



UNIVERSITY OF
CAMBRIDGE

Department of Architecture

MAUD & MAUS

Programme of Lecture and Seminar Courses 2017-2018

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A. Overview

This programme provides a list of the lectures and seminars for MAUD and MAUS students. It specifies the course requirements in terms of choices and commitments.

Broadly speaking, there are two strands of lectures and seminars: one is social-political and cultural, the other is concerned with technical studies in architecture and the city. The usual course format is a 1.5-2-hour slot per week where some lecturers offer a lecture whilst others offer a seminar; or a combination of both. The students are required to choose one specific strand and attend all the lectures and seminars in that strand. The students should discuss their choices of seminars with their respective Principal Supervisors ("Supervisors" in text below). The choices could be further discussed with the Course Director if required. Because the seminars will require specific preparations the students are required to agree and register attendance with the lecturer leading each seminar series.

In addition to the lectures and seminars listed below, there are a number of Undergraduate Tripos lectures that are directly relevant to the MAUD and MAUS students. Students are strongly advised to discuss with their respective Supervisors when designing their lecture timetables, taking due consideration of their essay and dissertation topics. It is important that the students find sufficient focus in their essays to contribute to the development of their research rather than have their time thinly spread among the lectures and seminars.

Michaelmas Term

In this Term, there are two series of core courses. Students are required to attend one of them according to their chosen strand, although they could attend at the other course:

- (1) Studies in Socio-Politics of Architecture and the City (Dr Hernández and Dr Sternberg).
- (2) Sustainable Building Design and Managing Urban Change (Dr Baker, Dr Jin, Dr Heo and Prof Steemers).

In parallel to the core lectures above, all students will be attending a Research Methods Course which will cover training in generic research methods, GIS and other mapping, survey methods, ethnographical research and essay/dissertation writing skills. In addition, clinics for GIS and CAD skills will be organised by the Course Directors when such needs arise.

Lent Term

In the Lent term, the students are required to choose one strand of seminars as follows:

For the social-political strand, the core seminar courses are:

1. The UK's Landscape and Economy: Four Studies Reconsidered (Mr Keiller)
2. Peripheral Urbanisms (Dr Hernández)
3. Medieval Modernisms: The Middle Ages as a vehicle for critique and creativity in modern architecture (Dr Sternberg)
4. Studies on Modernisation in Four Twentieth-Century Cities (Prof Bullock)

For the technical strand, the core seminar courses are:

1. People and Buildings: Topics on Behaviour, Wellbeing and Resilience (Dr Sunikka-Blank, Dr So and Prof Steemers)
2. Building Performance Modeling and Simulation (Dr Heo)
3. Materials Research (Dr Ramage et al.)

B. List of courses

Strand 1: Studies in Socio-Politics of Architecture and the City

Michaelmas Term

Core Lectures: Studies in the Socio-Politics of Architecture and the City

Dr Felipe Hernández and Dr Max Sternberg

Weeks 1-8, Monday 2-4pm in the Classroom/Boardroom

Lent Term

Core Seminars:

- 1 The UK's Landscape and Economy: Four Studies Reconsidered [Screening, Lecture and Seminar]**
Mr Patrick Keiller
Weeks 1-4, Wednesday 2-4pm in the Classroom/Boardroom
- 2 Peripheral Urbanisms [Lecture and Seminar]**
Dr Felipe Hernández
Weeks 1-4, Friday 2-4pm in the Classroom/Boardroom
- 3 Medieval Modernisms: The Middle Ages as a vehicle for critique and creativity in modern architecture**
Dr Max Sternberg
Weeks 1-4, Monday 2-4pm in the Classroom/Boardroom

- 4 Studies on Modernisation in Four Twentieth-Century Cities – [Lecture and Seminar]**
Prof Nick Bullock
Weeks 3-6, Wednesday 10am-12 in the Boardroom

Strand 2: Sustainable Building Design and Managing Urban Change

Michaelmas Term

Core Lecture Courses:

- 1. Sustainable Building Design**
Dr Nick Baker
Weeks 2-8, Friday 2-4pm in Classroom
- 2. Managing Urban Change**
Dr Ying Jin, Dr Yeonsook Heo and Prof Koen Steemers
Weeks 2-8, Friday 10am-12 in Lecture Room 2

Lent Term

Core Seminar Courses:

- 1. People and Buildings: Topics on Behaviour, Wellbeing and Resilience**
Dr Minna Sunikka-Blank, Dr Emily So and Prof Steemers
Weeks 1-8, Monday 10am-12pm in Classroom
- 2. Building Performance Modeling and Simulation**
Dr Yeonsook Heo
Weeks 1-4, Friday 11am-1pm in the Boardroom
- 3. Materials Research**
Dr Michael Ramage et al.
Weeks 5-8, Friday 11am-1pm in the Boardroom

MAUS Strands 1 and 2: Research Methods Course

Michaelmas Term

This course will cover training in generic research methods, GIS and other mapping, survey methods, ethnographical research and essay/dissertation writing skills (Dr Felipe Hernández et al.).

In addition, clinics for GIS and CAD skills will be organised by the Course Directors when such needs arise.

Weeks 1-8, Lecture and Workshop on Wednesday 2-3/4pm in the Classroom.
This course is compulsory for students in both strands of the MPhil.

C. Course Outlines

Strand 1: Studies in Socio-Politics of Architecture and the City

Michaelmas Term

Core Seminar Course:

1. **Studies in the Socio-Politics of Architecture and the City**
Dr Felipe Hernández and Dr Max Sternberg

Course Outline

This course offers an introduction to some of the major debates in urban studies today, exploring different perspectives on the socio-political and cultural role of architecture and urbanism. We explore the major socio-political and spatial transformations that shaped metropolitan cities in the twentieth century. With a focus on the period following World War II and following a broad chronological framework, this course traces the rise and fall of modernist planning and architecture, the welfare state and the advent of neo-liberal urbanism.

We will engage with current thinking, but equally draws on important twentieth-century texts that continue to influence discourses about the city today. The course introduces perspectives from a wide range of disciplines in the humanities and social sciences, including anthropology, geography and philosophy – always with a view to how they help us address the contemporary challenges of the City.

The purpose of the lectures is to reconnect text with context. By returning to the circumstances that gave rise to the text, and by reviewing the priorities and policies of the moment in the particular city, the course aims to provide both a historical understanding of the opportunities and challenges facing cities at the time and, by keying text to context, to promote a reading of the text enriched by an understanding of its then relevance. Modernisation touched the lives of all who lived in cities, leaving some as winners and rather more as losers. How Modernisation worked in practice varied not only from city to city, but over time as the assumptions about the role of government changed: the way that the European welfare states set about Modernisation was different from the ‘public/private’ model used by Moses in New York or the market driven approach that saw the construction of Docklands in London; in Paris, French dirigiste policy proceeded in a very different way from the more flexible policies of the Berlin *Senat*; in Latin America, twentieth-century modernisation brought about complex class struggles and a re-conceptualisation of democracy, these phenomena, along with the appearance of new forms of western intervention, caused cities to divert considerably from the way they had been conceived. After World War II, independence movements in Asia, South-East Asia and Africa led to new

imaginings of the city, and to new understanding of urban societies. Thus this course exceeds the margins of a dominant western theory in order to study the development of cities worldwide.

The discussion-based seminars engage with close readings of a selection of relevant texts and occasionally films. Readings and written reading responses have to be done in advance of the lecture every week.

Seminar Titles:

- a. Metropolis and Modernity: Paris and Berlin from the 19th into the early 20th century (Dr Max Sternberg)
- b. State, Power and Resistance: anthropological perspectives (Dr Max Sternberg)
- c. Everyday life and meaning: phenomenological perspectives (Dr Max Sternberg)
- d. Shifting urban paradigms in the 21st century
- e. From the Laws of Indies to the 'modern city': Urban Form and Imagined Societies in Latin America (Dr Felipe Hernández)
- f. The End of Empire and the growth of the African City (Dr Felipe Hernández)
- g. Conceptualising Twentieth-Century Cities South of Cancer (Dr Felipe Hernández)
- h. Formalising the Informal: Recent Urban Interventions in Cities South of Cancer (Dr Felipe Hernández)

Core Bibliography

Set readings marked by an asterix (*)

a. Metropolis and Modernity: Paris and Berlin from the 19th into the early 20th century

*Walter Benjamin, 'Paris: Capital of the Nineteenth Century', in *Selected Writings*, Vol. 3, Howar Eiland & Michael W. Jennings, eds. (Cambridge, Mass.: Harvard University Press, 2003): 32-49 (German original 1935).

Graeme Gilloch, *Myth and Metropolis: Walter Benjamin and the City* (Cambridge: Polity Press, 1997).

David Harvey, *Paris: Capital of Modernity* (London: Routledge, 2005).

*Siegfried Kracauer, 'Analysis of a City Map', 'The Mass Ornament', 'The Hotel Lobby', in *The Mass Ornament: Weimar Essays* (Cambridge, Mass.: Harvard University Press, 1995): 41-44, 75-86, 173-85 (German edition 1963).

Henrik Reeh, *Ornaments of the Metropolis: Siegfried Kracauer and Modern Urban Culture* (Cambridge, Mass.: MIT Press, 2006).

Richard Sennett, ed., *Classic Essays on the Culture of Cities* (New York: Meredith Corporation, 1969): 47-60 (German original 1903).

*Georg Simmel, 'Conflict', in *On Individuality and Social Forms*, ed. by Donald N. Levine (Chicago: Chicago University Press, 1971): 70-91 (German original 1908).

Anthony Vidler, 'Agoraphobia: Spatial Estrangement in Georg Simmel and Siegfried Kracauer', *New German Critique*, No. 54 (Autumn, 1991): 31-45.

Andrew Webber and Emma Wilson, eds., *Cities in Transition: The Moving Image and the Modern Metropolis* (London: Wallflower, 2008).
Max Weber, *The City* (London: Heinemann, 1958; German original 1905).

Films

*Vertov, *Man with a Movie Camera*

b. State, Power and Resistance: anthropological perspectives on Modernism

Pierre Bourdieu, *The Social Structure of the Economy* (Cambridge: Polity Press, 2001).

Michel Foucault, *Michel Foucault Reader*, Paul Rabinow, ed. (Harmondsworth: Penguin, 1991).

John Brian Harley, 'Deconstructing the Map', *Cartographica*, vol. 26, no. 2 (1989): 1-20.

*James C. Scott, *Seeing like the State* (New Haven, Yale University Press, 1998).

James C. Scott, *Domination and the Arts of Resistance: Hidden Transcripts* (New Haven, Conn.: Yale University Press, 1990).

Loïc Wacquant, *Urban Outcasts: A Comparative Sociology of Advanced Marginality* (Cambridge, Polity Press, 2008).

c. Everyday life and meaning: phenomenological perspectives

Gaston Bachelard, *The Poetics of Space* (Boston, Mass.: Beacon Press, 1994; French original 1958).

*Hans-Georg Gadamer, *Relevance of the Beautiful* (Cambridge: Cambridge University Press, 1986; German original 1977).

Hans-Georg Gadamer, *Truth and Method* (London: Sheed and Ward, 1975; German original 1960).

Karsten Harries, *The Ethical Function of Architecture* (Cambridge Mass.: MIT Press, 1998).

*Martin Heidegger, 'Building Dwelling Thinking', in *Poetry, Language Thought*, Albert Hofstadter ed. (New York: Harper & Row, 1971; German original 1951): 143-61.

Edmund Husserl, *The Crisis of European Sciences and Transcendental Phenomenology* (Evanston, Northwestern University Press, 1970; German original 1936).

Christian Norberg-Schluz, *Genius Loci* (New York: Rizzoli, 1980).

Maurice Merleau-Ponty, *Phenomenology of Perception* (London: Routledge, 1962; French original 1945).

Alberto Perez-Gomez, *Architecture and the Crisis of Modern Science* (Cambridge Mass.: MIT Press, 1980)

Fred Rush, *On Architecture* (London: Routledge, 2009).

*Dalibor Vesely, *Architecture in the Age of Divided Representation* (Cambridge Mass.: MIT Press, 2004).

d. Shifting urban paradigms in the 21st century

*Ash Amin, 'The Good City', *Urban Studies*, vol. 43, issues 5/6: 1009-1023.

Ash Amin and Nigel Thrift, *Cities: Re-imagining the Urban* (Cambridge: Polity Press, 2002).

Manuel Castells, *Communication Power* (Oxford: Oxford University Press, 2009).

Manuel Castells, *Networks of Outrage and Hope: Social Movements in the Internet Age* (Cambridge: Polity Press, 2012): 1-19, 218-40.

William Cronon, *Nature's Metropolis: Chicago and the Great West* (New York: W. W. Norton & Company: 1992).

Pete Fussey, Jon Coaffee, Gary Armstrong, and Richard Hobbs (2011) *Sustaining and Securing the Olympic City: Reconfiguring London for 2012 and beyond* (Farnham: Ashgate, 2011).

Stephen Graham, *Cities under Siege: The New Military Urbanism* (London: Verso, 2011).

Hille Koskela, "'The gaze without eyes": video-surveillance and the changing nature of urban space'. *Progress in Human Geography*, vol. 24, n. 2 (2000): 243–265.

*Bruno Latour, *We have never been modern* (New York: Harvester Wheatsheaf, 1993), chapter 1.

- *Reassembling the Social* (Oxford: Oxford University Press, 2005), Introduction.

*- *Paris ville invisible* (Paris: La Découverte, 1998), online translation: www.bruno-latour.fr/virtual/PARIS-INVISIBLE-GB.pdf, 1-2, 18-23.

e. From the Laws of Indies to the 'modern city': Urban Form and Imagined Societies in Latin America

*Rama, A. (1996) *The Lettered City*. J.C. Chasteen (trans.). Durham: Duke University Press.

*Hernández, F., P. Kellett. 'Introduction: Reimagining the Informal in Latin America', in Hernández, F., P. Kellett and L. Allen (eds) (2012). *Rethinking the Informal City: Critical Perspectives from Latin America*. Paperback edition. Oxford – New York: Berghahn Books, 1-20.

f. The End of Empire and the growth of the African City

Demissie, F (ed) (2012) *Colonial architecture and urbanism in Africa: intertwined and contested histories*. Farnham, Surrey, UK, England; Burlington, VT: Ashgate. Chapters: Introduction, 6, 12 and 15.

*Freund, B (2007) *The African city: a history*. Cambridge-New York: Cambridge University Press. Chapters: 3 and 5.

Çelik, Z (1997) *Urban forms and colonial confrontations: Algiers under French Rule*. Berkeley, Calif.: University of California Press.

Beeckmans, L. and M. C, Matos (eds) (2010) *OASE 82: L'Afrique c'set Chic: Architecture and Planning in Africa 1950-1970*. Rotterdam: NAI Publicheirs.

g. Conceptualising Twentieth-Century Cities South of Cancer

*Edensor, T. and M. Jayne (eds) (2011) *Urban Theory Beyond the West: A World of Cities*. London: Routledge. Chapters: 2, 5, 19 and 20 (Introduction recommended)

*Pieterse, E and A. Simone (2013) *Rogue urbanism: emergent African cities*. Auckland Park, South Africa: Jacana. Chapters: Introduction, 1 and 2.

Duanfang, L. (2010) *Third World Modernism: Architecture, Development and Identity*. London: Routledge.

Mayers, G. A. (2011) *African Cities: Alternative Visions of Urban Theory and Practice*. London: ZED Books.

Simone, A. (2004) *For the City Yet to Come: Changing African Life in Four Cities*. Durham: Duke University Press.

h. Formalising the Informal: Recent Urban Interventions in Cities South of Cancer

*Pieterse, E (2008) *City futures: confronting the crisis of urban development*. London-New York: Zed Books; Capetown, South Africa: UCT Press, c2008. Chapters: Introduction, 2, 6, 7.

*Hernández, F. (2009) *Beyond Modernist Masters: Latin American Architecture Today*. Basel – Berlin – Boston: Birkhäuser. Chapter 1

Lerner, J. (2014) *Urban Acupuncture*. Washington: Island Press.

McGirk, J. (2014) *Radical Cities: Across Latin America in Search of a New Architecture*. London: Verso.

Lent Term

Lecture and Seminar courses:

1: The UK's Landscape and Economy: Four Studies Reconsidered – Screening, Lecture & Seminar

Patrick Keiller

Course Outline

What are we to make of the peculiarities of the UK's built environment and landscape? This seminar series invites students to consider aspects of this question previously explored in four films realised since the early 1990s, and to attempt to discern to what extent the various predicaments have changed. Each lecture and seminar session will follow a screening of the relevant film.

a – The 'problem' of London

When the film *London* (1994) was photographed in 1992, for the film's protagonist the 'problem' of London was perhaps a degree of provincial stasis, and that it wasn't Paris. Within a few years, however, London was becoming less unlike other European capitals. This was a partly subjective, as distinct from physical, transformation. More recently, major rebuilding has become more common. This session will look particularly at Nine Elms, the neighbourhood of the new US Embassy.

b – Material Flows

Robinson in Space (1997) set out through England outside London to test a view, then widespread, that the UK's social and physical ills are symptoms of a failing, backward capitalism. It found instead an economy that, while unattractive, was not unsuccessful within the terms it set itself. Since the 1970s, a landscape of container ports, distribution estates and retailing had

been installed. Between 1995 and 1997 the UK even recorded a surplus of exports over imports. In the twenty years since, the UK's annual balance of payments deficit has risen to over £100 billion, almost 6 percent of GDP. How has the UK survived this continual shortfall?

c – The ‘problem’ of dwelling

The Dilapidated Dwelling (2000) was prompted by a newspaper report of a 1997 publication for the Joseph Rowntree Foundation that drew attention to the extremely low replacement rate of the UK's housing stock. The film questioned the implied longevity of owner-occupied housing and asked why so many past attempts to modernise house production have failed, suggesting a kind of opposition between ‘dwelling’ and advanced economies. Twenty years later, the scale of the UK's housing crisis raises further, perhaps more urgent, questions.

d – Landscape and land

Robinson in Ruins (2010) was part of a project that set out to examine the idea of ‘belonging’ to place, noting an apparent discrepancy between, on one hand, a widespread preoccupation with experiences of mobility and displacement and, on the other, a tendency to fall back on formulations of dwelling derived from a more settled, agricultural past. In this session, we can consider how these and related concerns have developed during the period since.

Bibliography

a. The ‘problem’ of London

Mackworth, Cecily, *English Interludes: Mallarmé, Verlaine, Paul Valéry, Valery Larbaud in England, 1860-1912* (London: Routledge & Kegan Paul, 1974).

Herzen, Alexander, ‘The Fogs of London’ in *Ends and Beginnings* (Oxford: OUP, 1985), pp.429-432, extract ‘Herzen in London’ in Jennings, Humphrey, *Pandæmonium* (London: Picador, 1987), pp. 267-268, and other editions.

Interview with Jonathan Harvey, ACME, Friday 13 March 1998 at

<https://vads.ac.uk/resources/OEP/acme/index.htm>

Fisher, Mark & Rogers, Richard, *A New London: Two Views* (London: Penguin, 1992)

Wainwright, Oliver, ‘The truth about property developers: how they are exploiting planning authorities and ruining our cities’, *Guardian*, 17 September 2014, <https://www.theguardian.com/cities/2014/sep/17/truth-property-developers-builders-exploit-planning-cities>

Moore, Rowan, ‘London is being transformed with 230 towers. Why the lack of consultation?’, *Guardian*, 29 March 2014, <https://www.theguardian.com/cities/2014/mar/29/london-skyline-lack-of-consultation> and others at <https://www.theguardian.com/cities/series/london-skyline-debate>

Collinson, Patrick, ‘Is it time to close the door to foreign buyers of British property’, *Guardian*, 21 November 2015,

<https://www.theguardian.com/money/blog/2015/nov/21/foreign-buyers-british-property>

b. Material Flows

Wood, Ellen Meiksins, *The Pristine Culture of Capitalism: A Historical Essay on Old Regimes and Modern States* (London: Verso, 1991), chapter 6, pp. 95-116.

Keiller, Patrick, 'Port Statistics', *The View from the Train: Cities and Other Landscapes* (London: Verso, 2013), pp. 35-49.

Williams, Karel et al, 'Undisclosed and unsustainable: problems of the UK national business model', CRESC Working Paper 75, December 2009, <http://hummedia.manchester.ac.uk/institutes/cresc/workingpapers/wp75.pdf>

Broadbent, Ben, 'The UK Current Account', speech at Directors Breakfast, Chatham House, 29 July 2014, <http://www.bankofengland.co.uk/publications/Documents/speeches/2014/speech750.pdf>

c. The 'problem' of dwelling

Cooper, Glenda, 'Housing: Homes must last longer than the Pyramids', *Independent*, 13 April 1997, <http://www.independent.co.uk/news/housing-homes-must-last-longer-than-the-pyramids-1267087.html>

Orwell, George, 'The world of today is...' etc. in *Nineteen Eighty-Four* (London: Penguin, 2000), pp. 196-197.

Heidegger, Martin, 'Building Dwelling Thinking' in *Poetry, Language, Thought* (New York: Harper & Row, 1975), pp. 145-161.

Latour, Bruno, *We Have Never Been Modern* (Cambridge MA: Harvard UP, 1993), 'Who has forgotten being?' at pp. 65-67.

Frampton, Kenneth, *Modern Architecture: A Critical History* (London: Thames & Hudson, 1985), on Siedlung Halen etc. at pp. 311-312 and quoting Woods and De Carlo on p. 278.

Herzberg, Henry, 'Housing at Alexandra Road', *Architects' Journal* 164/36 8 September 1976, pp. 441-455.

Posener, Julius, Blundell Jones, Peter, Beigel, Florian and others, *Architects' Journal* 187/18 4 May 1988: special issue on Walter Segal, pp. 37-91.

Lloyd, Toby, 'Understanding and adapting the land market is key to solving our housing crisis', <http://blogs.lse.ac.uk/politicsandpolicy/why-arent-we-building-enough-homes> 10 March 2014;

Lloyd, Toby, 'Why have all attempts to fix Britain's housing crisis failed? Look to the land', *Guardian*, 28 Feb 2017,

<https://www.theguardian.com/commentisfree/2017/feb/28/britain-housing-crisis-land-ownership-white-paper>

d. Landscape and land

Adorno, Theodor, 'Refuge for the Homeless', *Minima Moralia* (London: Verso, 2005), pp. 38-39.

Adorno, Theodor, 'On the Question: "What is German?"', *New German Critique*, 36, Autumn 1985, pp. 121-131.

Lefebvre, Henri, 'Notes Written One Sunday in the French Countryside', *Critique of Everyday Life* Volume 1 (London: Verso, 2008), pp. 201-227.
Hobsbawm, Eric & Rudé, George, *Captain Swing* (London: Lawrence & Wishart, 1969 and other editions), chapter 1, pp. 23-37.
Polanyi, Karl, *The Great Transformation: The Political and Economic Origins of Our Time* (Beacon Press: Boston, 2001), chapters 7 & 8, pp. 81-107.
Walter, John, 'A "Rising of the People"? The Oxfordshire Rising of 1596', *Past & Present* 107 May 1985, pp. 90-143, also in *Crowds and Popular Politics in Early Modern England* (Manchester: Manchester University Press, 2006), pp. 73-123.

Further reading

Aragon, Louis, *Paris Peasant* (Boston: Exact Change, 1994) and other editions
Debord, Guy, 'Introduction to a Critique of Urban Geography', reprinted in *The Situationists and the City*, ed. Tom McDonough (London: Verso, 2009), pp. 59-63.
Rifkin, Adrian, 'Benjamin's Paris, Freud's Rome: Whose London?', *Art History* 22/4, November 1999, pp. 619-632.
Massey, Doreen, *World City* (Cambridge: Polity, 2007)

Anderson, Perry, 'Origins of the Present Crisis', *New Left Review* 1/23, January-February 1964, pp. 26-53.
Keiller, Patrick, *Robinson in Space* (London: Reaktion, 1999)
Rubenstein, W D, *Capitalism, Culture and Decline in Britain: 1750-1990* (London: Routledge, 1993)

Swenarton, Mark, *Cook's Camden: The Making of Modern Housing* (London: Lund Humphries, 2017)
De Certeau, Michel, *The Practice of Everyday Life* (Berkeley etc: University of California Press, 1984, introduction pp. xi-xxiv).
Hatherley, Owen, 'The Death and Life of PFI Urbanism: Vagaries of style and politics in British cities 2009 – present', *Economy and Architecture*, eds. Odgers, McVicar, Kite (Abingdon: Routledge, 2015), pp. 191-203.
Cahill, Kevin, *Who Owns Britain: The Hidden Facts behind Land Ownership in the UK and Ireland* (Edinburgh: Canongate, 2002)
Keiller, Patrick, *The Possibility of Life's Survival on the Planet* (London: Tate Publishing, 2012)
Kropotkin, Petr, *Fields, Factories and Workshops*, various editions and at <https://archive.org/details/fieldsfactoriesw00kropiala>

2: Peripheral Urbanisms – [Seminar Only]

Dr Felipe Hernández

Course Outline

In architecture and cultural theory the notion of periphery references a marginal position away from the centre, which signifies the norm. As such, the notion of periphery opens up a theoretical area of contestation suitable to

examine the relationship between dominant architectural and urban discourses/practices versus the processes through which cities are produced.

Thus, in this seminar, the idea of periphery refers to multiple urban questions and situations. For example, the seminar studies non-Western cities (the world's periphery), which are largely considered to have failed in relation to those in the centre (Europe and North America). Discussions will also address the question about urban peripheries more literally: via developments on the outskirts of cities –suburbia, gated communities, industrial towns, university towns, retail centres and FTZs, among other cases which maintain an awkward relationship with the urban core. Informal and popular urbanisms are also a topic of interest because urban informality often refers to both a geographical periphery as well as to peripheral spatial practices and discourses. Indeed, questions relating to the emergence of participatory practices –and activism– in architecture and urbanism will also be a subject of discussion.

In short, this seminar uses the notion of urban periphery as a vehicle to study spatial practices and processes, as well as methods of design and analysis, that that are considered to be marginal at a time when dominant discourses no longer carry the same weight.

Seminar Titles:

- a. Thinking Peripheries
- b. History, Colonialism, Globalisation and Urban Form
- c. Race, Ethnicity, Politics and Urban Form
- d. Critical Spatial Practice: Design on the Urban Peripheries

Set Readings

a. *Thinking Peripheries*

Caldeira, T. (2015). Social Movements, Cultural Production, and Protests: São Paulo's Shifting Political Landscape. *Current Anthropology*, 56(S11), S126-S136.

McGEE, T. (2015) Deconstructing the Decentralized Urban Spaces of the Mega-Urban Regions in the Global South', in Hamel, P. and R. Keil (eds) *Suburban Governance: A Global View*. Ed. U of Toronto, 2015. 325-36

ROY, A. (2011), 'Slumdog Cities: Rethinking Subaltern Urbanism', in *International Journal of Urban and Regional Research*, 35: 223–238.

Recommended: Roy, A, (2015) *Territories of Poverty: Rethinking North and South*. Atlanta: University of Georgia Press.

b. *History, Colonialism, Globalisation and Urban Form*

Carl Nightingale, *Segregation: A Global History of Divided Cities*, Chicago-London: Chicago University Press (2012), Chapter 1 (all Part 1), 2, 6, 12 and Epilogue

Recommended reading: Chapters 7, 8, 9 and 11

Hernandez, F. (2010) *Bhabha for Architects*. London: Routledge.

King, A. (2016) *Writing the Global City: Globalisation, Postcolonialism and the Urban*. London: Routledge.

c. Race, Ethnicity, Politics and Urban Form

Loïc Wacquant, *Urban Outcasts: A Comparative Sociology of Advanced Marginality*

Cambridge: Polity (2008) Chapters 0, 1, 8, 9 and Postscript, recommended Reading: Chapter 2, 3, 5 and 7

Caldeira, T. "Marginality Again?!" in *International Journal of Urban and Regional Research* vol. 33 no. 3 (2009): 848-853

d. Critical Spatial Practice: Design on the Urban Peripheries

Kaminer, T. and Robles-Duran (2011) *Urban Asymmetries: Studies and Projects on Neoliberal Urbanization*. Rotterdam: 010. Chapters: to be circulated

Bruins, G. and A. Graafland (2012) *African Perspectives – [South] Africa: Society, Space, Literature and Architecture* Rotterdam: 010. Chapters: to be circulated

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Almandoz, A. (2014) *Modernization, Urbanization and development in Latin America, 1900-2000*. London: Routledge.

Avermaete, T. (ed) (2006) *Another Modern: The Post-War Architecture and Urbanism of Candillis-Josic-Woods*. Rotterdam: NAI Publishers.

Beeckmans, L. and M. C. Matos (eds) (2010) *OASE 82: L'Afrique c'est Chic: Architecture and Planning in Africa 1950-1970*. Rotterdam: NAI Publicheirs.

Çelik, Z (1997) *Urban forms and colonial confrontations: Algiers under French Rule*. Berkeley, Calif.: University of California Press.

Cohen, J.L. and M. Eleb (2002). *Casablanca: colonial myths and architectural ventures*. New York: Monacelli Press.

Coquery-Vidrovitch, C (2005) *The history of African cities south of the Sahara: from the origins to colonization [Histoire des villes d'Afrique noire]*. Translated by Mary Baker. Princeton, New Jersey: Markus Wiener Publishers, c2005.

De Boeck and M. F. Plissart (2004) *Kinshasa: tales of the invisible city* [as a sequel to the exhibition "Kinshasa, the imaginary city"] Ghent: Ludion; Tervuren: Royal Museum for Central Africa.

Demissie, F (ed) (2012) *Colonial architecture and urbanism in Africa: intertwined and contested histories*. Farnham, Surrey, UK, England; Burlington, VT: Ashgate.

Duanfang, L. (2010) *Third World Modernism: Architecture, Development and Identity*. London: Routledge.

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Mobilization for Global Justice. London and Cambridge (Mass.): Wiley Academy.

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Harvey, D (2012) *Rebel Cities: From the Right to the City to the Urban Revolution*. New York: verso.

Hernández, F. (2009) *Beyond Modernist Masters: Latin American Architecture Today*. Basel – Berlin – Boston: Birkhäuser.

Hernández, F., P. Kellett and L. Allen (eds) (2012). *Rethinking the Informal City: Critical Perspectives from Latin America*. Paperback edition. Oxford – New York: Berghahn Books.

Lerner, J. (2014) *Urban Acupuncture*. Washington: Island Press.

Mayers, G. A. (2011) *African Cities: Alternative Visions of Urban Theory and Practice*. London: ZED Books.

McGirk, J. (2014) *Radical Cities: Across Latin America in Search of a New Architecture*. London: Verso.

Murray, M. and M. A. Mayers (eds) (2011) *Cities in Contemporary Africa*. London: Palgrave Macmillan.

Pieterse, E (2008) *City futures: confronting the crisis of urban development*. London-New York: Zed Books; Capetown, South Africa: UCT Press, c2008.

Pieterse, E and A. Simone (2013) *Rogue urbanism: emergent African cities*. Auckland Park, South Africa: Jacana.

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Simone, A. (2004) *For the City Yet to Come: Changing African Life in Four Cities*. Durham: Duke University Press.

3: Medieval Modernisms: The Middle Ages as a vehicle for critique and creativity in modern architecture

Dr Max Sternberg

Frank Lloyd Wright called Victor Hugo's medievalist novel *Notre Dame de Paris* 'one the truly great things ever written on architecture.' This is not an isolated testimony. Modern architects time and again appropriated the medieval past to express their aspirations for the present and future. The Middle Ages represent the archetypal historical 'Other' of modernism, no other epoch has been derided or idealised in such recurrent and passionate forms. The advent of architectural modernism saw a radical renewal of the modern fascination with medieval imagery that was first cultivated by Romanticism. Architectural remnants such as cathedrals or monasteries, the practices involved in producing them, as well as the ritual or mystical meanings they carried, became charged constructs of the modern historical imagination. They served architects, artists and theorists as reference points in critiquing the social, cultural and spiritual role of architecture and the architect. This is true for avant-garde tendencies as diverging as rationalism, organicism, formalism and primitivism. The appropriation of the Middle Ages was an extraordinarily creative and productive process, not just in architecture, but also across literature, film and art. The complex uses of medieval images serve as a key to exploring some of the underlying and ongoing dichotomies within modernism and modern architecture: between tradition and novelty;

'structure' and 'spirit'; as well as the ethical and the aesthetic; and the individualist and the collective.

This course traces the changing uses of medieval imagery in architectural modernism in a range of media, drawing not only on architects' designs and writings, but also on the representations of medieval architecture and material culture in literature and film.

- The first session addresses seminal nineteenth century literary accounts that have exercised a significant influence on modern architectural discourse.
- The next session traces diverging interpretations of the relevance and the modernity of the Middle Ages in architectural theory from the late nineteenth into the early twentieth century.
- The third session explores the writings and designs of leading modernist architects in the inter-war period for whom the Middle Ages served as a profound motif and creative impulse.
- The final session looks at the new ways in which avant-garde film in the 50s and 60s adduced the relevance the Middle Ages for their differing critiques of modernity.

A note on set readings and films: Journal articles can be accessed through the university electronic systems unless otherwise specified. Chapters in books will be made available on Moodle. Set readings amount to c.50-60 pages in total for each seminar. Set films are available to borrow from the departmental library. Students are encouraged to arrange projections for the group.

Seminar a. Mirror of Modernity: The Romantic tradition

Set Texts

Johann Wolfgang von Goethe. "On German Architecture." In: *Goethe's Literary Essays*, edited by J. E Spingarn (New York, N.Y.: Harcourt, Brace, 1921), 3-14 [first published in German in 1772].

Victor Hugo, "Book III, Chapter 1: Notre Dame", In: *The Hunchback of Notre Dame* (Boston: Little Brown and company, 1888), 153-64 [first published in French in 1831].

John Ruskin, "Part II, Chapter 4: The Nature of Gothic." In: *The Stones of Venice* (New York: J. C. Links, 1960) [first published in 1853].

Further Reading

David Spurr. "Allegories of the Gothic in the Long Nineteenth Century." *Architecture and Modern Literature* (University of Michigan Press: Ann Arbor, 2012), pp. 99–141

Otto Gerhard Oexle. "The Middle Ages through Modern Eyes. A Historical Problem: The Prothero Lecture." *Transactions of the Royal Historical Society* 9 (1999): 121-42.

David E Barclay. "Medievalism and Nationalism in Nineteenth-Century Nationalism." In: *Medievalism in Europe*, edited by Leslie J. Workman (Cambridge: D. S. Brewer, 1993), 5-22.

Umberto Eco. *The Aesthetics of Chaosmos: the Middle Ages of James Joyce* (Cambridge, Mass: Harvard University Press, 1989)
Dorothea von Mücke. "Beyond the Paradigm of Architecture: Goethe on Architecture." *Grey Room*, 35 (2005), 6-27.

Seminar b. Competing claims of architectural theory: structure, society and form

Set texts

Eugène Viollet-le-Duc. [excerpts from] *Discourses on Architecture*. Edited by Henry van Brunt (Ann Arbor, Mi: University of Michigan Library, 2011). [first published in French between 1863-1873]
Eugène Viollet-le-Duc. [excerpts from] *Dictionnaire Raisoné*. In: *The Foundations of Architecture: Extracts from Dictionnaire Raisoné*, edited by Barry Bergdoll (New York: George Braziller, 1990) [first published in French 1854-68]
William Morris. "The Revival of Architecture." In *The Collected Works of William Morris* (Cambridge: Cambridge University Press: 2012), 318-30. [first published in 1888].
Wilhelm Worringer. [excerpts from] *Form Problems of the Gothic* (New York, N.Y.: G. E. Stechert: 1920). [first published in German 1911].

Further reading

Oechslin, Werner, 'The Janus-head of Greek-Gothic ... Fragments in the (never ending) Story of Modern Architecture's Search for Identity', in Barry Bergdoll and Werner Oechslin, eds., *Fragments, Architecture and the Unfinished* (London and New York, Thames and Hudson, 2006), pp. 149-82.
Georg Germann. *Gothic Revival in Europe and Britain: Sources, Influences and Ideas* (Cambridge, Mass.: MIT Press, 1973).
Harris Francis Mallgrave, *Modern Architectural Theory: A Historical Survey 1673-1968* (Cambridge: Cambridge University Press, 2009). (Chapters 9-11).
Robin D. Middleton, "The Abbe De Cordemoy and the Graeco-Gothic Ideal." *Journal of the Warburg and Courtauld Institutes* 26 (1963): 90-123.
Marvin Trachtenberg. "Suger's Miracles, Branner's Bourges: Reflections on 'Gothic Architecture' as Medieval Modernism." *Gesta*, 39 (2000): 183-205.
Paul Binski. "The Heroic Age of Gothic and the Metaphors of Modernism." *Gesta*, 52 (2013): 3-19.

Seminar c. Modernist masters and the search for order

Set texts

Peter Behrens. "Art and Technology". In: *Architectural Theory, Volume 2, An Anthology 1871-2005*. Edited by Harry Francis Mallgrave (Oxford: Wiley-Blackwell, 2008), 106-107 [first published in German in 1910]
Peter Behrens. "On Art for the Stage." *Perspecta* 26 (1990): 135-42. [first published in German 1900].

- Walter Gropius, "Bauhaus Manifesto" *Architectural Theory, Volume 2, An Anthology 1871-2005*. Edited by Harry Francis Mallgrave (Oxford: Wiley-Blackwell, 2008), 198-201 [first published in German in 1919].
- Mies van der Rohe. [excerpts from] *The Artless Word: Mies van der Rohe on the Building Art*. Edited by Fritz Neumeyer (Cambridge, Mass.: MIT Press, 1994).
- Le Corbusier. [excerpts from] *When the cathedrals were white* (London: Routledge 1948) [first published in French 1937].

Further reading

- Barbara Miller Lane. *National Romanticism and Modern Architecture in Germany and the Scandinavian Countries* (Cambridge: Cambridge University Press, 2000).
- Ross Anderson. "The Medieval Masons' Lodge as Paradigm in Peter Behrens's 'Dombauhütte' in Munich, 1922." *The Art Bulletin*, 90 (2008), 441-465 .
- Michael T. Saler. *The Avant-Garde in Interwar England: Medieval Modernism and the London Underground* (Oxford: Oxford University Press, 1999).
- Alexander Nagel. *Medieval Modern: Art out of Time* (London: Thames and Hudson, 2012).
- Wolfgang Pehnt. *Expressionist Architecture* (London: Thames and Hudson, 1973)
- Keith D. Lilley. "Modern visions of the medieval city: Competing conceptions of urbanism in European civic design." *Environment and Planning B: Planning and Design*, 26 (1999), 427-66.
- Volker M. Welter. "The Limits of Community: The Possibilities of Society: On Modern Architecture in Weimar Germany." *Oxford Art Journal*, 33 (2010): 65-80.

Seminar d. Existential encounters in avant-garde film

Set Films*

- Ingmar Bergman, *The Seventh Seal* (1957)
- Andrej Tarkovsky, *Andrej Rublev* (1966)
- Pier Paolo Pasolini, *Hawks and Sparrows* (1966)

* students are asked to watch 2 out of the 3

Further reading

- Laurie A. Finke and Martin B. Shichtman. *Cinematic Illuminations: The Middle Ages on Film* (Baltimore, Md.: Johns Hopkins University Press, 2010).
- Medieval Film*. Edited by Anke Bernau and Bettina Bildhauer (Manchester: Manchester University Press, 2009).
- Giorgio Agamben, *The Highest Poverty: Monastic Rules and Forms of Life* (Stanford, Cal.: Stanford University Press, 2013).

4: Studies on Modernisation in Four Twentieth-Century Cities – [Lecture and Seminar]

Prof Nick Bullock

Course Outline

Modernisation touched the lives of all who lived in cities, leaving some as winners and rather more as losers. How Modernisation worked in practice varied not only from city to city, but over time as the assumptions about the role of government changed: the way that the European welfare states set about Modernisation was different from the 'public/private' model used by Moses in New York or the market driven approach that saw the construction of Docklands in London; in Paris, French dirigiste policy proceeded in a very different way from the more flexible policies of the Berlin *Senat*.

Seminar Titles:

- a. The Modernisation of New York in the 1950s: Robert Moses versus Jane Jacobs
- b. Modernising Post-war Paris: the Gaullist Agenda and its Critics from Left and Right
- c. Modernising the Paris Region after WWII
- d. The End of Urban Renewal? Berlin and the Search for New Ways to Transform the City

Core Bibliography

Set readings marked by an asterix (*)

a. Modernising New York: Robert Moses versus Jane Jacobs 1945-70

Caro, R. *The Power Broker: Robert Moses and the Fall of New York*, Knopf, New York, 1974

Ballon, H. and Jackson, K.T. *Robert Moses and the Modern City, the Transformation of New York*, New York, Norton and Co, 2007, pp. 94-115; 122-33

*Jacobs, J. *The Life and Death of Great American Cities*, New York, 1961, Harmondsworth, Penguin Books, 1964, pp. 1-25

Schubert, D. (ed.) *Contemporary Perspectives on Jane Jacobs, reassessing the impact of an urban visionary*, Ashgate, Farnham, 2014

Schwartz, J. *The New York Approach: Robert Moses, urban liberals and redevelopment of the inner city*, Columbus, Ohio State University Press, 1993

*Wilson, J.Q. (ed.) *Urban Renewal: the Record and the Controversy*, Cambridge Mass, MIT Press, 1966

Zipp, S. *Manhattan Projects, the Rise and Fall of Urban Renewal in Cold War New York*, OUP, New York, 2010

b. Modernising Post-war Paris: the Gaullist Agenda and its Critics from Left and Right

- *Chevalier, L. *The Assassination of Paris*, (trans. Jordan, D.), Chicago, University of Chicago Press, 1994
- *Lefebvre, H. 'The Right to the City', in *Writings on Cities* (trans. and ed. Kofman, E. and Lebas, E.), Oxford, Blackwell, 1996
- Sutcliffe, A. *The Autumn of Central Paris: the Defeat of Town Planning 1850-1970*, London, Edward Arnold, 1970
- *Wakeman, R. *The Heroic City: Paris 1945-1958*, Chicago, University of Chicago Press, 2009

c. Modernising the Paris Region after WWII

- Bastié, J. *La Croissance de la Banlieue Parisienne*, Paris, Presses Universitaires de France, 1964
- Evenson, N. *Paris: a Century of Change, 1878-1978*, London, Yale University Press, 1979
- Hazan, E. *Paris sous Tension*, Paris, La Fabrique, 2011
- Noin, D. and White, P. *Paris*, Chichester, Wiley, 1997
- *Wacquant, L. 'Designing Urban Seclusion in the Twenty First Century', in 'Taboo', *Perspecta, The Yale Architectural Journal*, No.43, 2010
- Films*
- Matthieu Kassowitz, *La Haine* ()
- Eric Rohmer, *L'ami de mon ami* ()
- Jean-Luc Goddard, *Une ou deux choses que je sais d'elle* ()

d. The End of Urban Renewal? Berlin and the Search for New Ways to Transform the City

- Bernt, M. *Rübergeklappt, die 'Behutsame Stadterneuerung' im Berlin der 90er Jahre*, Berlin, Schelzky and Jeep, 2003
- Clelland, D. (ed.) 'Berlin as Model, IBA – the Internationale Bauausstellung, Berlin, September 1984', *Architectural Review*, September 1984, Vol.CLXXVI, No.1051
- IBA Project Report, *Internationale Bauausstellung*, Berlin 1987, Berlin. Berliner Senat, 1987
- Klemek, C. 'Jane Jacobs and the Transatlantic Collapse of Urban Renewal' in Schubert, D. (ed.) *Contemporary Perspectives on Jane Jacobs*, Farnham, Ashgate, 2014
- Koopmans, R. *Democracy from Below, New Social Movements and the Political System in West Germany*, Boulder, Westview Press, 1997
- Suhr, M. (ed.) *Urban Renewal, Berlin, Experience, Examples and Prospects*, Berlin, Berliner Senatsverwaltung für Bau- und Wohnungswesen, 1991

Strand 2: Technical Studies in Architecture and the City

Michaelmas Term

Core Lecture Courses

1. Sustainable Building Design

Dr Nick Baker

Course Outline

The course deals with the building science behind the environmental design of sustainable, healthy buildings. Well-established basic principles are revisited, but extended to the latest practice and technologies. An underlying theme is sustainability, in respect to the minimal use of energy and minimal environmental impact both locally and globally.

Another theme which will be developed more in discussion than the lecture, is the role of technical analysis in design. The role of simulation and its pitfalls are also discussed. A healthy scepticism is introduced in the concept of optimized design; instead, a “safe territory” design is proposed that returns a “good enough” performance over a wider range of unpredicted conditions. Finally, speculation of future life-style trends and built environment design responses is encouraged.

Lecture Titles:

- 1 Environmental comfort and adaptive theory
- 2 Heating buildings - principles and advanced design
- 3 Natural ventilation and passive cooling
- 4 Daylighting Design
- 5 Sustainable Refurbishment
- 6 Research methods and monitoring
- 7 The evolution of the sailing ship - a model for passive design

Bibliography

To follow

2. Managing Urban Change

Dr Ying Jin, Dr Yeonsook Heo and Prof Koen Steemers

Course Outline

This course is an introduction to the management of urban change through physical planning and urban design, particularly regarding theories and methods for anticipating foreseeable trends (e.g. population aging at a global scale) and allowing for major uncertainties (e.g. future energy sources and prices). I will focus on aspects closely related to economics and engineering

in order to address issues concerning investment, regulation, delivery and monitoring of on-going performance.

We start with the forces of agglomeration which attract today's new businesses and young people towards some (though not all) dense urban areas, and consider how to harness the forces in order to create better cities and avoid becoming victims. We then take a long view of the urban growth cycles of around 100 years which help foresee and manage needs for land, buildings and infrastructure in 5-10 year planning and design cycles. Thirdly, we analyse when it is sensible to embed cost-saving options to be taken up in the future within major design schemes, and when it is better to ignore such issues like most people do today. Finally, we use the management of urban travel as an example to see what the above theories and methods imply where it is necessary to reconcile conflicting requirements from all disciplines as an architect, urban designer or physical planner, whose duty it is to reinforce all three pillars of sustainability. The emphasis of the seminars is to help students develop their own ways to identify and investigate project opportunities in their academic and professional work.

Lecture Titles:

- a. A spikier world: why do ICT champions congregate in dense cities?
- b. Growths fast and slow: do cycles of development matter?
- c. The value of keeping options open: how does urban infrastructure cope with the uncertainties over its long life-span?
- d. Management of urban travel: can place-making improve traffic and vice versa?
- e. Urban Energy (Dr Heo)
- f. Urban Environment (Prof Steemers)

Bibliography

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- de Neufville, R and S Scholtes (2011). *Flexibility in Engineering Design*. The MIT Press, Cambridge, Mass.
- DECC (2010). *2050 Pathway Analysis*. See <http://webarchive.nationalarchives.gov.uk/20121217150421/http://decc.gov.uk/en/content/cms/tackling/2050/2050.aspx>. **
- Boarnet, MG and R Crane (2001). *Travel by Design*. Oxford University Press, New York.
- Fawcett, W, M Hughes, H Krieg, S Albrecht, and A Vennström (2012), *Flexible strategies for long-term sustainability under uncertainty*. *Building Research & Information* 40, 545-557
- Girouard, M (1985). *Cities and People*. Yale University Press, New Haven.
- Glaeser, EL (2008). *Cities, Agglomeration and Spatial Equilibrium*. Oxford University Press, Oxford.
- Gordon, I, (2008). *Density and the built environment*, *Energy Policy*, Vol 36, 4652–4656. **
- Hall, P and C Ward (2014). *Sociable Cities: The 21st-Century Reinvention of the Garden City*. Routledge, Abingdon, Oxon
- Hamilton-Baillie (2008). *Shared space: reconciling people, places and traffic*.

Built Environment, Vol 34, pp161-181.**
Headicar, P (2009). Transport Policy and Planning in Britain. Routledge, Abingdon, Oxon
Howard, E (1898). Garden Cities of Tomorrow. (Use the 1965 Edition with preface by FJ Osborn and introduction by Lewis Mumford, The MIT Press, Cambridge, Mass).
Jackson, KT (1985). Crabgrass Frontier: The Suburbanization of the United States. Oxford University Press, New York.
Jin, Y, MH Echenique and AJ Hargreaves (2013). A recursive spatial equilibrium model for planning large-scale urban change. Environment and Planning B: Planning and Design, Vol 40: pp1027-1050 (doi:10.1068/b39134).
Li, LM, AJ Dray-Novoy & H Kong (2008). Beijing. Palgrave Macmillan, New York.
MacKay, D (2008). Sustainable Energy – without the hot air; downloadable from <http://www.withouthotair.com/download.html>.
Train, K (2009). Discrete Choice Methods with Simulation. Cambridge University Press, Cambridge.
Wu, L (1999). Rehabilitating the Old City of Beijing. University of British Columbia Press, Vancouver.

Lent Term

Core Seminar Courses

1. People and Buildings: Topics on Behaviour, Wellbeing and Resilience

Dr Minna Sunikka-Blank, Dr Emily So and Prof Koen Steemers

Course Outline

This course takes as its starting point a human-centric approach to architecture and urban design. To enhance human well-being, building and urban design needs to move beyond optimising single parameters such as energy or temperature, to more holistic approaches that take their cues in health-supporting human behaviours. The design of our built environment affects our health and well-being, and can have long-term implications on quality of life.

The publication of “Nudge: Improving health, wealth and happiness” by Richard Thaler and Cass Sunstein in 2008 was influential in revealing that behaviour can be strongly influenced by context.¹ People can be nudged in to making better decisions in largely automatic, non-coercive and simple ways, through changing what Thaler and Sunstein refer to as “choice architecture”. Can architecture create choice architecture? The role that architecture can play seems evident: “Design-led interventions can make better choices easier or constrain behaviours by making certain actions more difficult”.²

¹ Thaler, R., & Sunstein, C. (2008). *Nudge: Improving decisions about health, wealth and happiness*. New Haven, CT: Yale University Press.

² King, D., Thompson, P., & Darzi, A. (2014). Enhancing health and wellbeing through 'behavioural design'. *Journal of the Royal Society of Medicine*, 336-337.

In this course, we will introduce a broad spectrum of topics in sustainability, user behaviour, well-being and relevant research methods. We shall explore different performance aspects, including energy efficiency, resilience, thermal comfort, for buildings at individual level and for cities as a whole. That is, we explore technical, behavioural, and socio-political factors that influence the performance of buildings at different scales. The course will be driven by practical scenarios/issues that will stimulate student interest and motivate them to build a scientific foundation. In addition, the course will provide theoretical and methodological foundations for formulation of research/design problems and research methods (both quantitative and qualitative). Throughout the term, the course will help students to tackle their design/research problems through a structured analytical process.

The seminar course consists of weekly two-hour sessions including in-depth discussions based on readings of relevant books or papers listed in the core bibliography. Reading and the production of reading notes have to be done in advance of the seminar every week.

Lecture titles

- a. Behaviour – energy use as a socio-technical issue (Dr Minna Sunikka-Blank)
- b. Behavior – the view from the social practice theory (Dr Minna Sunikka-Blank)
- c. Natural hazards and resilience (Dr Emily So)
- d. Architecture for resilience (Dr Emily So)
- e. Health and wellbeing (Prof Koen Steemers)
- f. Thermal comfort and heat stress (Prof Koen Steemers)
- g. Light, perception and health (Prof Koen Steemers)
- h. The urban environment (Prof Koen Steemers)

Bibliography

Research Design and Methodology

R. Lyman Ott and Michael Longnecker, “An Introduction to Statistical Methods and Data Analysis” Nelson Education, 2015.

John W. Creswell, “Research Design: Qualitative, Quantitative, and Mixed Methods” Sage Publications, 2013.

William M. Trochim, “The Research Methods Knowledge Base, 2nd Edition” at URL: <http://www.socialresearchmethods.net/kb/>, 2016.

Natural Hazards and Resilience

Brian Walker and David Salt “Resilience Thinking: Sustaining Ecosystems and People in a Changing World” Island Press, 2012.

Disaster Resilience:: A National Imperative By Committee on Science, Engineering, and Public Policy, Committee on Increasing National Resilience to Hazards and Disasters, Policy and Global Affairs, The National Academies, 2012

Benjamin Wisner “At Risk: Natural Hazards, People's Vulnerability and Disasters”. Routledge, 1994

David Alexander, "Natural Disasters", CRC Press, 1993.
Mark Pelling, "The Vulnerability of Cities: Natural Disasters and Social Resilience" Earthscan Publishing, 2003.

Useful websites:

<http://www.wcdrr.org/>

<https://www.gov.uk/government/collections/foresight-project>

Architecture for Resilience

Bryant, M and Allan, P. "Resilience as a framework for Urban Design. Proceedings of The 4th International Urban design conference on Urban resilience, Gold Coast, Australia, 2011.

Allan P. and Bryant, M. (2011) The Attributes of Resilience: A Tool in the Evaluation and Design of Earthquake- Prone Cities. Proceedings of The International Conference on Building Resilience, Kandalama, Sri Lanka.

Donald Watson and Michele Adams, "Design for Flooding: Architecture, Landscape, and Urban Design for Resilience to Climate Change" John Wiley & Sons, 2011.

Health and wellbeing

Aked, J., Michaelson, J., & Steuer, N. (2010). Good foundations: Towards a low carbon, high well-being built environment. London: New Economics Foundation

Aked, J., Thompson, S., Marks, N., & Cordon, C. (2008). Five ways to well-being: The evidence. London: New Economics Foundation.

Anderson, J. (2014). Urban design and well-being. Cambridge: Doctoral thesis, University of Cambridge.

Barton, H., Thompson, S., Burgess, S., Grant, M. (2015). The Routledge Handbook of Planning for Health and Well-being, Abingdon: Routledge.

Bluyssen, P. (2013). The Healthy Indoor Environment. Abingdon: Routledge.

Bluyssen, P. (2014). The Healthy Indoor Environment: How to assess occupants' wellbeing in buildings, Abingdon: Routledge.

CABE. (2009). Sustainable places for health and Well-being. London: Commission for Architecture and the Built Environment.

Cattell, V., Dines, N., Gesler, W., & Curtis, S. (2008). Mingling, observing, and lingering: everyday public spaces and their implications for well-being and social relations. Health Place, 544-561.

Huppert, F. and So, T. (2013). Flourishing across Europe: Application of a new conceptual framework for defining well-being. Social Indicators Research, 837-861.

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UK-GBC (2016). Health, wellbeing and productivity in retail: The impact of green buildings on people and profit. UK Green Building Council, London. Available from <http://www.ukgbc.org/resources/publication/health-wellbeing-and-productivity-retail-report>.

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2. Building Performance Modelling and Simulation

Dr Yeonsook Heo

Course outline

This course gives an overview of three main modelling methods used for predicting the indoor and outdoor climatic conditions in built environment. The course will provide theoretical and technical foundations of three distinctive methods: dynamic thermal modelling, airflow network modelling, and computational fluid dynamics modelling. In addition, the course will also discuss the relevance of different methods in different design applications. Furthermore, in order for students to appropriately deploy a modelling method in the context of their design/research projects, the course will also introduce a formal framework to support design decision-making through model-based design analysis.

Lecture titles

- a. Overview of Building Simulation Methods
- b. Dynamic Thermal Modelling
- c. Airflow Network and Computational Fluid Dynamics Modelling
- d. Model-based Design Analysis

Bibliography

Jan L.M. Hensen and Roberto Lamberts, eds. "Building Performance Simulation for Design and Operation" Routledge, 2012.

Ali Malkawi and Godfried Augenbroe, "Advanced Building Simulation" Routledge, 2004.

Joseph A. Clarke, "Energy Simulation in Building Design" Routledge, 2001.

CIBSE Guide A, "Environmental Design" Chartered Institution of Building Services Engineers, 2006.

CIBSE Guide F, "Energy Efficiency in Buildings" Chartered Institution of Building Services Engineers, 2004.

3. Natural Material Innovation

Dr Michael Ramage + Group

Course Outline

The relationship between structural form and natural force allowed medieval master builders to construct spaces that still inspire awe today, many of which would be difficult to recreate. But with an understanding of antique knowledge, traditional construction, and contemporary computation we can once again explore the form and structure of centuries ago in contemporary architecture and engineering. Combining historic wisdom with the latest natural material technology offers the promise of novel and sustainable building solutions. Understanding how materials that are traditionally considered weak can be reimagined through structural form offers new avenues for construction and architecture. For example, timber has exceptional properties for building, many of which have been overlooked in the past century. New research on natural fibre composites and engineered timber offers the possibility of wooden skyscrapers, the first generation of which are being realized in cities as diverse as London, Melbourne, Bergen, and Vancouver.

Lecture titles

- a. The Future of Masonry
- b. Impossibly Tall Timber Skyscrapers
- c. Natural Fibre Composites

Bibliography

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Ramage, M.H., Ochsendorf, J. and Rich, P. (2010) "Sustainable Shells: New African vaults built with soil-cement tiles," *Journal of the International Association of Shell and Spatial Structures*, Vol.51 No. 4 December, pp 255-261.

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Research Methods Course

For all MPhil students. 1st Year PhD students may also be attending subject to consent of their Supervisors.

Michaelmas Term

Weeks 1-8, Lecture and Workshop on Wednesday 2-3/4pm in the Classroom

11 October	How to get started (Felipe Hernández) 1 hour
18 October	GIS (TBC) 1 hour
25 October	GIS (TBC) 1 hour
1 November	Qualitative mapping (Lefkos Kyriacou) 2 hours
8 November	Surveying techniques (TBC) 1 hour
15 November	Ethnographic site observation and interviewing skills (TBC) 1.5 hours.
22 November	Academic writing skills 1/2 (Richard Berengarten) 1.5 hours
29 November	Academic writing skills 2/2 (Richard Berengarten) 1.5 hours

In addition, GIS and CAD clinics will be organised throughout the course for helping the design studio and course work. Students should confirm with the arrangements with their Course Directors at the beginning of the Michaelmas Term.