

# Sustainability: Concepts & Materiality

1 day interdisciplinary workshop on  
sustainability

Exploration and networking across  
UCL's faculties.

Keynote speaker:

Blanche Cameron Dip. Arch., AoU  
(University of East London and reset-development.org)

Discussants:

Dr Jerome Lewis (UCL) & Dr Victor Buchli (UCL)

**Friday, May 18, 2012**

**9:30 AM - 5:00 PM**

**University College London**

**Archaeology LT G06**

**31-34 Gordon Square**

**WC1H 0PY London**

All Welcome

Attendance is free but be sure to reserve a space  
online:

<http://sustainabilityconcepts-auto.eventbrite.com/>

For further details contact Jane Dickson

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Held in conjunction with the Cultures of  
Sustainability Section of the Environment Institute



# Sustainability Workshop

9.30am      **Coffee**

10.00      **Introductions:** Jane Dickson

**Keynote speaker:** Blanche Cameron (Uni East London and Reset.org)

10.30      **Papers Session 1 Cultural Shifts**

Chair: David Jeevendrampillai

Discussant: Dr Jerome Lewis

**Andrew Chilvers** (Civil, Environmental and Geomatic Engineering)

“Ethnographic studies of engineers and their role in materialising sustainability (or not)”

**Pakhee Kumar** (Bartlett)

“Sustainable Heritage Tourism: Challenges in Implementing International Policies”

**Katriina Rosengren** (Bartlett) “Operationalizing ‘Strong’ Sustainability in Northern European Urban Planning”

12.00      **Short Presentations**

**Sneha Krishnan** (Civil, Environmental & Geomatic Engineering)

“Disaster Resilience”

**Rebecca Collins** (Geography)

“Happy Hedonist or Engaged Environmentalist? The role of adolescents in the drive towards sustainable consumption”

**Elles van Asseldonk** (Anthropology and Engineering)

“Unpacking Sustainable Development”

**Elizabeth Rapoport** (Civil, Environmental and Geomatic Engineering)

“Sustainability in motion: global consultants and the international travels of the sustainable masterplan”

12.30 - 1.30      **Lunch**

To be provided for all speakers

1.30            **Session 2 Short Presentations**

**Carrie Behar** (Energy Institute)

“Sustainability and ventilation in UK housing- how can we ensure that the transition to sustainable ventilation technologies will result in the anticipated energy savings?”

**Sarah Wilkes** (Anthropology)

“Negotiating Materials Moralities: Sustainability and Risk in the UK Materials Industry”

**Faye Wade** (Energy Institute)

“The influence of central heating installers on space heating practices”

**Gabriele Oropallo** (Design and Sustainability)

“Post-Product: Industrial Design from Timeless to Timed”

2.00            **Session 2      Creative ReUse Papers**

Chair: David Jeevendrampillai

Discussant: Dr Victor Buchli

**Brian Garcia** (Bartlett)

“Usurping the Auto: Challenges for Implementing Public Transportation in Car Dominant Cities”

**Henrietta Lynch** (Energy Institute)

“The Works: Passivhaus at Ebbw Vale” Film

**Peter Oakley** (Anthropology)

“Sustainability: definitions and issues in the goldworking industries”

3.30            **Coffee**

3.45            Roundtable with Victor Buchli in discussion with Jerome Lewis

4.15-20       **Short close** – thanks

After workshop drinks - TBA

## Paper Abstracts

**Andrew Chilvers** (Civil, Environmental and Geomatic Engineering)

“Ethnographic studies of engineers and their role in materialising sustainability (or not)”

How does engineering become structured towards certain normativities? Are values explicitly considered in practice and how do they shape material outputs? How does this vary between modes and contexts of practice and change as engineers seek to align with new imperatives, such as sustainability? This presentation draws on a doctoral project currently underway that seeks to address these questions through studying the history and practices of a particular engineering and design consultancy; Arup.

The first part of the presentation presents findings from initial work done to map the historical development of the firm and the emergence of its contemporary culture. In this I identify a congruence that has emerged between the firm’s traditional design philosophy and organisational values – attributable to it’s founder, Sir Ove Arup – and more recent imperatives for engineers to show leadership towards sustainability.

However, I then introduce findings from ethnographic studies of the firm’s contemporary engineering designs. Here we find that the way in which design engineers become required to materialise design objectives both runs contrary to the firm’s sustainability aspirations and goes largely undiscussed. Rather, the true materiality of the design becomes an invisible part of the engineer’s input. Thus, whilst the strong external rhetoric and internal discourses of Arup around leadership on sustainability issues seem to indicate a normative restructuring, this is contradicted by the on-the-ground ethnographic findings which instead point to profound limitations to the engineer’s role as traditionally conceived.

**Pakhee Kumar** (Sustainable Heritage)

“Sustainable Heritage Tourism: Challenges in Implementing International Policies”

The concept of sustainable tourism emerged from its parental theory sustainable development. UNWTO (2011) and is defined as “tourism that takes full account of its current and future economic, social and environmental impacts, addressing the needs of visitors, the industry, the environment and host communities”. This paper aims to explore the challenges in achieving sustainable heritage tourism through comparison of international policies with implementation at local level using case studies.

The paper will address three issues:

1. The distribution of economic benefits of heritage tourism
2. Loss of authenticity of heritage due to tourism
3. Balancing access and conservation of heritage

The case of Neemrana heritage hotel, India not only suggests that it is the rich who benefit from tourism but also tourism can make heritage less accessible (both physically and economically) to the public. Comparing it with Jaisalmer fort, raises a question ‘can any heritage site be called as a successful example of sustainable heritage tourism?’ The case of Hmong society of Laos exemplifies that if not managed, tourism can bring alterations to heritage and detrimental to the local cultural and social heritage. Angkor Wat, Cambodia proves that only limiting visitor numbers cannot enhance the experience of the site. Nefertari’s tombs, Egypt demonstrates that limiting visitor numbers could make heritage inaccessible to wider public and hence raises question ‘is timed-ticketing and increased cost the right ways of attaining balance between access and conservation?’

## **Katriina Rosengren (Bartlett)**

### “Operationalizing ‘Strong’ Sustainability in Northern European Urban Planning”

This PhD takes strong sustainability in urban planning as a starting point to test in a Northern European context. It focuses on capital regions and seeks to understand how well the different pillars of sustainability (social, economic and environmental) are addressed, by whom and at which stages of the planning process. As general plans (ie the London Plan) are common blanket strategic planning documents in all of the capital cities involved, focus will be on this strategic planning tool and in evaluating how well these documents function as primary avenues for operationalizing strong sustainability in city planning.

Previously background research has been carried out on the concept of sustainability, and in particular, the definition formulated at the UN Conference on Environment and Development Earth Summit in Rio de Janeiro in 1992, where sustainable development was defined as a concept consisting of three equally important pillars: economic, environmental and social sustainability. The concept of strong sustainability has also been studied.

Since the governance of community planning is interdisciplinary and the concept of sustainability similarly interdisciplinary, it is necessary to first do small ‘test run’ with key planning documents to understand their status in the cities’ planning processes. Secondly, it is useful to understand to what degree these documents include mentions of sustainability. This paper focuses on the latter two subjects: the governmental framework of city planning in UK, Denmark, Sweden, Norway and Finland, as well as their inclusion of notions of sustainability in the form of objectives, outcomes or monitoring methods.

The next step will be to narrow down the number of cities to a few, and to then describe on a deeper level their understanding and implementation of sustainability. This PhD study will hopefully be of value in understanding the structure of sustainability management in parallel planning systems, and secondly, in shedding light on the ‘hue’ of sustainability when discussed in urban planning.

## **Brian Garcia (Bartlett)**

### “Usurping the Auto: Challenges for Implementing Public Transportation in Car Dominant Cities”

As climate change, resource scarcity, and population growth are increasing problems; public transportation is a crucial lynchpin for more environmentally sustainable transport and urban forms. Transportation accounts for approximately thirteen percent of greenhouse gas emissions. Many governments realize this and are investing in public transport and retrofitting their built environments for multi-modal transport systems including, bike lanes, bus rapid transit right of ways, light rail, and heavy rail systems. This paper looks at the challenges of implementing new modes of transportation in cities with a built form that prioritizes the private automobile.

Los Angeles is often the example of the automobile oriented city, with streets that cater to the private car. This also makes Los Angeles an excellent example for the challenges and possibilities of adaptive reuse. Recently, the city of Los Angeles has made great strides in constructing subway and light rail lines, designating bike lanes, and contains the largest bus system in the United States. Los Angeles is examined as an extreme example of the opportunities for retrofitting to a more sustainable and diverse street system that prioritizes a holistic network of transit modes.

This study presents interviews with local stakeholders in the effort to redesign the transport system of Los Angeles. Also presented is an analysis of current political trends in city redesign. This research provides us with conclusions that identify conflicting land use and policy hurdles, and the possibilities of public transportation retrofit.

## **Henrietta Lynch (Bartlett)**

### “The Works: Passivhaus at Ebbw Vale” Film

The Passivhaus low energy building design standard was developed in Germany in the early 1990s. Many believe it to be the world's leading standard for energy efficient building designs and to have the capacity to deliver UK government targets for Zero Carbon homes.

It calls for buildings to be constructed with high levels of building fabric performance inclusive of super insulation, low levels of air-permeability, no thermal bridges, passive solar design principles, high performance windows and mechanical ventilation with heat recovery (MVHR). This innovation is currently just beginning to emerge in the UK and has taken the support of both pioneer individuals and Government bodies such as the Welsh Assembly Government (WAG), but it will also require the development of a new cultural infrastructure inclusive of the development of indigenous skills and supply chains for its future progression.

The presentation is a short film about the technology transfer of Passivhaus components and skills from Germany to the UK, using the test Passivhaus development at 'The Works' in Ebbw Vale, South Wales designed by Bere Architects as a case study. The film includes for a slight twist at the end.

## **Peter Oakley (Anthropology)**

### “Sustainability: definitions and issues in the goldworking industries”

My PhD project is concerned with the material culture of manufacturing using gold, in particular the jewellery industry in the UK and the refiners who supply them with raw materials. During the period of my fieldwork (2009-11), individual refiners supplying jewellers began to utilise the notion of sustainability as a promotional tool and charge clients more to purchase heavily branded recycled gold that was claimed to be more sustainable.

Whilst recycled gold is subject to a closer monitoring programme than standard gold, there is no difference in the raw materials or technologies being employed to create standard gold bullion and stock. At the same time, gold recovery from sweepings, vacuum bags or exhausted plating solutions, activities that would fit a stringent application of the term recycling and more closely meet sustainability ideals, is never described as such; these activities are just considered unremarkable and financially sound practice. The data gathered during fieldwork provides a case study of how the term sustainability and recycling are used or misused in specific circumstances and the difficulty of applying these concepts to substances that elude the notion of raw material and processes that do not conform to general expectations of what production is or does.