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Source: *Hypatia*, SUMMER 2014, Vol. 29, No. 3, SPECIAL ISSUE: Climate Change (SUMMER 2014), pp. 599-616

Published by: Cambridge University Press

Stable URL: https://www.jstor.org/stable/24542019

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Indigenous Women, Climate Change Impacts, and Collective Action

KYLE POWYS WHYTE

Indigenous peoples must adapt to current and coming climate-induced environmental changes like sea-level rise, glacier retreat, and shifts in the ranges of important species. For some indigenous peoples, such changes can disrupt the continuance of the systems of responsibilities that their communities rely on self-consciously for living lives closely connected to the earth. Within this domain of indigeneity, some indigenous women take seriously the responsibilities that they may perceive they have as members of their communities. For the indigenous women who have such outlooks, responsibilities that they assume in their communities expose them to harms stemming from climate change impacts and other environmental changes. Yet at the same time, their commitment to these responsibilities motivates them to take on leadership positions in efforts at climate change adaptation and mitigation. I show why, at least for some indigenous women, this is an important way of framing the climate change impacts that affect them. I then argue that there is an important implication in this conversation for how we understand the political responsibilities of nonindigenous parties for supporting distinctly indigenous efforts at climate change adaptation and mitigation.

I. Introduction

Indigenous peoples encompass the 370 million persons globally whose communities exercised systems of self-government derived from their own cosmologies before an ended or ongoing period of colonization. Indigenous peoples now live within areas where states, like Australia or Canada, are recognized internationally as the preeminent sovereigns (Anaya 2004). Like other communities, indigenous peoples must adapt to climate-induced ecological variations like sea-level rise, glacier retreat, and shifts in the habitat ranges of different species. Climate change adaptation refers to adjustments that populations make in response to such variations, which include actions and policies from weather-protection programs to permanent relocation. Indigenous peoples are also engaged in efforts to mitigate climate change, like

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transitioning to renewable sources of energy and contesting incursions of fossil-fuel-burning industries into their territories. Climate change mitigation refers to actions and policies that attempt to curtail certain variations from occurring in some way in the first place. Some indigenous peoples see adaptation and mitigation as crucial endeavors because climate variations can disrupt the systems of responsibilities their community members self-consciously rely on for living lives closely connected to the earth and its many living, nonliving, and spiritual beings, like animal species and sacred places, and interconnected collectives, like forests and water systems (Osofsky 2006; Salick and Byg 2007; Cordalis and Suagee 2008; Krakoff 2008; Macchi et al. 2008; Tauli-Corpuz and Lynge 2008; UNPFII 2008; Wildcat 2009; Kronik and Verner 2010; Tsosie 2010; Voggesser 2010; Krakoff 2011; Shearer 2011; Tebtebba 2011; Willox et al. 2011; Grossman and Parker 2012; Roehr 2012; Abate and Kronk 2013; Maldonado, Pandya, and Colombi 2013; Wotkyns 2013). Such systems include those that persist from time immemorial, like webs of reciprocal relationships between a particular community and the aquatic and terrestrial plant and animal species in their homeland. They also include systems of responsibilities emerging more recently from creative, indigenous-led efforts to establish political relationships of peaceful coexistence among neighbors like nation-states, settler towns, nongovernmental and religious organizations, subnational governments like provinces, and international bodies like the United Nations (UN). Examples include treaties, formal agreements, schedules of indigenous rights, and other political instruments that increase respect, mutual understanding, and accountability among indigenous parties and parties of other heritages and nations.

In ongoing conversations on climate change, some indigenous women articulate how seriously they take the specific responsibilities they perceive themselves to have within the systems of responsibilities that matter to their communities. Such responsibilities can range from acting as custodians and teachers of local ecological knowledge to acting as conveners of political movements aiming at respectful coexistence with neighbors. For these indigenous women, the responsibilities that they assume in their communities can expose them to harms stemming from climate change and other environmental alterations. Yet at the same time, their commitment to these responsibilities motivates them to serve as enablers of adaptation and mitigation efforts (LaDuke 1999; Denton 2002; Yanez 2009; Glazebrook 2011; Tebtebba 2011). Not all indigenous women share this view, of course; however, I show why, at least for some indigenous women, this is an important way of framing their actual and potential experiences of climate change impacts (sections II and III).

I then outline an implication of this framing for theories of political responsibility between indigenous women and parties like governments and organizations in adaptation and mitigation contexts (section IV). *Political* responsibilities are the attitudes and patterns of behavior that various parties are expected to express through the structure and implementation strategies of political institutions like laws, courts, policies, mandates, agencies, departments, treaties, declarations, schedules of rights, codes of ethics, agreements, memoranda of understanding, and so on. The nature and expression of these responsibilities depend on the assumptions that parties make

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about their roles in relation to one another. I offer a starting point for the following positions: Some indigenous women have their own unique capacities for collective action that advance adaptation and mitigation. Non-indigenous parties' political responsibilities include deferring to indigenous women's own knowledges of and motivations for such capacities for collective action. Deference can be expressed through political institutions that bolster the conditions needed to support indigenous women's collective action (section IV). In many cases, this political responsibility is incumbent on indigenous national governments (for example, US federally recognized tribes) and political organizations (for example, Union of Ontario Indians). The positions in this paper seek to complement the work of environmental philosophers Chris Cuomo, Robert Figueroa, and Patricia Glazebrook, who have recently argued that responsibility must be thought of in terms of the unique agencies of indigenous and other populations—instead of focusing *only* on vulnerabilities (Cuomo 2011; Figueroa 2011; Glazebrook 2011).[1] More work beyond this paper should seek to further clarify the political reforms needed to support indigenous women's collective agencies for adapting to and mitigating climate change (section V).

II. Climate Change Impacts, Collective Continuance, and Indigenous Peoples

Section I cited the growing academic, policy, and grey literature (informally published written material) documenting actual and potential climate change impacts on indigenous peoples. A key dimension of this literature concerns how climate change impacts affect the various culturally derived responsibilities assumed by some indigenous persons as participants in particular communities. In this section, I describe the basics of why these cultural effects matter. This view arises from my perspective and particular experiences as a Potawatomi Indian living in the US, from my conversations and collaborations regarding climate change with numerous indigenous persons within and outside of North America, and from engagement with relevant academic literature from several disciplines. Although this view may not reflect the diversity of views among all indigenous peoples about climate change, I feel it nonetheless highlights important elements of the discourses cited in section I and in which I am involved as a participant.

Impacts include variations of the patterns of community relations of diverse entities. These patterns are the structures of organization, which include political, societal, cultural, religious, and familial institutions that tie together humans and multiple living, non-living, and spiritual beings, and natural interdependent collectives (forested areas, species habitats, water cycles, and so on). Climate-induced variations —or climate change impacts—are the impacts arising based on the capacity of patterns of community relations to absorb local ecological alterations stemming from climate change (Liu et al. 2007; Cuomo 2011). Climate change impacts are disruptive when structures of organization can absorb the ecological changes only by changing key components of the structures themselves. For example, sea-level rise may force a community to relocate and adopt a new economy. Shifting growing seasons may

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require a community to change its diet. Climate-enabled invasive species may require a community to adopt new and more attentive environmental stewardship. Such disruptions are often experienced as harmful to certain values (as in the case of a changing diet), but can also serve as a motivation for improvements (as in the case of more attentive environmental stewardship).

Many indigenous persons interpret climate change impacts as jeopardizing the values associated with the *collective continuance* of the communities in which they participate. Collective continuance is a community's aptitude for being adaptive in ways sufficient for the livelihoods of its members to flourish into the future. The flourishing of livelihoods refers to both indigenous conceptions of (1) how to contest colonial hardships, like religious discrimination and disrespect for treaty rights, and (2) how to pursue comprehensive aims at robust living, like building cohesive societies, vibrant cultures, strong subsistence and commercial economies, and peaceful relations with a range of neighbors, from settler towns to nation-states to the United Nations (UN). Given (1) and (2), indigenous collective continuance can be seen as a community's fitness for making adjustments to current or predicted change in ways that contest colonial hardships and embolden comprehensive aims at robust living (Whyte 2013).

Climate change impacts can be understood as affecting the quality of the relationships that constitute collective continuance. According to this view, collective continuance is composed of and oriented around the many *relationships* within single communities and amid neighboring communities that persons assume based on their culturally framed perceptions of what matters. The capacity to contest colonial hardships, for example, may require relationships of solidarity among community members that cultivate political action, furnish healing from colonial traumas (like boarding schools), and ignite spiritual awakening (Ortiz and Chino 1980; Alfred 1999; LaDuke 1999; Tinker 2004; Green 2007). It may also require establishing relationships of trust and common political purpose across indigenous peoples who face similar hardships (Mayer 2007; Grossman 2008). The capacity to build cohesive societies, vibrant cultures, and subsistence economies may require close-knit family and social relationships, such as strong intergenerational ties and shared experiences between elders and youth and sustainable regimes of land-tenure (Merculieff 2007; Trosper 2009; Wildcat 2009; Tebtebba 2011). Emotion-laden relationships among species and with features of the land (like rivers or mountains) and natural interdependent collectives may also be required (Willox et al. 2011). Commercial economies require relationships that generate feasible, culturally appropriate opportunities and relationships that regulate economic production (Trosper 2007; Ranco et al. 2011). Peaceful relations with neighbors require relationships that respect the differences of each community in terms of culture, relative power to exploit one another, specific needs, and capacities to exercise agency (Alfred 1999; Holmes, Lickers, and Barkley 2002; Napoleon 2005; Turner 2006; Davis 2010; Ross et al. 2010; Middleton 2011).

The significances of these relationships are realized through the responsibilities incumbent on the parties to the relationships. That is, to be in a relationship is to have responsibilities toward the others in the relationship. Many indigenous authors have described the idea of responsibility. I interpret them as seeing *responsibilities* as

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the reciprocal (though not necessarily equal) attitudes and patterns of behavior that are expected *by* and *of* various parties by virtue of the assumptions made about how the parties relate to one another within a community context (Weaver 1996; Alfred 1999; LaDuke 1999; Kimmerer 2000; Pierotti and Wildcat 2000; Borrows 2002; Mayer 2007; McGregor 2009; Wildcat 2009). For example, elders may assume responsibilities to mentor youth by passing on wisdom or leading certain ceremonies; younger generations are, in turn, responsible for learning actively from the elders about the nonhuman, spiritual, and ritualistic dimensions of the community and its conception of the earth, its living, nonliving, and spiritual beings, and natural interdependent collectives. A community may have a responsibility to care for salmon habitat; salmon, in turn, may provide food and support for other species. Community members may be responsible for kindling spirituality by not evaluating their fellow community members according to colonial stereotypes about indigenous women or by visibly standing up against policies that victimize some people because they are indigenous women (Smith 2005). Such may be understood as a mutual responsibility of honor and respect among community members. International bodies like the UN may have responsibilities to respect emerging norms that acknowledge the special needs and knowledges of indigenous peoples (Anaya 2004; Mauro and Hardison 2000). These and other similar responsibilities are among the constitutive features of collective continuance because—on this view—they enable the contesting of colonial hardships and the pursuit of robust living. Some indigenous people's concern with collective continuance has to do with maintaining the capacity to be adaptive with respect to *relational responsibilities*, or all those relationships and their corresponding responsibilities that facilitate the future flourishing of indigenous lives that are closely connected to the earth and its many living and nonliving beings and natural interdependent collectives. I refer to relational responsibilities as *responsibilities* in the rest of the paper.

Responsibilities constitute collective continuance as part of larger systems of interconnected responsibilities. *Systems of responsibilities* are the actual schemes of roles and relationships that serve as the background against which particular responsibilities stand out as meaningful and binding. For example, a responsibility to maintain species habitat is part of a more comprehensive web of interspecies responsibilities that are tied to a community's cosmology. Cosmology refers to the fundamental way in which community members, in common, experience everything around them as endowed or not with agency, spirituality, and connectedness. Systems of responsibilities have intrinsic value and instrumental value for communities. For example, in Wabanaki culture the responsibilities surrounding berry plants have intrinsic value because they are integral to customs and rituals and establish part of the cultural status of Wabanaki women (Lynn et al. 2013). Thus, an entire system of responsibilities is embedded in and permeates everything about the berry plants. The system has intrinsic value because it is essential for framing certain dimensions of Wabanaki existence. The berry plants have instrumental value because they are superfoods, according to nutritionists, having health benefits like cardiovascular protection. Even systems of responsibilities amid communities have both kinds of value. For example,

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the government-to-government relation between the US and federally recognized tribes has intrinsic value because it can honor, at least in part, indigenous senses of nationhood. It also has instrumental value because respecting tribal sovereignty is considered to be the best way to formulate, implement, and assess policies (Lynn et al. 2013; Whyte 2013).

The concept of collective continuance identifies a range of values that some indigenous persons hold in relation to the patterns of community life in which they participate. The relationships and responsibilities constitutive of collective continuance can be disrupted by climate change impacts. A reason for this is that climate change impacts can alter the ecological contexts in which systems of responsibilities are meaningful. Changes in landscapes may engender fewer opportunities for elders to assume the responsibility to teach youth in practical situations. Climate change may affect the range, quality, and quantity of species like berries, making it more difficult or even impossible for tribal members to assume the responsibilities they perceive themselves to have toward those species (Lynn et al. 2013). Anishinaabe scholar Deborah McGregor, for example, discusses how variable weather patterns, invasive species, and widely fluctuating temperatures are engendering spring conditions that make it hard to have sensitive knowledge about when to begin or stop tapping maple trees for syrup. Making syrup is a traditional cultural and familial activity that spans generations and provides a source of nourishment for family and community members. Multiple, interconnected responsibilities are bound up in this activity, among young and old, siblings, between humans and trees, and natural interconnected collectives (GLIFWC 2006; Cave et al. 2011). Disruptions of webs of responsibilities involved in relations with elders, berries, and maple trees jeopardize some of what is valued intrinsically and extrinsically by certain indigenous peoples. The severity of disruption is of course influenced and amplified by the obstructive political orders rooted in colonialism, industrialization, imperialism, and globalization to which many indigenous peoples are subject. I treat these obstructive circumstances in more detail elsewhere, though I do not discuss them in any substantial detail here (Whyte 2013).

III. Climate Change Impacts, Indigenous Women, and Systems of Responsibilities

Individual indigenous people, even those of the same community, do not experience disruptions of systems of responsibilities in the same way. Kinship, age, wealth, race, religion, political situation, and other characteristics affect and frame what one experiences as an indigenous person. In the domain of indigeneity I have been discussing so far, more focused academic and grey literature is emerging in which some indigenous women express how climate change impacts affect their ability to exercise the responsibilities that they assume within the webs of responsibilities that matter to their communities. This section outlines ways of interpreting disruptions of systems of responsibilities through a gender framework that I interpret as being suggested by some indigenous women scholars and activists. Insofar as systems of responsibilities are a key part of what constitutes collective continuance, I intend to indicate why it

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is important to consider how these scholars and activists discuss indigenous women's experiences of climate change impacts.

McGregor's scholarship on water over the last ten years is a point of departure for considering how some indigenous women may see themselves as implicated in climate change impacts (McGregor 2012). According to McGregor, many Anishinaabe people value water greatly, which arises from the Anishinaabe creation story in which water is considered to play the role of a source and supporter of life. In this role, water mediates interactions among many living beings on the earth. Consequently, water is a considered a relative that has responsibilities to give and support life (Lavalley 2006; McGregor 2009). Humans, in turn, have responsibilities to care for and respect water; they must especially do things that encourage water's life-giving force. Ceremonies are structured to remind people of their connections to water, and bodies of water are considered to have their own unique personalities.

Water has intrinsic value because it is among the basic elements of Anishinaabe cosmology (as told in the creation story), which frames how community members view the reality of their relations to water. Water has instrumental value because of the myriad ways in which water quality and abundance benefit human and animal health (McGregor 2009). Touching on both senses of value, McGregor says that:

> We must look at the life that water supports (plants/medicines, animals, people, birds, etc.) and the life that supports water (e.g., the earth, the rain, the fish). Water has a role and a responsibility to fulfill, just as people do. We do not have the right to interfere with water's duties to the rest of Creation. Indigenous knowledge tells us that water is the blood of Mother Earth and that water itself is considered a living entity with just as much right to live as we have. (McGregor 2009, 37–38; see also McGregor and Whitaker 2001)

In accordance with the details of this account, indigenous peoples, like water, have culturally perceived responsibilities to exercise. In McGregor's descriptions of her culture, women in particular have responsibilities to water *as Anishinaabe* women. For example, McGregor cites a position paper by a women's group, Akii Kwe, from the Bkejwanong Territory (Walpole Island First Nation), which says that "We use the sacred water in our Purification Lodge, in ceremonies of healing, rites of passage, naming ceremonies and especially in women's ceremonies" (Akii Kwe 1998, 3; McGregor 2009). McGregor describes further a basis for how Anishinaabe women have responsibilities to water:

> In the water ceremony we make an offering to water, to acknowledge its life-giving forces and to pay respect. We have a responsibility to take care of the water and this ceremony reminds us to do it. Women bring forth life, the life of the people. Water brings forth life also, and we have a special role to play in this responsibility that we share with water. (McGregor and Whitaker 2001, 24; see also McGregor 2009)

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In this paper, I can only extrapolate an idea of the multiple, specific responsibilities that Anishinaabe women have toward water as McGregor describes. In her published work, women are described as and attest to having responsibilities within ceremonies (and for convening them), responsibilities to attend to the quality of water, responsibilities to develop and pass on knowledge of water and its stewardship to younger generations. They also have responsibilities to take action to protect water when its quality is compromised. These more specific responsibilities are part of a more general significance of the relationship between women and water for Anishinaabe communities. This relationship is part of the identity of some Anishinaabe women (intrinsic value), for McGregor, and some of their specific responsibilities protect the instrumental value of water to them and their community members. McGregor's position on Anishinaabe women's responsibilities and water is important not because of would-be factual claims about indigenous women's roles, which can be challenged, but because it indicates that certain kinds of orientation toward water, for example, imply cultural understandings of one's responsibilities to the earth's living, nonliving, and spiritual beings and natural interdependent collectives.

Climate change impacts in the Great Lakes are projected to affect the ecological contexts needed for some Anishinaabe women and water to carry out their responsibilities to each other. Climate change impacts that degrade water in different ways will affect some of the core dimensions of Anishinaabe women's identities and their contributions within their communities, and will make their responsibilities to water more time-consuming and harder (if not impossible) to carry out. Some of the effects on women's very existences concern what it means to grapple with degradation of a close relative (in this case water). Water may not be able to be used by women in ceremonies as it was before. Moreover, indigenous women do not participate actively in Canadian climate change or environmental-policy processes, which threatens their responsibility to protect water (Cave et al. 2011; Corbiere, McGregor, and Migwans 2011). This point can be seen as part of a gender framework that sees climate change impacts as being implicated with the responsibilities some women assume in indigenous communities. Degraded water is a core existential concern for Anishinaabe women. Because of this, they experience some aspects of climate change impacts differently than indigenous men and non-Anishinaabe persons. Though my focus in this paper is cultural, a more complete gender framework would include greater attention to other social and political dimensions of indigenous women's lives.

Despite lacking participation in policy processes, some Anishinaabe women are taking collective action to carry out their responsibilities to water. McGregor discusses how a group of Anishinaabe women began walking around the Great Lakes in the early 2000s, which they call the Mother Earth Water Walk. The purpose is to help people in the basin recognize and re-recognize the importance of water in its spiritual dimensions instead of as an inanimate resource. The spring walks include a water ceremony, feast, and celebration, and the participating grandmothers take turns carrying a water vessel and eagle staff. Another collective action is the grassroots women's group Akii Kwe, which I briefly referred to earlier via McGregor's work. McGregor describes it as a group of Anishinaabe women from Walpole Island who "have been diligently

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trying to protect water in their territory for years. Guided by their traditional responsibilities, they consider it their duty to speak for the water" (McGregor 2005, 107). McGregor emphasizes how the women in Akii Kwe are guided by their knowledge of how to be sensitive to water and to care for water, which arises from their living close to and attentively to bodies of water (McGregor 2012).

McGregor documents how these collective actions by Anishinaabe women are changing decision-making processes in Canada. The Anishinabek Nation, an indigenous multiparty organization that plays an important role in Canadian politics, created the Women's Water Commission for bringing women's voices into Ontario and Great Lakes water issues. The explicit goal of the commission includes fostering "the traditional role of the Women in caring for water." "Traditional," here, should be understood according to McGregor's descriptions of the responsibilities of indigenous women. The Commission seeks to encourage recognition of traditional responsibilities along with the need to include women as part of the decision-making processes (McGregor 2012, 12–13). The first appointed leader of the commission was among the women who were integral in establishing the Mother Earth Water Walk. The Walk has also spread across North America, becoming a regional form of action that includes more people each year, not just Anishinaabe women (McGregor 2012; Mother Earth Water Walk 2013). Each of these collective actions could be described as a form of indigenous women's networking. I understand networks as strategic coalitions and committees that coordinate joint social action for addressing pressing issues and that facilitate learning and respect across the different lives that people live.

According to McGregor's descriptions, these indigenous women's networks emanate from Anishinaabe women's responsibilities.[2] Based on McGregor's work, I interpret Akii Kwe, the Mother Earth Water Walk, and the Women's Water Commission as endeavoring to protect two important *types* of systems of responsibilities. The first type is *persisting* systems of responsibilities. These are systems that are identified and interpreted as having existed within a culture from time immemorial. The second type is *emerging* systems of responsibilities. These are systems that need to be established now as innovative and morally necessary ways of addressing recent issues like climate change impacts. The forms of Anishinaabe women's collective action mentioned here protect persisting systems of responsibilities rooted in how aspects of the Anishinaabe creation story delineate enduring responsibilities between women and water. They also promote emerging systems of responsibilities having to do with making spaces for women's voices in provincial and national decision-making as exemplified by the Women's Water Commission. Hopefully, nonindigenous Canadians cultivate responsibilities to respect and listen to Anishinaabe women. Though much progress remains to be made, collective action is changing the ways in which Anishinaabe women and their Canadian neighbors interact. Collective continuance is promoted, then, both in terms of maintaining the persisting systems of responsibilities, but also in making strides toward better, responsibility-based systems of coexistence among Anishinaabe people and their neighbors.

Many indigenous women and other scholars outside of North America express compatible views about climate change impacts and responsibilities (Dictaan-Bang-oa

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2009; Apgar 2011; Mandaluyong Declaration 2011; Tebtebba 2011). The Mandaluyong Declaration of the Global Conference on Indigenous Women, Climate Change, and REDD Plus (2010) involved eighty women from sixty indigenous peoples from twenty-nine countries. Focusing on indigenous women, the declaration discusses multiple ways in which indigenous women's cultural responsibilities and social situations put them at great risk from climate change impacts. Shifts in species and changes in the quality of environments are described as disruptions to indigenous women's very identities and contributions to the overall webs of relationships and responsibilities that matter to their communities. The declaration claims further that climate change impacts weaken "cultural norms and values that guide customary sustainable resource use and management associated with food production and consumption" (Mandaluyong Declaration 2011, 300). The declaration states that

> Our spirituality which links humans and nature, the seen and the unseen, the past, present and future, and the living and nonliving has been and remains as the foundation of our sustainable resource management and use. We believe that if we continue to live by our values and still use our sustainable systems and practices for meeting our basic needs, we can adapt better to climate change. (304)

As a form of collective action, the declaration sets down seven priorities for climate adaptation and mitigation that must be communicated to and adopted by other indigenous and nonindigenous persons, communities, organizations, and governments. The seven priorities suggest ways in which both persisting and emerging systems of responsibilities can be protected and created. For example, priority 3 provides a call to

> reinforce indigenous women's traditional knowledge on mitigation and adaptation and facilitate the transfer of this knowledge to the younger generations. This includes knowledge on traditional forest management, sustainable agriculture, pastoralism, disaster preparedness and rehabilitation... and enhance traditional community sharing and self-help systems.... (308)

The declaration also seeks to create emerging systems of responsibilities among indigenous and nonindigenous parties and the implementation of the UN Declaration on the Rights of Indigenous Peoples (UNDRIP). Priority 5 calls for facilitating "participation of Indigenous women to relevant national and global processes related to climate change and human rights... play active roles in National Climate Change Networks, National REDD Plus Formations..." (309–10).

I interpret the Mandaluyong Declaration and the examples described by McGregor as unique ways in which indigenous women take collective actions intended to support the collective continuance of their communities. Their efforts contribute to climate change adaptation and mitigation and strengthen the voices of the indigenous women who participate in them. In some cases, they also serve to strengthen the voices of others who are influenced by and begin to take part in these collective actions. Some of the motivations for these collective actions are the very perceptions

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that climate change impacts affect indigenous women's responsibilities within webs of living, nonliving, and spiritual beings and natural, interdependent collectives. Certainly, the structure of these collective actions is deeply indebted to the very responsibilities that motivate effort in the first place. For example, the structure of the Mother Earth Water Walk flows from the Anishinaabe cultural traditions associated with the relationship between women and water. I have called these webs systems of responsibilities. I see the work in the previous section as part of a gender framework because it emphasizes some ways in which being an indigenous woman affects how one experiences and is motivated to respond to climate change impacts.

IV. Indigenous Women and Political Responsibilities

According to the authors and work discussed in the previous section, some indigenous women feel strongly that climate change impacts involve disruptions of their responsibilities as participants in their communities. Such disruptions may be tied to considerable climate injustices for the following reasons. Indigenous women may not have contributed as much as other groups to climate change drivers like deforestation and greenhouse-gas emissions, and may be more vulnerable to harm owing to their living under certain institutions that they did not create nor benefit from (for example, sexist institutions, colonial institutions, and so on). Each of these injustices suggests that non-indigenous parties have political responsibilities to indigenous women relative to climate change impacts. Again, political responsibilities are the reciprocal attitudes and patterns of behavior that various parties are expected to express through the structure and implementation strategies of political institutions like laws, courts, policies, mandates, agencies, departments, treaties, declarations, schedules of rights, codes of ethics, agreements, memoranda of understanding, and so on. The content of these responsibilities arises from the assumptions that parties make about their roles in relation to one another. In this section, I provide further details about the theories behind the arguments for political responsibilities just mentioned. I then seek to outline how these theories do not yet include any political responsibilities that would support the concerns and forms of collective action belonging uniquely to some indigenous women.

There are three good, and commonly invoked, theories for why parties like governments, corporations, nongovernmental organizations, and various consumers and consumer groups have political responsibilities to groups like indigenous women. First, political responsibilities can be derived from the fact that indigenous women are members of indigenous peoples whose precolonial and current footprints are likely to be relatively small, even though many such communities today use automobiles, electricity, and manufactured goods (Cuomo 2011). Parties like governments of industrial nations are politically responsible for their having promoted and benefited from much higher footprints because disruptive climate change impacts are experienced by those who contributed and benefited relatively little. Second, political responsibility can stem from the fact that, as women, indigenous women are likely to live under oppressive institutions that endorse or allow economic marginalization, exploitation, racial

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and gender discrimination, inequality before the law, systematic violence, deprivation of political participation, and silencing. These oppressive social structures make climate change impacts even more disruptive because women's capacities are disempowered, and they are disengaged from involvement in key political processes (Denton 2002; Glazebrook 2011; Tebtebba 2011). Indigenous women may, then, have special vulnerabilities, as other women do in relation to climate change. Indigenous women did not create these institutions and certainly do not benefit from them since the institutions are rooted in patriarchy, colonialism, imperialism, and globalization. Parties like nation-states and corporations have a political responsibility to eliminate discrimination against women. Third, political responsibility can also be understood in relation to indigenous women's knowledge. Given that many indigenous women live close to the land, they may be acute observers of local manifestations of ecological changes, have knowledge of long time-scales of the environment where their communities have lived for generations, and have key insights for understanding the best strategies to adapt (Figueroa 2011; Glazebrook 2011; Tebtebba 2011). Scientists and policy-makers have a political responsibility to include indigenous women's knowledge in their research, planning, and other empirical work.

The theories of political responsibility just outlined are and could be exercised in the political institutions dealing with climate change through the provision of support and resources for indigenous women to avoid bearing impacts to which they contributed little in the first place or to which they are particularly vulnerable. For example, UN policies, such as REDD+ (Reducing Emissions from Deforestation and Forest Degradation), should not force indigenous women to change their already low carbon-footprint lifestyles in order that the forests their communities depend on can suit the needs of others whose behaviors are slow to change. Climate change adaptation policies, for example, coming from the UN, should always include gender analysis for determining people's needs and susceptibilities. Climate change policies should be adjusted to conform with existing rights codes such as Articles 21 and 22 of UNDRIP, which reference the need for special attention to the rights and special needs of indigenous women and that indigenous women enjoy full protection and guarantees against all forms of violence and discrimination (Tebtebba 2006). Women's voices as knowers should be formally included in policy processes. Glazebrook, for example, argues that "it… is counterproductive not to include women's perspectives in climate change adaptation discussions" because of the "contributions they can make to the climate struggle as resilient and expert actors" (Glazebrook 2011, 769). Scientific organizations like the Intergovernmental Panel on Climate Change (IPCC) and the US National Climate Assessment must support the inclusion of indigenous women's knowledge in their empirical work (Nakashima et al. 2012). Each of the three responsibilities, then, can be imagined as changing how political institutions supporting adaptation and mitigation address indigenous women's relatively small contribution to climate change, their special vulnerability, and their ecological knowledge.

Each of these political responsibilities should continue to be enshrined and expressed in relevant political institutions. When appropriate, they should also be enshrined in the policies of indigenous governments and multiparty indigenous

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organizations. However, the political responsibilities just outlined do not yet address the claims made by indigenous women that I discussed in the previous section, which include how indigenous women's responsibilities, and hence identities, are implicated in climate change impacts and the unique forms of collective action that indigenous women take toward adaptation and mitigation. There are important reasons why this is the case. The first two political responsibilities are based on the passivity of indigenous women as members of indigenous peoples. Indigenous women are described primarily in terms of what they have not brought about. Yet the Mother Earth Water Walk and the Mandaluyong Declaration emphasize the agency of indigenous women that arises from the spiritual relations they maintain with relatives like water. In these cases, climate change impacts are seen as implicating the responsibilities these indigenous women *enact* within systems of responsibilities that matter to their communities. Moreover, these indigenous women have capacities for unique forms of collective action that can influence adaptation and mitigation beyond their communities, and serve as vehicles for more formal inclusion of indigenous women in policy processes from which they were previously excluded.

The third political responsibility emphasizes the involvement of indigenous women as knowledge keepers and knowers in other senses who should be included within scientific and political organizations that have already been put in place by nonindigenous parties, like the IPCC. Yet McGregor understands indigenous women's knowledge as being more than a body of insights about the environment; rather, knowledge involves being embedded within systems of responsibilities that one actively *performs*. Knowledge, then, refers to knowing what one ought to do to be a *responsible* environmental steward or guardian (in McGregor's case, she discusses water). The Mandaluyong Declaration also expands the notion of knowledge by placing priority on what science can do for indigenous women if they are allowed to determine the purpose for which scientific research is employed. Both McGregor and the Declaration stress broader notions of knowledge that embrace indigenous women's insights for establishing principles and structures of collective action toward adaptation and mitigation that are appropriate for their communities. For example, environmental scientists have often told indigenous peoples not to eat their first foods because of contamination. These scientific assessments often included indigenous women's knowledge. Yet the impact of not eating traditional foods, which can sever multiple responsibilities among humans and certain species, can lead to far worse harms to indigenous identity, community well-being, and human health (such as having to eat more fast food) (Arquette et al. 2002; Ranco et al. 2011; see also Nadasdy 1999). Here, a major articulation of indigenous women's knowledge is often understood according to knowledge of what responsibilities are important for indigenous communities' collective continuance and how science can be redeployed to serve these responsibilities, instead of serving only the goals established by people of other heritages and nations.

Far from being passive or serving as epistemic sources only, McGregor and the Declaration point out, in my interpretation, how the responsibilities that some indigenous women assume are wellsprings for high-impact collective actions whose

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motivations and structures belong uniquely to indigenous women. It is this idea that is missing from the theories of political responsibility enumerated earlier in this section. The indigenous women's networks described in the previous section are not forms of collective agency motivated by what another society understands to be a fair form of political participation for indigenous women. They are forms of collective action based on structures that indigenous women see as furnishing regional and global-scale participation and representation for their culturally inspired concerns and ideas, and that are most appropriate for addressing how their communities are affected by climate change impacts. They are forms of collective action that seek to engender global relations of coexistence *on indigenous people's terms*. A fourth theory of political responsibility can be glimpsed here that starts with deference to what indigenous women know is needed for implementing their own unique forms of collective action (Thomas 2006). Via their political institutions, parties like the UN, nation-states, corporations, and consumer groups would see themselves as being responsible for bolstering the conditions needed for indigenous women to succeed in exercising their own forms of collective action. That is, deference would be expressed through political institutions that did not prevent but would include measures that provide the particular kinds of backing needed for indigenous women's forms of collective action to flourish.

V. Conclusion: Toward Future Work

This paper is only an opening call for more philosophical engagement with a conception of political responsibility that would include bolstering indigenous women's own forms of collective action that support the collective continuance of their communities. The idea that there is a political responsibility to bolster the conditions for indigenous women's networking does not, obviously, tell us what those conditions are. Further work needs to engage indigenous communities in order to identify how nonindigenous parties as well as indigenous governments and multiparty groups can provide the assistance needed for these networks to flourish. Moreover, many other forms of collective action besides indigenous women's networking must be understood. Nonindigenous parties should rethink the models by which they understand their political responsibilities to indigenous peoples to be inclusive of some of the ideas for collective action advanced by indigenous women.

Notes

I owe special thanks for support on this paper from Kristie Dotson, Lisa Kretz, Kathy Lynn, the blind referees, and the editors of this special issue, Chris Cuomo and Nancy Tuana.

1. This paper also complements the work of environmental philosopher Lisa Kretz, which focuses on the importance of understanding people's motives for addressing climate change (Kretz 2012).

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2. These forms of collective action serve as examples of what Daniel Wildcat has called "indigeneity" (Wildcat 2009).

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