



Five Points on Sociology, PEWS and Climate Change¹

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I'd like to thank Jackie Smith for inviting me to participate in this symposium. JWSR has a wonderful track record of publishing research on the environment, including climate change, and I'm proud that I modestly contributed to this while serving as coeditor of the journal from 2007 to 2011, and by guest coediting a special issue on globalization and the environment that appeared prior to my term as coeditor (<http://jwsr.pitt.edu/ojs/index.php/jwsr/issue/view/35>). Indeed, the ASA Section on Political Economy of the World-System (PEWS) has much to contribute to our understanding of historical (Bunker and Ciccantell 2005; Hornborg, McNeill, and Martinez-Alier 2007; Moore 2011) and contemporary socio-ecological relationships (Gareau 2013; Kick and McKinney 2014; Prell et al. 2014; Rice 2007).

Later this year France will host the 21st Session of the Conference of the Parties to the United Nations Framework Convention on Climate Change (UNFCCC). The stakes keep getting higher. The science is clear that anthropogenic climate change is worsening and the world isn't doing what needs to be done to mitigate greenhouse gas emissions. In this short essay I make

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five points concerning sociological research on climate change, with particular attention given to the ways in which the PEWS tradition helps shape portions of this scholarly work, and I make a few connections between this work and the climate justice community. Given space constraints I must sacrifice much depth for a little breadth.

The first point I would like to make is the broader environmental sociology community has made significant contributions to our understanding of anthropogenic climate change (Dietz et al. 2015; Jorgenson and Clark 2012; Knight and Schor 2014; York 2012). I am part of the American Sociological Association's (ASA) Task Force on Sociology and Climate Change, which is headed by Riley Dunlap, leading scholar on sociology and climate change (and many other socio-ecological topics). This task force has been in existence since 2010, and according to ASA it is the largest task force in the association's history. The participating members span the various ASA sections (in addition to the Environment and Technology Section) and intellectual traditions in the discipline, and the participating members vary in their career stages as well. Multiple PEWS scholars are actively involved with the task force and have been from the beginning.

For those readers unfamiliar with the history of environmental sociology, it is safe to say that not so long ago it was at the margins of the discipline. The ASA task force is in some ways an institutional recognition of the relevance of environmental sociology for the broader discipline and that we as a scholarly community have much to contribute to climate change scholarship. A brand new book resulting from the task force, and edited by Riley Dunlap and Robert Brulle (2015), consists of a dozen or so chapters on different themes within the sociological work on climate change. I've read the chapters and coauthored two of them, and the influence of the PEWS tradition on sociological work on climate change is evident throughout the book. The ASA plans to put notable resources into promoting the volume. The work is important and could be quite useful for civil society groups, the policy community and for various educational purposes. It will be published in paperback and relatively affordable.

The second point that I would like to make – which probably won't surprise anyone reading the essays in this symposium – is that the human causes, consequences, and solutions to climate change are largely grounded in structures of power and inequality, broadly defined (Derber 2010; Foster, Clark, and York 2010). PEWS scholars were among the first sociologists to make such observations through their research (Grimes 1999; Roberts and Grimes 1999; Burns, Davis, and Kick 1997), and you can see this influence in the environmental sociology community as well as in the broader sustainability science community (Rosa and Dietz 2012). Core nations are hugely responsible for the climate crisis, while non-core nations in general are most vulnerable to climate change (Roberts and Parks 2007). The reasons are historically and structurally complicated and much more research is needed to unpack the complexities.

My third point: without in any way discounting the injustices tied to climate change for non-core nations relative to core nations, we must remember that there are internal peripheries in the core and in the semiperiphery. Leading PEWS scholars, such as Wilma Dunaway (1996) and Thomas Hall (1989), have described the existence and struggles of internal peripheries quite elegantly in their research. The poor and disenfranchised of internal peripheries are very vulnerable to climate change. Of course this is commonsense in the climate justice world. But my experiences working at multiple universities in the US and abroad suggest that it isn't commonsense to most others. We need to be vocal whenever we can about the point that the human causes and consequences of climate change are tied to structures of power and inequality at multiple scales. This is a key message of the climate justice community, and quite simply, much PEWS scholarship supports this message.

The scholarly literature on power, inequality, and climate change tends to focus on economic forms of the former two. My fourth point: there are other social institutions and modes of power that contribute to the climate crisis, and they are often overlooked. For example, military power and militarism in general play major roles. PEWS scholarship, such as Chase-Dunn (1998) and Kentor (2000), have shown that military power helps structure and reproduce the stratified interstate system. Some of my recent collaborative research builds on these ideas and integrates them with newer strands of environmental inequality scholarship (Hooks and Smith 2004, 2012) to show that the world's militaries consume enormous amounts of fossil fuels and other resources to create and maintain their vast global infrastructure (Clark, Jorgenson, and Kentor 2010; Jorgenson and Clark 2015), and military vehicles of all shapes and sizes are not energy efficient!

More broadly, nations that have larger and technologically advanced militaries are able to utilize their military power to gain disproportionate access to natural resources throughout the world, including fossil fuels. Various civil society groups, such as Physicians for Social Responsibility (<http://www.psr.org/chapters/iowa/militarism.html>), recognize the importance in addressing the ways in which military power and militarization contribute to the climate crisis. I predict this will become much more of a central issue in the climate justice movement.

My fifth and final point: recent research by environmental sociologists and scholars in related fields indicates that societies can achieve a high standard of living while consuming relatively moderate levels of fossil fuels and other resources (Dietz 2015; Dietz, Rosa, and York 2012; Lamb et al 2014). In other words, at a certain point fossil fuel consumption and human well-being begin to "decouple". However, a lion's share of the world's nations continues to increase their energy consumption and thus carbon emissions while not proportionally enhancing their collective human well-being. This relationship is known as the carbon intensity of human

well-being (CIWB), and measured as a ratio of carbon emissions per unit of human well-being (e.g., carbon emissions per capita / average life expectancy) (Jorgenson 2014).

Recent studies indicate that CIWB is positively associated with both economic development and domestic income inequality, and these relationships tend to increase in magnitude through time (Jorgenson 2014, 2015). In other words, economic development does not appear to be a pathway to reducing CIWB in nations throughout the world, but reducing income inequality just might be – at least to some extent. Further, new research is showing that particular forms of unequal exchange relationships between core and peripheral nations exacerbate CIWB for of the latter (Givens 2014). This is a rapidly growing area of research that (1) engages fundamental principles in the PEWS tradition, and (2) that has much to offer to broader discussions of climate justice and sustainability more generally.

As I've noted, environmental sociology contributes greatly to our understanding of the human dimensions of climate change. The PEWS perspective has shaped a notable amount of this research from the get-go, and this work has contributed to the further development and diversification of the PEWS tradition. Much of the findings from this research are consistent with the fundamental arguments of the climate justice community concerning the ways in which structures of power and inequality caused the climate crisis. This crisis is the greatest challenge facing humanity. Solving it means solving the sorts of structural problems in the world that generations of PEWS scholars have studied for decades.

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