

REBEKAH A. GREEN

INSTITUTE FOR GLOBAL AND COMMUNITY RESILIENCE

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EDUCATION

2007

Summer Academy for Social Vulnerability - Megacities, July 22-27, 2007
United Nations University – Institute for Environment and Human Security and Munich Re Foundation, Hohenkammer, Germany

2000-2005

Cornell University, Ithaca, NY
Ph.D. in **Structural Engineering**, May 2005
Minors: **Anthropology, Science and Technology Studies**
Dissertation Title: Negotiating Risk: Earthquakes, Structural Vulnerability, and Clientelism in Istanbul
GPA: 4.0/4.0

Grants: *Fulbright Foreign Scholarship to Turkey (2001-2002)*
American Research Institute in Turkey, John Freely Scholarship (2002-2003)
American Association of University Women, Engineering Dissertation Fellowship (2003-2004)
Cornell College of Engineering Fellowship (2004-2005)

1997-2000

Cornell University, Ithaca, NY
M.S. in Structural Engineering
Minors: Anthropology, Historic Preservation
GPA: 4.0/4.0

Grants: *NSF Graduate Student Fellowship (1998-2001)*
Graduate Research and Engineering Ethics Scholarship (2000-2001)

1992-1996

University of Washington, Seattle, WA
B. S. in Civil and Environmental Engineering
Graduated Cum Laude, GPA: 3.7/4.0

ACADEMIC EXPERIENCE

Sept. 2007-Present

Research Associate, Institute for Global and Community Resilience
Western Washington University, Bellingham, WA

- Develop research agenda on disaster risk reduction and emergency planning through sustainable community development
- Liaison between Institute and regional, national and international practitioners and researchers
- Supervise student research and post-disaster reconnaissance field study.

Grants: *Natural Hazards Center Quick Response Grant 2007* (grant writer and co-PI)

2005-2007

Postdoctoral Fellow at the Earth Institute

Columbia University, New York, NY

- Lead two year study of Hurricane Katrina damage and the implications for recovery policy in low-income neighborhoods of New Orleans (NSF SGER grant).
- Supervised research assistants and graduate students in independent studies courses.
- Developed multi-institution collaboration for study of disaster vulnerability and recovery in New Orleans.
- Led NSF – HSD proposal development and submittal.

Grants: NSF – SGER 0606606 (Lead researcher)

**PROFESSIONAL /CONSULTING
EXPERIENCE**

April 2006- present

RiskRED Core Consulting Team Member

Risk Reduction Education for Disasters (RiskRED), New York, NY.

- **Lead Project Consultant**
 - OECD Stocktaking on Global Risk Awareness and Risk Reduction Awareness
 - Perform stocktaking of 13 countries.
 - Developed policy handbook on risk awareness and risk reduction awareness for Natural Catastrophes for the Organization for Economic Cooperation and Development.
 - Presented major findings of stocktaking and policy handbook to OECD Insurance and Private Pension Committee, Paris.
- **Student Research Supervisor**
 - Supervise various student research and volunteer activities (ongoing).
- **Project Coordinator**
 - Disaster Preparedness around the World Exhibit in partnership with Lamont-Doherty Earth Observatory and Earth Institute, Nyack, NY.
 - Developed exhibit featuring disaster preparedness emergency supplies from six countries and interactive activities for community residents.

2005 – 2007

Research Analyst, ACORN Housing/University Collaboration

ACORN Housing and University Partnerships, LA

- Coordinated field damage and conditions survey of Upper and Lower Ninth Ward.
- Analyzed damage and recovery to form the basis of future planning initiatives.
- Multiple presentations to public officials and private foundations.

2003-2006

Project Consultant, Earthquake Resistant Adobe Construction in Central Asia

GeoHazards International, Palo Alto, CA

- Worked with engineers, tradesmen, and educators in Kazakhstan, Uzbekistan, and Tajikistan to develop adobe construction recommendations and public awareness campaigns.
- Trained Central Asian community organizers in non-structural and structural mitigation for dissemination in home countries.
- Assisted in development and implementation of leadership training for emerging Central Asian researchers and activists.

July 2002

-March 2003

Project Coordinator, Non-Structural Mitigation Project

American Red Cross and Istanbul Disaster Preparedness Education Program, Turkey

- Tested the effectiveness of non-structural mitigation products on shake table to develop non-structural mitigation guidelines for home, office and school mitigation.
- Developed pioneering public education booklet, multi-media educational presentation, hands-on activities and instructor-training materials for public consumption.
- Coordinated collaboration between public educators, trade school teachers, public, and engineers, and local entrepreneurs.

- February 2002 **Lead Engineering Researcher**, Reconnaissance Study of Causes of Deaths and Injuries in Afyon (Sultandagi-Bolvadin) Earthquake, Turkey.
American Red Cross and Istanbul Disaster Preparedness Education Program
- Developed and implemented qualitative and quantitative damage assessment and social science survey for adobe and *hımsı* construction.
 - Analyzed and reported damage and damage perception findings.
- Oct. 2002 -June 2003 **Project Consultant, Structural Awareness for Seismic Safety Pilot Project**
Lutheran World Relief and Istanbul Disaster Preparedness Education Program, Turkey
- Assessed public awareness of disaster resistant construction concepts.
 - Developed innovative public education booklet, multi-media educational presentation, demonstrations to enhance learning, and instructor training materials.
 - Worked with Istanbul trade schools to adapt and integrate disaster resistant construction education as co-curricular education module.
- 1997 – 1998 **Historic Preservationist**
Harriet Tubman Home, Auburn, NY
- Performed extensive historical research to document the construction and ownership of historic home built by legendary escaped slave for National Register of National Historic Landmarks registry.
 - Developed preservation plan for historic masonry structure.
- 1996-1997 **Structural Design Engineer**
KPFF Consulting Engineers, Seattle, WA
- Performed structural designs in wood, steel, and concrete.
 - Performed computer modeling of dynamic earthquake loading.
- Summer 1995 **Civil Engineering Internship**
Port of Seattle, Seattle, WA
- Investigated and documented shipping line operations for appendix to governmental bidding contract.
 - Reconciled estimate of 70 million dollar superfund site.
- TEACHING EXPERIENCE**
- Fall 2003 CEE 492 *Engineers for a Sustainable World*, Cornell University, Ithaca, NY
- Taught two-week module on ethical considerations regarding international development.
- Spring 2002 GSM 501 *Successful Business Management*, Sabancı Üniversitesi, Turkey
- Developed and taught three-week ethics module for graduate level management students.
- Fall 1999 CEE 116 *Modern Structures*, Cornell University, Ithaca, NY
- Developed and taught three-week ethics module on professional engineering ethics.
- Spring 2000 S&TS/HIST 292 *Inventing an Information Society*, Cornell University, Ithaca, NY
- Teaching assistant: facilitated discussion sections, performed grading, assisted in exam development.
- Spring 1998 CEE 371 *Structural Behavior*, Cornell University, Ithaca, NY
- Teaching assistant: developed and implemented tutorial sessions, performed grading, and held office hours.

- Fall 1997 CEE 595 *Introduction to Construction Management*, Cornell University, Ithaca, NY
- Teaching assistant: managed mock construction bidding and award project, performed grading, and held office hours.
- Spring 1996 CIVE 390 *Civil Engineering Systems*, University of Washington, Seattle, WA
- Undergraduate teaching assistant: held office hours and graded homework.

COMMUNITY SERVICE

- Fall 2005 **Facilitator, Red Hook Community Farm Planning Charette**
E-Design Dynamics, NY
- Spring 2004 **Participatory Action Research Methods Training for Summer Interns**
Cornell University Chapter of Engineers for a Sustainable World
- Fall 2003 **Project Coordinator, Engineers for a Sustainable World**
Cornell University Chapter of Engineers for a Sustainable World
- Guided team of students in developing hands-on demonstration activities to teach key principles in structural dynamics.
- Fall 2002 **Community Emergency Response Team Training**, Istanbul, Turkey
- 2000-2001 **Participant Action Research Intern**
Tompkins County Quality of Life 2000 Committee, Tompkins County, NY
- Developed multiple quality of life indicators for Tompkins County in collaboration with a diverse group representing Tompkins County.
- 1997-1998 **Student Assembly for the Environment Committee**, Cornell University
- Developed resolution and implementation plan for recycled paper use at Cornell University.
- 1989-1995 **King County Explorer Search and Rescue**, Seattle, WA
- Participated in and led search teams, trained volunteers, 300+ hours.

HONORS

- 2006 EERI Shaw Family Innovation Prize
- 1997-1998 John E. Perry Teaching Assistant Prize
- 1995-1996 Annual National Dean's List
- 1995-1996 UW SWE Civil Engineering Female Student of the Year

AFFILIATIONS

- Consulting Team **RiskRED - Risk Reduction Education for Disasters**
- Project Consultant **Disaster Preparedness Education Unit**, Boğaziçi University, Turkey
- Proposal Reviewer **ProVention Consortuim**, Research and Applied Grants Programme
- Member Earthquake Engineering Research Institute
- Member American Anthropological Association

LANGUAGES

- English Native proficiency
- Turkish Professional working proficiency

REFEREED AND INVITED PUBLICATIONS

Green, R. (2007). Risk Awareness and Education on Natural Catastrophes: Draft Stocktaking. Paris, Organization for Economic Co-operation and Development.

Green, R. (2008). Unauthorized Development and Seismic Hazard Vulnerability: A Study of Squatters and Engineers in Istanbul, Turkey *Disasters*, 31(4): 311-335.

Green, R., Bates, L., Smyth, A. (2007). Impediments to Recovery in New Orleans' Upper and Lower Ninth Ward One Year After Hurricane Katrina, *Disasters*, 31 (4): forthcoming.

Green, R. (est. Sept. 2007) Unauthorized Construction, Housing Policy and Hazard Vulnerability in Rapid Growth Cities. *Hazards and the Built Environment: Attaining Built-in Resilience*, L. Boshier, ed., Taylor & Francis Books, London, (invited submission, in press).

Petal, M., Green, R., Kelman, I., Shaw, R., Dixit, A., Gupta, M. and Sharma, A. (est. Sept. 2007) Disaster Risk Reduction and Community-Based Construction. *Hazards and the Built Environment: Attaining Built-In Resilience*, L. Boshier, ed., Taylor & Francis, London, (invited submission, in press).

Green, R. A. (2005). *Negotiating Risk: Earthquakes, Structural Vulnerability and Clientelism in Istanbul*. Cornell University, Ithaca.

Petal, M., Tüzün, C., U., C., and Green, R. (2004). "Teaching Structural Hazards Awareness: New Partnerships for Preparedness and Community Response." *Bulletin of Earthquake Engineering*, 2 (2), 155-171.

Green, R., Çalışkan, Ö., Yüzügülü, Ö., and Petal, M. "Home and Office Non-Structural Mitigation: Lessons Learned from Shake Table Testing in Turkey." *Proceedings of the Fifth National Conference on Earthquake Engineering*, Istanbul, Turkey, May 23-24, 2003.

Green, R. (2004). "This Is Istanbul, Real Istanbul: Conversations on Negotiating Earthquake Risk." *American Research Institute in Turkey Newsletter*, Fall.

Green, R. (2000). "A Second Story." *Research Ethics: Cases and Commentaries*, Vol. 4, B. Schrag, ed., Association for Practical and Professional Ethics, Bloomington, IN, 120-127.

PUBLICATIONS IN PROGRESS

Green, R. (2007). An Engineer Among Friends: Risk Perception and Clientelism in Building Assessments of Istanbul, Turkey, *Risk Analysis*, in review.

Bates, Lisa, and Rebekah Green. 2007. (Mis)uses of Data: What Counts as Damage in Post-Katrina New Orleans Recovery Planning. *Journal of the American Planning Association* (in progress).

Franco, Guillermo, Rebekah Green, Bijan Khazai, Andrew Smyth, and George Deodatis. 2008. Field Survey of Katrina Depth-Damage Relationships for New Orleans Homes. *Natural Hazards Review* (in review).

Green, R., Bijan Khazai, George Deodatis, and Andrew Smyth. 2008. Patterns of Structural Damage to Residential Housing in the Upper and Lower Ninth Ward of New Orleans following hurricane Katrina. (in progress).

PUBLICATIONS FOR COMMUNITY RISK REDUCTION

ACORN Housing/University Partnership. (2007). "A People's Plan for Overcoming the Hurricane Katrina Blues: A Comprehensive Strategy for Building a More Vibrant, Sustainable, and Equitable 9th Ward." www.rebuildtheninth.org.

CAR-ESI. (2005). "Seismic Safety for Adobe Homes: What Everyone Should Know." GeoHazards International and the Central Asia Region Earthquake Safety Initiative, Palo Alto, CA.

Green, R., Sungay, B., and Paci, Z. (2005). *Structural Awareness for Seismic Safety Handbook*, Beyaz Gemi Publishers (Turkish edition), Istanbul, Turkey. http://www.ahep.org/ev/egitim4_2e.htm.

Green, R., Çalışkan, Ö., Sungay, B., and Paci, Z. (2005). *Non-Structural Risk Mitigation Handbook*, Beyaz Gemi Publishers (Turkish edition), Istanbul, Turkey. http://www.ahep.org/ev/egitim3_2e.htm.

Green, R. (2004). "This Is Istanbul, Real Istanbul: Conversations on Negotiating Earthquake Risk." *American Research Institute in Turkey Newsletter*, Fall.

Green, R. "Home and Office Non-Structural Mitigation: Lessons Learned from Shake Table Testing." *Proceedings of the ATC 29-2A Seminar on Seismic Design, Performance, and Retrofit of Nonstructural Components in Critical Facilities*, Newport Beach, CA.

INVITED PRESENTATIONS

Green, R. (2007). Risk Awareness and Education on Natural Catastrophes: Draft Stocktaking. December 6, Paris, Organization for Economic Co-operation and Development, Insurance Private Pensions Committee Meeting.

Green, R. "Remnants of Hurricane Katrina: Assessing Damage Conditions as a Baseline for Equitable Recovery Planning." Association of Collegiate Schools of Planning, 2007 Annual Meeting, Milwaukee, October 18-21, 2007.

Green, R. "Lower Ninth Ward Damage and Recovery." Planners Network 2007, New Orleans, May 30- June 3, 2007.

Green, R. "Building Structures in the Global South." Engineers without Borders Fall Regional Meeting, Columbia University, September 29, 2006.

Green, R. "Vulnerable: The Interplay of the Social and the Physical." Understanding Katrina: Examining the Science, Physical Vulnerabilities, and Social Consequences, Earth Institute at Columbia University and School of International and Public Affairs, Columbia University, New York, NY, November 11, 2005.

Green, R. "Cultures of Risk: Earthquakes and Engineering in Istanbul, Turkey." Bovay Program in History and Ethics in Engineering Lecture Series, Cornell University, Ithaca, NY, October 20, 2004.

Green, R. "Negotiating Risk: Earthquakes, Structural Vulnerability and Clientelism in Istanbul." Cornell Structural Engineering Lunch Club Lecture Series, Cornell University, Ithaca, NY, April 20, 2005.

Green, R. "Preserving Harriet Tubman's Home," Cornell Structural Engineering Lunch Club Lecture Series, Cornell University, Ithaca, NY, April 14, 1999.

CONFERENCE PRESENTATIONS

Green, R. "Assessed: Damage Reports and Recovery in New Orleans." Urban Affairs Association, 37th Annual Meetings, Seattle, April 25-28, 2007.

Green, R., Khazai, B., Franco, G., Smyth, A., Deodatis, G., Seirup, L., Choo, L.. "The Fifty Percent Bar: Damage assessments and recovery in low income neighborhoods of New Orleans." NSF Katrina Symposium, New Orleans, November 3-4, 2006.

Green, R. "Unauthorized Development and Natural Hazard Vulnerability: A Study of Squatters and Engineers in Istanbul, Turkey." Sixth Annual IIASA-DPRI Forum on Disaster Risk Management: Risks and Challenges for Business and Industry, Istanbul, Turkey, August, 13-17, 2006.

Green, R. "Earthquake Resistant Buildings and Basic Public Awareness in Vulnerable Mega Cities: A Pilot Project in Istanbul, Turkey." World Congress on Natural Disaster Mitigation, New Delhi, India, February, 19-22, 2004.

Green, R. and Petal, M. "Earthquake Resistant Buildings and Basic Public Awareness in Istanbul." Central Asian Structural Workgroup Workshop, GeoHazards International, Tashkent, Uzbekistan, January 25, 2004.

Green, R., "Home and Office Non-Structural Mitigation: Lessons Learned from Shake Table Testing." ATC 29-2A Seminar on Seismic Design, Performance, and Retrofit of Nonstructural Components in Critical Facilities, Newport Beach, CA, October 23-24, 2003.

Green, R. "An Engineer Sits at the Table: Technical Knowledge in the Participatory Process." Tenth World Congress on Participatory Action Research, Pretoria, South Africa, September 21-34, 2003.

Green, R., Çalışkan, Ö., Yüzügülü, Ö., Petal, M. "Home and Office Non-Structural Mitigation: Lessons Learned from Shake Table Testing in Turkey." Fifth National Conference on Earthquake Engineering, Istanbul, Turkey, May 26-30, 2003.

Green, R., "Preliminary Reconnaissance Report: Performance of and Attitudes towards Traditional Housing after the February 2, 2002 Afyon Earthquake." Aegean Initiative Joint Disaster Workshop between Greece and Turkey, Istanbul, Turkey, March 1, 2002.

Green, R. "Democratizing the University Classroom through Interdisciplinary Learning." Fifth World Congress on Action Learning, Action Research and Process Management, Ballarat, Australia, September 10-13, 2000.