

Urban Analytics & City Science

Overview

Dani Arribas-Bel

Background

- □ **Cities** are (increasingly) relevant for all of humanity's challenges but also their solutions
- □ **Data**, data, data
- □ Data is the oil, **analytics** is the refinery (Rey, 2021)

Definition

Editorial

B Urban Analytics and
City Science

Urban analytics defined

EPB: Urban Analytics and City
Science

2019, Vol. 46(3) 403–405

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Suddenly you realise there is a new phrase or term that everyone is using and you wonder where it came from. Urban analytics is one of those clichés that seems to effortlessly roll off the tongue as though we have used it all our lives. It strictly originates from ‘urban analysis’, but it is more than this for the term analytics implies a set of **methods that can be used to explore, understand and predict properties and features of any system, in our case of cities.**

Batty (2019)

Source

New, big, fast
data; but also the
theory behind
them

Trajectory

Origins & evolution

- Vague but early start linked to physics
- From deductive to inductive
- Computing and data technologies critical in trajectory

Urban Analytics: History, Trajectory, and Critique¹

Geoff Boeing², Michael Batty³, Shan Jiang⁴, Lisa Schweitzer⁵

Source

Urban Data Science

Article

B Urban Analytics and
City Science

A roundtable discussion: Defining urban data science

EPB: Urban Analytics and City Science
2019, Vol. 46(9) 1756–1768
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Kang et al. (2019)

Source

Contemporary Urban Analytics

- Landing the **data/AI** revolution on cities and regions
- Natively interdisciplinary (the **urban** as nexus)
- Linked to policy, decision-making, **practice**

Praxis

EP-B Urban Data/Code

Editorial

B Urban Analytics and
City Science

Urban data/code: A new EP-B section

EPB: Urban Analytics and City Science
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Arribas-Bel et
al. (2021)

Source

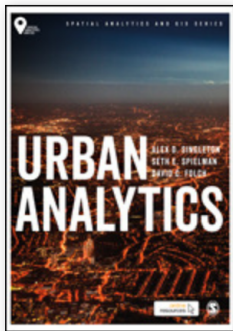
In this editorial, we are introducing a new section in *Environment & Planning B* (EP-B) that we call “Urban Data/Code”. In some ways, papers in “Urban Data/Code” will be similar to every other one at EP-B: high-quality pieces of scholarship concerned with Urban Analytics and City Science that will undergo standard peer-review before being accepted, and which will be published as part of each issue of the journal. In other ways, they will differ quite a bit: unlike traditional manuscripts, those in “Urban Data/Code” will exclusively contain *descriptions of novel software or data products that will help us better understand cities and the people who inhabit them*. In this editorial, we will provide some background to this new addition to the EP-B family as well as sketching out in more detail what we are looking for in candidate submissions.

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Urban Analytics

FIRST EDITION

[Alex D. Singleton](#) - University of Liverpool, UK

[Seth Spielman](#) - University of Colorado, Boulder, USA

[David Folch](#) - Florida State University, USA

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[Online Resources](#)

Series:

[Spatial Analytics and GIS](#)

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December 2017 | 200 pages | SAGE Publications Ltd

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- Urban theory & methods
- Interdisciplinary
- Modern tools

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Urban analytics

Developing data science and AI focused on the process, structure, interactions and evolution of agents, technology and infrastructure within and between cities

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Source



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