

The city as a text, as signs and inscriptions by human beings in space, so that users, people moving through the city, can be seen as readers of poems [...]. *Roland Barthes*<sup>1</sup>

## Introduction

Beyond the outward reality of the perceivable physical urban environment, there are various invisible layers (or realities) which have contributed to their physical presence. In order to explain a specific urban condition or in order to construct a specific response a key analytical step is to decide on the many effective processes and scales (underlying dynamics) which are constitutional for their inscription into space.

Space is nothing given per se – to understand space and how it is socially constructed Henri Lefebvre<sup>2</sup> outlined his analytical model of the «Production of Space» as a conceptual triad. Lefebvre introduces three types of space in order to convey its complex character. These comprise «perceived space» – physical form that is generated and used; the «conceived space» that of logics, maps, mathematics as mental construct which is the instrumental space of corporations, planners and politicians; and finally «lived space» as the medium through which the body lives out its life in interaction with other bodies by associated images and symbols (space as real-and-imagined which overlays physical space). These spaces cannot be separated, they inform each other.<sup>3</sup>

London suggests itself as an example of complex space negotiation with regard to the construct of the «Green City». London is not only one of the alpha nodes in the system of global cities, it has a mayor who promotes a vision for the future of the city which is ostensibly «green». In the light of increasing depletion of the world's environmental capital<sup>4</sup> this appears to be a logical move. But the crucial question is if this policy is merely a rhetorical empty shell allowing for continued capital surpluses absorption as usual or whether a genuine attempt is being made to significantly transform urban practices into less destructive modes of operation.

I explore the construct of a «Green London» following three specific textual perspectives; first through the conceived discourse of the «Green City»; second through the abstract space of corporations – economic practices of markets; and by looking on the design of buildings as part of the physical and perceivable urban environment.

These textual layers are irrevocably interwoven. I will argue that beyond these perspectives the «Green» identity<sup>5</sup> is part of a wider (neglected) cultural project, which could become a powerful tool for change. The important questions are how, from what, by whom and for what are these identities constructed.<sup>6</sup>



1 Photo of an advertisement in the London Underground «welcome to the future»

## Discourse

It is not language that has a hole in its ozone layer; and the ‹real› thing continues to be polluted and degraded even as we refine our deconstructive insights on the level of the signifier. *Kate Soper*<sup>7</sup>

In the spatial development strategy ‹The London Plan› mayor Ken Livingstone<sup>8</sup> unfolds his vision «[...] to develop London as an exemplary, sustainable world city [...] to ensure that London can become [...] a green city.»<sup>9</sup> The targeted launch of discourses plays an important role in the positioning of cities and cities marketing. Recently the attribute of being ‹Green› has been becoming an important and valuable asset – transformed from a term of exclusion to a term of attraction (Fig. 1).

David Harvey states that «the contemporary battleground over words like ‹nature› and ‹environment› is a leading edge of political conflict, precisely because of the ‹incompletely explicit assumptions, or more or less unconscious mental habits,› which surround them.»<sup>10</sup> The idea of a ‹green› or ‹sustainable›<sup>11</sup> city embodies a paradox in itself when it comes to the question of territorial boundaries. Cities are acknowledged to be dominant destructive forces which are highly dependent on their hinterlands. The multiple circuits of material flows traversing through cities cannot be conceptualized within their city boundaries alone – they entail the entire globe. The term ‹Green› refers to the long standing ideological distinction between nature and society, which often leads to the domination and marginalization of nature.<sup>12</sup> Nature becomes transfigured in the eyes of romanticism, the green space as distant and mythical arcadia. Nature has always been subject to transformations, an untouched nature never existed. The exit ‹back to nature› is no longer a feasible option anymore indeed it is one which for David Harvey never existed. Nature is nothing external to the city, it is the mind's construction of our perception; it is internal with the desire for the untouched pure and good. Martin Seel<sup>13</sup> tries to explain that mind-set by giving reasons why nature is generally connotated positively; he argues that nature represents a space of contemplation, a corresponding place and a stage of imagin-

ation. Reading the term from the biology viewpoint it exercises fascination through the efficiency of natural cycles and the enormous diversity of species.

If nature is conceptualized as a complex interacting system that can be thought of as a single *organism* where all living individuals have a regulatory effect on the Earth's environment – cities are an inescapable part of that system. The city does not stand outside the environment, but it is itself a set of environmental conditions. Linking the «Green City» to sentimental and naïve conceptions of nature blocks paths to understanding the urban environment in the only way valid, as a complex system – highly transformed, fragmented, and digitalized – a post-industrial landscape.

We have to shift our analysis from an argument about protection of the natural environment to a discussion responding to the urban forces and profit-logics. The system called the city does not have to be alien to the principles of cycle efficiency and diversity opulence.

## Markets

You cannot divorce what has happened in our urbanizing world without attaching it to this dynamic of the capital surplus absorption problem. *David Harvey*<sup>14</sup>

The relationships between the biosphere and the societies are significantly determined by the economic practices of markets. Markets have been transformed significantly over time – today abstract market transactions can be seen as an invisible layer with a significant constitutional impact for spatial production. They represent the main institutional dynamic through which economic activities are articulated and economic value is constituted.<sup>15</sup>

The ecosphere provides various goods and services to the economy, but today markets fail to factor in certain circuits (that is waste assimilation) in their supply-cost logics – resulting in damaging procedures with unpredictable consequences. The Stern Review,<sup>16</sup> commissioned by the UK government, examines the evidence on the economic impacts of climate change and describes the recent predominant modes of economics as the greatest and widest-ranging market failure ever seen.<sup>17</sup>

London as the «global powerhouse» of world finance and business plays a chief characters on the global stage of investment activities. Applying Saskia Sassen's<sup>18</sup> conceptual framework of the «strategic geography of global economic power» to the London case puts a different perspective on what a «Green London» could entail. Following her path major trans-national corporations (TNCs) with their headquarters based in London could be held accountable, because they concentrate their organizational and command architecture of their globe spanning activities within the city territory. A «Green London» therefore could be conceptualized as an authority to monitor and control the destructive degree of their global economic enterprises. The destruction of the biosphere does not stop at the city boundary; addressing environmental issues at the local scale only clearly fails to address the main dynamics of global market paradigms (Fig. 2).

Markets as solutions to environmental depletion are necessary sites for change. They in isolation will not bear the solution themselves. Given the epoch-making change which has to be implemented, the free play of market forces will



## 2 Geography of Power: Trans-National Corporations based with Headquarters in London

need strong governmental interference. But markets do not solely operate by logics of cost benefit. According to Harvey «social and psychological propensities, such as individualism and the drive for personal fulfilment through self-expression [...] status or some mark of individual identity all play a role in shaping modes of consumption and life-styles.»<sup>19</sup>

### **Buildings**

Environmentalism is a vast new intellectual project [...] environmentally architecture can and should be open to the culturally new as it is to the technically new, communication is as important as performance. *Susannah Hagan*<sup>20</sup>

Typically the abstract reality of total energy consumption is represented by the industrial sectors – industry itself, services, transport and the domestic sphere. This abstract way of representation does not say anything about buildings as the physical site of energy consumption. Buildings account across all sectors for a 46% share in total UK energy consumption and 47% of Greenhouse gas emissions. They therefore form a major destructive force. The capital of the UK London currently has a population of almost eight million people and is projected to grow further. The building sector is consequently a key domain to address questions of environmental depletion.

Since the beginning of architectural theory in western antiquity, as set out by Vitruvius, the relationship of architecture and nature and the expression of these relations has been a central theme. The modern architectural movement has fundamentally transformed that relationship by deliberately attempting to master natural constraints<sup>21</sup> through technical utilization, ending up with air conditioned energy guzzling buildings. Questions of environmental depletion and scarcity of fossil fuels are not topics new to architecture; architectural theory has already been addressing these issues since the 60s, nevertheless energy consumption has risen steadily ever since. Today there is a broad variety of high and low building technologies available and the potential for technical innovation has by no means yet been exhausted. The Director of the International Energy



3 Idealised Skyline of London

Agency (IEA) Nobuo Tanaka identified the building sector as one site for significant energy savings but has made it clear – the IEA countries are not on a path to a sustainable energy future.<sup>22</sup>

Switching the textual layers from the realm of building related energy data and architectural discourse to the physical building itself – 30 St Mary Axe (nicknamed the ‘Gherkin’) is an unmistakable icon of London (Fig. 3). It has captured the centre of attention in the skyline and so resoundingly serves as an advocate for green building design<sup>23</sup>. How does the ‘green’ identity become manifested between conceived discourse and empirical building performance?

The Gherkin’s creators Foster and Partners have successfully branded it with the label «London’s first ecological tall building»<sup>24</sup> which was echoed in several press releases to enter the collective memory. Its circular plan encloses maximum floor area ratio and the aerodynamic building envelope minimizes wind resistance – both beneficial for reduced energy consumption. Foster states, that 30 St Mary Axe consumes 40% less energy than a ‘typical’ office building.<sup>25</sup> Due to a lack of empiricism these predicted claims have not been proven yet. But 30 St Mary Axe retains the key faults of the modern tower: It is freestanding, monolithic, acontextual and forbiddingly glacial.<sup>26</sup> Its visual accessibility in the far reach of the skyline is opposed by exclusion at its base point entrance. The ‘Green’ shell is a cliché which cannot be operationalised anymore. «The new power lies in the codes of information and in the images of representations around which societies organize their institutions, and people decide their behaviour.»<sup>27</sup>

We have to address the major underlying dynamics and be critical about the actual environmental performance beyond any empty ascriptions. The contemporary challenge for «New Green» buildings lays not only in crunching numbers of energy efficiency coefficients. The challenge is also to alter the established patterns of design and reformulate the paradigmatic codes of connections between nature, building technology, usage and design to create something powerful new.

## Notes

- 1 Roland Barthes, «Semiotics and the City», in: Jan Brand and Hans Janslign, *Het idee van de Staat*, Arnhem 1983. Hier nach Urban Feedback, 2005, [http://www.urbanfeedback.com/articles/uf\\_tokyo%20paper.html](http://www.urbanfeedback.com/articles/uf_tokyo%20paper.html), retrieved December 21, 2007.
- 2 Henri Lefebvre, *The Production of Space*, Oxford, 1991, p. 33 and 38.
- 3 Cp. Stuart Eddin and Mark Gottdiener, in: *Anarchitektur*, Berlin 2002, No.1, Issue Material zu: Lefebvre, p. 22–26, here p. 23 and p. 27–35, here p. 30–31.
- 4 The sum of total nature's resources.
- 5 Castells defines identity as «the process of construction of meaning on the basis of a cultural attribute, or related set of cultural attributes, that is/are given priority over other sources of meaning.» Manuel Castells, *The Power of Identity*, Oxford and Cambridge 1997, p. 6.
- 6 Ibid., p. 7
- 7 Kate Soper, *What is Nature?*, Oxford and Cambridge 1995, p. 151 cited in Susannah Hagan, «Five Reasons», in: *Harvard Design Magazine*, 2003, no. 18, p. 4–11, here p. 5.
- 8 Ken Livingstone has been the mayor of Greater London since 4 May 2000.
- 9 Greater London Authority, *The London Plan*, London 2004, p. 5.
- 10 David Harvey, *Justice, Nature and the Geography of Difference*, Oxford and Cambridge, 1996, p. 118.
- 11 Brundtland Report (1987): «Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs.»
- 12 Ulrich Beck, *Risikogesellschaft – Auf dem Weg in eine andere Moderne*, Frankfurt am Main 1986, p. 9.
- 13 Martin Seel, *Eine Ästhetik der Natur*, Frankfurt am Main, 1996, p. 38, 89 and 135.
- 14 David Harvey, *The Neo-liberal City Lecture*, at Dickinson College, Carlisle, February 1, 2007.
- 15 William Rees cited in Sassen (2004), see footnote 17.
- 16 Nicholas Stern was Chief Economist and Senior Vice-President of the World Bank from 2000 to 2003; Nicholas Stern & Great Britain Government, *The Economics of Climate Change: the Stern Review*, Cambridge 2007.
- 17 Stern Review, 2007, [http://www.hm-treasury.gov.uk/media/4/3/Executive\\_Summary.pdf](http://www.hm-treasury.gov.uk/media/4/3/Executive_Summary.pdf), retrieved December 21, 2007.
- 18 Saskia Sassen, «Human Settlement Development: The central Role of Cities in our Environment's Future – Constraints and Possibilities», in: *Encyclopedia of Life Support Systems*, Oxford 2004, Vol. Human Settlement Develop-ment. <http://www.eolss.net>, retrieved December 21, 2007.
- 19 David Harvey, *The Condition of Postmodernity*, Oxford and Cambridge, 1990, p. 123.
- 20 Susannah Hagan, <http://books.elsevier.com>, retrieved April 14, 2007.
- 21 Beck 1986 (wie Anm. 12).
- 22 Statement made on a press conference 10th September 2007 in Berlin. The IEA countries include: Australia, Austria, Belgium, Canada, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Switzerland, Ireland, Italy, Japan, Luxembourg, Netherlands New Zealand, Norway, Portugal, Republic of Korea, Slovak Republic, Spain, Sweden, Turkey, United Kingdom
- 23 Guy Nordenson, «Truth in Tall Buildings», in: *Harvard Design Magazine*, 2007, no.26, p. 30–37, here p. 31.
- 24 Foster and Partners, <http://www.fosterandpartners.com/Projects/1004/Default.aspx>, retrieved April 28, 2007
- 25 Guidelines from the U.K.'s then Department of the Environment, Transport, and the Regions on energy conservation, ECON 19, list a «Typical Prestige Air Conditioned Office Building» as consuming 568 kw per square meter per year and recommends a «Good Practice» target of 348 kw / m<sup>2</sup> / year. 30 St Mary Axe is predicted by mechanical engineers Hilson Moran to use 215 kw / m<sup>2</sup> / year. Source. See Peter Buchanan, «The Tower: An Anachronism Awaiting Rebirth», in: *Harvard Design Magazine*, 2007, no. 26, p. 5–14, here p. 14
- 26 Ebd., p. 13.
- 27 Castells 1997 (wie Anm. 5), p. 360.