

# Correspondence

and Shanghai, with a view to meeting city dwellers' needs more effectively. Incorporating decision-making theory into analyses of the data from these 'urban observatories' would yield further valuable information.

Huge amounts of data can be amassed from digitized social, cultural and economic records of citizens' choices and behaviours, as well as from fixed and mobile sensors, including those at urban vantage points. This information allows 'natural' experiments that chronicle the population's responses as the urban environment undergoes planned and unplanned changes.

Combining such data with models of human decision-making can provide a deeper insight into real-world choices. For example, analysis of local crime statistics together with results of cognitive testing in pre-school children showed that a murder occurring near their homes influenced children's levels of attention and impulse control at school (P. T. Sharkey *et al. Am. J. Public Health* **102**, 2287–2293; 2012).

Twitter messages, requests for city services and information, and other behavioural metrics could likewise be used to investigate human decision-making.

**Aristides A. N. Patrinos\*** *New York University, New York, USA.*  
*aap11@nyu.edu*

*\*On behalf of 6 correspondents (see [go.nature.com/mabntz](http://go.nature.com/mabntz) for full list).*

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## City data can inform decision theory

Data are being collected on human behaviour in cities such as London, New York, Singapore



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**Supplementary information to:  
City data can inform decision theory**

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**Aristides A. N. Patrinos, Hannah Bayer, Paul W. Glimcher, Steven Koonin** *New York University, New York, USA.*  
[aap11@nyu.edu](mailto:aap11@nyu.edu)  
**Miyoung Chun** *The Kavli Foundation, Oxnard, California, USA.*  
**Gary King** *Harvard University, Cambridge, Massachusetts, USA.*