

# *Spatial Signatures in Great Britain*

*Open source classification of space*

<https://urbangrammarai.xyz>

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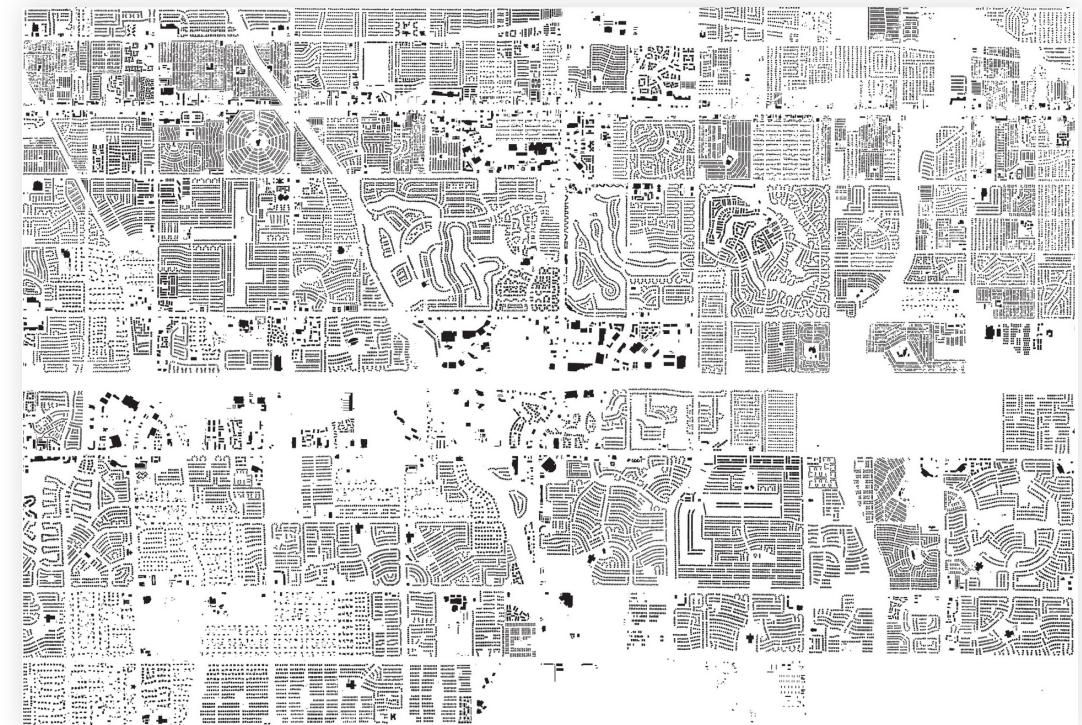


The  
Alan Turing  
Institute



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*

Journal of Urban Economics 111 (2019) 93–107  
Contents lists available at ScienceDirect  
Journal of Urban Economics journal homepage: [www.elsevier.com/locate/jue](http://www.elsevier.com/locate/jue)

The economic effects of density: A synthesis<sup>☆</sup>  
Gabriel M. Ahlfeldt<sup>a,1,\*</sup>, Elisabetta Pietrostefani<sup>b</sup>  
<sup>a</sup>London School of Economics and Political Sciences (LSE) and Centre for Economic Policy Research (CEPR), Houghton Street, London WC2A 2AE, United Kingdom  
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Cities in Bad Shape: Urban Geometry in India - American Economic Association — Mozilla Firefox

AMERICAN ECONOMIC ASSOCIATION Journals Annual Meeting Careers More +

Home > Journals > American Economic Review > August 2020 > Cities in Bad Shape: Urban Geometry in India

## Cities in Bad Shape: Urban Geometry in India

Mariaflavia Harari

AMERICAN ECONOMIC REVIEW  
VOL. 110, NO. 8, AUGUST 2020  
(pp. 2377-2421)

ARTICLE  
pubs.acs.org/est

## Environmental Science & Technology

Effects of Income and Urban Form on Urban NO<sub>2</sub>: Global Evidence from Satellites  
Matthew J. Bechle,<sup>†</sup> Dylan B. Millet,<sup>†,‡</sup> and Julian D. Marshall<sup>\*,†</sup>  
<sup>†</sup>Department of Civil Engineering, University of Minnesota, Minneapolis, Minnesota 55455, United States  
<sup>‡</sup>Department of Soil, Water, and Climate, University of Minnesota, Minneapolis, Minnesota 55455, United States

Living with beauty: report of the Building Better, Building Beautiful Commission

Independent report on how to promote and increase the use of high-quality design for new build homes and neighbourhoods.

From: Ministry of Housing, Communities & Local Government  
Published: 30 January 2020

Applies to: England

Related content  
[Creating space for beauty: interim report of the Building Better, Building Beautiful Commission](#)

## Rethinking Urban Sprawl MOVING TOWARDS SUSTAINABLE CITIES



OECD

## NEW URBAN AGENDA

H | III | UN

## 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*

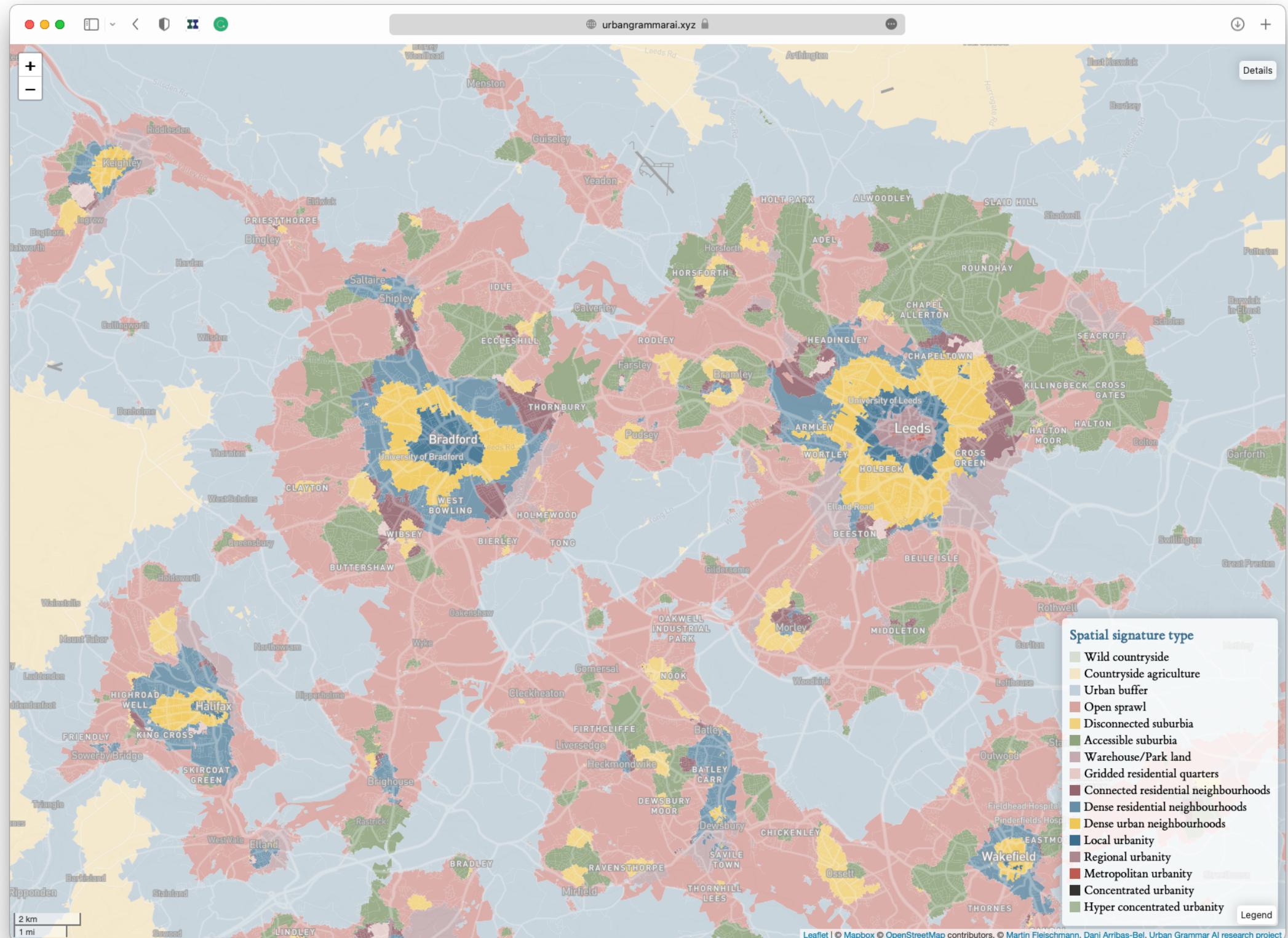
- Dimension
- Shape
- Intensity
- Connectivity
- Diversity

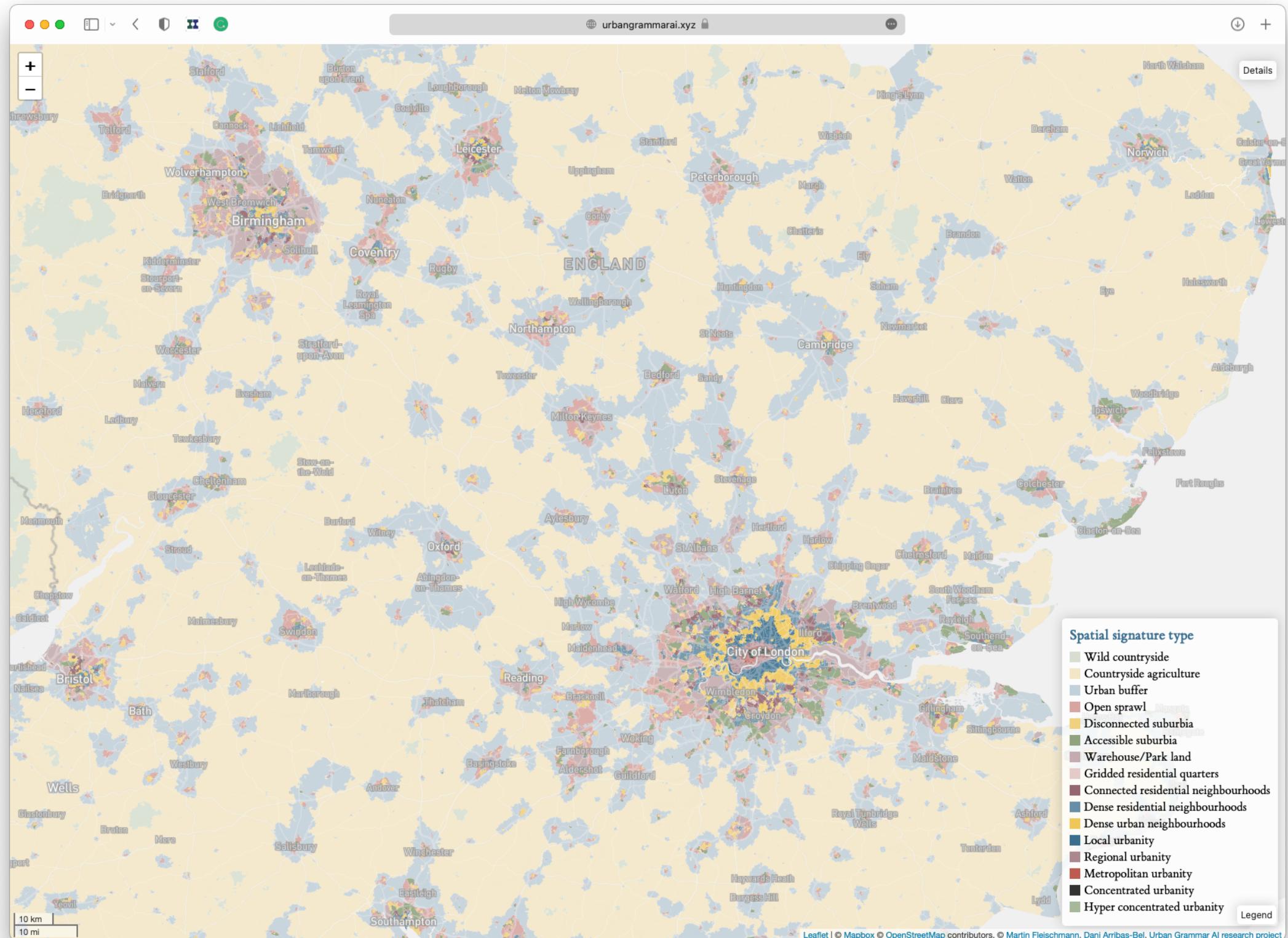
*Function*

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

$N \approx 300$

# Spatial Signatures of Great Britain

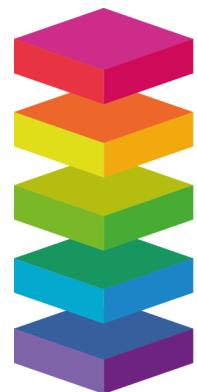




# The map

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

# The data



Consumer  
Data  
Research  
Centre

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An ESRC Data  
Investment

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