b3d6d6ee3' -- Amsterdam
),
bbox AS (
    SELECT
        ST_XMin(env) AS xmin,
        ST_YMin(env) AS ymin,
        ST_XMax(env) AS xmax,
        ST_YMax(env) AS ymax
    FROM (
        SELECT ST_Envelope(geometry) AS env
        FROM   city
    )
),

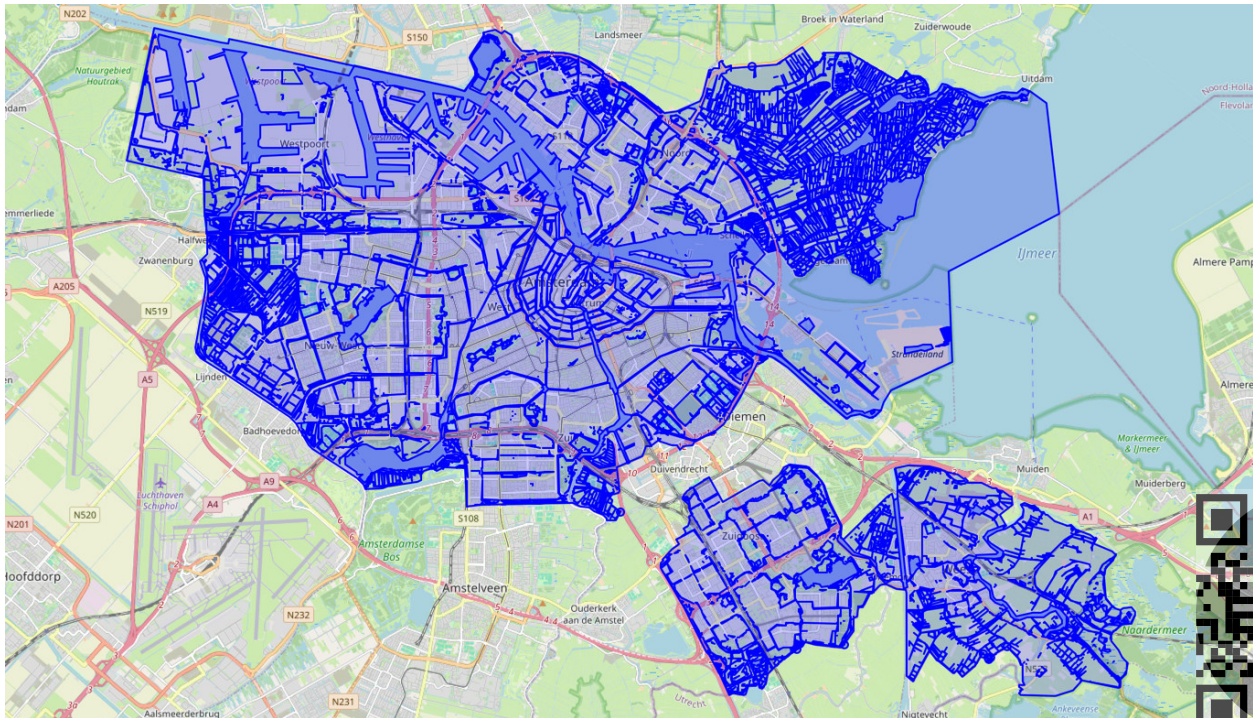
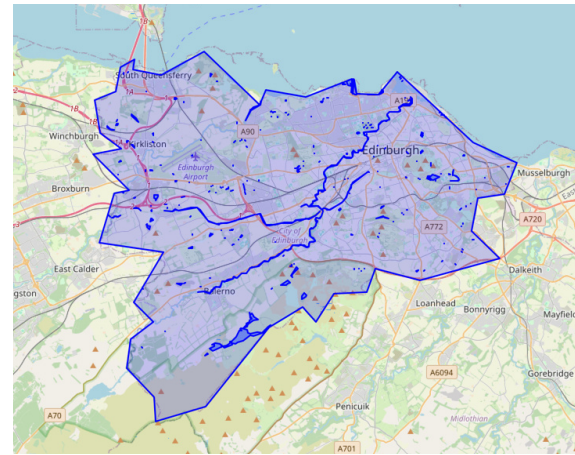
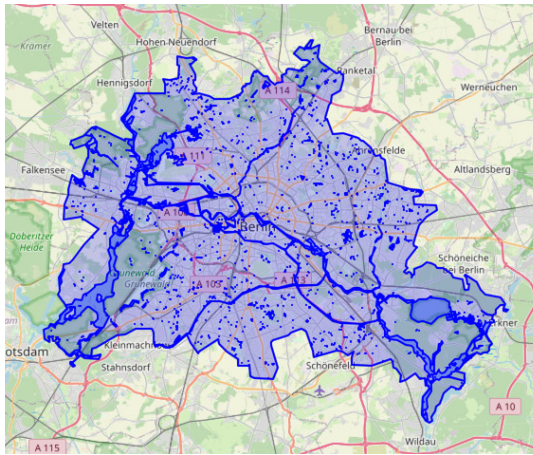
unioned AS (
    SELECT geometry
    FROM   city
    UNION ALL
    SELECT ST_Union_Agg(w.geometry) AS geometry
    FROM   base_water      AS w
    CROSS JOIN bbox        AS bb
    WHERE  ST_GeometryType(w.geometry) IN ('POLYGON',
                                           'MULTIPOLYGON')

        AND (w.bbox).xmin > bb.xmin
        AND (w.bbox).ymin > bb.ymin
        AND (w.bbox).xmax < bb.xmax
        AND (w.bbox).ymax < bb.ymax
), intersection AS (
    SELECT ST_Intersection_Agg(geometry) AS geometry
    FROM   unioned
)
SELECT geometry, ST_Area(geometry) AS area
FROM   intersection
UNION ALL
SELECT geometry, ST_Area(geometry) AS area
FROM   city

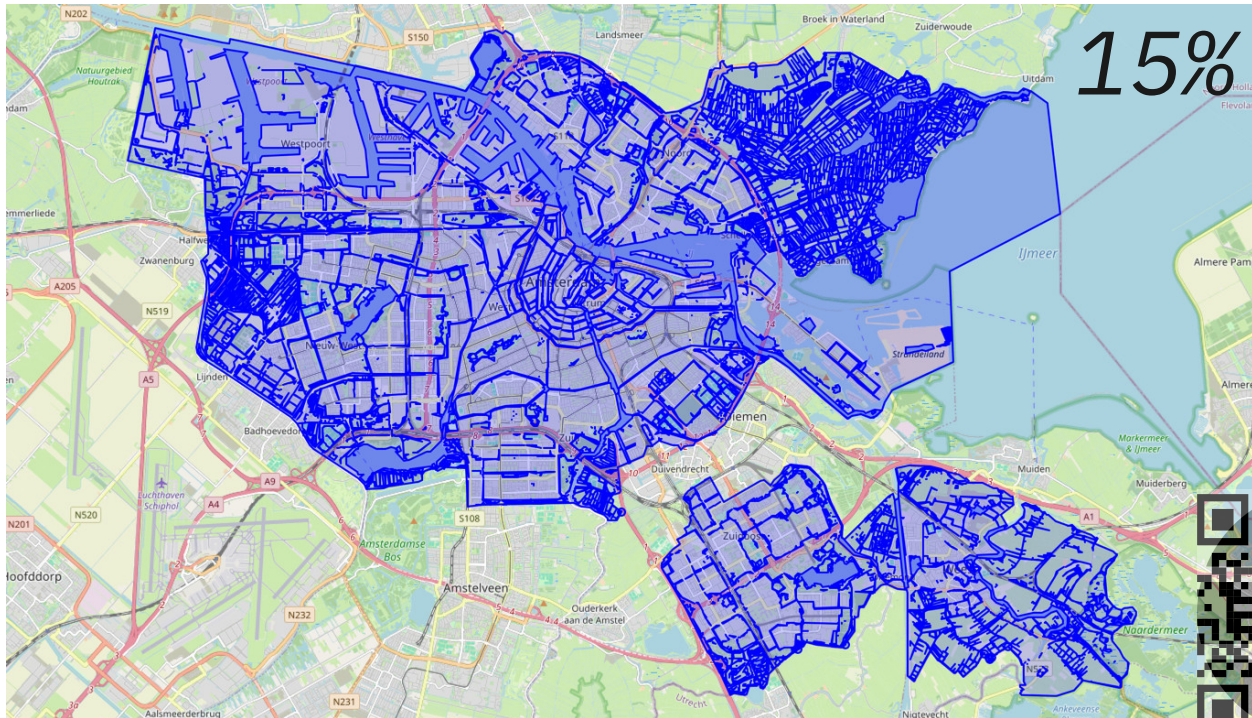
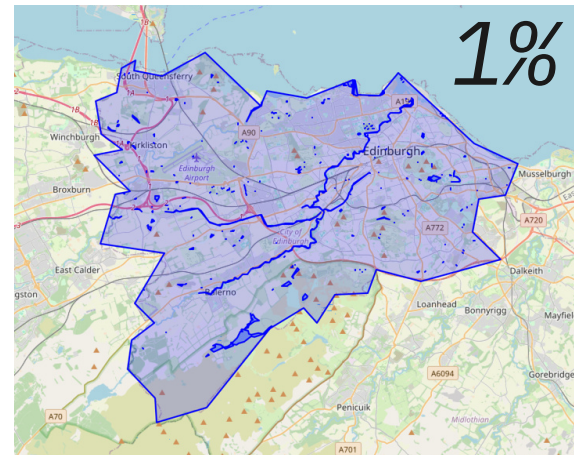
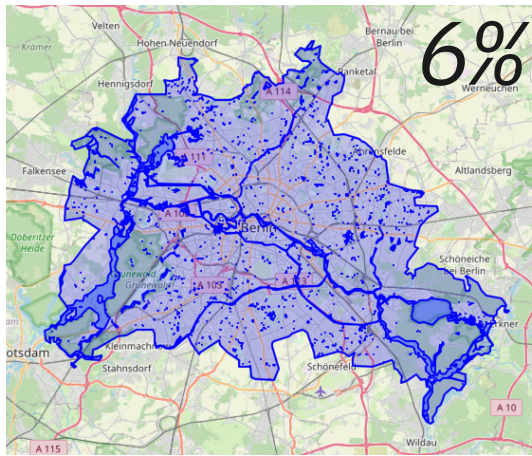
```

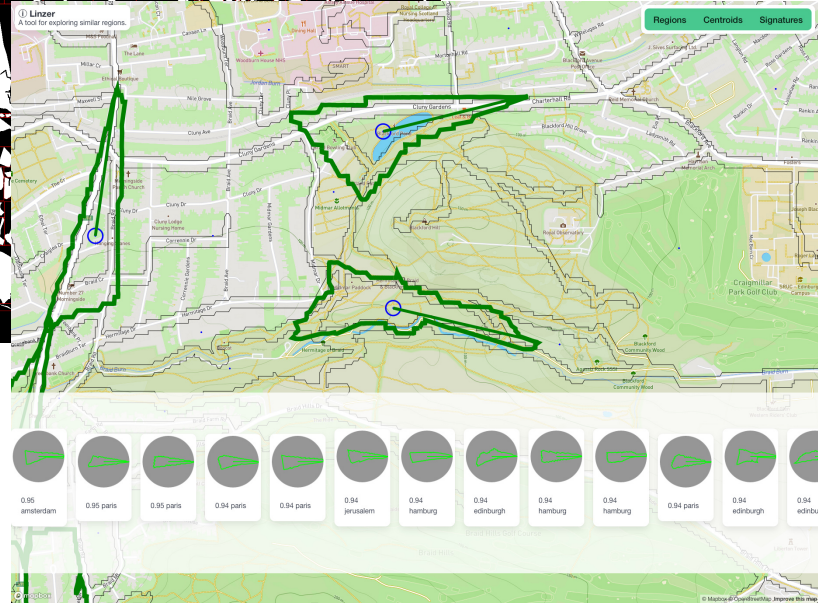
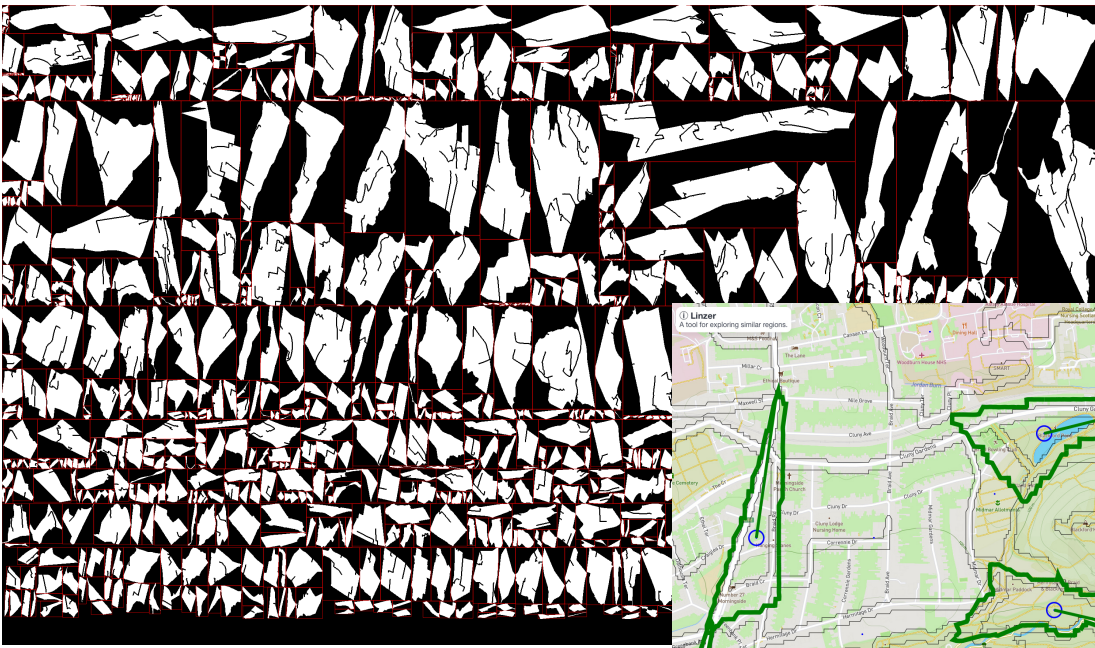


Quiz



Quiz





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