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a Sustainable and Just Urban Environment

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# Pursuing Urban Political Ecology for a Sustainable and Just Urban Environment

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**Abstract:** Urban political ecology, environmental justice and sustainable development frameworks have all emerged as theoretical lenses appropriate for studying urban environmental unevenness in the last few decades. In this short essay, the primary concepts of urban political ecology perspective are discussed and compared with those of environmental justice and sustainable development theories. Identifying the connections and differences amongst these three frameworks this paper suggests that urban political ecology is strongly positioned for progressive scholarship and planning necessary for a more just and sustainable urban environmental future. At the same time normative goals and policy-oriented methodologies of the environmental justice and sustainability rhetoric can further strengthen urban political ecological thinking and praxis.

## Introduction

Socio-economic and environmental unevenness is inherent to capitalism (Smith, 1984), especially neoliberal capitalism (Harvey, 2005). Neoliberal political economy is characterized by reduction of state-driven redistribution of wealth and by selective rolling back and rolling out of regulations primarily for the sake of capital accumulation (Harvey, 2005; Peck and Tickell, 2002). These processes lead to increasing socio-economic inequality that manifests itself in the city's built as well as natural environment. Whether in the concentration of dereliction, boarded up houses, polluting industries or access to well-maintained parks, city is the common realm where the impact of entrenched unevenness is witnessed. That unevenness undermines human and ecological wellbeing and that we should move towards a more "just" socio-environment is a universally accepted aspiration among scholars and policy makers. However, different approaches have been followed towards understanding, interpreting, and challenging such socio-environmental unevenness.

In this short essay I focus on Urban Political Ecology (UPE) as an appropriate theoretical lens to uncover and challenge the process of development of the uneven urban socio-environment. While UPE has gained popularity there are other contending approaches like the Environmental Justice and Sustainable Development frameworks. In this paper I will engage with the basic tenets of UPE while discussing how this lens strengthens, falls short of, or varies from these alternative

approaches. I suggest that while there are some contradictions amongst these three perspectives, they are closely linked. Identifying these linkages and disconnects will serve to find the most effective means of progressive scholarship and planning for a more just and sustainable future. I do not suggest this essay to be a comprehensive literature review on UPE (See Keil, 2003; 2005). This is a modest attempt to synthesize the existing, albeit sporadic discussion on the nexus of UPE, environmental justice and sustainable development literature. As a scholar interested in urban environmental unevenness I have been grappling with the question of why and how UPE is suited for this task and how existing work on environmental justice and sustainability relate to UPE. I believe this brief essay will help think through such questions and advance discussion on strengths and weaknesses of these theoretical approaches.

## Urban Political Ecology: Basic tenets

While UPE is a comparatively recent theoretical development, "political ecology" as an area of critical research inspired by cultural and political-economic studies has been around for quite some time now. It is based on the main assumption "that any tug on the strands of the global web of human-environment linkages reverberates throughout the system as a whole" (Robbins, 2004:5) and that environmental changes are a result of humanizing of nature and naturalization of humanity (Escobar, 1996). Much of this political ecology thinking has been confined to a rural, third world context until

recently (See Blaikie and Brookfield, 1987; Blaikie, 1985). During the last few decades the basic notion of underlying interconnectedness of human and natural processes has been appropriately extended to the foreground of “urban” through UPE. This lens allows an investigation into the complex issues of how particular urban environment is produced and who gains and who loses due to particular power relations influencing changes within the urban environment (Kaika, 2005; Swyngedouw and Heynen, 2003; Swyngedouw and Kaika, 2000; Braun and Castree, 1998; Swyngedouw, 1996). In the following paragraphs I attempt to elaborate on some of the main concepts of UPE perspective and compare and contrast with those of Environmental Justice (EJ) and Sustainable Development (SD) frameworks<sup>1</sup>.

### *The Nature-Society Dialectics*

Marx and Engels (1970:63) stated back in 1800’s that “nature [which] preceded human history...no longer exists anywhere.” They pointed out that we need to think of nature rather as a socio-nature, a hybrid that mediates both part of nature and society. However, traditionally most theoretical frameworks have misinterpreted the human-nature/society-environment relationship by considering the two as independent components. This misrepresentation perhaps owes its origin to the century-old philosophy of environmental determinism that defined environment as nature untouched by man and positioned natural environment as superior to and in control of mankind. Scholars, specifically urban political ecologists are presently trying to reconcile this rift between the “human” and the “nature” in an attempt to break away from the traditional separatist view of nature as something exterior to the human society (Lake, 2003; Swyngedouw and Kaika, 2000; Braun and Castree, 1998; Keil and Graham, 1998; Swyngedouw, 1996; Cronon, 1991). Rather it is being emphasized that urban environmental (in)equalities are ultimately results of complex dialectics of society-nature interaction. Here environment is understood in its broadest sense comprising of social and natural surroundings within which the human society thrives.

<sup>1</sup> Although here I focus on the primary tenets, we should be aware that each of these bodies of literature comprise of multiple, often contending ideas and discourses.

UPE is rooted in the belief that while urbanization leads to a “progressive distancing from nature through production of second nature” (Lefebvre, 1976), the second nature remains a part and parcel of the first nature. Thus UPE advocates believe that nature and society is continuously constituted through the other (Braun and Castree, 1998). Whether we consider the city as a whole or particular components within it, like the urban forests, city’s water supply, or the quality of air, ultimately they are all “quasi-objects” (Latour, 1993), cyborgs, tricksters (Haraway, 1991), or imbroglios (Braun and Castree, 1998) embodying both a part of nature and a part of society in an inseparable manner. Acknowledging this dialectic relationship of society and nature contrary to long held dualistic notion, UPE develops a comprehensive and socio-politically sensitive understanding of urban environmental unevenness and its possible remedies. In other words it helps to get past the “binary logic” of “pristine nature” vs. “destructive humanity” (Braun, 2002) redefining environment as everything there is (Harvey, 1996).

### *Historic-geographic materialist analysis*

Equally intrinsic to this dialectic understanding is the historical geographical materialist approach towards analyzing the process of production of urban socio-natures within UPE. Through historical materialism, Marx explained the operation of capitalist mode of production, with a focus on social, political, institutional structures that sustain its material existence (Smith and Keefe, 1980). This theory emphasized upon the significance of taking a historical perspective for proper analysis of social transformation. Eventually scholars have recognized the importance of merging a geographic understanding of socio-spatial phenomena with Marx’s historical perspective thus formulating “historical geographical materialism” as an analytic tool for understanding human-nature interaction (Harvey, 1989). Gandy (2002) suggests that urban nature has become “a collage of past and present, a medley of different elements that binds the concrete fabric of the city to the abstract commodification of space.” Implicit within this statement is the message that the present socio-ecological make up is a function of a long historical-geographic process of the dialectical interaction of nature and society. Therefore, understanding present state and

modifying the future requires a historical geographic perspective.

### *Politics of Power*

A closely related corollary to the socio-environmental dialectic understanding of production of urban nature in UPE is that this production occurs within a realm of differential social, political, cultural, and economic power relations. Actors defend and create urban natures within the context of class, ethnicity, race and/or gender-based conflicts (Swyngedouw and Kaika, 2000). Thus processes of domination or exploitation, while not always overtly visible, are intrinsic to production of urban inequalities. Moreover, the power-laden relations that shape the formation of urban environment constantly change between different agents and at varying spatial scales. As such urban political ecologists advocate a historical-geographical insight into these shifting power relations for the sake of formulating future radical political-ecological urban strategy (Swyngedouw and Heynen, 2003).

Harvey (1989) has explained that urbanization is a process of contestation for achieving control over society's scarce resources. In this struggle, it is the already prosperous ones with relatively more socio-economic power who win, letting the marginalized fall further back. Along similar lines, Heynen *et al.* (2006) recognized "...the deeply uneven power relations through which contemporary 'cyborg' cities become produced." Uncovering these intricate power relations is extremely important for understanding contemporary socio-environmental processes, such as widespread suburbanization of middle-income white families, disproportionate exposure of racial minorities to environmental pollution, international trading or dumping of toxic wastes etc. Therefore, unfolding the world as an uneven playing ground for negotiating power relations presents the best way to understand and examine present socio-ecological conditions (Braun, 2002). In sum, the dialectic understanding of nature-society relationship, historical-geographic analysis of the process of urban-environmental development and the sensitivity to unequal power-relations amongst the producers and consumers of urban landscape form the three pillars of UPE. Together these tenets enable UPE to operationalize its political program of creating a more just and sustainable urban socio-environment.

### **Environmental Justice and UPE**

UPE scholarship has been largely motivated by the ethics of socio-environmental justice which is also the central concern of environmental justice movement and literature. The unifying insight of EJ perspective is that neither the costs of pollution nor the benefits of environmental protection are evenly distributed in our society (Bullard, 1994). These disparities stem from socio-economic and political inequalities. Therefore "(C)ombining elements of civil rights, social justice, and respect for environment", advocates of EJ remain "... committed to reversing past practices that have had the effect of placing disproportionately large ecological and economic burdens on working-class families and communities of color" (Faber, 1998:1).

Contrary to traditional understandings of urban-nature relation, EJ scholars view people as integral part of nature. In this regard it aligns with UPE. This grassroots movement-based perspective defines environment as "the place you work, the place you live, the place you play in" (Di Chiro, 1996:301). As such it deviates from mainstream environmentalism (including Sustainable Development rhetoric) which portrays "human" as the main perpetrators of "environment." Instead EJ advocates suggest that certain groups of people are as much victims of environmental pollution and degradation as nature herself and hence the universal separation between human and nature is politically incorrect (Di Chiro, 1996). While denying a dualistic understanding of society and environment, EJ work has long been preoccupied with unequal distribution of negative environmental conditions like pollution and waste facility sitting (Krieg, 2004; Cole and Foster 2001; Bullard, 1994), neglecting issues of access to positive environmental amenities that are equally crucial for healthy social reproduction (Floyd and Johnson, 2002; Wolch *et al.*, 2005). Environment thus has been narrowly defined in practice despite the wider range of concern for positive and negative environmental conditions articulated within the Principles of Environmental Justice (Taylor, 2000).

EJ scholarship, started as an attempt to prove distributional disparities in polluting industries and toxic waste facilities along class/race lines. However, scholars are increasingly pointing out that it is the socio-political and institutional context that enables or disables communities from preventing negative environmental developments or attracting positive environmental resources in their neighborhoods

(Kurtz, 2005; Lake, 1996; Pulido 1996). Hence the degree to which different communities are given the opportunity to make decisions related to urban environmental change is important. This focus on procedural justice makes EJ more compatible to UPE, which also emphasizes on the socio-natural process of production of urban environments. While EJ work has broadened to consider distributional and procedural aspects of environmental production (Cutter, 1995), race often appears as a causal explanation to urban inequalities, foreclosing discussions related to other socio-political conditions.

Furthermore, EJ literature is often accused of being utopian as the concept of justice itself has multiple meanings and is not easy to achieve (Young, 1990). However, Harvey has explained that this utopianism is needed to overcome the pessimism that works to bolster the *status quo*, and to work towards a world where “people could think about, discuss, and communicate their alternative visions” (Harvey, 2000:263). EJ perspective begins to articulate such an alternative vision that can further facilitate UPE’s political agenda to create a democratic and equitable socio-environment.

Ultimately, EJ perspective is truly valued for being a political movement (Low and Gleeson, 1998). As a socio-environmental movement inspired by the civil rights politics in the U.S., EJ has successfully culminated into a variety of federal and state policies (Holifield, 2001). It is therefore a theoretical perspective, a body of empirical research, a policy-making tool and a political movement all at the same time mediating theory and practice, a virtue that UPE needs to nurture.

### Sustainable Development and UPE

The rhetoric of “sustainability” has spread to the field of urban research and planning since 1990’s (Hough, 2004; Evans, 2002; Eden, 1996; Kirkby *et al*, 1995; Haughton and Hunter, 1994). The World Commission on Environment and Development defined sustainable development as “...development that meets the needs of the present without compromising the ability of future generations to meet their own needs” (WCED, 1987:43). Recognizing the importance of socio-environmental justice, Agyeman *et al* (2002:78) have suggested that SD also “need(s) to ensure a better quality of life for all, in a just and equitable manner, whilst living within the limits of supporting ecosystems.” As

such scholars are increasingly becoming sensitive to notions of inter-generational and intra-generational equity and equity across different class, ethnic and gender barriers (Johnston *et al*, 2000). In fact many scholars believe that justice and sustainability are mutually interdependent (Agyeman *et al*, 2002; Goldman, 1993). However in practice concern for social equality is less transparent within this body of literature and consequential policy prescriptions.

While SD framework has become extremely influential in planning (Barton *et al*, 2003; Barton, 2000; Williams *et al*, 2000; Wackernagel and Rees, 1996), strong critique has stemmed from social critical theorists, including urban political ecologists. Firstly, SD rhetoric is critiqued for presenting an imaginary of a singular external nature that needs to be preserved for long term human sustenance. Unlike UPE or EJ framework, sustainability research aspires to preserve a pristine nature/environment. This presents two problems. First it continues to present cities as separate containers of natural and social processes and nurtures an anti-urban sentiment that either conceptualizes the city as the main problem causing unsustainable outcomes or places *nature* in a superior position than the *urban* (Braun, 2005). Furthermore, this discourse obscures the fact that the “nature” that entrepreneurial city officials, profit-seeking businesses, radical environmentalists and communities exposed to contaminations wish to preserve are not all the same. Thus the very political, contradictory and plural character of “nature” and “sustainability” is neglected in SD theory and practice (Kruger and Gibbs, 2007).

Unlike UPE and EJ, both of which rest on challenging unequal socio-natural processes of urban development through radical politicization, SD is often critiqued as a positive/positivist theoretical agenda (Keil, 2003), which helps to support and perpetuate the inherent contradictions of present neoliberal urbanization. Maintaining the *status quo* requires sustainability rhetoric to focus on a policy-oriented technocratic language (Swyngedouw, 2007; Braun, 2005). Lake and Hanson (2000) explain that the dependence of sustainability literature on a purely technocratic language is problematic because unsustainable outcomes are a result of social, economic and political processes. Hence trying to achieve sustainable development without challenging these underlying social processes is unproductive. Similarly, Swyngedouw



(2007) describes the technocentric nature of SD framework in terms of a “consensual postpolitics.” He has explained that while SD framework allows disagreement amongst stakeholders of urban environmental development regarding the ways to achieve sustainability, limited discussion is permitted regarding who defines sustainability, or what sort of nature is to be sustained, or for whom. Therefore, SD research and policies work within the existing socio-economic order systematically avoiding true contestation and foreclosing important political questions (Kaika, 2005; Dobson, 1998; Low and Gleeson, 1998). Despite these criticisms, the goal of sustainability remains at the heart of progressive scholarship and planning.

### **UPE, an appropriate lens for developing a just and sustainable urban socio-environment**

The above discussion reveals that UPE is a comprehensive framework for studying human-environment interaction and uneven urban environmental development. First, UPE provides a dialectic understanding of human-environment interaction where environment encompasses not just pristine nature (as suggested in SD literature), but hybrid socio-natures that affect human society in both beneficial and harmful ways. As such UPE offers a broader understanding of urban environment and can be applied to a wider range of socio-environmental topics unlike EJ scholarship that has remained focused primarily on environmental hazards until recently. Secondly, UPE lens reveals and challenges the unsustainable and unjust processes of production of uneven urban environments. It neither remains preoccupied with distributional aspects of environmental costs and benefits like EJ, nor does it assume such processes of uneven development as technical, managerial and apolitical issues like SD framework. Finally, UPE has a largely critical disposition that often challenges the existing socio-economic order as the primary cause of increasing social and environmental unevenness. UPE scholarship is thus inherently radical and political in nature unlike SD framework that works to maintain the status quo. While EJ scholarship, like UPE, is rooted in a political agenda, it has remained primarily focused on the politics of race.

UPE, EJ and SD perspectives have considerable overlaps in terms of their thematic concern for nature, human society, and their interaction

that lead to the development of uneven urban environments. However, UPE framework deals with urban environmental transformation more comprehensively as it brings together ecological understanding, political thinking and social justice concerns under a single umbrella. Despite its comprehensive engagement with urban-environment interaction, UPE is yet to inform material policies and practices the way EJ or SD theory has successfully done. Although Keil (2003) suggests that urban and regional planners are increasingly depending on political ecological framework for facilitating sustainable development there seems to be a lack of an explicit practice of UPE (Whitehead, 2005). Therefore, UPE scholars need to translate UPE’s normative goals of justice and sustainability, and its critical, political, and analytical strengths into practical policies. This will further strengthen UPE as a theoretical framework for understanding, and as a practical means for ameliorating unequal geographies of production and consumption of socio-environments in cities.

### **References**

- Agyeman, Julian, Robert D. Bullard and Bob Evans. 2002. Exploring the nexus: Bringing together sustainability, environmental justice and equity. *Space and Polity* 6(1), 77-90.
- Barton, Hugh. 2000. *Sustainable Communities: The Potential for Eco-Neighborhoods*. London: Earthscan Publications Ltd.
- Barton, Hugh, Marcus Grant and Richard Guise. 2003. *Shaping Neighborhoods - A Guide for Health, Sustainability and Vitality*. London & New York: Spon Press.
- Blaikie, Piers. 1985. *The Political Economy of Soil Erosion in Developing Countries*. London and New York: Longman Development Studies.
- Blaikie, Piers and Harold Brookfield. 1987. *Land Degradation and Society*. London and New York: Methuen.
- Braun, Bruce. 2002. *The Intemperate Rainforest: Nature, Culture, and Power on Canada’s West Coast*. Minneapolis, London: University of Minnesota Press.
- Braun, Bruce. 2005. Environmental Issues: Writing a more-than-human urban geography. *Progress in Human Geography* 29(5), 635-650.
- Braun, Bruce and Noel Castree (eds). 1998. *Remaking Reality: Nature at the Millennium*. London and New York: Routledge.

- Bullard, Robert D. 1994. *Dumping in Dixie: Race Class and Environmental Quality*. Boulder, CO: Westview Press.
- Cole, Luke.W. and Sheila, R. Foster. 2001. *From the Ground Up: Environmental Racism and the Rise of the Environmental Justice Movement*. New York and London: New York University Press.
- Cronon, William. 1991. *Nature's Metropolis - Chicago and the Great West*. New York, London: W.W. Norton & Company.
- Cutter, Susan L. 1995. Race, class and environmental justice. *Progress in Human Geography* 19, 111-122.
- Di Chiro, Giovanna. 1996. Nature as community: The convergence of environment and social justice. In, Cronon, William (ed.), *Uncommon Ground*. New York: W.W. Norton and Company, pp. 98-320.
- Dobson, Andrew. 1998. *Justice and the Environment: Conceptions of Environmental Sustainability and Dimensions of Social Justice*. Oxford, New York: Oxford University Press.
- Eden, Sally. 1996. *Environmental Issues and Business: Implications of a Changing Agenda*. Chichester: John Wiley and Sons.
- Escobar, Arturo. 1996. Constructing nature: Elements for a poststructural political ecology. In, Richard Peet and Michael Watts (eds.), *Liberation ecologies: Environment, Development, Social Movements*. London, UK: Routledge, pp. 46-68.
- Evans, Peter B. 2002. *Livable Cities? Urban Struggles for Livelihood and Sustainability*. Berkeley and Los Angeles: University of California Press Berkeley.
- Faber, Daniel J. (ed.) 1998. *The Struggle for Ecological Democracy: Environmental Justice Movements in the United States*. New York, London: The Guilford Press.
- Floyd, F. Myron and Cassandra Y. Johnson. 2002. Coming to terms with environmental justice in outdoor recreation: a conceptual discussion with research implications. *Leisure Science* 24, 59-77.
- Gandy, Matthew. 2002. *Concrete and Clay: Reworking Nature in New York City*. Cambridge, MA: The MIT Press.
- Goldman, Benjamin. 1993. *Not Just Prosperity. Achieving Sustainability with Environmental Justice*. Washington DC: National Wildlife Federation.
- Haraway, Donna. 1991. *Simians, Cyborgs and Women- The Reinvention of Nature*. London: Free Association Books.
- Harvey, David. 2005. *A Brief History of Neoliberalism*. New York: Oxford University Press.
- Harvey, David. 2000. *Spaces of Hope*. Berkeley: University of California Press.
- Harvey, David. 1996. *Justice, Nature and the Geography of Difference*. Oxford: Blackwell Publishers.
- Harvey, David. 1989. *The Urban Experience*. Baltimore and London: The John Hopkins University Press.
- Haughton, Graham and Colin Hunter. 1994. *Sustainable Cities. Regional Policy and Development Series 7*. London and Bristol, Pennsylvania: Jessica Kingsley Publishers Ltd.
- Heynen, Nikolas, Maria Kaika, and Eric Swyngedouw (eds). 2006. *In the Nature of Cities: Urban Political Ecology and the Politics of Urban Metabolism*. London & New York: Routledge Taylor and Francis Group.
- Holifield, Ryan. 2001. Defining environmental justice and environmental racism. *Urban Geography* 22(1), 78-90.
- Hough, Michael. 2004. *Cities and Natural Process: A Basis for Sustainability* (2<sup>nd</sup> Ed). London & New York: Routledge Taylor and Francis Group.
- Johnston, R.J., Derek Gregory, Geraldine Pratt and Michael Watts. 2000. *The Dictionary of Human Geography* (4<sup>th</sup> Ed). Oxford: Blackwell Publisher.
- Kaika, Maria. 2005. *City of Flows- Nature, Modernity and the City*. New York: Routledge.
- Keil, Roger. 2005. Urban political ecology. *Urban Geography* 26(7), 640-651.
- Keil, Roger. 2003. Urban political ecology. *Urban Geography* 24(8), 723-738.
- Keil, Roger and John Graham. 1998. Reasserting nature: Constructing urban environment after Fordism. In, Bruce Braun and Noel Castree (eds). *Remaking Reality-Nature at the Millennium*. London & New York: Routledge.
- Kirkby, John, Philip O'Keefe and Lloyd Timberlake (eds). 1995. *The Earthscan Reader in sustainable development*. London: Earthscan.
- Krieg, Eric J. 2004. Race and environmental justice in Buffalo, NY: a zip code and historical analysis of ecological hazards. *Society and Natural Resources* 18, 199-213.
- Krueger, Rob and David Gibbs. 2007. *The Sustainable Development Paradox: Urban Political Economy in the United States and Europe*. New York: The Guilford Press.
- Kurtz, Hilda. 2005. Reflections on the iconography of environmental justice activism. *Area* 37(1), 79-88.



- Lake, Robert W. 2003. Dilemmas of environmental planning in post-urban New Jersey. *Social Science Quarterly* 84(4), 1002-1017.
- Lake, Robert W. 1996. Volunteers, NIMBYs, and environmental justice: Dilemmas of democratic practice. *Antipode* 28(2), 160-174.
- Lake, Robert W. and Susan Hanson. 2000. Needed: geographic research on urban sustainability. *Urban Geography* 21(1), 1-4.
- Latour, Bruno. 1993. *We Have Never Been Modern*. London: Harvester Wheatsheaf.
- Lefebvre, Henri. 1976. *The Survival of Capitalism: Reproduction of the Relations of Production*. London: Allison and Busby.
- Low, Nicholas and Brendan Gleeson. 1998. *Justice, Society and Nature: An Exploration of Political Ecology*. London and New York: Routledge.
- Marx, Karl. 1967. *Capital Vol. 1*. New York: International Publishers.
- Marx, Karl and Friedrich Engels. 1970. (eds). *The German Ideology*. New York: International Publishers.
- Peck, Jamie and Adam Tickell. 2002. Neoliberalizing space. In, Neil Brenner and Nik Theodore (eds), *Spaces of Neoliberalism: Urban Restructuring in North America and Western Europe*. Oxford: Blackwell, pp. 33-57.
- Pulido, Laura. 1996. A critical review of the methodology of environmental racism research. *Antipode* 28(2), 142-159.
- Robbins, Paul. 2004. *Political Ecology: A Critical Introduction*. Oxford: Blackwell Publisher.
- Smith, Neil. 1984. *The Uneven Development: Nature, Capital and the Production of Space*. Basil Blackwell Publisher Ltd.
- Smith, Neil and Phill O' Keefe. 1980. Geography, Marx and the Concept of Nature. *Antipode*, 12(2), 30-39.
- Swyngedouw, Erik. 2007. Impossible "Sustainability" and the postpolitical condition. In, Robe Krueger and Gibbs David (eds.), *The Sustainable Development Paradox: Urban Political Economy in the United States and Europe*. New York: The Guilford Press, pp. 13-40.
- Swyngedouw, Erik. 1996. The city as a hybrid: On nature, society and cyborg urbanization. *Capitalism Nature Socialism* 7, 65-80.
- Swyngedouw, Erik and Nik Heynen. 2003. Urban political ecology, justice and the politics of scale. *Antipode* 35(5), 898-918.
- Swyngedouw, Erik and Maria Kaika. 2000. The environment of the city or....the urbanization of nature. In, Gavin Bridge and Sophie Watson (eds.), *Reader in Urban Studies*. Oxford: Blackwell Publishers, pp. 567-580.
- Swyngedouw, Erik, Maria Kaika and Jose Esteban Castro. 2002. Urban water: A political ecology perspective. *Built Environment* 28, 124-137.
- Wackernagel, Mathis and William, E. Rees. 1996. *Our Ecological Footprint: Reducing Human Impact on the Earth*. Gabriola Island BC, Philadelphia PA: New Society Publishers.
- WCED, World Commission on Environment and Development. 1987. *Our Common Future*. Oxford University Press.
- Whitehead, Mark. 2005. Between the marvelous and the mundane: Everyday life in the socialist city and the politics of the environment. *Environment and Planning D: Society and Space*, 23, 273-294.
- Williams, Katie, Elizabeth Burton and Michael Jenks. 2000. *Achieving Sustainable Urban Form*. London & New York: E & FN Spon Taylor and Francis Group.
- Wolch, Jennifer, John P. Wilson and Jed Fehrenbach. 2005. Parks and park funding in Los Angeles: an equity mapping analysis. *Urban Geography* 26(2), 4-35.
- Young, Iris Marion. 1990. *Justice and the Politics of Difference*. Princeton, NJ: Princeton University Press.



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