WE MUST GO BACK TO THE EARLY 1960s to find the roots of modern environmental discourse. Rachel Carson's work, *Silent Spring* (1961), seems to have had a paradigmatic effect in mobilising the western world's environmental consciousness. This book became a wake-up call, a warning signal, for millions of people. The author's ingenious use of a powerful metaphor is probably one reason why she was so successful in getting her message. Who would not miss the birds' optimistic springtime music? The loss of bird-song would be the loss of our most beloved and cherished sign of re-emerging life. The opposite of this re-emergence would be death; the death of nature – to quote another, now classic, articulation of environmentalism and anti-modernism.¹

Carson's book prepared the intellectual climate, and from the mid-sixties and onwards, the emerging radical movements for global justice, women's liberation, racial equality and environmental protection became catalysts of change. Thus, as a consequence of scientific concern and popular reaction, the traditional "nature preservation" discourse turned into the current "environmental protection" discourse. This combination of science, public opinion and politics has since accompanied the environmental movement. At the national level, the more or less spontaneous organisational activities of local and regional groups were followed by a new level of political organisation. In the late 1970s, green parties, devoted to ideological ecologism and global justice, began to emerge. Some of these were successful. They managed to create a niche for environmental issues in national politics, and eventually they

Carson, Rachel (1961), Silent Spring; Merchant, Carolyn (1980), Nature's Death. Concerning Carson see also Worster, Donald (1994), Nature's Economy. A History of Ecological Ideas. (second ed.), pp. 347 ff.

gained parliamentary positions.² Thus the merging of politics and science, mediated by public opinion, is one of the environmental movement's distinctive features, and has been so from the very beginning.

Today, the environmental sciences appear to be more influential than ever.³ They are at present very much dominated by the natural sciences, but there is growing awareness of the need to include the social sciences as well. Cross-disciplinary cooperation has become more common, and is today often seen as key to scientific success. One significant aspect of this quest for broadened perspectives has been a growing interest in history and historical processes.⁴

From the historian's point of view, environmental science has become both a historic topic and a scientific field in which he or she can participate. A large number of studies have focused almost exclusively on the environmental movement's intellectual history. Donald Worster, a leading exponent of this tradition, however, favours a broader perspective. In his opinion, environmental history should cover not only the ideas behind environmental discourse, but human actions and the status ascribed to nature as well.⁵ It appears that Worster's vision, to some degree, has become a reality. Renowned international textbooks, such as J.R. McNeill's *Something New under the Sun* (2000) and Donald Hughes' *An Environmental History of the World* (2000) cover a vast range of topics – from industrial pollution to the politics of popular resistance.⁶ Numerous attempts to cover global environmental history have adopted integrated perspectives.⁷ In this context, one must not forget the Annales School, or some of its leading representatives – such as Fernand Braudel and Emmanuel LeRoy Ladurie,

^{2.} Burchell, Jon [2002], The Evolution of Green Politics: development and change within European Green Parties. London; Talshir, Gayil [2002], The political ideology of green parties. From the politics of nature to redefining the nature of politics.

^{3.} This is obvious in the current disoucrse on the climate, where politicians and scientists have entered into active collaboration under the auspices of the UN-initiated Intergovernmental Panel of Climate Change (IPCC). See for instance Weart, Spencer R. (2003), The Discovery of Global Warming. (Harvard UP) Cambridge Mass., London, pp. 158-173. Since the early 1990s, the panel's successive reports have all managed to provoke great debate about global warming and its consequences for the natural environment and human society.

^{4.} Matossian, Mary Kilbourne (1997), Shaping World History: Breakthroughs in Ecology, Technology, Science, and Politics.

Worster, D. (1993), "Ecological History" in: Merchant, C. (ed.), Major Problems in American Environmental History. Lexington, Mass. pp. 5f; Worster, D. (1988), "Doing Environmental History" in: Worster, D. (ed.), The ends of Earth: Perspectives on Modern Environmental History, 341. Cambridge UP, p. 293. See also Worster, D. (1994), Nature's Economy, A History of Ecological Ideas. (second ed.) pp. 420-433. Compare Lennqvist, Jörgen (2007), Våtmarkshistoria: Hjälmarens och Kvismarens stränder under 1800- och 1900-talen. (Örebro Studies in History 7 Diss.) pp. 39-46.

^{6.} McNeill, J. R. (2000), Something New Under the Sun. An Environmental History of the Twentieth-Century World London and New York; Hughes, Donald (2000), An Environmental History of the World. Humankind's changing role in the community of life. London.

See for instance Ponting, Clive (2007), A New Green History of the World. The environment and the Collapse of Great Civilizations. (Rev. and updated ed.) London or Fernández-Armesto, Felipe (2000), Civilizations. Basingstoke and Oxford.

"The vitality of this research field should be no surprise, as it primarily focuses on research themes of long-standing importance. This field might in fact be seen – at least from some points of view – as a reformulation of older agendas within urban and social history."

who explicitly attempt to integrate notions of the limits and possibilities of physical nature with ideas about broad social processes. 8

Generally one might say that environmental science is confronting two basic but interrelated fields of research. On the one hand, environmental scientists are studying ecological systems, their functions and their changes. This approach is predominantly adopted in the natural sciences, in which the scientist raises questions about the status of nature, the impact that human actions have on nature, and the manner in which nature may "strike back" at human societies. On the other hand, environmental science is not only a question of how, what, when and where. It is a science that concerns itself with environmental degradation as much as it concerns itself

Braudel, Fernand (1949/1991), Medelhavet och medelhavsvärlden på Filip II:s tid. (Alhambra) (The Mediterranean and the Mediterranean World in the Age of Philip III; Braudel, Fernand (1982-86), Civilisationer och kapitalism 1400-1800. (Capitalism and Material Life, 1400-1800) Band 1-3. Stockholm; Ladurie, Emanuel Le Roy (1972), Times of Feast, Times of Famine - a history of climate since the year 1000. (Eng. ed.) London. See also Bernhardt, Christoph (2004), "Umweltprobleme in der neueren europäischen Stadtgeschichte", in Bernhardt, C. (ed.), Environmental Problems in European Cities in the Nineteenth and Twentieth Centuries, Münster & New York, p. 5, quoting Ladurie 1974.

with the morphology of ecological systems. Without this ethical foundation, it is doubtful whether there can be an environmental science as we know it today. This was the case when environmental science emerged in the 1960s, and remains so to this day. Accordingly, it is characteristic of environmental science that it, apart from it being a purely descriptive science, also formulates a moral imperative and highlights possible implications of social and political behaviour.

This double thrust has been typical of environmental history, as well. When, in the early 1970s, environmental history started to emerge on university agendas, courses in the discipline often took a critical as well as an analytical approach. Modern textbooks are saturated with more or less open value statements and accounts of shocking examples of ecological disaster. This is not least the case for the subdiscipline of Urban environmental history.

Urban Environmental History

Urban environmental history is a relatively new field of research. It took shape and gained momentum in the late 1980s and early 1990s, and has since, as a merging of urban and environmental history, developed into a vital sub-discipline. Today it is characterised by a widening multidisciplinary debate, an international conference structure, and the rapidly expanding publication of books, journals, conference papers etc. It is firmly established in the USA and West Europe, but is also gaining importance in post-socialist East Europe, and in many third-world countries. ¹¹ The vitality of this research field should be no surprise, as it primarily focuses on research themes of long-standing importance. This field might in fact be seen – at least from some points of view – as a reformulation of older agendas within urban and social history.

As Swyngedouw and Heynen recently pointed out, "'environmental' issues have been central to urban change and urban politics for at least a century, if not longer". 12 Organic theories that view cities as natural systems began to take shape in Great Britian as early as in the late eighteenth century, and ecological approaches gradually

^{9.} Worster (1994), pp. 350-359. Compare also Tarr, J. A. (2001), "Urban history and environmental history in the United States: complementary and overlapping fields", in Bernhardt, C. (ed.), Environmental Problems in European Cities in the Nineteenth and Twentieth Centuries, Münster & New York, p. 35 concerning gender and environmental justice.

See for instance Simmons, Ian (1994), Miljöhistoria. En introduktion. (Studentlitteratur) Lund, pp. 134ff, 140, 147. Sörlin, Sverker, Öckerman, Anders (1998), Jorden en ö. (Natur och Kultur) Stockholm, pp. 34, 38ff, 92ff, 98f.

^{11.} Tarr (2001), p. 37: Schott (2005)

^{12.} Erik Swyngedouw & Nikolas C. Heynen, "Urban Political Ecology, Justice and the Politics of Scale", Antipode (2003), p. 900.

began to inform research work within this field. ¹³ Thus there is an intellectual tradition of ecological thinking which dates back to the middle of the nineteenth century, represented by such early thinkers as David Thoreau (*Walden*), Friedrich Engels and Karl Marx. Marx saw labour as part of a "metabolism", as a way of mediating the relationship between man and nature. ¹⁴ By changing nature, man changed himself. In 1845, Engels brought attention to the horrible ecological consequences that industrialisation had had on English cities. ¹⁵

Further important steps were taken in the 1920s and 1930s when the Chicago School of Urban Sociology applied an ecological approach to the field of urban development. These perspectives were developed and reformulated over the following decades, and made a re-emergence within urban geography in the 1950s. ¹⁶ In 1973, Raymond Williams, following the same intellectual line of thought, concluded that the social relations between man and nature were closely integrated with processes of urbanisation. ¹⁷ In a similar manner, David Harvey has spoken of "an ecological transformation" determined by the dialectic between environment and urbanisation. Mike Davis, much like Henri Lefebvre, studied an "ecology of fear" produced by the urban environments of Los Angeles. ¹⁸ Another example of works inspired by the ecological approach is *The Sanitary City*, written by one of America's leading contemporary environmental historians, Martin Melosi. ¹⁹

Nature and society are inextricably intertwined in the production of urban spaces, which have the potential for being either emancipating or oppressive. The binary of nature and man exists only as an idea, and needs to be problematised when applied to urbanisation and urban society. As both David Harvey and Jane Jacobs have suggested, human activity cannot be seen as external to the ecosystem. ²⁰ The ecological

^{13.} Melosi, Martin V. (2000), The Sanitary City. Urban Infrastructure in America from Colonial Times to the Present. [The John Hopkins University Press] London & Baltimore, p. 4.

^{14.} Marx, Karl, Capital. Volume 1, (New York: Vintage Books, 1976 [1867]), p. 283.

^{15.} Engels, Friedrich, The Condition of the Working Class in England, (Harmondsworth: Penguin 1987 [1845]).

^{16.} Melosi (2000), p. 5.

^{17.} Williams, Raymond, The Country and the City, (London: Hogarth Press 1985 [1973]).

Harvey, David, Justice, Nature and the Geography of Difference, (Oxford: Blackwell 1996); Mike Davis, Ecology of Fear: Los Angeles and the Imagination of Disaster, (New York: Norton 1988); Henri Lefebvre, The Production of Space, (Oxford; Blackwell 1991 [1974]).

^{19.} Melosi (2000), pp. 2-6.

^{20.} Harvey, Justice..., p. 186; Jacobs, Jane, The Life and Death of Great American Cities, [New York: Vintage Books, 1992 [1961]].

perspective interprets urban space not as something unnatural but as the outcome of a natural, socially mediated process. 21

What is then urban environmental history? How can we delimit this sub-discipline as such? Are we in need of a more precise definition of the field? In the anthology *Environmental Problems in European Cities in the Nineteenth and Twentieth Centuries* (ed. C. Bernhardt) Joel Tarr identifies five primary themes in current research:²²

- The impact on the natural environment of urban development and citydwellers' activities
- Societal responses to this impact and efforts to alleviate environmental problems
- Exploration of the effect that the natural environment has on city life
- The relationship between cities and their ever-widening hinterlands
- The role of gender, class and race with regard to environmental issues

These five broad themes cover most of the field of urban environmental history. To these one might add humans' purposeful transformation of landscapes of any kind into urban townscapes. We feel that the field of urban environmental history should include ideas and discourses of history that were formulated for the purpose of redesigning existing environments, natural or cultural, in order to make them into artificial urban fabrics. Thus, the visions, actions and social roles of urban planners should be integrated into the urban environmental field. This means that one aspect of urban environmental history will approach more traditional fields of urban study such as urban geography, town planning and urban architecture.

We believe that the field may be extended further, to place more focus on the apparent contradiction between science and ethics. Within this particular science, there is a clear connection between critical analysis and political purpose. Urban environmental history is, at least in large parts, essentially an emancipatory science. As such it has its roots in general environmental science and environmental history. However, the perspective on urban environments has not always been particularly constructive. The environmental discourse has, in the past, been characterised by an anti-urban discourse – and often still is. Green ideology and green politics have

^{21.} Swyngedouw & Heynen, "Urban Political Ecology", p. 908. See also Cronon, William (ed.), Uncommon Ground. Rethinking the Human Place in Nature. (New York: W W Norton, 1996).

^{22.} Tarr (2001), pp. 38. See also Schott (2004), "Urban environmental history: what lessons are there to be learnt?" (Boreal Environmental Research 9: 519-528.) Helsinki.

sometimes been more or less synonymous with a kind of "back to the countryside" syndrome. As a consequence, some urban environmental historians have challenged the environmentalist movements' assumptions and have expanded their research to include an investigation of these movements as such.²³

Without understating the importance of early environmental activism, one might claim that it gained much of its energy from an idyllic view of nature and the countryside. Some environmental activism was directed against the city as a way of organising human life and using natural resources. In a similar fashion, early academic works on environmental history focused on a historic conflict between urban and rural society. In *The Death of Nature*, Carolyn Merchant criticised the development of urban civilisation in early-modern time, representing it as a manifestation of male power, which dominated Nature by feminising it and portraying it as weak and in need of control. Here, urban life was seen as an evil but necessary element of Western society.

A seminal work of intellectual environmental history, Donald Worster's *Nature's Economy*, left no space for the city whatsoever. Worster imagined Nature as a force that determines the history of mankind. He ignores the role urban society plays in determining the human imagination of nature and environment. More recently, Worster has developed this theme further, employing an "agro-ecological perspective" on history. Environmental historians such as Melosi and Tarr soon attacked this view. They argued that environmental history could not be reduced to a history of the *natural* environment.²⁴

In reviews of environmental history, political discourse is often separated from the sphere of academic research. Environmental history originated in the political debate of the 1960s and 1970s, but in recent years, historians have been trying to break loose from these ideological roots. ²⁵ Even though major progress has been made over the last three decades, the field of research is still encumbered by ideological concerns.

^{23.} Diefendorf, Jeffry M. and Dorsey, Kurk, "Challenges for Environmental History", in Diefendorf, Jeffry M. and Dorsey, Kurk, ed. (2005), City, Country, Empire. Landscapes in Environmental History. (University of Pittsburgh Press), pp. 6f.

^{24.} Donald Worster. "Transformations of the Earth. Towards an Agro-Ecological Perspective in History", Journal of American History 76 (March 1990), pp. 1087-1106. See e.g. Martin V. Melosi, "The Place of the City in Environmental History", Environmental History Review (Spring 1993), pp. 1-23 for reactions on Worster. For more references on this turning point, see Dieter Schott, "Resources of the City: Towards a European Urban Environmental History", in Scott et al (eds.), Resources of the City, pp. 3-4.

^{25.} Tarr, Joel A. 2005, "The Metabolism of the Industrial City: The Case of Pittsburgh", in Diefendorf, Jeffry M. and Dorsey, Kurk, ed. (2005), City, Country, Empire. Landscapes in Environmental History. (University of Pittsburgh Press), p 15f.

"This field has been more concerned with environmental threats and dangers against human life than with the real ecological questions of functioning ecosystems, or the 'Schlaraffenland' of a pre-urban existence."

There is still a living tradition for criticising Western civilisation and idyllising non-urban life, from which the discipline has only recently begun to free itself.

Urban environmental history explicitly or implicitly rejects these anti-urban and idyllising tendencies. This field has been more concerned with environmental threats and dangers against human life than with the real ecological questions of functioning ecosystems, or the "Schlaraffenland" of a pre-urban existence. A focus on the city naturally means a concentration on constructed environments. By its very nature, it inspires an interest in agency, mentalities and discourses, and it focuses on problems, challenges, threats and urban fragility, but also on sustainability, resilience and possibilities.

Today, urban environmental history is a fast-growing field of research. It is, in fact, growing so rapidly that this introduction does not provide space for covering all its aspects. We will therefore restrict our discussion to a few, as we feel, interesting examples of studies and works, and will concentrate on a few themes, some of which are essential as a framework for this book.

Many of the environmental problems we find discussed in historical works, of old as well as of a recent date, are closely connected to urban growth, one of the major challenges of our time. This is, of course, nothing new. Throughout history,

environmental issues have often been urban issues as well. Ancient Athens grappled with serious environmental problems. In many cases, extended debates on environmental pollution and degradation have been concerned with waste from urban industries, air pollution created by urban transport systems, waste disposal from large cities and changing land-use patterns caused by urban growth. The teaming modern metropolises have often been accused of causing environmental degradation. Las Vegas has been called a "black hole" of ecological destruction; cities like Los Angeles, Tokyo and Beijing are sometimes described as choking air polluters; the big cities of the third world, we learn, are unhealthy death traps of urban waste, uncleanliness, and epidemics. Thus, urban environmental history has been characterised by an overwhelming focus on urbanisation's negative aspects. Meanwhile, purely ecological aspects have been the focus of "metabolism" studies and so-called ecological footprint calculations of major cities. However, it is no exaggeration to claim that the ethical and critical perspectives have dominated, and still provide the drive that fuels the quest for knowledge within urban environmental history.

Thus, interest in urban environmental politics was expressed in, for instance, Dan Coward's thorough study of *Sydney's Environmental History* 1851-1981 (1988).²⁸ In an extensive narrative, covering 140 years of local environmental problems, Coward systematically shows how municipal authorities and other policymakers have tried to meet emerging threats against the welfare of the city and the well-being of its inhabitants. Coward's study gives an impressive account of almost every aspect of urban degradation, and is impregnated with a sometimes implicit, but nonetheless obvious, concern for the ethical aspect of man's relation to the environment. "The quality of our environment is", he reasons, "a symptom of our behaviour". He concludes by expressing a profoundly optimistic view on the virtues and possibilities of historical knowledge. "As a method of reflective thinking, history can also help steer us to what we may do and toward what we may become."²⁹

At present, a number of prominent American scholars have made contributions to the field. Here, we may mention William Cronon's *Nature's Metropolis*. *Chicago and the Great West* (1991), Joel Tarr's *The Search for the Ultimate Sink* (1996), and

^{26.} Sörlin and Öckerman 1998, cpt.III; McNeill 2000, cpt. 3 and 9; Davis, Ecology of Fear.

^{27.} Schott (2004), p. 523, is here referring to Winiwarter (2001) and Fischer-Kowalski (1997) on "metabolism". For the use of the concept "metabolism" see also Tarr 2005.

^{28.} Coward, Dan H. (1988), Sydney's Environmental History 1851-1981. (Dept. of Economic History, Research School of Social Sciences, Australian National University.) Canberra.

^{29.} Coward 1988, p. 305.

Martin Melosi's The Sanitary City (2000). American scholarship has always been influential in the field of urban environmental history and continues to be so, Tarr and Melosi being two of its leading figures.30 Tarr conducted wide-ranging studies of environmental degradation and urban politics in Pittsburgh during the 20th century, Pittsburgh being among the worst hit of America's industrial cities when it came to air pollution. The work combines the results of several decades of research into urban environmental history. Since the early 1970s, Tarr's writings have covered water and air pollution, as well as environmentally problematic land-use patterns. He has explored the causes, effects, and policies of environmental degradation from wide perspectives.³¹ Water and land degradation are important issues in Melosi's book as well. His focus on sanitary services and technological systems helps him keep together a vast study on environmental governance in American cities over a long time perspective. This broad narrative is chronologically organised, starting with the "Age of Miasmas" before 1880, the "Bacteriological Revolution" 1880-1945, and ending with the "New Ecology" following 1945. This helps the reader understand the major phases of development, and reflects on the deeper interpretive layers of the interrelationship between human agency and environmental change.

The vitality of American urban environmental history is also demonstrated in the recent anthology *Land of Sunshine*, edited by William Deverell and Greg Hise. This work focuses on the environmental history of the city and greater metropolitan area of Los Angeles.³² This city has attracted attention, as it has been the scene of reoccurring environmental disasters, from earthquakes and forest fires to air pollution caused by the combined effects of, on the one hand, traffic and industry emissions and, on the other, temperature inversion.³³ The book takes a broad approach to major themes of the field, such as place analysis, land use, environmental governance and nature-culture relations. It reaches "deeply back into the ancient past of the Southern California region" as well as into "the present as history". Another interesting and unconventional example of current American urban environmental history is Ari

^{30.} Schott 2004, p. 519f.

^{31.} Tarr, J.A. (1996), The Search for the Ultimate Sink. Urban Pollution in Historical Perspective. (The University of Akron Press)
Akron, Ohio. See the foreword of Melosi (pp. xxi-xxviii) for a brief presentation of Tarr and his role in, and importance for, urban environmental history in USA.

^{32.} Deverell, William and Hise, Greg, ed. (2005/pbk 2006), Lanf of Sunshine. An Environmental History of Metropolitan Los Angeles. (University of Pittsburgh Press)

See for instance Davis, Mike 1988, and Sarah S. Elkind (2005), "Los Angeles Nature: Urban Environmental Politics in the Twentieth Century", in Diefendorf, Jeffry M. and Dorsey, Kurk, ed., City, Country, Empire. Landscapes in Environmental History. (University of Pittsburgh Press)

"Today we see urban environmental publications appear with ever greater regularity, and a conference structure has taken shape which provides a European forum for the continuous discussion of urban environmental history."

Kelman's *A River and its City*, which focuses on the Mississippi River as a thematic thread running through the environmental history of New Orleans. The river appears to have played a major role in the environmental past of the city as well as in the local population's mental make-up. Although the river often has caused environmental problems - or worse, disasters, New Orlean's situation could still be conceived of as "perfectly crafted by a kindly God".³⁴

In Europe, the urban variant of environmental history appears to have started somewhat later, inspired and strongly influenced by American scholars. In the late 1990s, several important works were published in the field, and around the turn of the millennium, the movement gained momentum at conferences and round-table discussions. Today we see urban environmental publications appear with ever greater

regularity, and a conference structure has taken shape which provides a European forum for the continuous discussion of urban environmental history. 35

The Fourth International Conference on Urban History in Venice 1998 appears to have been somewhat of a path-breaker for European urban environmental history. At this conference, one session was exclusively dedicated to this sub-discipline, and it attracted the interest of a wide range of scholars. Some years later, a follow-up publication appeared, edited by Christoph Bernhardt, *Environmental Problems in European Cities in the 19th and 20th Century*, in which scholars from several west European countries presented case studies on various, mostly 19th and 20th century, urban environmental topics.³⁶ The articles together cover a vast spectrum of themes and aspects, and offer an account of the causes and effects of industrial urbanism and its sanitary and environmental consequences.

Another interesting recent contribution in the field of European urban environmental history is the anthology *Resources of the City. Contributions to an Environmental History of Modern Europe* (eds. Dieter Schott, Bill Luckin, Geneviève Massard-Guilbaud, 2005), in which the authors take new perspectives on urban environmental history. Geographically, the focus is on USA and Western Europe.³⁷ Chronologically, the authors concentrate on modern history – the period stretching from 1850 to the late twentieth century. Thematically, the book concentrates on issues of urban sanitation, such as the management of air and water quality. The contributions focus on cultural perspectives of environmental history. Urban communities are perceived not merely as entities that consume resources and pollute the environment but as societies that shape their environments and affect their hinterlands.

It is easy to identify some of the major themes and questions that modern urban environmental history confronts. Many of the above-mentioned works, for instance, focus on environmental technology aimed at controlling urban pollution, on urban environmental policies, on public reactions (in the populace as well as in the media), on power structures and the role played by politicians and technicians, on ideologies and visions, on urban degradation, recovery, reconstruction and sustainability. Among contemporary environmental problems on which these studies and works focus we find waste disposal, water and air pollution, loss of green spaces, traffic

Bernhardt (2004), "Foreword" and "Umweltprobleme in der neueren europäischen Stadtgeschichte", in Bernhardt, C. ed. (2004), Environmental Problems in European Cities in the 19th and 20th Century/Umweltprobleme in europäischen Städten des 19. und 20. Jahrhunderts. Münster & New York; Schott 2004, p. 520f.

^{36.} Bernhardt, C. (ed.), Environmental Problems in European Cities in the Nineteenth and Twentieth Centuries, Münster & New York.

^{37.} With one contribution from East Germany as well.

infarcts, flooding, epidemics, and even the invasion of unexpected and sometimes unwelcome species of animals, such as lice, rats, rabbits etc.

There also appears to be a growing interest in the relative fragility of the urban environment and in urban security. Recent American experiences, such as "nine-eleven" and the cataclysmic storm-destruction of one of the nation's most famous historical cities, New Orleans, as well as the tragic tsunami catastrophe in South-East Asia, have forced the themes of fragility and resilience onto the world's environmental agenda.

Thus it has been a recent trend in urban environmental history to focus on urban catastrophes and urban resilience. However, urban fragility is not an entirely new research subject for urban historians.³⁸ The research theme of the International Commission of Urban History (1990–1995), which was led by the late Swiss urban historian Martin Körner, was urban destruction and reconstruction. The commission's work led to the release of three extensive reports, which covered a range of urban disasters – from destruction brought on by earthquakes, fires and flooding to intentional disasters caused by unrest, war and abuse of power. These three reports provide us with an extensive collection of urban horrors through history, but also with accounts of a wide spectrum of rebuilding efforts. Thus they give multiple examples of cities' ability to survive and overcome even their darkest moments.³⁹

Regardless of these early efforts, it is reasonable to claim that the urban resilience theme gained momentum as a result of the great urban disasters we witnessed over the recent years. Spectacular cases of urban misfortune have alerted people to issues such as fragility and survival aspects of urban life. Recently, in their anthology *The Resilient City: How Modern Cities Recover from Disaster* (2004), Lawrence J. Vale and Thomas J. Campanella have published a collection of studies on urban resilience. This book is a vital attempt to capture the discourses and politics of urban resilience and recovery. It is an extensive collection of case studies, covering a wide range of cities – from the

^{38.} Already in the 1970s an extended American research project, financed by the US National Science Foundation, was organised for the purpose of offering systematic studies of urban fragility and resilience. In their report Reconstruction following Disaster (1977) the research group came up with a general model that describes the recovering process in its elementary phases. They identified four phases of recovery: (1) the period of immediate emergency response (the first days or up to one week); (2) the period of restoration (2 to 10 weeks); (3) reconstruction to pre-disaster level (10 to 100 weeks); (4) the final phase of major constructions, a period used for making structural improvements and for commemorating the event (from 100 weeks to 10 years). See Vale and Campanella, (eds.) The Resilient City: How Modern Cities Recover from Disaster. (New York: Oxford University Press, 2004), pp. 336f. The recent opening of an Urban Resilience Centre at the University of Stockholm (2007) is another expression of this growing interest in social and environmental resilience.

^{39.} Körner, Martin, ed. (1999-2000), Destruction and Reconstruction of Towns. Vol 1-3. Bern-Stuttgart-Wien.

Americas and Europe to the Middle East and East Asia. An interesting aspect of the book is its focus on disaster and recovery discourses, such as "narratives of resilience", and the "symbolic dimensions of disaster and recovery".⁴⁰

While we do not wish to belittle the important achievements made in the urban environmental field of today, we still feel a need to hear voices from other parts of the world. It is essential that such voices be heard if we are to improve our general understanding of urban environmental history. These voices have, without a doubt, already begun to make themselves heard at conferences, in journals and in publications, and they will most certainly grow in strength and significance in the near future. Our current discussion on global environmental problems is, for instance, increasingly concerned with the non-western parts of the world. Fast-growing urban areas in the non-western world are confronting the same – or worse – environmental problems as have the cities in Europe and USA in the past.

The central and eastern parts of Europe make up another region that, after the fall of the Soviet Union, has brought to light the tremendous pollution common during the communist era, which poses new environmental problems. There is, therefore, a need to gain knowledge of the environmental ideas, debates, and discourses in East Europe during the socialist era. However, the "transitional" economies of post-socialist Europe must be considered as interesting and as important as those of the socialist era. The sudden post-Soviet economic downturn and following recovery, as well as the rapid introduction of democracy and the western-style capitalist mode of production in these former socialist states, have caused severe developmental tensions and instabilities. There is an obvious risk of environmental harm during times of social instability and unpredictability, and consequently an urgent need to gain knowledge and to construct the political instruments needed to cope with the environmental future. Some of these aspects, as they apply to the non-western world as well as to central Europe, are touched upon in this book.

The Purpose and Contents of the Book

This book includes contributions to several branches of contemporary urban environmental history. Together the contributors cover a broad span of subjects, from urban environmental degradation to popular movements, from discourses to rules and

Vale and Campanella, (eds.) The Resilient City: How Modern Cities Recover from Disaster. (New York: Oxford University Press, 2004), pp. 15-21.

"While the individual contributions treat separate aspects of urban environmental history, they all focus on the field's larger themes; forces of urban change, environmental threats, environmental policies, and environmental discourses."

regulations, and a wide range of historical subjects, from the medieval to the modern and post-modern city. The book is basically focused on particular case studies of individual cities or groups of cities. Thus, the chapters represent eleven case studies that to some degree reflect the present state of academic research. The authors' choices of subjects are based on their particular profiles as researchers and scholars. While the individual contributions treat separate aspects of urban environmental history, they all focus on the field's larger themes; forces of urban change, environmental threats, environmental policies, and environmental discourses.

The book is divided into three sections, according to a geographic principle. It has a broad international range, including studies on Western Europe (medieval York and Coventry, 19th century Paris), Eastern Europe (Hungary's Borsodi Basin in the Cold War era, post-socialist Zagreb), the Americas (19th century Pennsylvania, contemporary central Mexico), contemporary Tokyo, and Stockholm (16th to 20th centuries). However, it must be noted that each of the three geographic sections also focuses on a specific aspect of urban environmental history. Section one, for example, is mainly concerned with attempts to control and regulate urban environments. Section two draws attention to the consequences of economic exploitation and urban growth, and to the strategies – or lack of same – that people employ in order to counter such conse-

quences. Finally, the third section explores a long history of environmental change in one particular city, Stockholm. Here, the focus is on urban air and water quality.

The contributions in the first section of the book illuminate the environmental "policies" of entirely different epochs and regions, but they are all concerned with how authorities and/or expert groups have attempted, and sometimes failed, to regulate and restrain urban degradation. Thus, two articles focus on historic cases of urban degradation in England and France. The other two discuss late-socialist and post-socialist political processes in east-central and southeast Europe. Together the four articles bear witness to how authorities, in the past and at present, have tried to cope with environmental problems and with the task of planning city development.

Through the ages, waste disposal has been among the greatest of the urban problems. This is an issue that has continuously troubled urban authorities throughout the world. The problem was as important to medieval towns as it is to modern cities, as Dolly Jørgensen (Virginia, USA) demonstrates in her contribution What to Do with Waste? The Challenges of Waste Disposal in Two Late Medieval Towns. Her study, which focuses on the two English towns of York and Coventry during the 14th and 15th centuries, shows that clean rivers and streets have been a constant concern of city authorities. Rejecting the old view of medieval towns as filthy and unhealthy environments, she argues that the recurring legislation on this issue should be interpreted as a sign of effective concern, rather than of legislative failure. The rules and ordinances actually illustrate a lack of tolerance with, rather than an acceptance of, sloppy waste disposal.

In his study, On the Origins of Sustainable Development: the February 11th, 1806 French Police Regulation Concerning Workshops, Factories or Laboratories, André Guillerme (France) describes how an early policy of urban environmental protection emerged in Paris in the first decade of the nineteenth century. The French police regulation of 1806, for example, was initiated as an attempt to regulate the industrial "smellscapes" of Paris, a city with an increasing number of unregulated air-polluting proto-industries. This new policy appears to have been so successful that a general Order of Council was initiated in 1810, which extended the scope of the policy to include the entire empire. The policy led to such far-reaching changes of the industrial geography and urban landscape of Paris that Guillerme does not hesitate to characterise this new environmental policy as "the origin of what we today call 'sustainable development'".

In his article Discourses over Nature. The Politicisation of the Environment in Central and Eastern Europe during the Cold War (1949- mid 1980s), Viktor Pal (Hungary) focuses the searchlight on the public discourse on environmental problems

in Hungary's Borosodi Basin. With his point of departure in Bourdieu's 'habitus' theory, he illuminates the discursive restrictions that governed the debates and the decisions made by authorities, engineers, and journalists concerning two cases of environmental degradation, the waterworks of the medium-sized town of Miskolc and a much debated and infamous barrage system project between Bratislava and Budapest. Both were engulfed in a discourse of political prestige and economic progress that did not challenge the existing power relations, and the local majority lacked the expertise and proper political practices that make up the 'habitus' necessary for taking an active part in the environmental discourse.

The post-socialist, transitional society in south-east Europe is the focus of Branco Cavrić's (Croatia) article Actors of Townscape Change in a Transitional European City: the Case of the Croatian Capital Zagreb. Cavrić discusses the roles played by different groups competing for the right to utilise the land, and the impact that these have had on both the natural and the developed environments of the Croatian capital. Although private investors have become key players in urban development, politicians, planners and other important participants continue to exert substantial influence. Today the situation is marked by controversy. Cavrić argues that the ongoing liberal capitalist transformation process is taking place in a society that is still not ready for a complete change. The only path leading to a sustainable and modern city, he concludes, must be a collaborative, multi-disciplinary, and participatory approach of different key players on the urban arena.

The book's second section discusses three cases of urban degradation, and the populace's reaction or lack of reaction. This is illuminated by examples taken from widely different geographic locations, Pennsylvania USA, central Mexico and Tokyo Japan. The three cases illustrate the consequences of unrestricted economic use of urban environments and the important part that policies and public opinion play in restraining unchecked economic exploitation. Thus, economic interests and the defence of capital investments is a major theme in **Kenneth Kolson's Pithole City: Epitaph for a Boom Town**. Pithole City was a short-lived town that emerged as a product of the oil boom of the 1860s. When Pithole City was in its full bloom, it was considered the State of Pennsylvania's third most important city. It had its own church and newspaper, and no less than fifty hotels and boarding houses. In the wake of the Civil War, it became a magnet for disbanded soldiers, and thus turned into a predominantly male town with all that this entailed – in the shape of drinking, violence and prostitution. The town disappeared as fast as it had appeared. In less than half a decade, the town "was, for all practical purposes, dead". Kolson tries to find out why this happened.

In his contribution **Grass Roots Movements in Defence of a Small Town – the Case of Cerro de San Pedro, Mexico** the Mexican scholar **José G. Vargas-Hernández** examines the influence of grassroots movements in the small town Cerro de San Pedro when these react to pollution threatening their local environment. He gives an account of the actions that NGOs and local authorities take in answer to an environmental threat posed by a Canadian mining company. Vargas-Hernández concludes that the distribution of correct and public information is a key factor in generating consensus between the public and private companies. The case of Cerro de San Pedro also provides an illuminating illustration of harsh conflicts, sometimes leading to the use of outright threats, which may emerge when local interests confront those of large-scale international corporations.

The Japanese scholar **Akimitsu Takagi** plunges directly into one of the central urban environmental concerns of today, i.e. how to protect and preserve urban green areas against the forces of modernisation. His article, **Sayama Hills – Preservation and Utilisation of a Tokyo Suburban Green Area**, is a penetrating study of the popular struggle for the preservation of a large and beautiful green area within the metropolitan region of modern Tokyo. Akimitsu conveys a profoundly optimistic view of the situation, expressing great respect for the concerns and defensive activities of ordinary people and popular organisations, as well as for the emerging openmindedness that comes out in companies' (mainly railroad companies) and the political administrations' responses to popular concerns. Thanks to the organisational efforts of concerned people, the Sayama Hills has turned into an attractive resort and a place that brings enlightenment about the environment to the urban population of Greater Tokyo.

The last section of the book contains four studies on urban environmental problems in the Swedish capital Stockholm. Together, the articles cover an extensive time range – from the 16th to the 20th century – and they are all concerned with the issue of air and water quality. Thus, **Sven Lilja's** (Sweden) article, **The Atmosphere of the City – Climate in the History of Stockholm**, presents a historic overview of urban problems related to weather and climate. The article approaches the climate history of Stockholm from a macro- as well as a micro-perspective, and discusses possible effects that climate regimes and climate changes may have on the city. This article's central theme is the social and political consequence of weather phenomena, and Lilja shows how weather-induced conditions have given rise to stress and anxiety, and how Stockholm's growth in the last two centuries has been so great as to change the city's local climate.

In his contribution, **Perceptions of morality and environment in Stockholm, c. 1750–1800, Mattias Legnér** (Sweden) offers an account of late eighteenth century views on the urban environment. At the time, progressive-minded physicians in the city began to question the manner in which the urban environment was created and maintained. Legnér argues that public physicians of this time were unlikely to subscribe entirely to the classic *miasma* theory, according to which diseases are caused by substances produced below-ground and spread to humans through poisonous emission. Being realistic, these physicians recognised that diseases could have a manifold of causes. Legnér suggests that physicians of the late eighteenth century were influenced by the new bourgeois thinking, which considered personal hygiene a sign of civility and good morals.

It appears that, at the end of the 19th century, the city authorities of Stockholm considered the city's air quality somewhat of an environmental problem. In his article **The 1902 Stockholm Smoke Question, Hossein Sheiban** (Sweden) shows how city authorities handled the air pollution problem in the late 19th century. At this early time, the city authorities, and other power groups, lacked an environmental vocabulary in which to formulate the problems of industrial smoke emission into the city's air. The smoke problem was analysed and discussed within an economic discourse as "a platform for mutual understanding and dialogue between competing large economic interests". An effective environmental discourse emerged much later, with the modern environmental movement's appearance in the second half of the 20th century. Thus, the late 19th century politicians lacked an intellectual tool that was essential to the handling of an urgent, local, environmental problem.

The problem of water pollution is vividly illuminated in Simo Laakonen's (Finland) and Staffan Thelin's (Sweden) study of the interrelations between media, experts, and politicians in 20th century Stockholm. In their article, Beauty on Water? Two Turning Points in Stockholm's Water Protection Policy, they convincingly argue that decisive changes to Stockholm's water cleaning systems far from always were the result of the calculated initiatives of a well-prepared political society. Rather, they were equally often reactions to environmental stress situations. The authors emphasise the important part played by the media in this context, and conclude that "pressure applied by the newspapers was indispensable in forcing both experts and politicians to take a decisive stand for water protection".

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