

Adventures in Deep Topography

Course Description

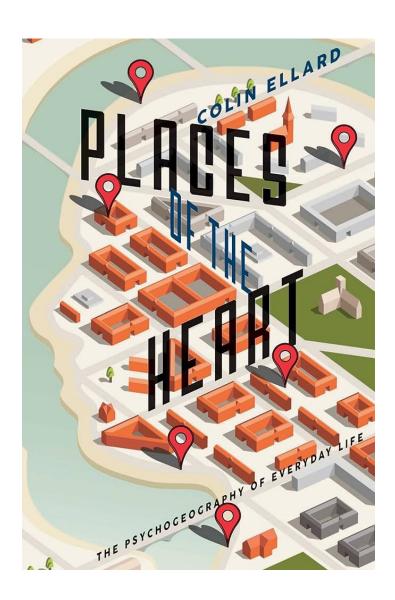
Embark on a captivating journey through urban landscapes in this innovative course that merges sustainability with the psychology of city living. Explore key concepts of deep topography and psychogeography, revealing their influence on urban criticism and human connectedness. Dive into LEED v4.1 BD+C strategies that enhance urban occupants' sense of place through walking, interaction with green spaces, and cultural preservation. We examine how thoughtful urban planning enhances the human experience and well-being. Join us in reimagining cities as vibrant, sustainable environments that resonate with their inhabitants.



Learning Objectives

- Explore the key concepts of deep topography and psychogeography and how they relate to urban criticism, urban pathologies, and human connectedness
- Describe LEED v4.1 BD+C Sustainable Sites credits and how they correspond to urban occupants' sense of place
- Review LEED v4.1 BD+C strategies that encourage walking, interaction with green spaces, and preserving cultural elements
- Discuss LEED v4.1 BD+C Location and Transportation credits and how they correlate to the experiences of urban occupants' sense of place and human health





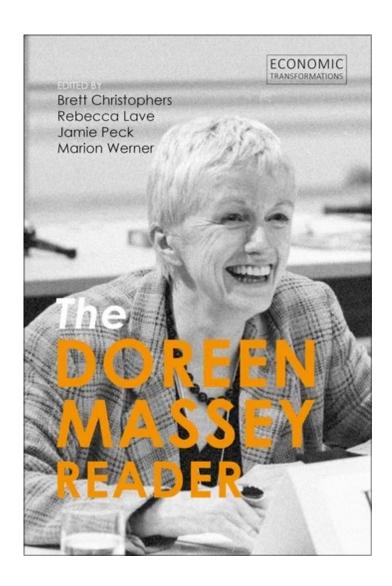
- Savannah Hypothesis: Humans have an innate preference for savannah-like environments, shaped by evolutionary survival needs.
- Natural Preferences: Research highlights a preference for scattered clumps of trees with wide trunks and low canopies.
- Nature's Benefits: Exposure to natural settings improves mental and physical well-being.

Deep Topographers

- Jean-Jacques Rousseau
- Thomas De Quincey
- Rebecca Solnit
- Nick Papadimitriou



Urban Adventurer: Deep Topography Discoveries



- Dynamic Space: Massey viewed space as relational, evolving through interactions from local to global.
- Multiplicity: Space embodies coexistence and diversity, rejecting fixed or bounded notions.
- Always Changing: Space is fluid, under constant construction through social and power dynamics.

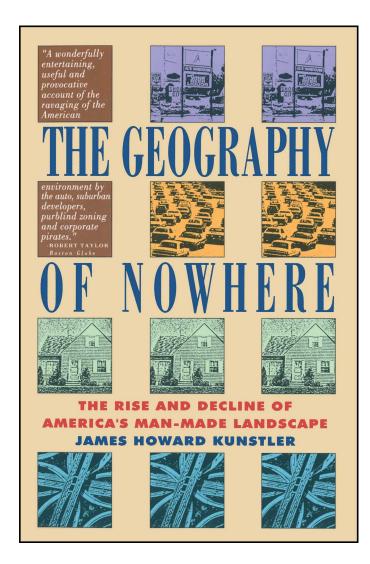


- LEED strategies focus on walkable cities, human health, and sustainable design, with the Location and Transportation category rewarding thoughtful building placement.
- Well-located buildings utilize existing infrastructure, public transit, and amenities, reducing the need for new construction and its associated environmental impact.
- By recognizing existing development patterns and land density, projects can minimize ecological costs and strain on the environment.

Location and Transportation Credits

- LEED for Neighborhood Development Location
- High Priority Site and Equitable Development
- Surrounding Density and Diverse Uses





- Kunstler's "The Geography of Nowhere" critiques suburban sprawl for creating soulless, homogenized environments lacking unique character.
- The book argues that suburban development has led to a disconnection from community and sense of place.
- Kunstler highlights how sprawl has resulted in the destruction of rural landscapes and blurred traditional urban-rural distinctions.

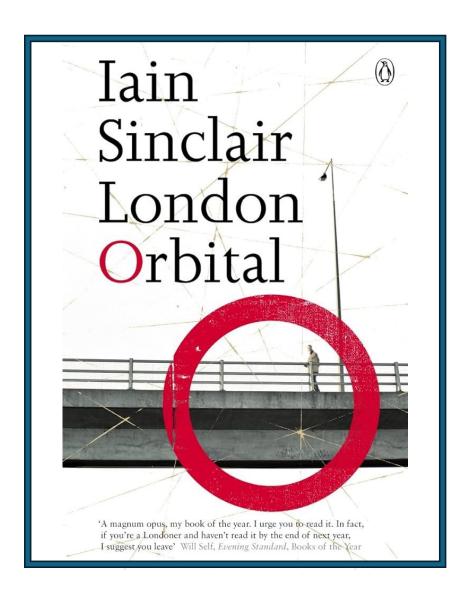


- The Sustainable Sites category rewards decisions about the environment surrounding buildings, emphasizing relationships between buildings, ecosystems, and ecosystem services.
- Credits focus on restoring project site elements and integrating sites with local and regional ecosystems.
- The category aims to preserve the biodiversity that natural systems rely on.

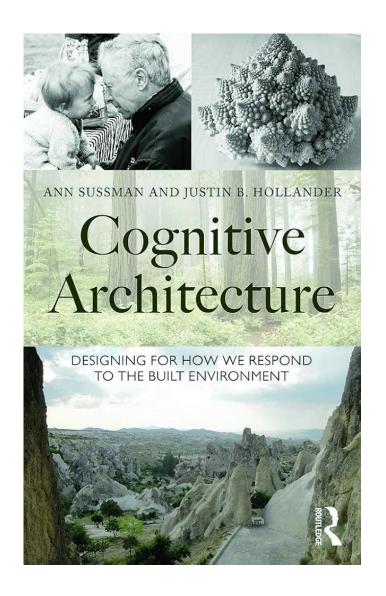
Sustainable Sites Credits

- Site Assessment
- Protect or Restore Habitat
- Open Space
- Rainwater Management

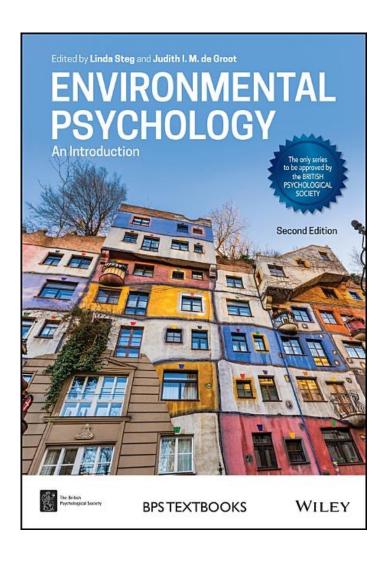




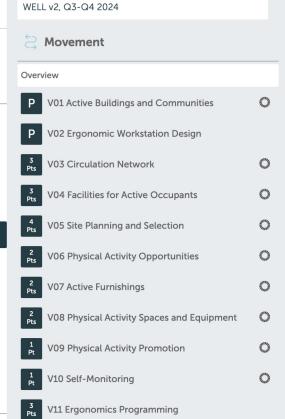
- Iain Sinclair expresses concern for the loss of natural spaces in urban environments, as documented in his work "London Orbital."
- He highlights how infrastructure like the M25 motorway has significantly impacted the landscape surrounding London.
- Sinclair notes that such developments have marginalized walking and impeded travelers' movements through the affected areas.



- The urban environment can significantly impact physical and mental health.
- "Cognitive Architecture" explores the intersection of architecture, psychology, and neuroscience in relation to built environments.
- The book advocates for an inside-out approach to design, based on understanding human behavior for more effective architectural planning.



- Linda Steg, an environmental psychologist, studies how urban environments impact human behavior and well-being.
- Her research examines factors influencing transportation choices, including those that encourage or discourage car use.
- Steg emphasizes the importance of considering psychological factors, not just infrastructure, in urban planning for sustainable transport.



 \equiv

0



🗸 Imperial 😯 中文

INTENT

The WELL Movement concept promotes physical activity in everyday life through environmental design, policies and programs to ensure that movement opportunities are integrated into the fabric of our culture, buildings and communities.

BACKGROUND

Movement is intricately connected to all aspects of daily life. Physical activity encompasses a diverse range of activity domains, including occupational, transportation, household and leisure-time activities. Our understanding of the relationship between physical activity and health continues to evolve. We now know that all movement matters for health and that physical activity can be accumulated through the day in a variety of ways. Therefore, it is critical that our buildings, communities and sociocultural environments consider movement as a vital part of th human condition – and as a key health promotion tool.

Physical inactivity has been a primary focus within the public health community for decades, due to its contribution to pre-mature mortality an chronic diseases, including type II diabetes, cardiovascular disease, depression, stroke, dementia and some forms of cancer.^{2–4} Despite the wid understood benefits of regular physical activity, global estimates from 2016 show that nearly a quarter (23%) of the adult population are physical inactive.⁴ There are evident disparities between developed and developing countries, where 29% and 15% of the population are estimated to be inactive, respectively.⁴ Compared to adults, adolescents and older populations exhibit even higher levels of physical inactivity – about 80% and 53%, respectively.⁴ In 2013, it is estimated that physical inactivity cost the healthcare systems globally about \$54 billion and contributed to near \$14 billion in productivity losses.⁵ The reasons for these trends are complex and numerous. Global and national social and economic shifts are known to impact health behavior. For example, rising urbanization and economic development are associated with declining physical activity levels.⁶

LEED Strategies

- Improve public health by encouraging pedestrian activity
- Reduce vehicle miles traveled and automobile dependence
- Enhance community participation and safety
- Functional entry points into the circulation network
- Building height to street width ratio requirements
- Minimum building-height-to-street-width ratios
- Continuous sidewalks



Psychogeography/Deep Topography

Coverley, M. (2017, June 18). Psychogeography: a way to delve into the soul of a city. The Conversation. https://theconversation.com/psychogeography-a-way-to-delve-into-the-soul-of-a-city-78032

Ellard, C. (2015). Places of the Heart: The Psychogeography of Everyday Life. Bellevue Literary Press.

Seal, B. (n.d.). Baudelaire, Benjamin and the Birth of the Flâneur. Psychogeographic Review. https://psychogeographicreview.com/baudelaire-benjamin-and-the-birth-of-the-flaneur/

Bogan, J. (2019, May 19). Blake's City of Golgonooza in Jerusalem: Metaphor and Mandala. The Human Divine. https://thehumandivine.org/2019/05/19/blakes-city-of-golgonooza-in-jerusalem-metaphor-and-mandala-by-james-bogan/



Psychogeography/Deep Topography

Cresswell, T. (n.d.). Place Re-imagined: A Review of Doreen Massey. Humans and Nature. https://humansandnature.org/place-re-imagined-a-review-of-doreen-massey/

Bollen, C. (2017, November 16). Iain Sinclair: Walking Is A Democracy. Guernica. https://www.guernicamag.com/iain-sinclair-walking-democracy/

Sturm, S. (2021, April 28). On Iain Sinclair and the Radical Act of Walking Through a City. Literary Hub. https://lithub.com/on-iain-sinclair-and-the-radical-act-of-walking-through-a-city/

Hancox, D. (2019). Walking in the Smart City. M/C Journal, 22(4). https://journal.media-culture.org.au/index.php/mcjournal/article/view/1554



Urban Pathologies and Health

World Health Organization. (2023, April 27). Urban health. https://www.who.int/news-room/fact-sheets/detail/urban-health

Guerra, E. (2019, June 10). Do denser neighborhoods have safer streets? Planetizen. https://www.planetizen.com/blogs/104765-do-denser-neighborhoods-have-safer-streets

McCahill, C. (2019, June 3). Dense areas are safer, but road design is critical. State Smart Transportation Initiative. https://ssti.us/2019/06/03/dense-areas-are-safer-but-road-design-is-critical/

VCU Health. (2023, May 15). Walking in urban green spaces is better for you than walking in gray spaces. https://www.vcuhealth.org/news/walking-in-urban-green-spaces-is-better-for-you-than-walking-in-gray-spaces



Urban Pathologies and Health

Gong, Y., Palmer, S., Gallacher, J., Marsden, T., & Fone, D. (2016). A systematic review of the relationship between objective measurements of the urban environment and psychological distress. Environment International, 96, 48-57. https://pmc.ncbi.nlm.nih.gov/articles/PMC4661642/

Kunstler, J. H. (1993). The geography of nowhere: The rise and decline of America's man-made landscape. Simon & Schuster.

Sussman, A., & Hollander, J. B. (2015). Cognitive architecture: Designing for how we respond to the built environment. Routledge.

Steg, L., & de Groot, J. I. M. (Eds.). (2018). Environmental psychology: An introduction (2nd ed.). Wiley-Blackwell.



Parks and Green Spaces

Gunn, L. D., Davern, M., Higgs, C., Boulange, C., Arundel, J., & Giles-Corti, B. (2023). Economic valuation of the health benefits of urban parks: A case study application. International Journal of Environmental Research and Public Health, 20(5),

4087. https://pmc.ncbi.nlm.nih.gov/articles/PMC10049315/

Green, J. (2023, August 14). New evidence on the health benefits of top-performing parks. The Dirt. https://dirt.asla.org/2023/08/14/new-evidence-on-the-health-benefits-of-top-performing-parks/

Eldridge, M., Burrowes, K., & Spauster, P. (2019). Investing in equitable urban park systems: Emerging funding strategies and tools. Urban

Institute. https://www.urban.org/sites/default/files/2022-03/the-health-benefits-of-parks-and-their-economic-impacts <



Rainwater Management and Cycling Data

Kaushal, S. S., Mayer, P. M., Vidon, P. G., Smith, R. M., Pennino, M. J., Newcomer, T. A., Duan, S., Welty, C., & Belt, K. T. (2024). Urban nutrient retention and release in the Anthropocene. Nature Reviews Earth & Environment. https://www.nature.com/articles/s43017-024-00599-x

U.S. Geological Survey. (n.d.). Stormwater runoff in urban watersheds. https://www.usgs.gov/media/images/stormwater-runoff-urban-watersheds

Harvard T.H. Chan School of Public Health. (n.d.). Bicycling. The Nutrition Source. https://nutritionsource.hsph.harvard.edu/bicycling/

Aubrey, A. (2024, May 20). Biking is good for your knees and may help you live longer, research finds. NPR. https://www.npr.org/sections/health-shots/2024/05/20/1251561467/biking-knee-pain-longevity-arthritis

