

Greening in the Red Zone

Green Space and Disaster Resistance, Recovery and Resilience

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CORNELL U

Access to green space and the act of creating green spaces is well understood to promote human health, especially in therapeutic contexts among individuals suffering traumatic events. Less well understood, although currently being studied, is the role of access to green space and the act of creating and caring for it in promoting neighborhood health and well-being as related to social-ecological system resilience. An important implication of this work lies in specific instances of greening and the presence of greened spaces in promoting and enhancing recovery, and perhaps resilience, in social-ecological systems disrupted or perturbed by violent conflict or other catastrophic disaster. Despite the well documented importance of “interaction with nature” in post-traumatic stress management, examples of community-based natural resource management are often overlooked in disaster relief contexts.

In this piece I preview the forthcoming edited volume titled *Greening in the Red Zone* (Tidball and Krasny, eds, Springer), which will begin to address this gap in initial documentation of greening responses to disaster and will provide illustration and interpretation of these “greening” phenomena through a series of cases or examples. Through this book project, and the brief review of it here in this commentary, I hope to contribute to the disaster relief discourse by exploring how access to green space and the act of creating

of individuals and small groups of people, in relation to each other and powered by the adaptive systems of human life and development” (“Disaster Preparation and Recovery,” *Ecology and Society*, 2008) This notion is of particular relevance in areas that are densely populated, where both catastrophes and recovery from them are most complex.

Although much of our thinking about individuals who have experienced catastrophe focuses on suffering and despair, Fredrickson et al (“What Good are Positive Emotions in Crisis?” *Journal of Personality and Social Psychology*, 2003) argue that not only are resilient people buffered from depression by positive emotions but also actually thrive through such emotions. In a study of individuals who experienced the Sept 11 terrorist attacks, Fredrickson et al conclude that “positive emotions do not disappear in times of acute and chronic stress ... they are present and functional during crisis” and that “efforts to cultivate and nurture positive emotions in the aftermath of crisis pay off both in the short-term, by improving subjective experiences, undoing physiological arousal, and enhancing broad-minded coping, and in the long-term, by minimizing depression and building enduring resources, the hallmark of thriving” They suggest that “finding positive meaning may be the most powerful leverage point for cultivating positive emotions during times of crisis”

Might there be a deeper signifi-

to prepare for crops, as in “work the soil” or “cultivate the land”; to educate, socialize, form and refine, as in “cultivate your musical taste”; and to seek the acquaintance or

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goodwill of, or “make friends with.” Drawing on these multiple definitions and on our interest in nature, community and crisis, we ask: Might there be a role for cultivation of nature in fostering positive emotions following a disaster or armed conflict? Can cultivation, and even the presence of the fruits of these labors, contribute to individual and social-ecological resilience after a crisis?

Green and Red

The evidence accumulated in the forthcoming *Greening in the Red Zone* focuses on community greeners (the people), community greening (the practice) and community green space (the places). The chapter authors answer questions about the role of “greening” people, practice and places in building and demonstrating resilience in the face of catastrophic surprise and change. They explore, through multiple theoretical and methodological lenses, how the act of people coming together around the restoration and stewardship of nature might enhance individual and community resilience, and perhaps even contribute to social-ecological system resilience, in chaotic post-disaster or post-conflict contexts. Because of the rapid growth of cities globally and their ever looming importance as sites of conflict and disaster, much of the focus of the discussion is on urban settings (eg, the Berlin Wall, post-Katrina New Orleans, post-9/11 New York, Sarajevo), although regionwide examples are also included (eg, the UN Buffer

Zone in Cyprus, the Demilitarized Zone between North and South Korea).

We operationalize greening as an integrated approach to the cultivation (including planting, stewardship and adaptive management) of vegetation and green spaces. Greening takes place in cities, towns, townships, informal settlements in urban and peri-urban areas and in battlefields of war and of disaster. Greening sites include small woodlands, public and private urban parks and gardens, urban nature areas, street tree and city square plantings, botanical gardens and cemeteries. The chapter authors explore how greening can enable or enhance recovery from disaster or conflict in situations where community members both actively and measurably participate in and receive benefits from their greening activities.

The term *red zone* has a history. One of its first usages was in reference to the “Zone rouge,” the name given to about 465 square miles of northeastern France that was destroyed during World War I (Smith and Hill, 1920). In more recent times, the term has been used to refer to unsafe areas in Iraq after the 2003 invasion of the US and its allies, the opposite of the “Green Zone,” a presumably more safe area in Iraq. The term was also used to describe dangerous areas in Bangkok, Thailand during the 2010 unrest (www.ennaharonline.com/en/international/3948.html).

For our purposes, we use the term *red zone* to refer to multiple settings (spatial and temporal) that may be characterized as intense, potentially or recently hostile or dangerous areas or times, including those in post-disaster situations caused by natural disasters such as hurricanes, earthquakes and areas associated with terrorist attacks and war. Within these red zones are people for whom the red zone represents a perturbation or disruption of their individual, family and community patterns of living. For a herder in rural Afghanistan, a soldier occupying the herder’s village or a relief worker from an NGO, red zones represent both a time period and points on a landscape where ecological and social forces are disturbed suddenly, drastically and with little warning. These situations are referred to as Stability, Security, Transition and Reconstruction

COMMENTARY

green spaces in extreme situations might contribute to resistance, recovery and resilience of individuals, communities and social-ecological systems.

Cultivating Resilience

Resilience scholars Masten and Obradović remind us that “it is often argued that ‘all disasters are local,’ at least in the short term ... and that all human resilience is local, emerging from the actions

cance to Fredrickson et al’s choice of the words “cultivate” and “cultivating” in the above passage? Marianne Krasny and I propose that the term *cultivate* has both metaphoric and material meaning and that both meanings are foundational to the multiple greening arguments presented in this book. According to online dictionaries, *cultivate* has various accepted definitions, such as: to nurture or foster the growth of plants;

(SSTR) contexts by aid, diplomacy and military organizations.

Filling in the Gaps

Returning to the objective of this edited volume, the aim is to explore how people and their relationship with nature might enhance individual and community resilience and perhaps even contribute to social-ecological system resilience in chaotic post-disaster or post-conflict contexts. I remind the reader that we hope to take very initial steps to address gaps in the resilience literature dealing with the surprisingly few resilience studies focused on cultural systems (Wright and Masten 2005). We also plan to attend to the literature's striking absence of "work that embeds human development in ecosystems that include interactions among species and nonhuman systems" and integrates the theory and science of individual human resilience in development with broader ecological systems theory and research exemplified by resilience scholarship (Masten and Obradović 2008).

This book is not intended to be the answer or the proverbial silver bullet for post-conflict and post-disaster situations, nor for advocates of community forestry and greening. We don't intend to communicate that community greening is a panacea. However, we have increasingly heard from post-conflict planners in military and development assistance agencies, in urban community development contexts and among post-disaster first responders that there is something important about the role humans' relationship with nature plays in survival situations, when the threat of loss of life, of home and hearth is real and looms large, or after disaster strikes when one is trying to put the pieces back together again. This book, we hope, will begin to document these reports and engage them critically from a number of disciplines and perspectives.

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Sri Lanka

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example, the tsunami altered land-holding patterns along the coasts by consolidating property in the hands of hotel developers in some areas with intensive tourism. In the agricultural and fishing region on the east coast, allocation of house reconstruction funds to male members of the family threatened to undermine local traditions of female-owned dowry houses and the widespread Tamil and Muslim custom of matrilineal marriage, placing dwellings in the hands of male instead of female kin. Drawing on prior knowledge of the area, anthropologists pointed out these changes to development workers, and subsequent fieldwork revealed that the matrilineal household system is likely to be preserved in practice, despite these post-tsunami housing policies. An eventual return to local Tamil Hindu goddess worship was also documented despite the immediate post-tsunami loss of faith in protective seashore temples and shrines.

Political Fallout

Disasters always unfold within pre-existing political contexts. Sri Lanka's recovery from the tsunami provides multiple lessons about disaster diplomacy and the impor-

tance of political conditions to the success of short-term relief and long-term rebuilding operations. The tsunami occurred during a long-standing conflict between the Government of Sri Lanka (GoSL) and the separatist guerrilla movement of the Liberation Tigers of Tamil Eelam (LTTE). Sri Lankanists will likely spend another decade assessing the impact of the tsunami on Sri Lanka's entrenched ethnic conflict and the ceasefire that had been signed in early 2002. Scholars already concur that the lack of trust between the two sides adversely affected the distribution of relief supplies. Instead of building trust through collaborative humanitarian efforts, the GoSL sought to centralize distribution of international aid while the LTTE hoped to control distribution in the territories under its authority.

The stakeholders were keenly aware that the microcosm of relief administration carried implications for territorial control, political legitimacy and national sovereignty. Aggressive Sinhala nationalists categorically refused to devolve power in the distribution of aid, believing that this step would grant undue legitimacy to the LTTE's de facto state in the north. Unable to agree on power sharing for the administration of humanitarian aid, the warring parties fell deeper into conflict.

Mistrust skyrocketed as delays in deploying relief to the north and east (areas already adversely affected by the civil war) increased perceptions of inequity. By 2006, the 2002 ceasefire had disintegrated. Increasing hostilities led to the official abrogation of the cease fire in 2008 and the GoSL's seizure by military campaign of all LTTE-occupied territories by mid-2009. In the final analysis, our tsunami research team watched as the aftermath of the disaster enhanced the authority of the central government instead of promoting peaceful reconciliation between the warring factions.

Michele Ruth Gamburd is professor of anthropology at Portland State University. She is the author of The Kitchen Spoon's Handle: Transnationalism and Sri Lanka's Migrant Housemaids (2000) and Breaking the Ashes: The Culture of Illicit Liquor in Sri Lanka (2008).

Dennis B McGilvray is professor of anthropology at University of Colorado at Boulder. His most recent books include Muslim Perspectives on the Sri Lankan Conflict (with Mirak Raheem, 2007) and Crucible of Conflict: Tamil and Muslim Society on the East Coast of Sri Lanka (2008). ☐



February 2011 Anthropology News Call for Proposals: Circulation of Knowledge and Culture

As we begin 2011, the dissemination of knowledge and culture continue to change. When doing the work of anthropology, one must learn how others communicate their culture, whether it be through objects, actions or language. In turn, anthropologists share what they learn.

For the February issue of *Anthropology News*, we seek proposals for a thematic series on the circulation of knowledge and culture. We invite you to explore how knowledge circulates among all stakeholders, whether research participants, colleagues or others outside of anthropology. We welcome proposals that reflect on a variety of questions including but not limited to: How does knowledge circulate? How do we circulate this knowledge back to the communities studied? How are people in communities studied following up on the results of anthropologists' work? How might this circulation of ideas change culture? How does circula-

tion of knowledge and culture play out in research? How can anthropological knowledge better cross disciplinary boundaries and be circulated outside anthropology?

Guidelines

To participate, email a 300-word abstract and 50–100-word biosketch to *Anthropology News* Acting Managing Editor Amy Goldenberg (agoldenberg@aaanet.org). We welcome proposals for In Focus commentaries, Teaching Strategies, Field Notes articles, photo essays, news stories and interviews. Proposals for photo essays should also include up to five high resolution photographs (tiff or jpg), each with a caption and credit. Selected authors will be notified of their status in early November, and full articles—commentaries of 1,000–1,400 words or shorter pieces for other article types—will be due December 1.

Proposal submission deadline: October 20, 2010. Early submissions are encouraged.