

Urban Form, Density & Microclimate: How must planning & design change?

Richard Lorch

13 November 2018 Glasgow Caledonian University – London campus



International Research, Development, Demonstration & Innovation

SPECIAL ISSUE

Urban form, density & microclimate



Guest editors:
Rohinton Emmanuel and Koen Steemers

Volume 46 Numbers 7–8 October–November 2018 ISSN 0961-3218, www.rbri.co.uk

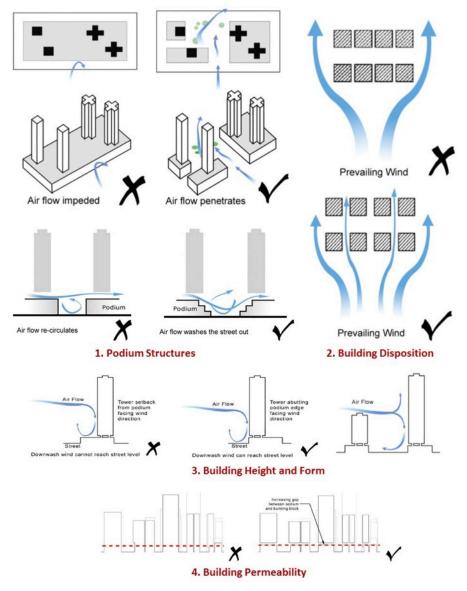
EDITOR: Richard Lorch



www.tandfonline.com/toc/rbri20/46/8

Special issue: papers

- Connecting the realms of urban form, density and microclimate
- Natural ventilation in cities: the implications of fluid mechanics
- Interdependent energy relationships between buildings at the street scale
- Energy use and height in office buildings
- Technomass and cooling demand in South America: a superlinear relationship?
- Urban geometry, SVF and insolation of open spaces: London and Paris
- Challenges in the low-carbon adaptation of China's apartment towers
- Scale-adaptive morphometric analysis for urban air quality and ventilation applications



Lau, K. et al. (2018) **Defining the environmental performance of neighbourhoods in high-density cities**. *Building Research & Information*, 46(5), 540-551. DOI: 10.1080/09613218.2018.1399583

Tonight's format

- 4 short presentations
- 2 respondents
- orchestrated discussion

Rohinton Emmanuel

Urban form, density & microclimates

Michael Hebbert

Form, density, microclimate: take-home lessons for town planning

Sue Grimmond

Improving urban meteorological information for the building scale

Philip Steadman

Energy and the density and height of buildings

Respondents

Julia Thrift

Town and Country Planning Association

Euan Mills

Future Cities Catapult

Chair: Professor Flora Samuel



Key questions for discussion

- 1. How must planning & design change?
- 2. Who is empowered? Who is responsible?
- 3. How can current barriers be overcome?
- 4. What knowledge & skills are needed?
- 5. Professional institutions education curricula, CPD and practice?
- 6. Mainstreaming an appropriate public narrative? Public health, healthy places