# Environment and Technology Division Newsletter

Brent K. Marshall Student Paper Award Announcement ... 1

CFP 2	
Election Announcement 2	
Message from Division Chair  2	
Innovative Methods Section: Using Social Network Analysis in Environmental Research by Shawn A. Trivette 3	
Announcements 3	
Article: What those Fighting Fossil Fuel Companies Understand by Robert Wengronowitz 5	
Please send any announcements, member news, and blurbs to ljvandenscott@u.nort <u>hwestern.edu</u> for inclusion in the next newsletter.	

# <u>ENVIRONMENT AND TECHNOLOGY PAPER</u> <u>AWARD</u> Deadline: 1/31/14

The Environment and Technology Division is pleased to announce its 2014 Brent K. Marshall Graduate Student Paper Award. This award honors the late Brent Marshall's (1965-2008) personal and professional commitment to the Division and encouragement of student engagement in academic scholarship and research. Papers will be considered in the areas of environmental sociology including, but not limited to political economy of the environment global environmental issues, social movements and the environment, technology and society, natural disasters and society, and risk perception. The winner will receive a \$120 cash award, membership dues, annual meeting registration, and a ticket to the annual SSSP awards banquet where the winner will be acknowledged. The winner will also be offered the opportunity to present this paper at one of the sessions held at the 2014 SSSP meeting in San Francisco. To be eligible, the paper must meet the following criteria: 1) the paper must have been written during 2013; 2) the paper may not have been submitted for publication (papers presented at other professional meetings or that have been submitted for presentation at other meetings are eligible); 3) the paper must be authored by one or more students and not coauthored by faculty or a colleague who is not a student; 4) the paper must be 25 pages or less, including notes, references, and tables; and, 5) the paper must be accompanied by a letter from a faculty member at the student's university nominating the work for The Brent K. Marshall Graduate Student Paper Award (formerly the Environment and Technology Division Graduate Student Paper Competition). Students should send one copy of the paper accompanied by a letter of support to: Lisa-Jo van den Scott, Sociology Department, Northwestern University, 1810 Chicago Ave, Evanston, IL 60208 or by e-mail to ljvandenscott@u.northwestern.edu Electronic submissions are preferred. In addition, authors are required to submit their papers through the annual meeting Call for Papers online system. Submissions must be received no later than midnight 1/31/2014.

# Call For Papers: SSSP Meeting, August 15-17, 2014

The CFP from SSSP is now out! The deadline for submission is January 31, 2014. The Environment and Technology Division is sponsoring the following sessions. Keep an eye out and think about any work you may have that might fit into one of these sessions:

Environmental Privilege: Consumption, Waste, and Inequality

Urban Environmental Issues

Introducing Environmental Issues to the Classroom (Critical Dialogue); co-sponsored with Teaching Social Problems

Community Spaces and Food Justice; cosponsored with Community Research and Development

Uppers and Downers in the World of Activism: Environmental Concerns around Drug Use; co-sponsored with Drinking and Drugs

Global Perspectives: Sustainability, Ecological Justice, and Globalization; cosponsored with Global and Health, Health Policy, and Health Services

Person-Environment Interaction: The Role of Innovative Technology; co-sponsored with Disabilities

Technology and its Impact on the Everyday: Institutional Management of Risk; cosponsored with Institutional Ethnography

Family Dynamics and Social Consequences of Technological Change; co-sponsored with Family

### Election Announcement

We are have reached that time again for a Division Chair election. Please consider putting your name forward to be considered. This role is highly rewarding and is a great way to network, meet fascinating people, and participate in the operations and organization of the annual meeting. If you are interested, please let me know via e-mail at ljvandenscott@u.northwestern.edu

## Message from the Division Chair

Thank you all for making the New York meetings so successful. It is your participation which determines the success of the meetings and keeps our division a vibrant part of the SSSP community. Thank you, also, to the contributors to this volume - please read on as their additions are invaluable.

This coming year marks the 40<sup>th</sup> anniversary of the inception of the Environment and Technology Division at SSSP. In honour of this occasion, we are having a special invited panel, organized by Tamara Mix, entitled "Persistence and Change in Environmental Issues: 40 Years." This promises to be an exciting panel.

I look forward to the coming year. Please let me know if I or the division can be of service.

Lisa-Jo van den Scott

### Innovative Methods Section:

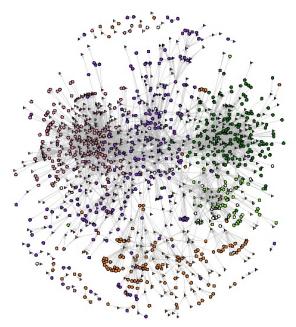
# <u>Using Social Network Analysis in Environmental Research</u> Shawn A. Trivette Louisiana Tech University

Social network analysis has been around for quite some time, yet it still seems to be one of social research's best-kept secrets. Maybe part of that, at least in sociology, is because it doesn't neatly fit into our qualitative/quantitative dichotomies; maybe part of it is because it requires a bit more specialized skill than our more "traditional" methods. Regardless, it's a research approach with considerable potential because at its heart is a way of measuring and making sense of relationships.

Classical social scientific data (both qualitative and quantitative data) typically entail information collected on discrete entities, whether individual people, organizations, or nations/states. Network data include such information, but network data require a second piece: information about the *relations* (or the "ties") between those entities. These ties can come in many forms (marriage, trade, mentorship, sexual activity, political alliances, email correspondence, etc.). Some ties are directed ties; in directed ties, there is a "sender" and a "receiver" and the direction of the relationship matters. An example from my own research would be a local farm selling produce to a nearby restaurant. Other ties, such as friendships or economic mergers, are undirected or mutual, meaning both parties equally "choose" the other for the relationship to exist.

Analysis of these various ties can tell us a lot about the social world, both on macro and micro levels. On the micro level, we can use network analysis to identify key players in an organization (especially if those key players aren't the official leaders) or which specific countries (or corporations) have the greatest control over resource flows. On the macro level, network analysis can reveal patterns in overall social structure. This may be useful if we want to understand how ideas (or diseases) spread through a segment of society, or it may help us understand communication channels and why some groups are or aren't working well with one another.

Network analysis has application in all sorts of environmentally-related research: how communities come together to respond to environmental crisis or environmental injustices, how corporate managers cover up environmental disasters or protect themselves from blame (allowing others to "take the fall" instead), and how our social networks may influence our understanding of environmental issues, just to name a few. Figure 1 shows a very simple example from my own research. In this sociogram (that's what visual representations of networks are called) of farm and food buyer relations in southern New England, we can see very tight (color-coded) regional clustering, indicating that local food in this area travels a very short range. This is a finding I likely would not have seen without the relational aspect social network analysis provides.





If you'd like more information about using network analysis in your own work, the references below are good places to start. And feel free to drop me a line if you want to bounce an idea around (or would like a few more advanced resources).

#### **References**:

de Nooy, Wouter, Andrej Mrvar, & Vladimir Batagelj. 2005. *Exploratory Social Network Analysis with Pajek*. New York: Cambridge University Press. Hanneman, Robert A., & Mark Riddle. 2005. *Introduction to Social Network Analysis*. Riverside, CA: University of California Riverside. (published in digital form at http://faculty.ucr.edu/~hanneman/) Watts, Duncan J. 2003. Six Degrees: The Science of a Connected Age. New York: W.W. Norton.

## Announcements:

#### **New Publications**

Reed, Jennifer J (UNLV). 2013. "Gender (Re)Production of Emotion Work and Feeling Rules in Second Life." Pp. 77-87 in Women and Second Life: Essays on Virtual Identity, Work and Play, edited by Julia Achterberg and Dianna Baldwin. Jefferson, NC: McFarland.

Michelle A. Meyer (Texas A&M University), Jennifer Cross (Colorado State University) and co-authors have published a chapter entitled, "Green School Building Success: Innovation through a Flat Team Approach," in the book Constructing Green: The Social Structures of Sustainability, from MIT Press.

http://mitpress.mit.edu/books/construc ting-green

#### Awards

Congratulations to Jennifer J. Reed who has won the 2013 Outstanding Graduate Student Public Sociology Award from the Department of Sociology, University of Nevada-Las Vegas.

# Climate Justice: What those Fighting Fossil Fuel Companies Understand Robert Wengronowitz Boston College

A group of fifteen students in the group Boston College Fossil Free (BCFF) led a callback chant: "President Leahy, What you gonna do? Board of Trustees, What you gonna do? Gonna divest from Shell, And BP too; Exxon-Mobil, they're the worst." BCFF's September 2013 action followed a string of publicly displayed oil spills with signs reading "BC: STOP FUNDING THIS" at the otherwise placid University. Below, I describe the impetus behind BCFF and the fossil fuel divestment campaign underway in schools, cities, counties, states, foundations, and religious institutions.

BCFF formed in December 2012 on the heels of Bill McKibben's (founder of 350.org) Do The Math tour that highlighted three critical numbers (see McKibben 2012). The **first number**, 2°C above pre-industrial levels, represents the amount of warming governments around the globe have agreed humanity must avoid.<sup>1</sup> For all of its failures – the agreement is non-binding and unenforceable – the Copenhagen Accord of 2009 agreed to limit "the increase in global temperature below 2°C, and take action to meet this objective consistent with science and on the basis of equity." "Consistent with science" is radical enough in the hallowed halls of international negotiations, but "on the basis of equity" sounds like it came out of a sociology department! We should hold

our governments accountable for their promises, especially this one.

The **second number** is 565 Gigatons (Gt, billion tons).<sup>2</sup> That's the estimated amount of additional CO<sub>2</sub> humanity can emit to have a good chance (~75%) of staying below 2°C (Meinshausen et al. 2009, see also Allen et al. 2009). The **third number** – 2,795 Gt of CO<sub>2</sub> – is the amount of CO<sub>2</sub> in the proven fossil fuel reserves of the corporations and countries that extract coal, oil, and gas (Carbon Tracker 2012). BCFF



<sup>&</sup>lt;sup>1</sup> Anderson and Bows (2011:20) point out that "despite high-level statements to the contrary, there is now little to no chance of maintaining the global mean surface temperature at or below 2°C." This is because humanity has already raised temperature ~.9°C and existing infrastructure alone (e.g., cars and power plants already built) will emit ~496 Gt of CO<sub>2</sub> (Davis, Caldeira, and Matthews 2010). As if matters weren't dire enough: "the impacts associated with 2°C have been revised upwards, sufficiently so that 2°C now more appropriately represents the threshold between 'dangerous' and 'extremely dangerous' climate change" (Anderson and Bows 2011:20).

<sup>&</sup>lt;sup>2</sup> That estimate is through 2009. Emissions for 2010-2012 from fossil fuels and cement are approximately 105 Gt, meaning we've used about a fifth of the emissions in three years!

and organizers involved in more than 400 other divestment campaigns understand that fossil fuel companies have no desire to leave approximately four-fifths of their proven reserves untapped; after all, even if executives decided the fate of the planet mattered, the stockholders to whom they are accountable would immediately have them removed. Enter the divestment campaign.

In order to have a reasonable chance of staying below 2°C, we must have a binding and enforceable international treaty, which means the U.S. must have domestic policies to reduce our emissions drastically. To accomplish this, fossil fuel firms' powerful influence on the political process must be weakened. The BP's and Chevron's of the world must be seen as the public pariah they are – on par with tobacco and arms manufacturers. Even though our increasingly neoliberalized universities look more and more like corporations, they still carry some weight in the world of popular opinion. As universities sell off their fossil fuel investments (six already have), the enemy will become increasingly clear, opening up political opportunities.

There are additional benefits to the divestment campaign. For many within BCFF (and I suspect many other groups), the divestment campaign represents their first activist project. The struggle to divest can lead to both an understanding of the increasingly hierarchical and bureaucratized nature of our universities (BCFF's application to become a registered student organization was rejected) and to a will and real empowerment to turn the tide. Unleashing the billions invested in fossil fuels into conservation, efficiency, and renewable energy will lessen the crisis, at least to some extent. "Green revolving loan funds" are an oft-mentioned alternative to fossil fuel stocks that have the added benefit of dispersing power at universities. In the end, the divestment campaign might not be enough, but at least these young people are standing up for their future.



### **References:**

Allen, Myles R. et al. 2009. "Warming Caused by Cumulative Carbon Emissions Towards the Trillionth Tonne." *Nature* 458(7242):1163–66.

Anderson, Kevin, and Alice Bows. 2011. "Beyond 'dangerous' Climate Change: Emission Scenarios for a New World." *Philosophical Transactions of the Royal Society A: Mathematical, Physical and Engineering Sciences* 369(1934):20–44.

Carbon Tracker. 2012. *Unburnable Carbon - Are the World's Financial Markets Carrying a Carbon Bubble?* Retrieved April 19, 2013 (http://www.carbontracker.org/wp-content/uploads/downloads/2012/08/Unburnable-Carbon-Full1.pdf).

Davis, Steven J., Ken Caldeira, and H. Damon Matthews. 2010. "Future CO2 Emissions and Climate Change from Existing Energy Infrastructure." *Science* 329(5997):1330–33. McKibben, Bill. 2012. "Global Warming's Terrifying New Math: Three Simple Numbers That Add up to Global Catastrophe - and That Make Clear Who the Real Enemy Is." *Rolling Stone*, July 19. Retrieved April 16, 2013

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Meinshausen, Malte et al. 2009. "Greenhouse-gas Emission Targets for Limiting Global Warming to 2?°C." *Nature* 458(7242):1158–62.