

# *Spatial Signatures in Great Britain*

*Open source classification of space*

<https://urbangrammarai.xyz>

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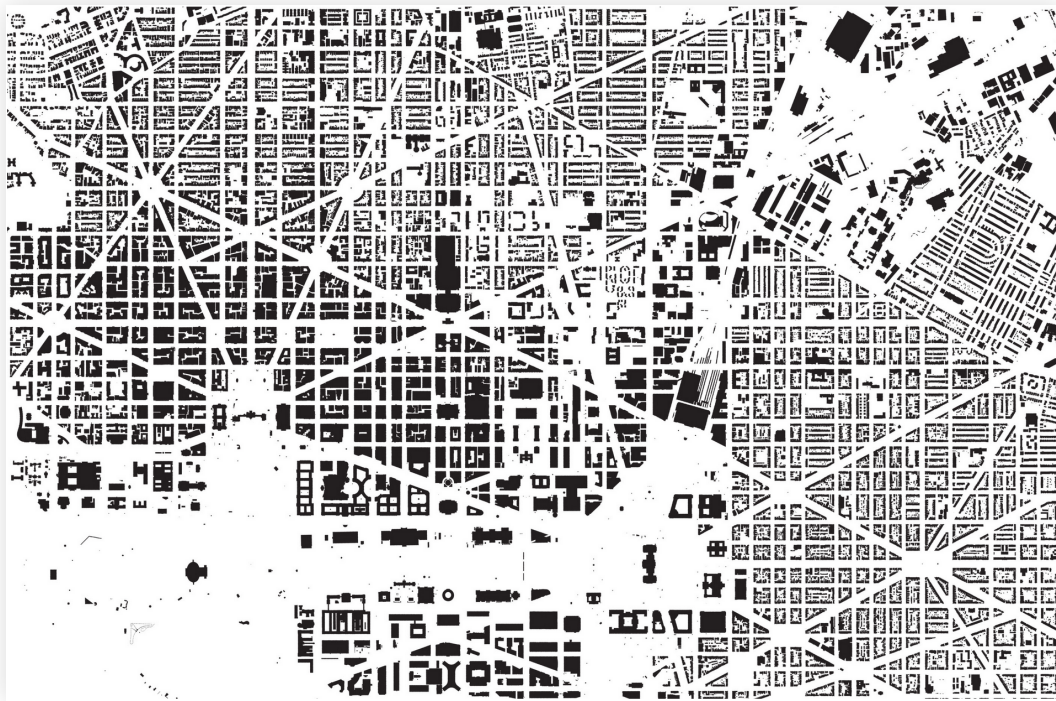


**The  
Alan Turing  
Institute**



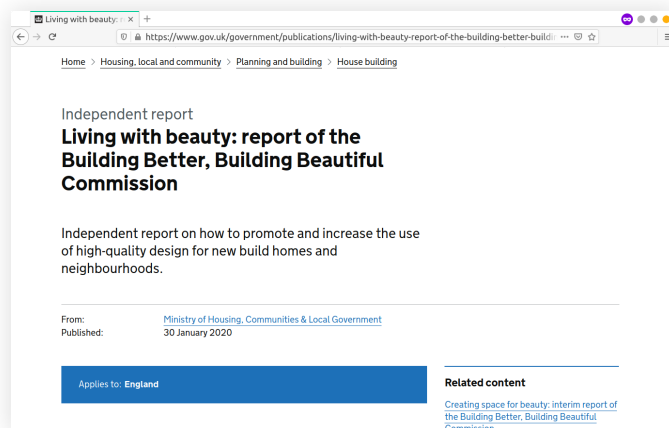
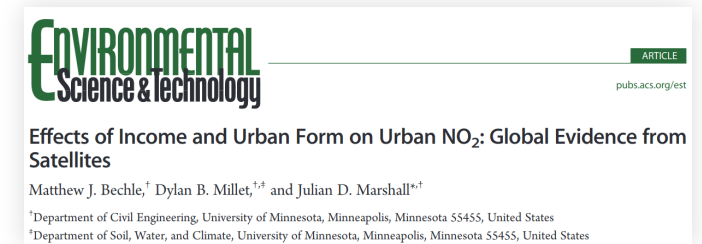
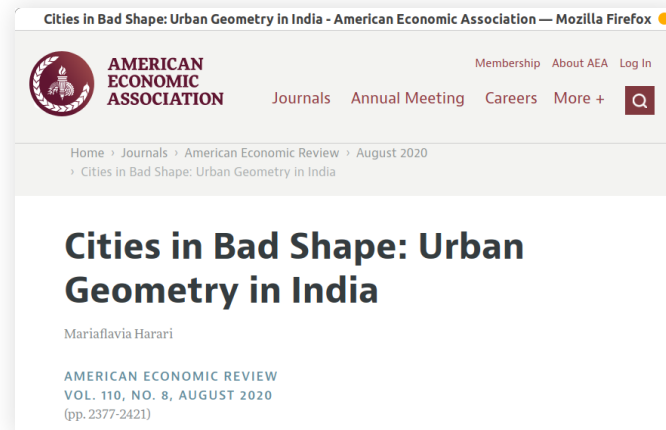
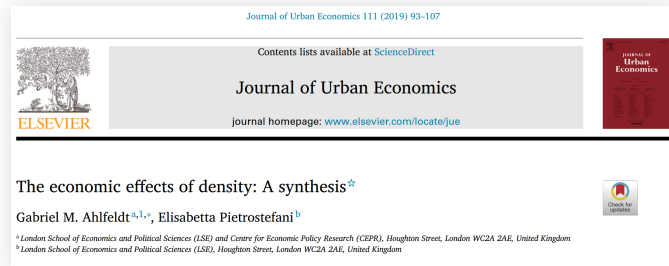
Geographic  
Data Science  
Lab

# How we arrange “stuff” in cities matters...



Source: *A map of every building in America* (New York Times)

... it matters *a lot*



## Form

*What does it look like?*

“Physical structure and appearance of cities”

## Function

*What is it used for?*

“Activities that take place within an environment”



# Spatial Signatures

*A characterisation of space based on form and function  
designed to understand urban environments*

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# Characters

## *Form*

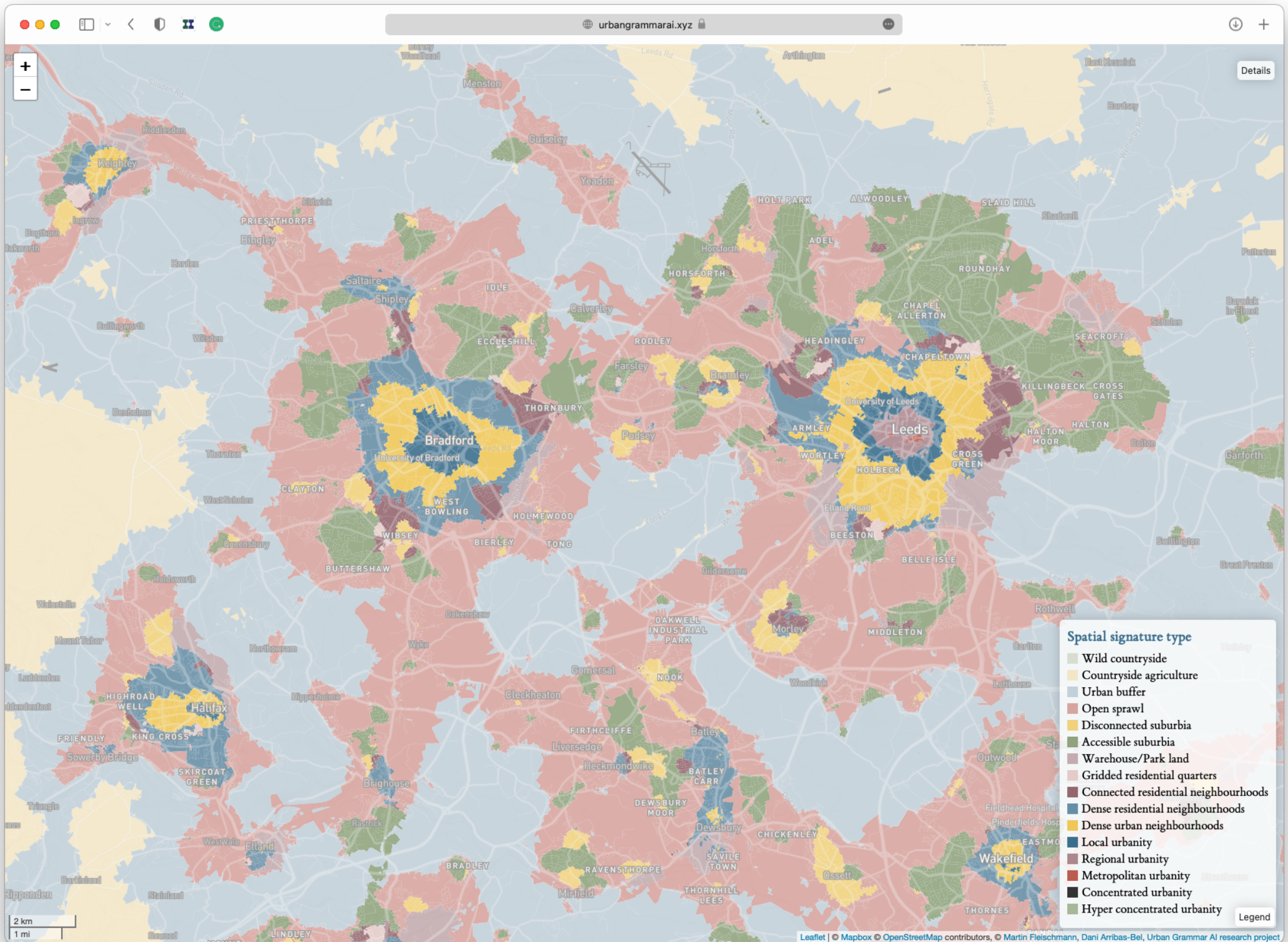
- Dimension
- Shape
- Intensity
- Connectivity
- Diversity

## *Function*

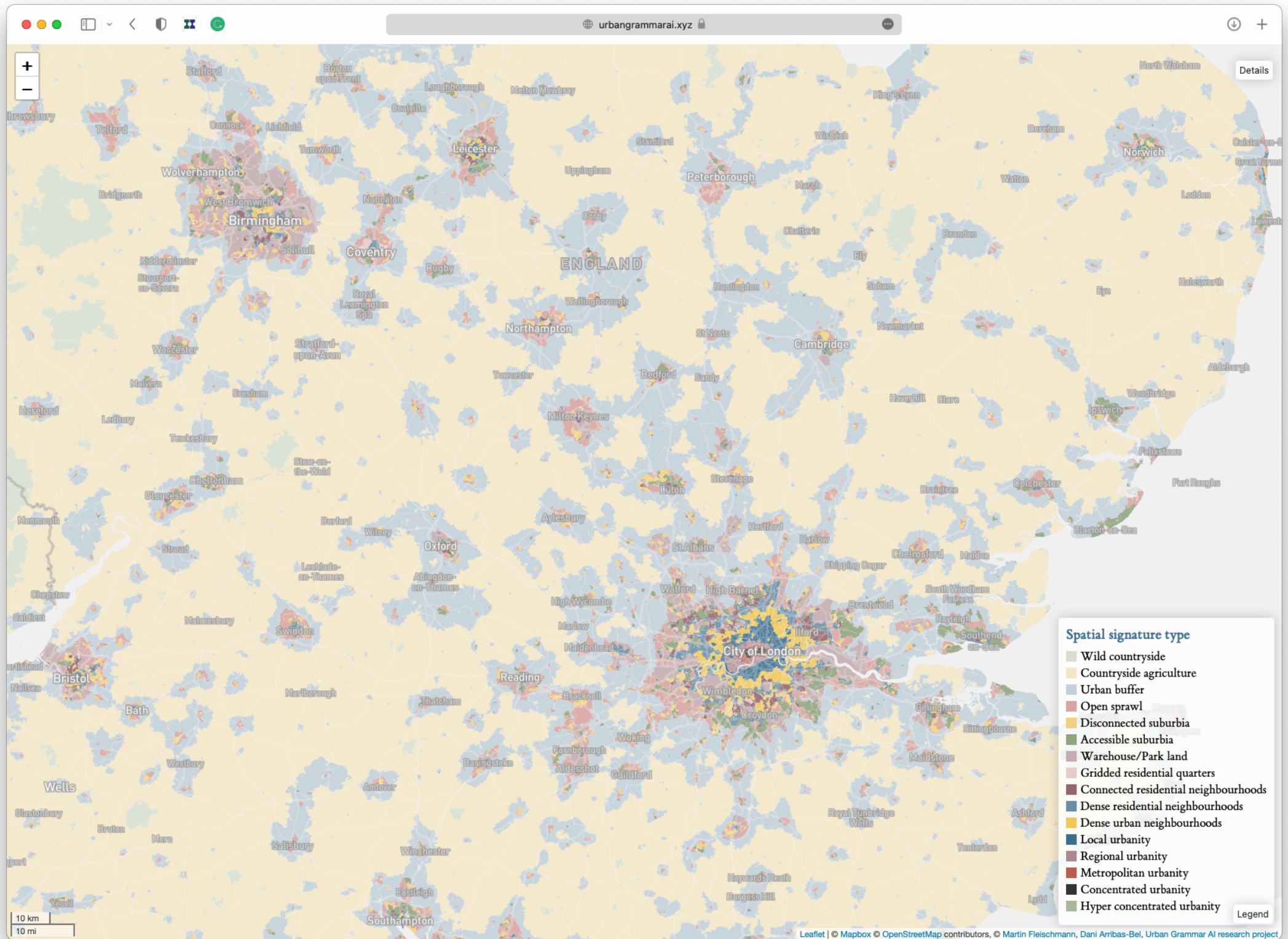
- Population
- Employment
- Industry
- Land  
use/cover
- Amenity access

$N \approx 300$

# Spatial Signatures of Great Britain







# The map

<https://urbangrammarai.xyz/great-britain>

# The data



Consumer  
Data  
Research  
Centre

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An ESRC Data  
Investment

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