

Examining evaluation in sustainable neighbourhood masterplanning

Rosalie Callway, Prof. Tim Dixon, Dr. Dragana Nikolic

Introduction

This study seeks a better understanding of standardised evaluative practice in sustainable neighbourhood development

Rationale and method

BREEAM Communities is a UK-based standard that aims to promote sustainable communities through encouraging developers to apply a standard evaluative framework in the design-phase of a masterplan process. Few studies have examined the content of the standard in relation to the narratives around urban design and masterplanning practice. A literature and case study review have been applied to offer insights regarding the reported benefits and challenges facing the standard (Box 1), and the strategic role it might play in shaping neighbourhood masterplan processes.

Box 1. Benefits and challenges for BREEAM Communities

Reported benefits

- Better integration:** linking sustainability requirements into procurement and design processes
- Cost savings:** optimising the development's sustainability performance, avoiding costs of late design changes and smoothing the planning application process
- Non-prescriptive:** Achieving target rating without undue impacts to flexibility of design decisions, budgets and potential solutions
- Reputational benefits:** independently verified certification improving organisational transparency and credibility (avoid 'greenwash')
- Sustainable neighbourhoods:** benefits to certified neighbourhoods and encouraging market uplift as competitors adopt similar practice

Reported challenges relating to technical structure and application

- Missing sustainability concepts:** emerging or dominant concepts such as financial viability, resilience or circular economies are lacking
- Procedural inconsistencies:** varying application of principles e.g. community engagement and standardised issue weighting, lack of ex-post validation
- Design to construction transition:** site design can be subject to change well beyond the 'design phase', potentially impacting site sustainability 'performance'
- Complexity:** potential conflicts between differing design and sustainability intentions are not addressed e.g. security verses permeability
- Market context:** many developments may be a smaller scale than BRE considers viable to assess. Market volatility may affect the rate and numbers of larger-scale developments taking place
- Policy context:** only three UK councils require the use of BREEAM Communities (Bristol, Eastleigh and Swindon)

Unpacking evaluative practice

An empirical examination of six UK development sites is being applied to review the practitioners, practices and 'praxis' (enactment of practice) involved in the masterplan journey, to seek to better understanding of evaluative activities in the process (Fig.1 and 2).

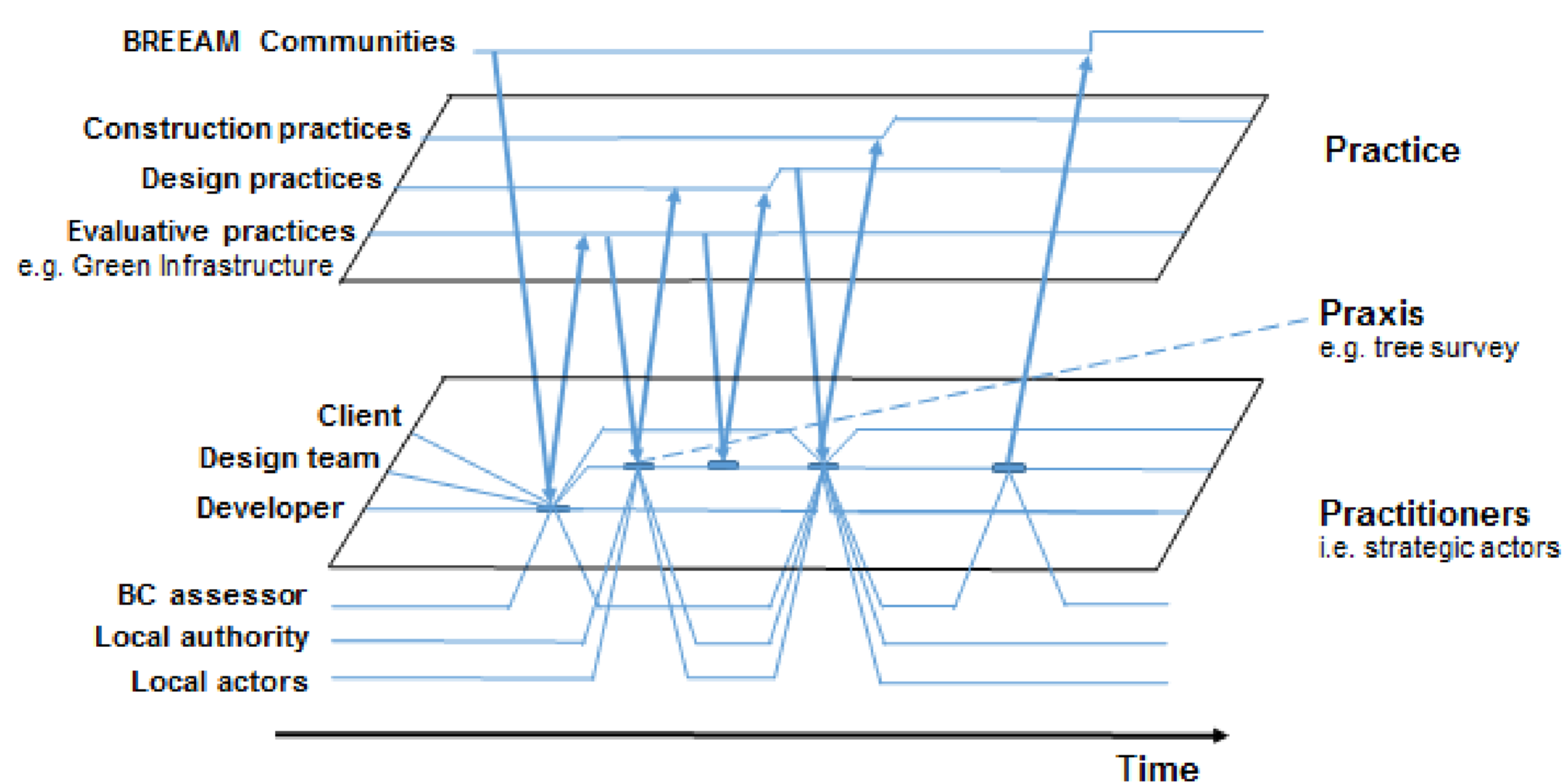


Figure 1. Neighbourhood masterplanning as 'Strategy as Practice'

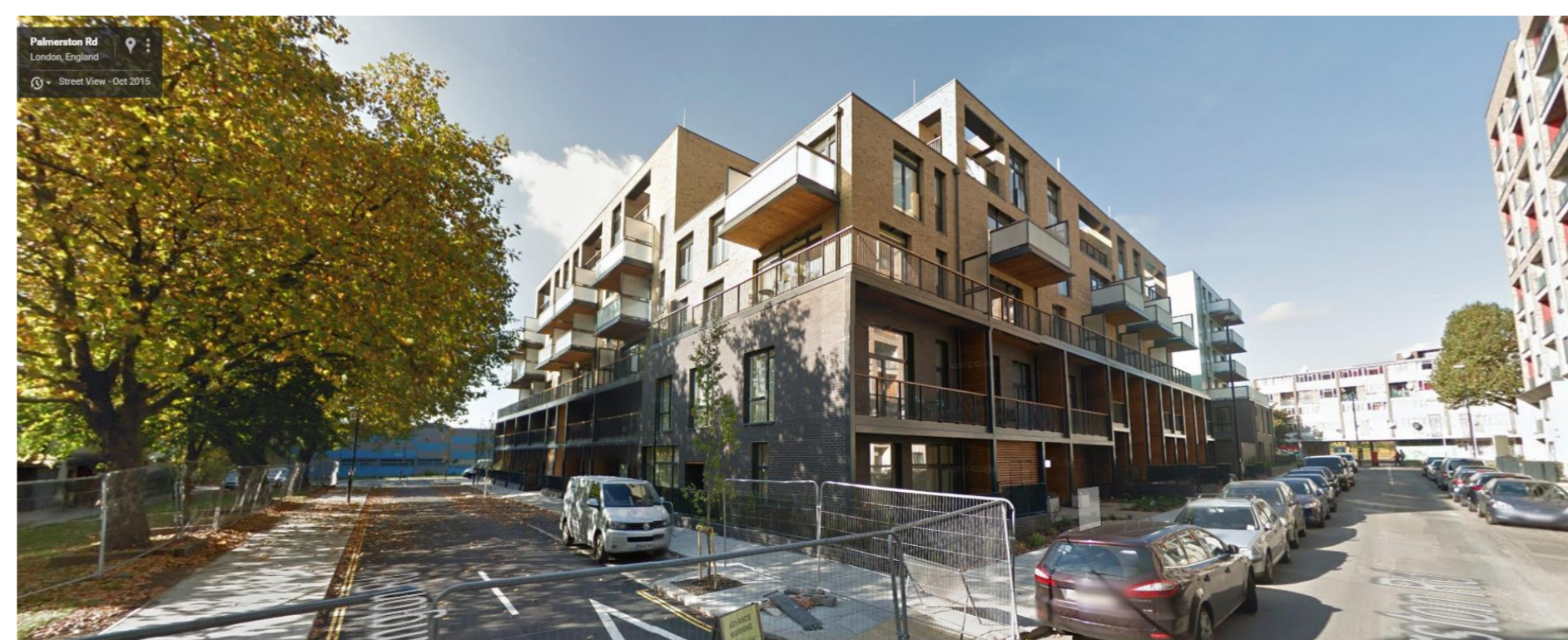


Figure 2. Palmerston Road, South Acton estate, Ealing, London
Source: Google map photos, top photo in 2008 & bottom in 2015

Green infrastructure lens

The case study review examines evaluative practices through the 'lens' of green infrastructure evaluation as a means to consider the challenges facing collaborative masterplanning and BREEAM Communities, including complexity and synchronicity across site objectives (Fig.3).

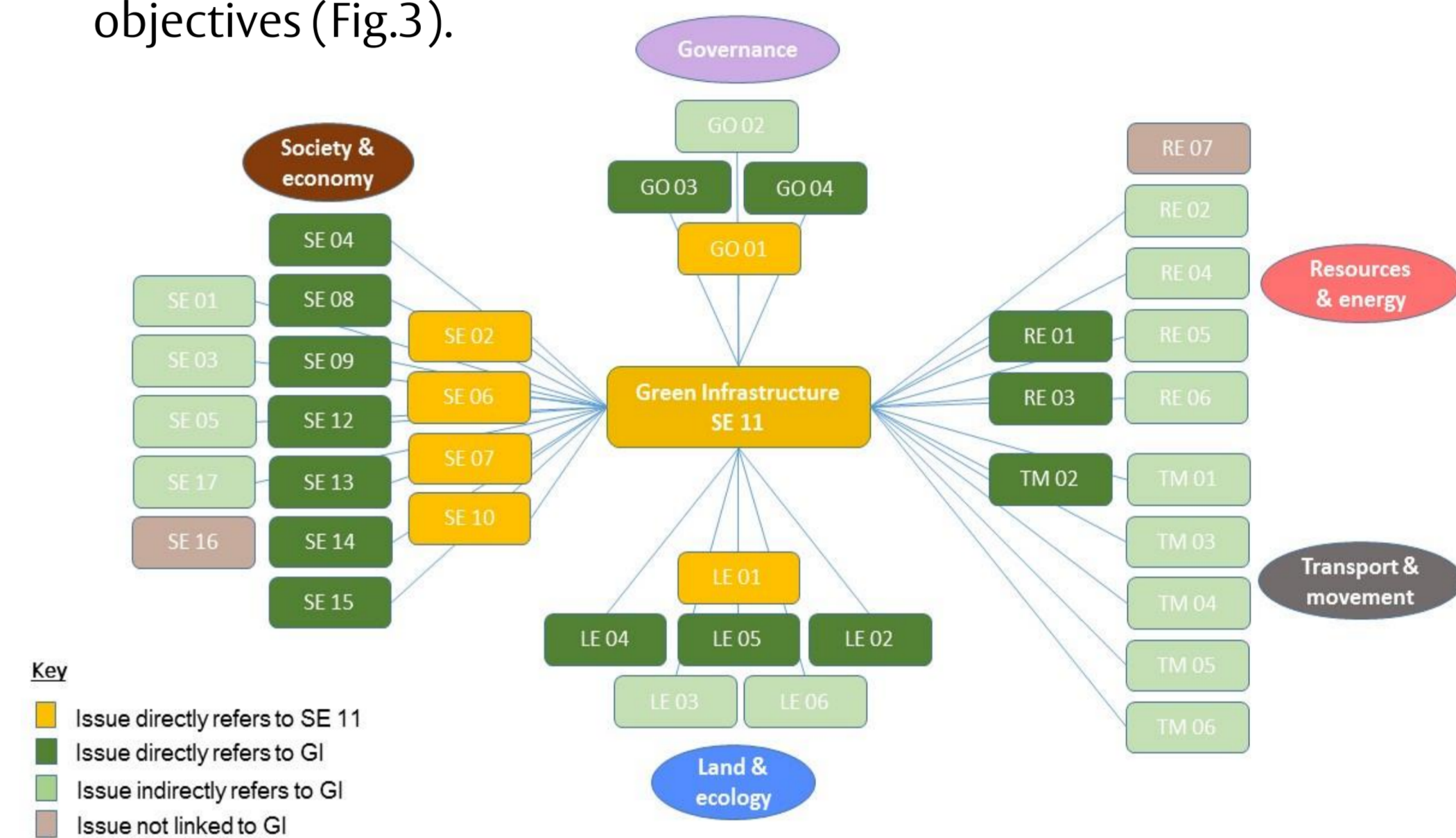


Figure 3. References to Green Infrastructure (GI) in BREEAM Communities

Next steps

Early empirical findings point to the dynamic and transactional nature of evaluative practice and practitioners, boundaries and varying degrees of embeddedness within masterplanning. Wider sector consultation will be applied to consider how generally relevant these emerging insights may be and the potential implications for the future application of BREEAM Communities.

References

- Joss, S. et al (2015) *Tomorrow's City Today: Prospects for Standardising Sustainable Urban Development*. University of Westminster Ecocities project.
- BRE (2011) *BREEAM Communities Technical manual*. Building Research Establishment
- Whittington (2006) *Completing the Practice Turn in Strategy Research*. Journal of Organisation Studies. 27 (5) p613-634
- Carmona, M. et al (2010) *Public places urban spaces; dimensions of urban design*. Routledge; 2nd ed

Acknowledgements

Thanks to BRE and EPSRC for their sponsorship of this project

Contact information

- School of Built Environment, University of Reading, Whiteknights, RG6 6AH
- Email: r.f.callway@pgr.reading.ac.uk
- www.reading.ac.uk