



Quantifying human behaviour with online data

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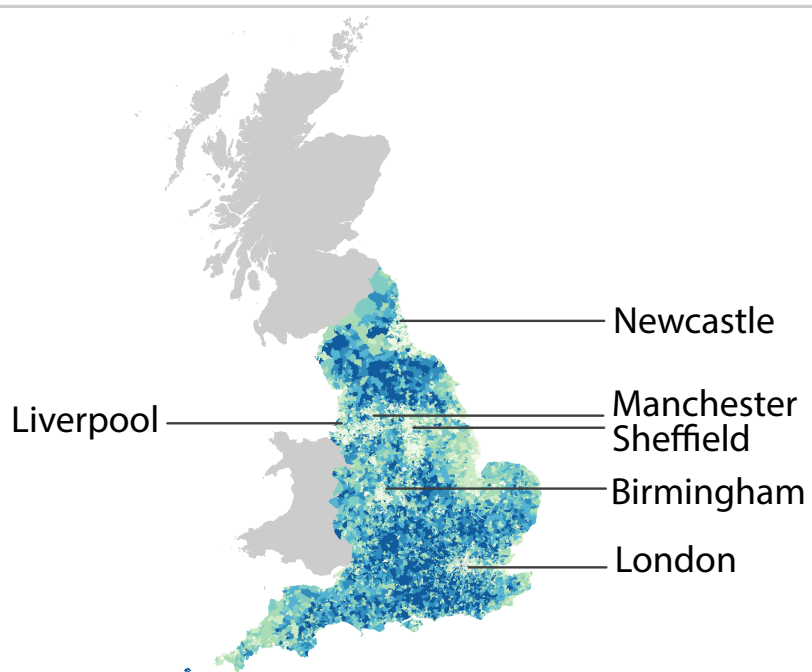
@suzymoat | @t_preis | @thedatascilab



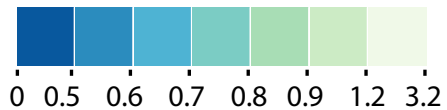
Photo: Tom Richardson (Geograph)



POOR HEALTH



**Average rates of
poor health (SMR)**





Home

FAQ

Leaderboard

ScenicOrNot helps you to explore every corner of England, Scotland and Wales, all the while comparing your aesthetic judgements with fellow players.

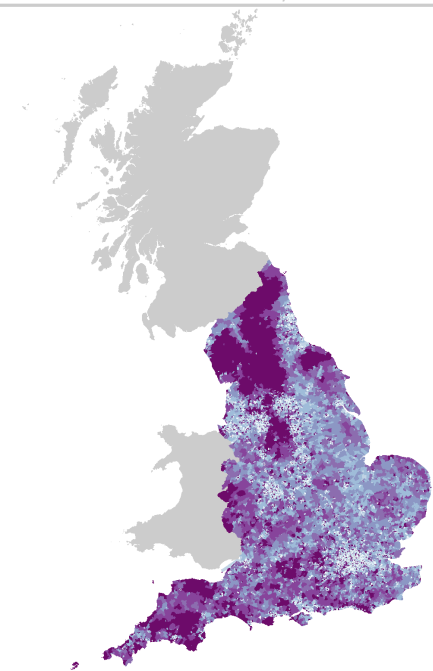
VOTING BOARD
- click numbers below to vote -

Not Scenic  1 2 3 4 5 6 7 8 9 10  Very Scenic

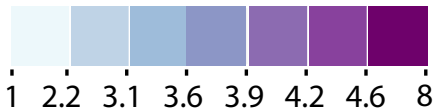


[Photo by David Wild \(Licence\)](#)

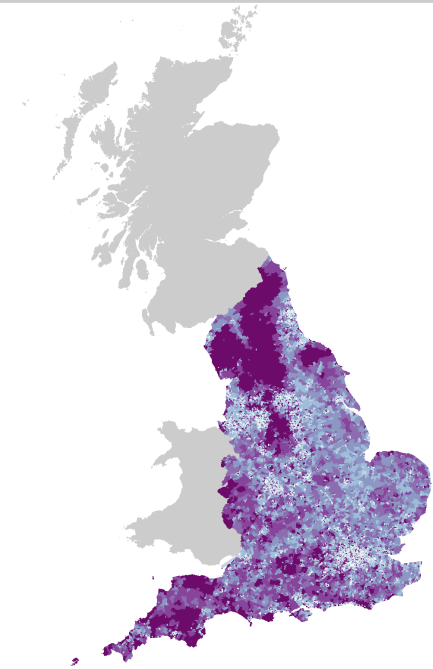
SCENICNESS



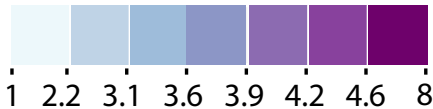
Average scenic rating



SCENICNESS



Average scenic rating

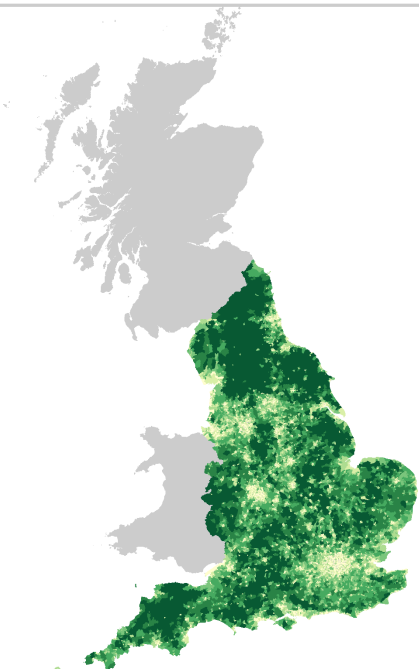


People who live
in more scenic
locations
report
better health

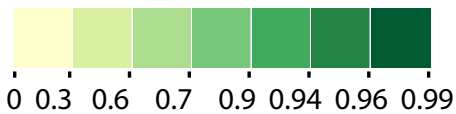
Seresinhe, Preis & Moat (2015)



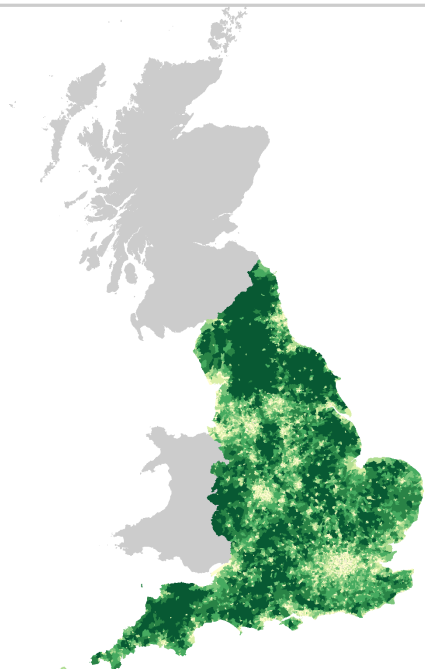
GREENSPACE



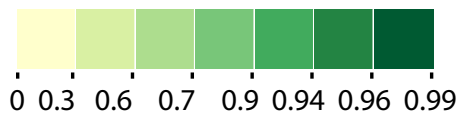
**Average percentage
of greenspace**



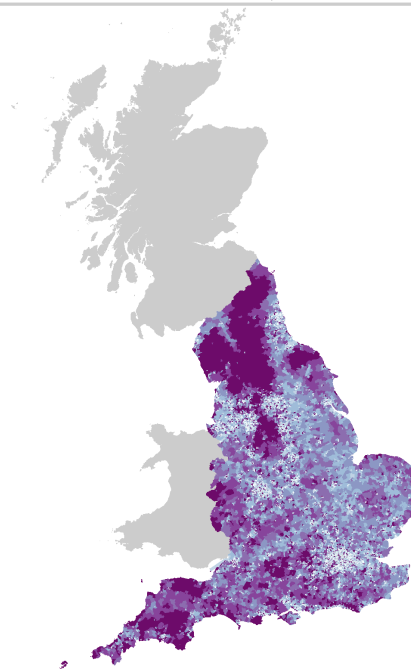
GREENSPACE



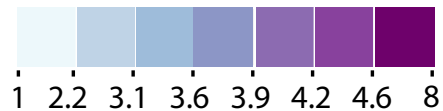
Average percentage of greenspace

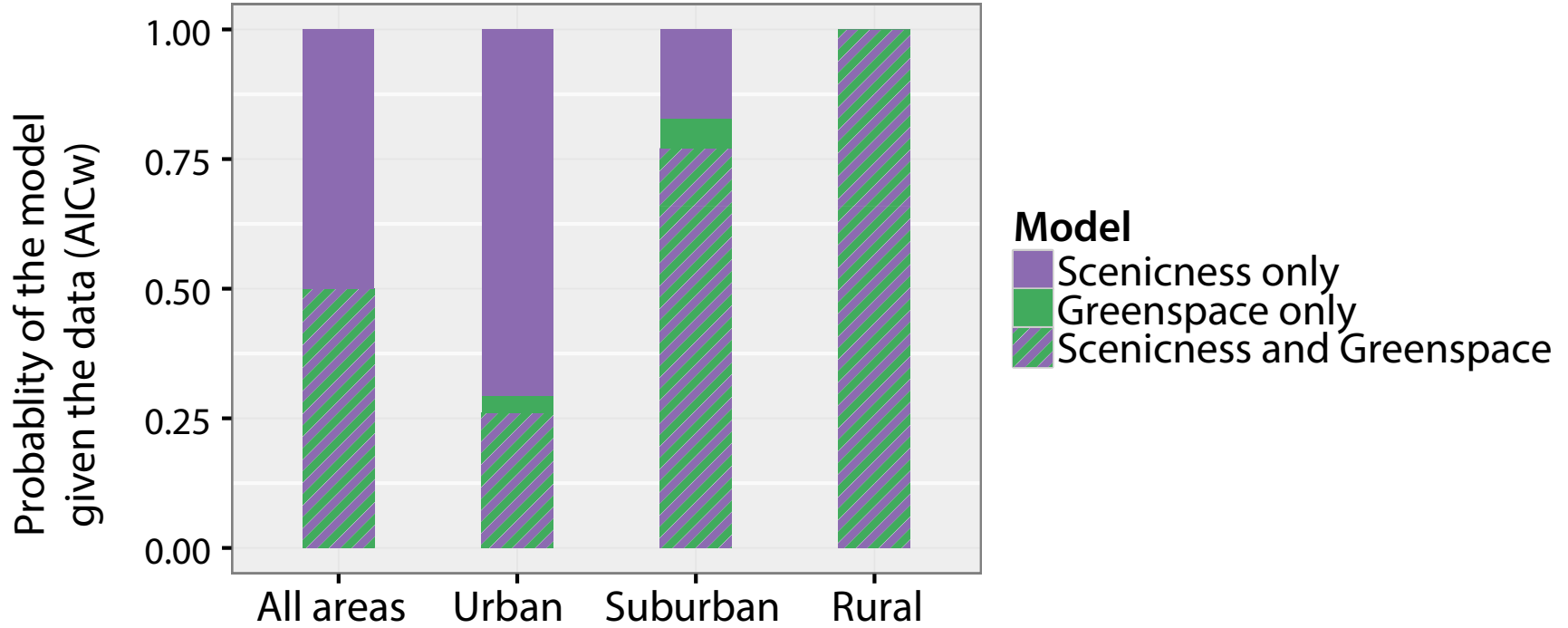


SCENICNESS

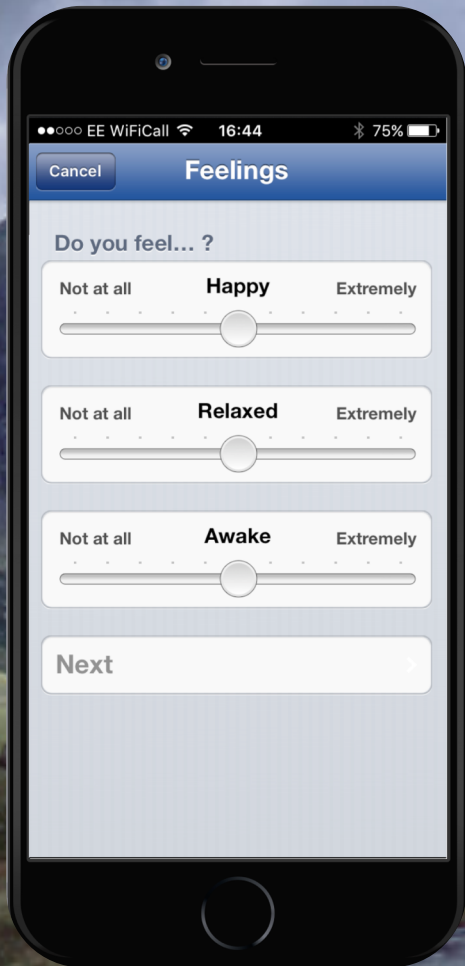


Average scenic rating



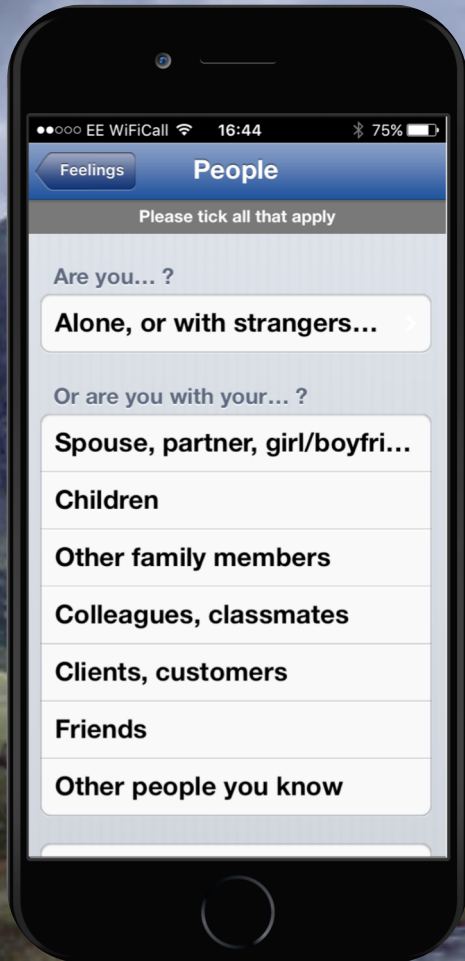






George MacKerron's Mappiness

mappiness.org.uk



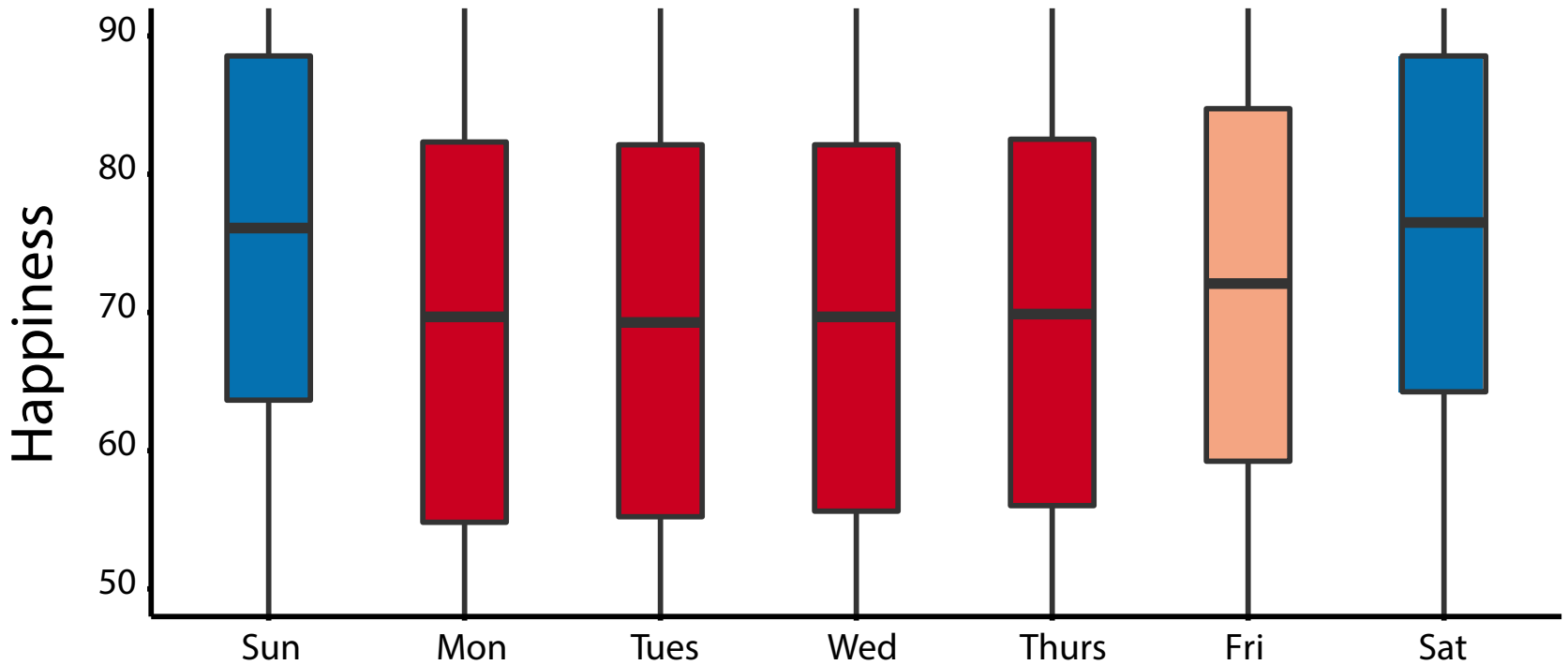
George MacKerron's Mappiness

mappiness.org.uk

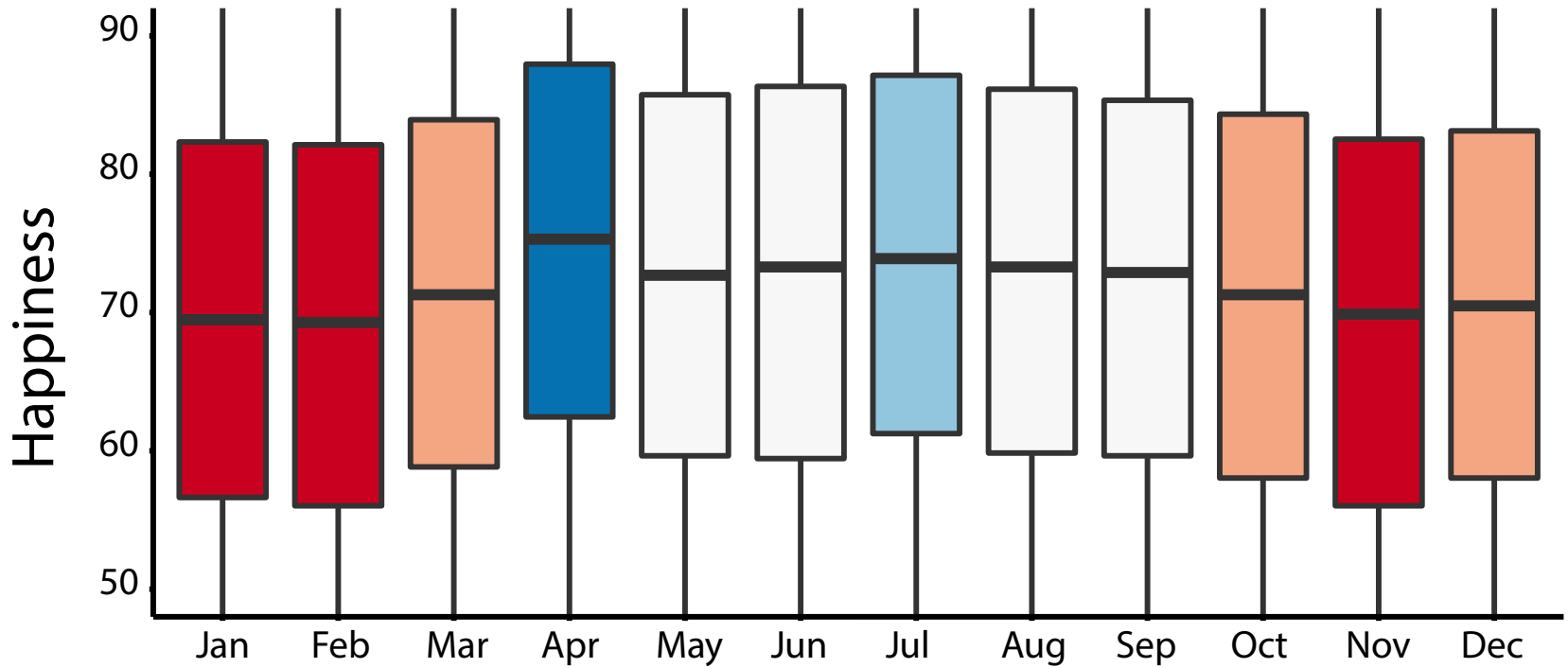


George MacKerron's Mappiness

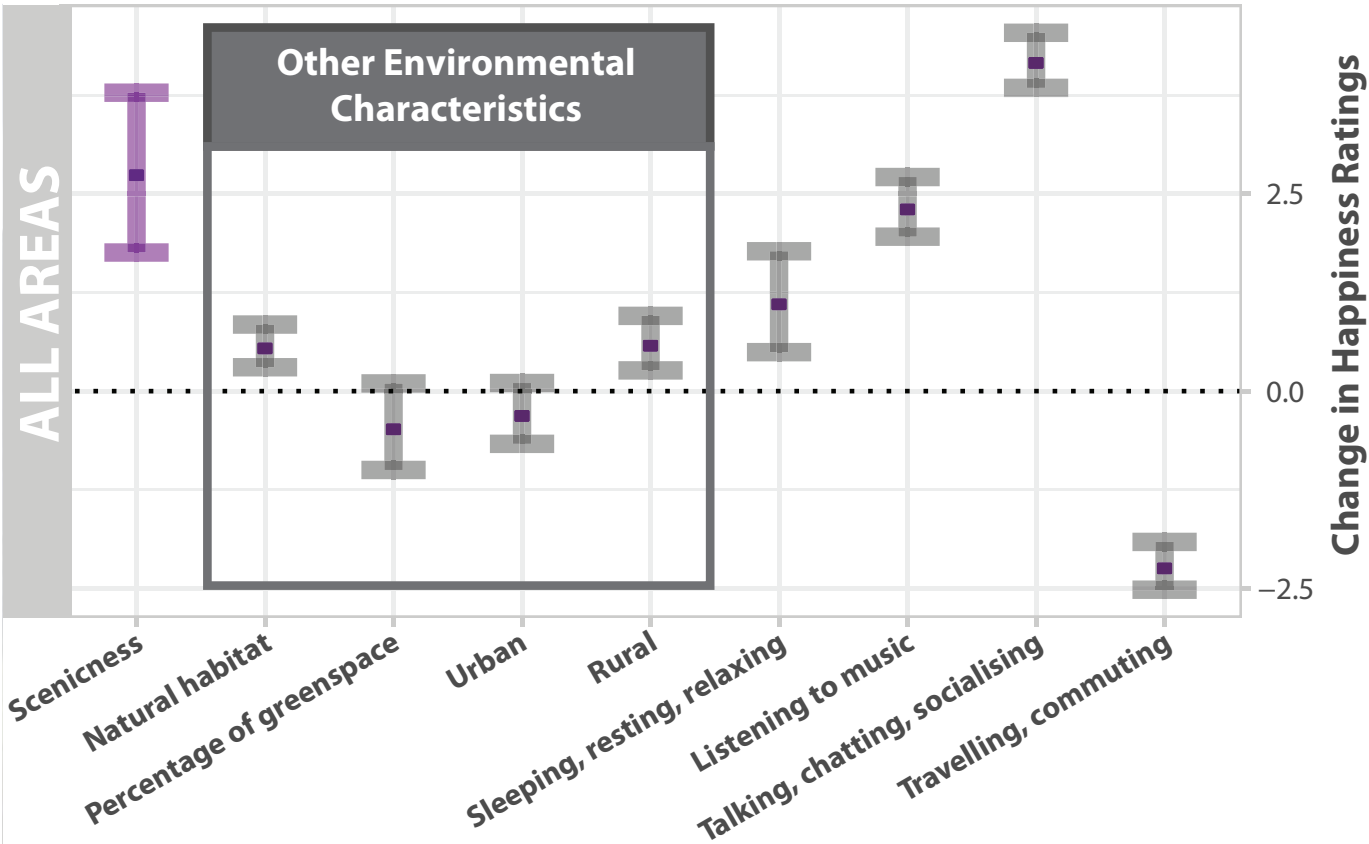
mappiness.org.uk



Seresinhe, Preis, MacKerron & Moat (2019)



Seresinhe, Preis, MacKerron & Moat (2019)



Seresinhe, Preis, MacKerron & Moat (2019)





Places365
Categories

0.293 Valley
0.203 Lake Natural
0.128 Mountain

SUN Scene
Attributes

0.856 Natural Light
0.081 Open Area
0.058 Sailing / Boating

Seresinhe, Preis & Moat (2017)

Lake natural



Seresinhe, Preis
& Moat (2017)

Lake natural



Valley



Seresinhe, Preis
& Moat (2017)

Lake natural



Industrial area



Valley



Seresinhe, Preis
& Moat (2017)

Lake natural



Industrial area



Valley



Hospital



Seresinhe, Preis
& Moat (2017)

Cottage



Seresinhe, Preis
& Moat (2017)

Cottage



Viaduct



Seresinhe, Preis
& Moat (2017)

Cottage



Trees



Viaduct



Seresinhe, Preis
& Moat (2017)

Cottage



Trees



Viaduct

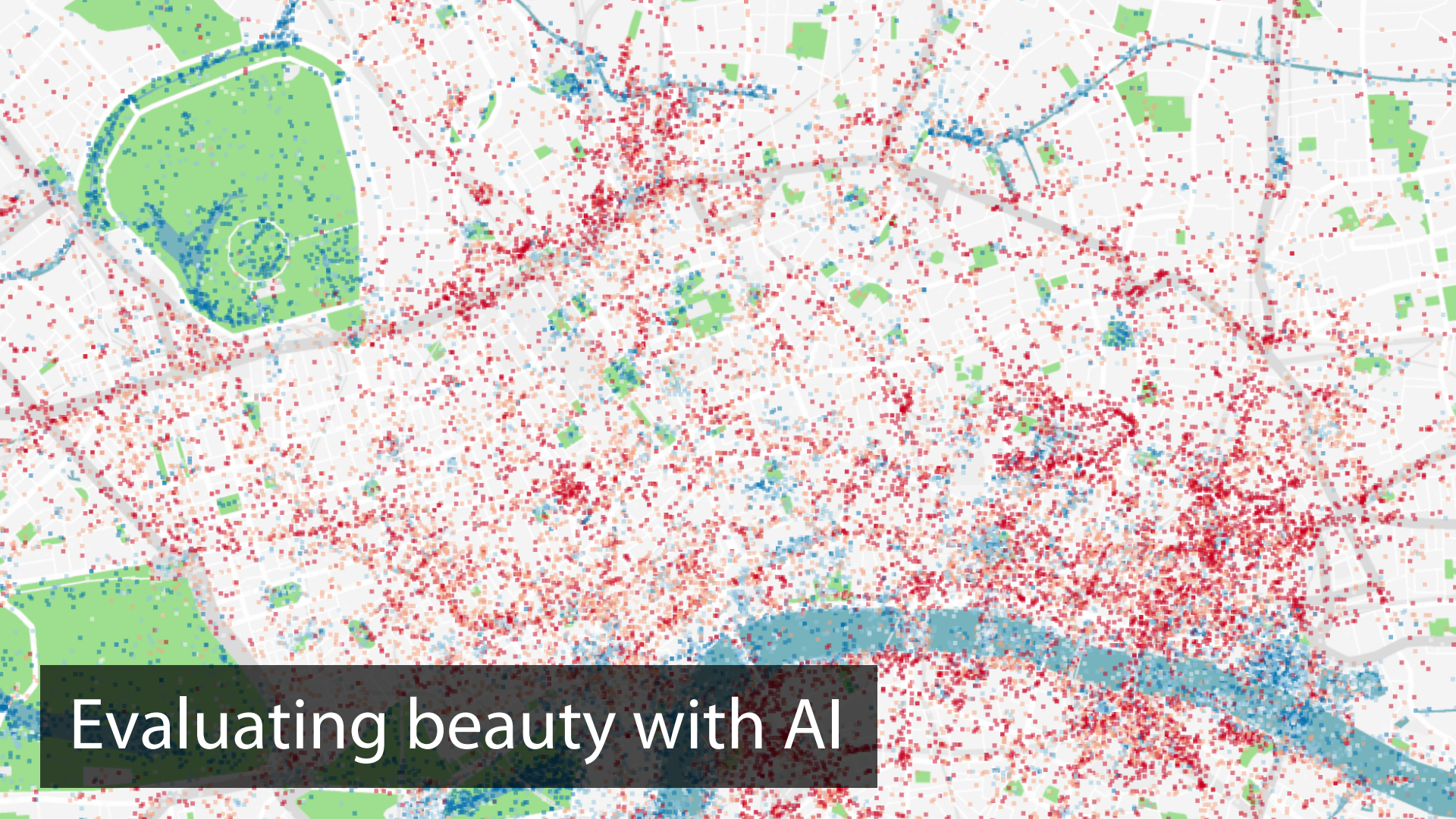


Grass



Seresinhe, Preis
& Moat (2017)





Evaluating beauty with AI



6.7

Seresinhe, Preis &
Moat (2017)



4.5

Seresinhe, Preis &
Moat (2017)



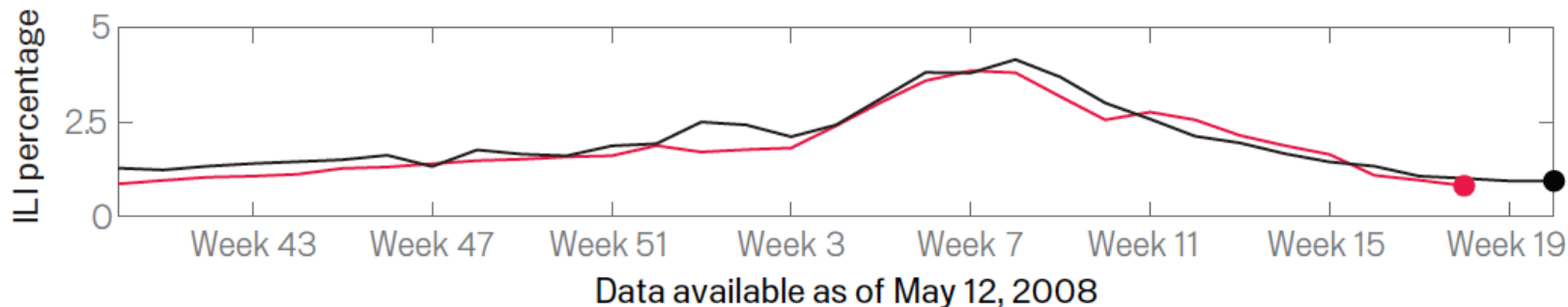
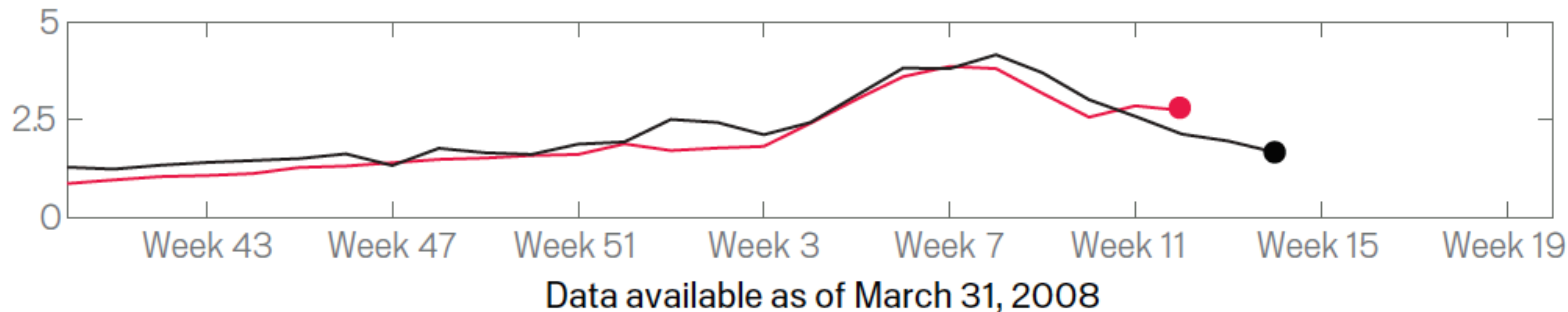
4.7

Seresinhe, Preis &
Moat (2017)

Google
UK

MacBook Pro

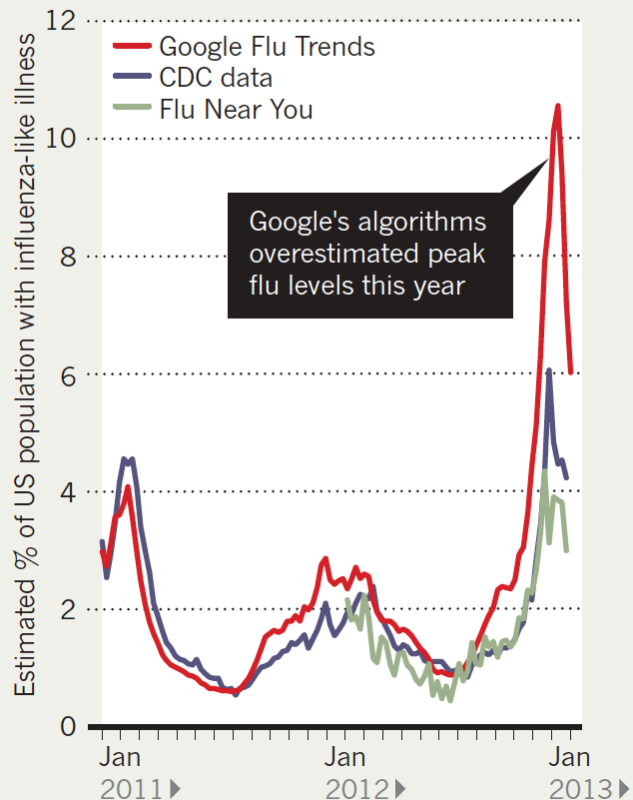




- Flu data
- Google Trends estimate

FEVER PEAKS

A comparison of three different methods of measuring the proportion of the US population with an influenza-like illness.



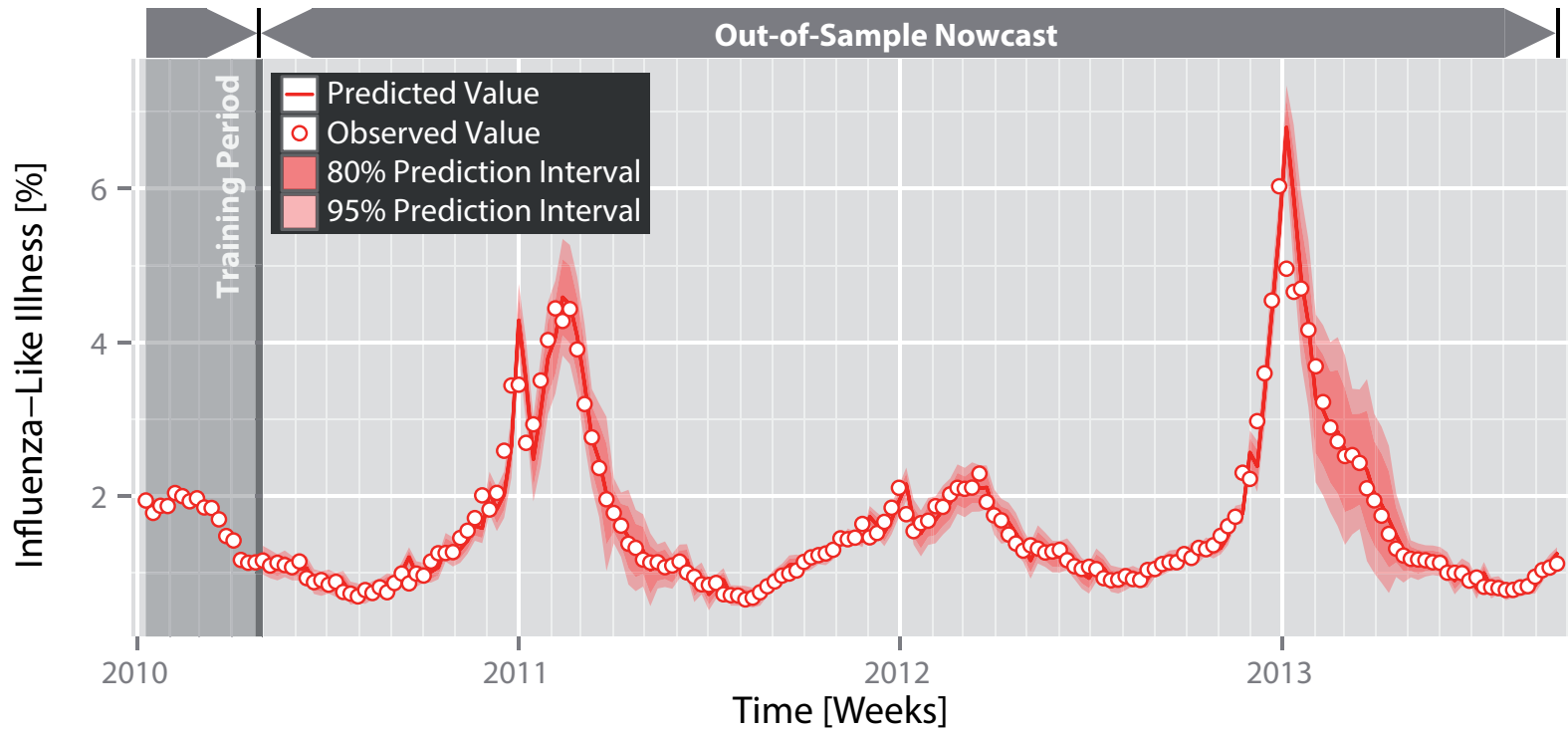
EPIDEMIOLOGY

When Google got flu wrong

US outbreak foxes a leading web-based method for tracking seasonal flu.

“The press reports may have triggered many flu-related searches by people who were not ill.”

Butler, *Nature* **494**, 155 (2013)



**Flu estimate errors reduced
by between 16% and 53%.**

Preis & Moat (2014)

SCIENTIFIC REPORTS

www.nature.com/scientificreports

OPEN

Happiness is Greater in More Scenic Locations

Chanuki Illushka Seresinhe^{1,2}, Tobias Preis^{3,2,3}, George Mack¹, Helen Susannah Moat^{1,2,3}

Received: 27 June 2018
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Does spending time in beautiful settings boost people's happiness? This long remained elusive due to a paucity of large-scale data on environmental happiness. Here, we draw on two novel datasets: first, individual happiness, and second, crowdsourced ratings of the "scenicness" of England from the online game Scenic-Or-Not. We find that individual happiness and scenicness are related for a range of factors such as the location, even when we account for the income of local inhabitants, the weather conditions, and the income of local inhabitants. The results suggest that the design of the environment and subject and architects consider the design of the places we expect to see as well as parliamentary buildings as well as parliamentary buildings as well as parliamentary buildings.

<https://www.nature.com/articles/s41598-019-40854-6>

<http://www.nature.com/articles/srep16899>

SCIENTIFIC REPORTS

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OPEN

Quantifying the Impact of Scenic Environments on Health

Chanuki Illushka Seresinhe, Tobias Preis & Helen Susannah Moat

Received: 11 February 2015
Accepted: 22 October 2015
Published: 25 November 2015

Few people would deny an intuitive sense of increased wellbeing when spending time in beautiful locations. Here, we ask: can we quantify the relationship between environmental aesthetics and human health? We draw on data from Scenic-Or-Not, a website that crowdsources ratings of "scenicness" for geotagged photographs across Great Britain, in combination with data on citizen-reported health from the Census for England and Wales. We find that inhabitants of more scenic environments report better health, across urban, suburban and rural areas, even when taking socioeconomic indicators of deprivation into account. Our results provide evidence in line with the environment and health hypothesis, suggesting that natural habitats as well as parliamentary buildings as well as parliamentary buildings.

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Research



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Using deep learning to quantify the beauty of outdoor places

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