



Spatio-temporal patterns of metal theft on the British railway network

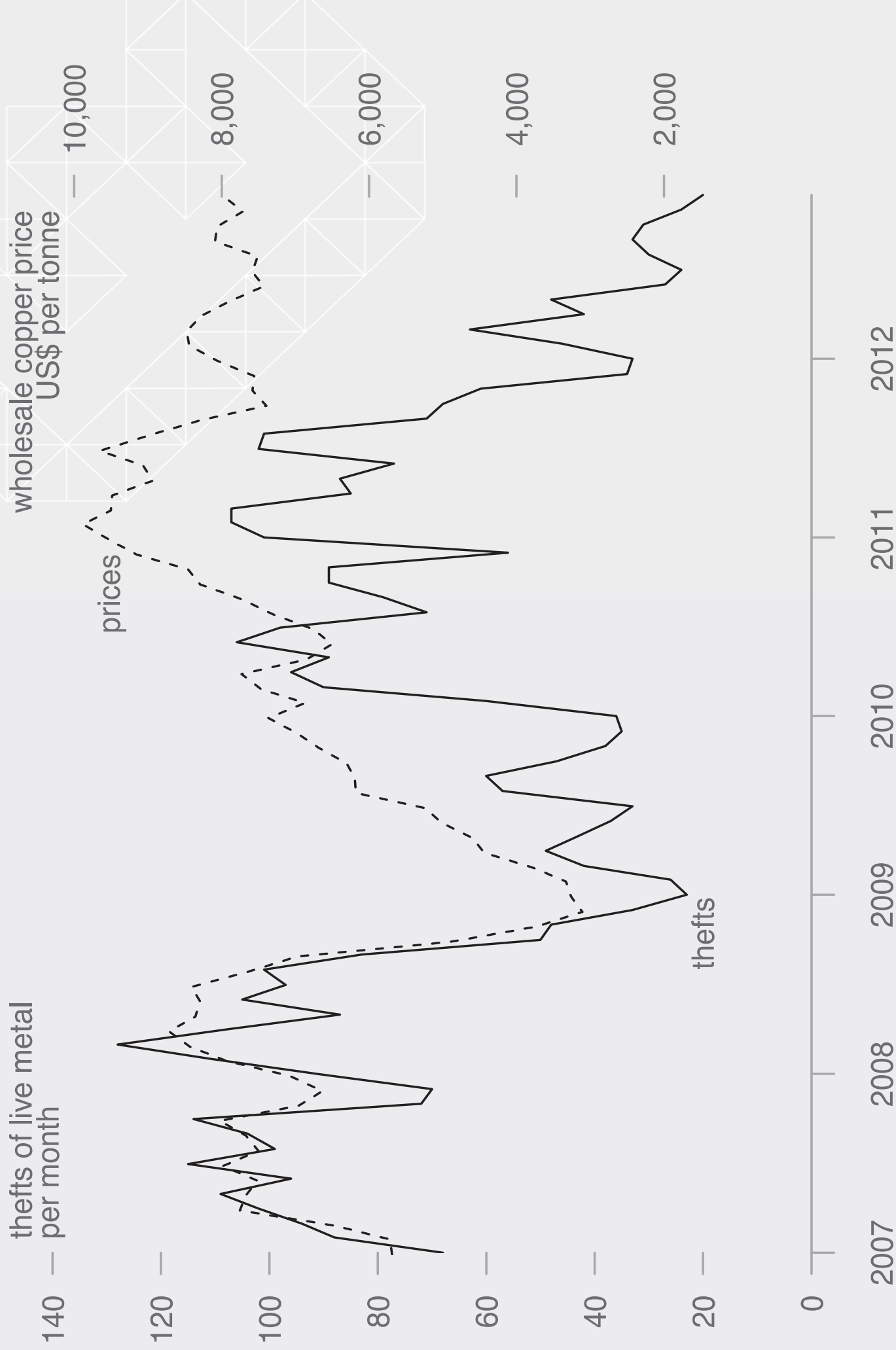
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Is the price–theft relationship real?

Sidebottom, Ashby and Johnson (2014) asked if you can predict railway ‘live’ metal theft from:

- wholesale (LME) copper price,
- frequency of other railway thefts,
- unemployment.

2007

2008

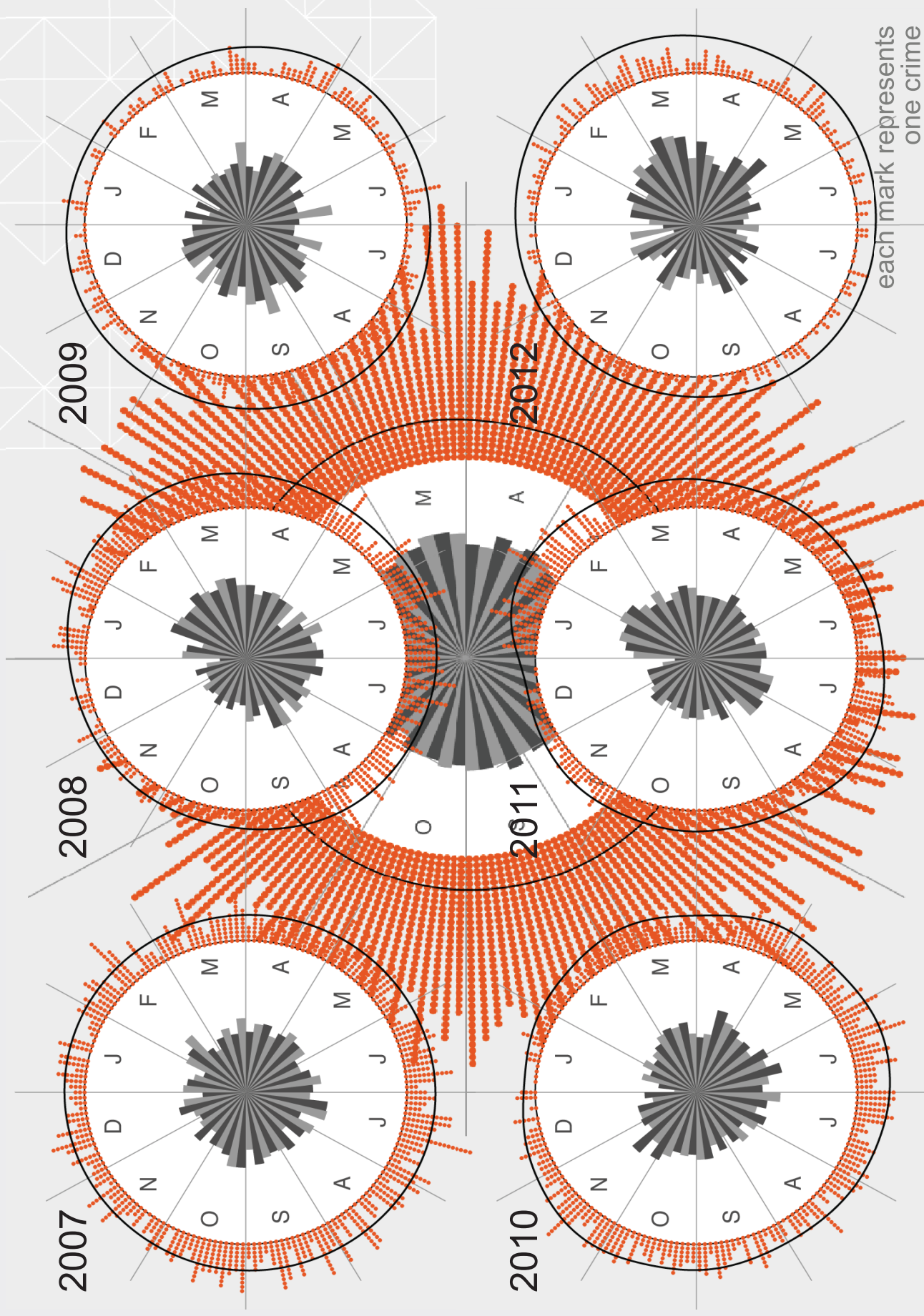
2009

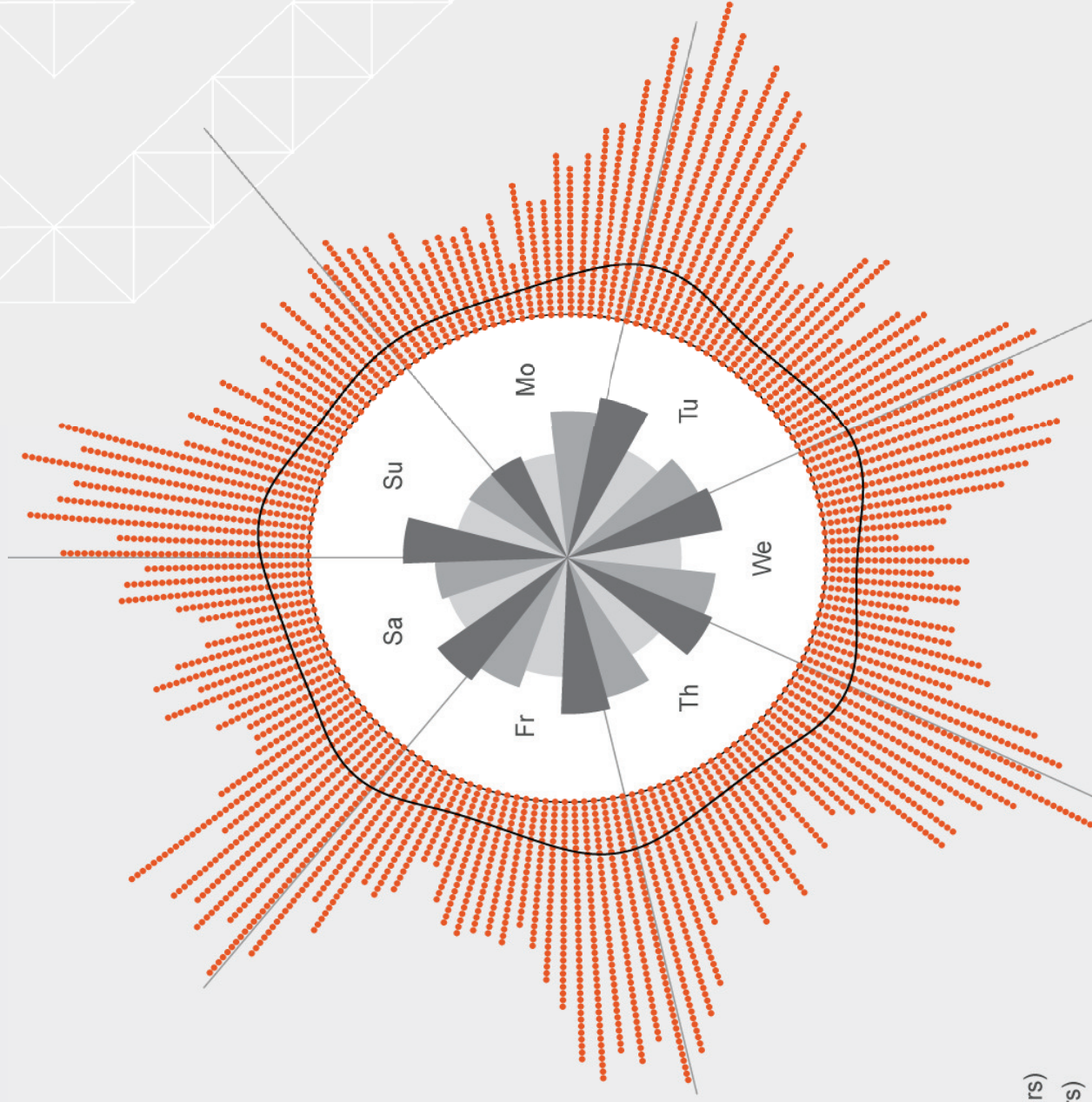
2010

2011

2012

each mark represents
one crime

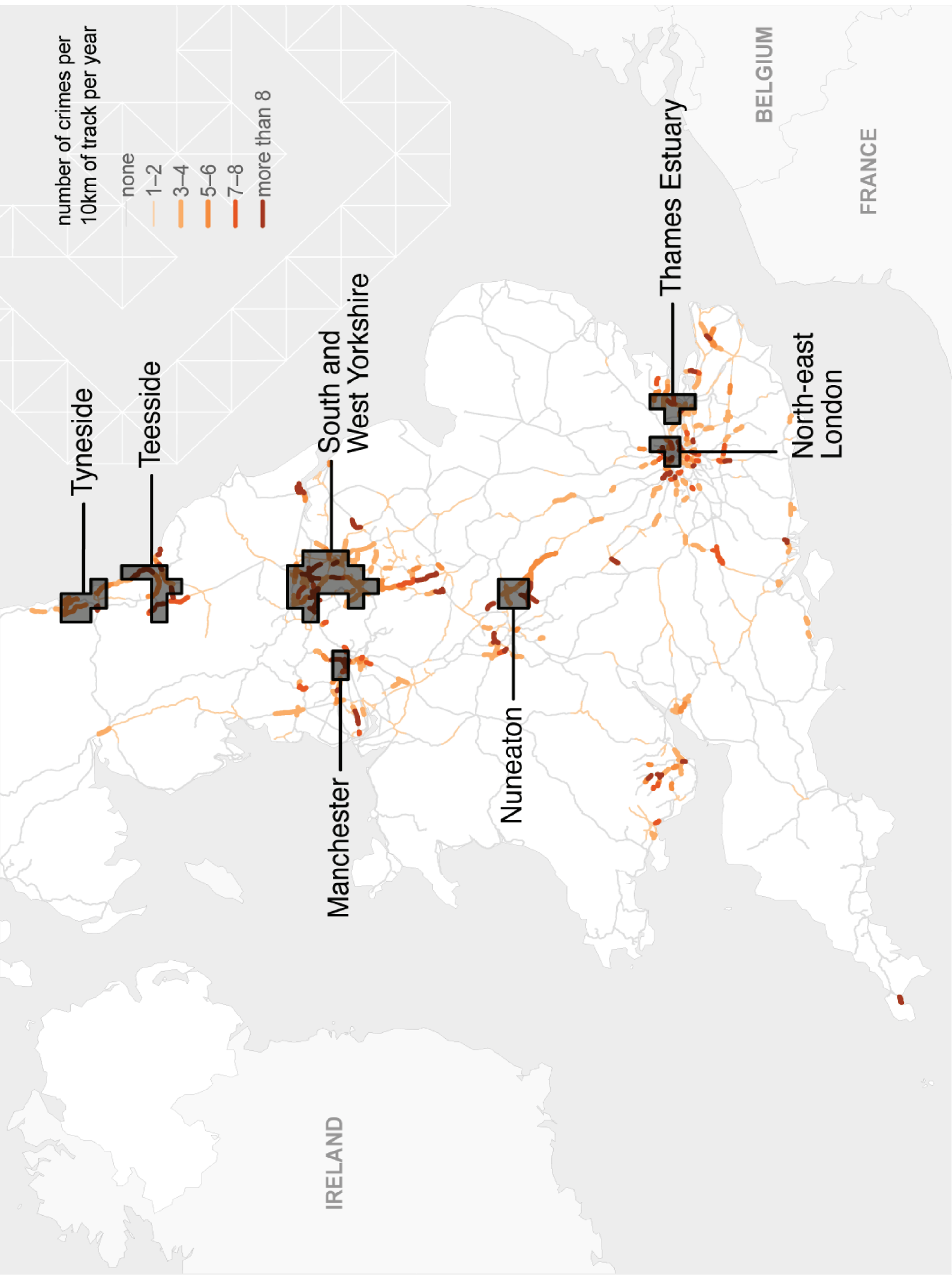


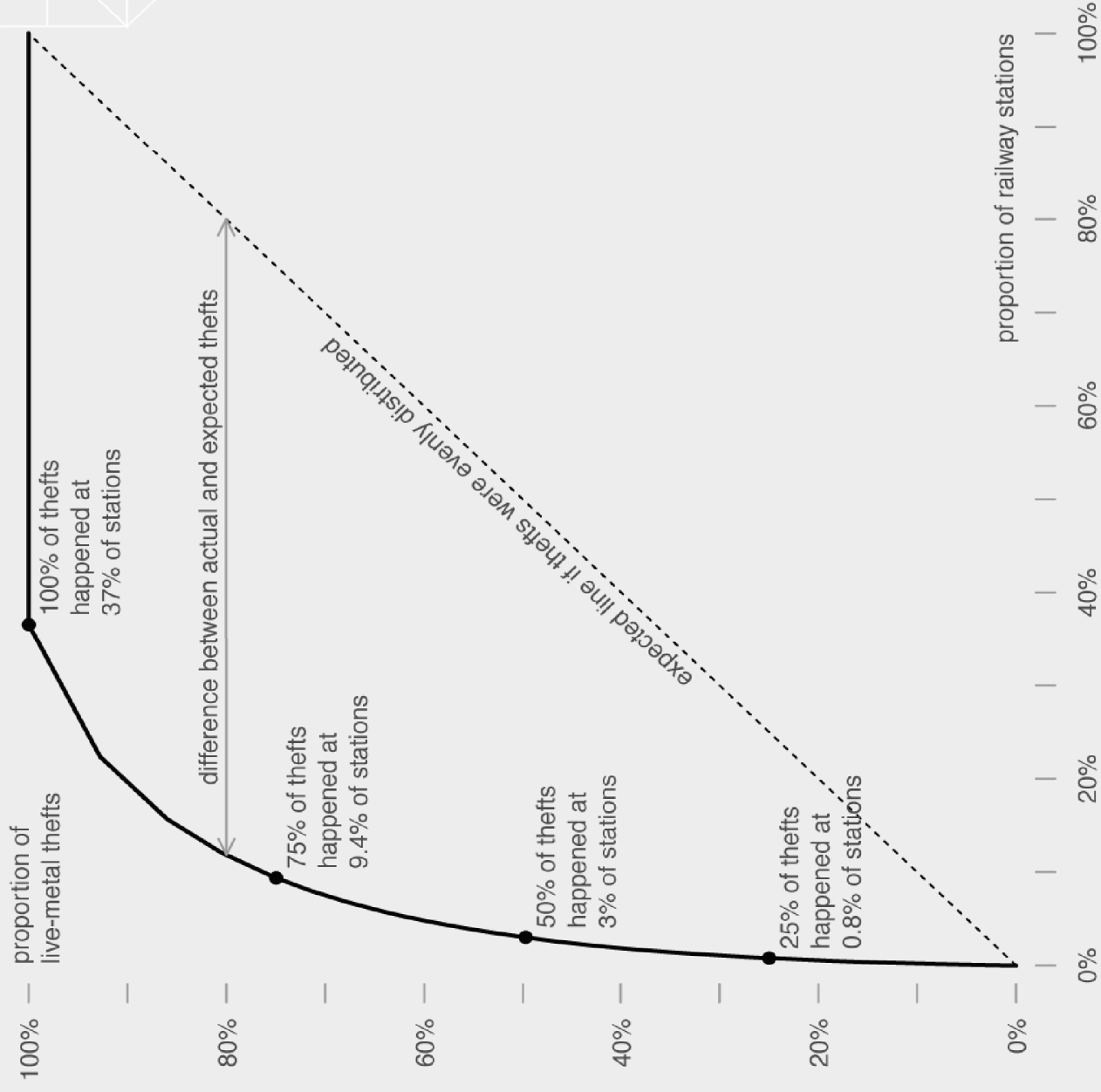


Police shifts

- Early (0700–1459 hrs)
- Late (1500–2259 hrs)
- Night (2300–0659 hrs)

crimes derived aoristically



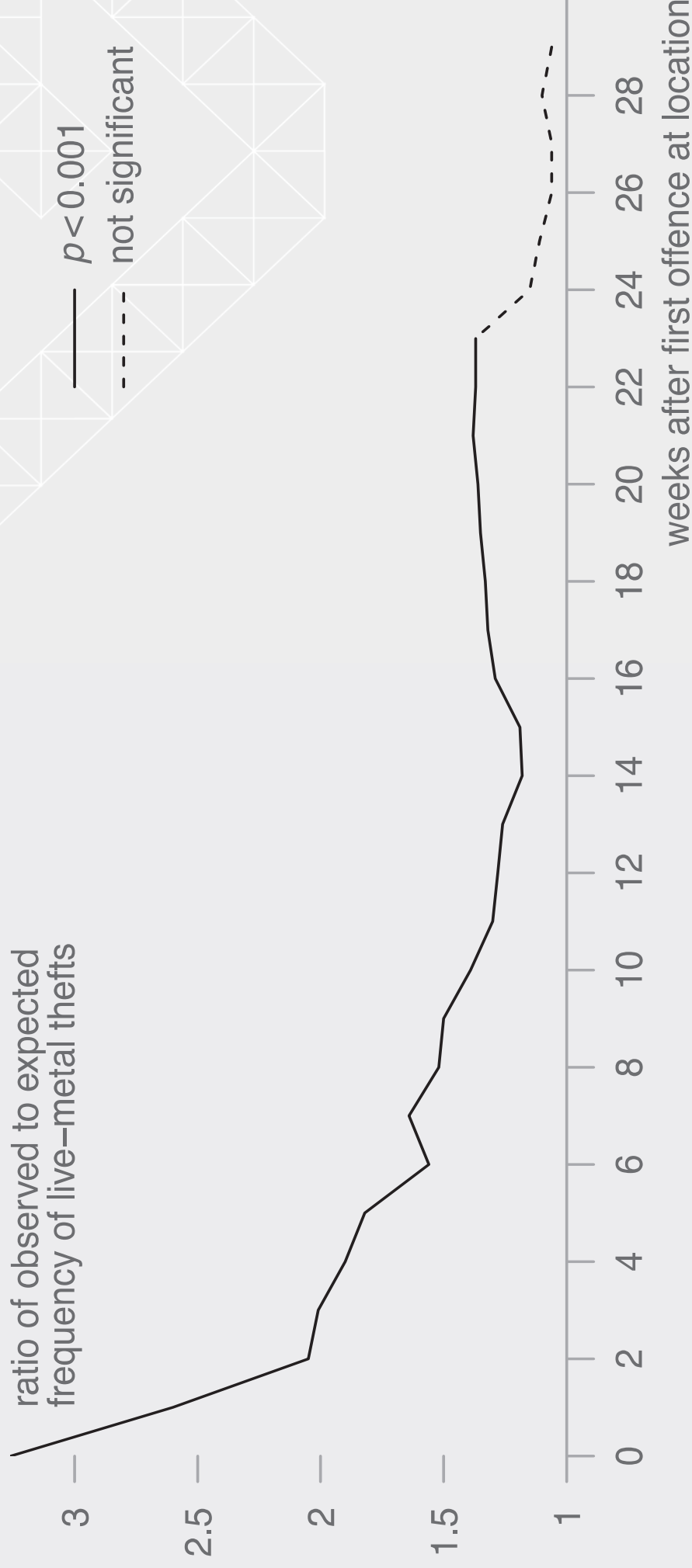


78%
of thefts at multiple-
offence locations

ratio of observed to expected
frequency of live-metal thefts

— $p < 0.001$

- - - not significant



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Thanks

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Credits

Software: ArcGIS CrimeStat Near Repeat Calculator R

Map data: Ordnance Survey/EDINA Eurogeographics

Pictures: Chicago Transit Authority via Flickr





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